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LOCKHEED MARTIN

October 18, 2019

**VIA PRIVATE CARRIER**

Brian Dietz
Interim Program Administrator
Land Restoration Program
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Transmittal of the Response Action Completion Report for Groundwater at Block I
Lockheed Martin Corporation – Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Dietz,

For your review please find enclosed two hard copies with a CD of the above-referenced document. This report describes the activities and results associated with implementing the response action plan to address groundwater contamination at Block I of the Lockheed Martin Middle River Complex in Middle River, Maryland. This report also recommends (based on response action results) that a "No Further Action" letter issued by the Maryland Department of the Environment (MDE) is appropriate for the Block I groundwater treatment area. If possible, we respectfully request to receive MDE's document review comments by December 5, 2019.

Please let me know if you have any questions. My office phone is (301) 548-2209.

Sincerely,

Thomas D. Blackman
Project Lead, Environmental Remediation

cc: (via email without enclosure)
Gary Schold, MDE
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# DRAFT RESPONSE ACTION COMPLETION REPORT FOR GROUNDWATER AT BLOCK I LOCKHEED MARTIN MIDDLE RIVER COMPLEX 2323 EASTERN BOULEVARD MIDDLE RIVER, MARYLAND

Prepared for:
Lockheed Martin Corporation

Prepared by:
Tetra Tech, Inc.

October 2019

Approved by:
Lockheed Martin, Inc.

Revision: _____



Michael Martin, P.G.
Regional Manager



Christopher Pike
Project Manager

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# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| *cis*-1,2-DCE | *cis*-1,2-dichloroethene |
| DHC | *Dehalococcoides ethenogenes* |
| DO | dissolved oxygen |
| GAC | granular activated carbon |
| gpm | gallon(s) per minute |
| lbs | pounds |
| Lockheed Martin | Lockheed Martin Corporation |
| MDE | Maryland Department of the Environment |
| µg/L | microgram(s) per liter |
| mg/L | milligram(s) per liter |
| MRC | Middle River Complex |
| mV | millivolt(s) |
| O&M | operations and maintenance |
| ORP | oxidation-reduction potential |
| RAP | response action plan |
| TCE | trichloroethene |
| Tetra Tech | Tetra Tech, Inc. |
| TOC | total organic carbon |
| VC | vinyl chloride |
| VOC | volatile organic compound |

# SECTION 1
# INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc., (Tetra Tech) has prepared this report describing the activities and results associated with implementing the response action plan (RAP) to address groundwater contamination at Block I of the Lockheed Martin Middle River Complex (MRC) in Middle River, Maryland. This report also recommends (based on response action results) that a "No Further Action" letter issued by the Maryland Department of the Environment (MDE) is appropriate for the Block I groundwater treatment area. This report addresses only the active treatment area in Block I; assessment of groundwater in other areas of Block I is on-going.

## 1.1 SITE LOCATION AND BACKGROUND

The Middle River Complex is located at 2323 Eastern Boulevard in Middle River, Maryland (Figure 1-1). It consists of multiple land parcels designated as tax blocks (Figure 1-2, referred to as blocks herein), all owned by LMC Properties, Inc., a subsidiary of Lockheed Martin. Block I contains currently operating facilities; surrounding Block I are the external Blocks A, B, D, E, F, G, and H. Some of these external blocks are used by Lockheed Martin Corporation for offices and parking, while others are leased by tenants for parking or operations.

This Middle River Complex groundwater response action is being conducted in accordance with the "Administrative Consent Order and Settlement Agreement" ACO SAR-MDE0746 2015 1 01 between the Maryland Department of the Environment and Lockheed Martin Corporation. The groundwater response action includes enhanced anaerobic-bioremediation in three areas with high groundwater concentrations of trichloroethene (TCE): the southeastern trichloroethene area (Block E), the southwestern trichloroethene area (Block G), and the northern trichloroethene area (Block I). These three areas are shown on Figure 1-3. Note that the trichloroethene plumes shown on Figure 1-3 and the injection locations shown on Figure 1-3 are shown as they appear in the *Groundwater Response Action Plan* (Tetra Tech, Inc., 2012).

Semi-permanent injection wells were installed at the Middle River Complex to inject biological amendments into the subsurface; these wells are arranged in rows and connected via underground piping to injection equipment in each of the three trichloroethene areas. The injection equipment and controls are housed in two modified shipping containers (i.e., the equipment modules); any one of which can be used for the Block G, I, and E systems. The system allows flexibility for selecting and setting system parameters (e.g., the number of operational injection wells; substrate type and dosage; and injection rates, volumes, and durations).

This report documents the injection program performed in Block I; response actions and results at Blocks E and G are not addressed in this document. Three injection events have been performed at Block I. The first injection was performed from March 2015 to April 2015, the second injection was performed from October 2015 to December 2015, and the third injection was performed from June 2017 to September 2017. The following relevant documents describe the history and implementation of groundwater response action in Block I:

- *Groundwater Response Action Plan* (Tetra Tech, 2012)
- *Groundwater Response Action 100% Design-Basis Report (Tetra Tech, 2013)*
- *Operation and Maintenance Plan for Groundwater Remediation System at Lockheed Martin Middle River Complex (Tetra Tech, 2014)*
- *Revised Groundwater Response Action Plan Addendum 2: Remedial Action Objectives and Project Implementation Schedule (Tetra Tech, 2015a)*
- *First Injection-Event Completion Report (Tetra Tech, 2015)*
- *Second Injection-Event Completion Report, Blocks G and I (Tetra Tech, 2016)*
- *Third Injection-Event Completion Report, Block I (Tetra Tech, 2018)*

## 1.2 PURPOSE AND ORGANIZATION

This report describes the response action for groundwater at Block I, presents its results, and provides a request for a "No Further Action" classification for the Block I groundwater treatment area from the Maryland Department of the Environment. This report is organized as follows:

Section 2— Implementation of the Remedial Action: Presents a summary of remedial action implementation in Block I.

Section 3—Performance Evaluation: Discusses the results of the injections, performance verification sampling results, and the conclusions that can be drawn from these results.

Section 4—Recommendation for Path Forward: Provides the basis for a No Further Action request.

Section 5—References: Provides a list of the references used to compile this report.

# SECTION 2
# REMEDIAL ACTION IMPLEMENTATION

The groundwater remediation system at Block I comprises an injection-equipment module connected to injection-well arrays. A low-concentration amendment solution, consisting of sodium lactate (substrate) diluted in treated, pH-adjusted, potable water, is injected into the well array. The amendment solution was prepared using the following process:

- The equipment module was connected to potable water via a pressurized water-supply line.
- Potable water was passed through a particulate filter and granular activated-carbon (GAC) vessel to remove suspended solids, residual chlorine disinfectant, and other impurities.
- The water stream was then directed to a semi-permeable, hollow-membrane contactor that removed dissolved oxygen (DO).
- Substrate and pH buffering solution (sodium bicarbonate) were dosed into the treated water and mixed.
- The injection solution was directed to the injection manifold, where it was injected into individual injection wells via dedicated lines.

The process equipment includes a GAC vessel; a filter for particulates; a DO removal contactor; a vacuum pump, metering pumps, and storage tanks for substrate and pH buffering solution; mechanical and electronic flow meters and totalizers; control valves; process instrumentation; and controls. Process equipment and electrical components (such as the distribution manifold, flow meter, process piping, hollow-membrane cartridge, and other lightweight instrumentation) are mounted on the module-container sidewalls. Heavier equipment is secured to the module floor.

Untreated water enters the equipment enclosure from a pressurized domestic-water line. In Block I, the source of this water is the water line in the nearby chemical building. The water

stream is first treated by a GAC vessel to remove residual chlorine. DO is then removed by a membrane contactor and inlet particulate filter.

Amendment solution is introduced directly into the treated stream effluent before it reaches the distribution manifold connected to the injection wells. A buffering solution of sodium bicarbonate is then used to adjust pH; buffer was added both at the manifold and directly into the injection wells. The amendment solution was then directed to the 10-branch piping manifold, where it was directed to individual injection wells.

The startup, shutdown, and operation and maintenance (O&M) procedures followed during the injection events at Block I are detailed in the *Operation and Maintenance Plan for the Groundwater Remediation System at Lockheed Martin Middle River Complex* (Tetra Tech, Inc. [Tetra Tech], 2014).

## 2.1 SUMMARY OF FIRST INJECTION EVENT

The first injection series at Block I began on March 13, 2015, and concluded on April 15, 2015. Refer to *First Injection Completion Report* (Tetra Tech, 2015) for a complete description of the first injection. The system layout for the first injection in Block I is shown on Figure 2-1.

The injection was temporarily discontinued on March 20, 2015, and remained inoperable until April 6, 2015, to reduce preferential channeling into the underground utilities in this area. All eight injection wells in Block I were used for injection. All injection wells received flow, and a total volume of 39,607 gallons was injected into the subsurface. On average, each well received approximately 4,950 gallons of amendments solution which is very close to the design goal of 5,030 gallons per well. A total of 730 pounds (lbs) of sodium lactate substrate (as pure ingredient) and 465 lbs of sodium bicarbonate were injected. The average lactate concentration (as pure ingredient) was 0.22% by weight, and the average sodium bicarbonate concentration was 1.4 grams per liter (g/L). The average injected sodium lactate and sodium bicarbonate quantities per well were 91 lbs and 58 lbs, respectively. Table 2-1 contains a summary of Block I injection parameters.

Block I baseline sampling was conducted in February 2014, and post-injection sampling for the first injection was conducted twice (in May 2015 and in July 2015) once the injection was complete. The key baseline and post-injection parameters collected included total organic carbon (TOC), oxidation reduction potential (ORP), DO, pH, volatile organic compound (VOC) concentrations, and de-chlorinating bacteria presence (*Dehalococcoides ethenogenes* [DHC]).

## 2.2 SUMMARY OF SECOND INJECTION EVENT

The second injection event at Block I began October 5, 2015, and concluded December 22, 2015. Refer to *Second Injection Completion Report, Blocks G and I* (Tetra Tech, 2016) for a complete description of the second injection. Remedial system layout for the second injection was the same as used for the first (see Figure 2-1).

The second injection was stopped on October 19, 2015, and remained inoperable until November 4, 2015, to reduce preferential channeling into the underground utilities. The injection process was interrupted again from November 10, 2015, to December 9, 2015, to clean the injection manifold. All eight injection wells in Block I were used simultaneously for injection. All injection wells received flow, and 39,300 gallons of amendment were injected into the subsurface. On average, each well received approximately 4,910 gallons of amendment solution, a volume close to the design goal of 5,030 gallons per well. Nearly 1,470 lbs of sodium lactate substrate (as pure ingredient) and 510 lbs of sodium bicarbonate were injected. The average lactate concentration (as pure ingredient) was 0.45% by weight, and the average sodium bicarbonate concentration was 1.56 g/L. The average injected sodium lactate and sodium bicarbonate quantities per well were 184 lbs and 64 lbs, respectively. Injection volumes, amendment dosages, and concentrations were very close to Block I design values. Table 2-1 contains a summary of the injection parameters.

Three post-(second)injection monitoring events, evaluating TOC, ORP, DO, pH, VOCs, and DHC, were completed as described below:

- March 2016—one month after second injection event
- May 2016—three months after second injection event

- July 2016—six months after second injection event

The remedial design objectives for Block I groundwater were not met by the end of the second injection, because sufficient distribution of the amended fluid (substrate and sodium bicarbonate buffering solution) could not be achieved, mainly due to the low permeability and heterogeneous nature of the geology at Block I. Underground utilities present in the area could also have contributed to a preferential channeling of the injected fluid. Nevertheless, a partial distribution of substrate was achieved, so the design goal of creating an environment in which the ORP was sufficiently low for reduction was met. Conditions were not optimal, however, because the substrate was not delivered to a significant portion of the injection area, and sodium-bicarbonate buffering was not effective enough to raise groundwater pH to meet the design goal. The overall results for the second injection were similar or slightly worse as compared to the results of the first injection. In order to improve subsequent substrate distribution in Block I, substrate delivery for the third injection was modified by including a groundwater pumping component.

## 2.3 SUMMARY OF THIRD INJECTION EVENT

The third injection in Block I began on June 16, 2017, and concluded on September 8, 2017. Refer to *Third Injection Completion Report, Block I* (Tetra Tech, 2018) for a complete description of the third injection. The modified remedial system layout for the third injection is shown on Figure 2-2.

Five post-injection performance monitoring rounds were conducted at months one, three, six, and eleven, and at two years, after the third injection. Performance monitoring was conducted as described in the performance monitoring plan (Tetra Tech, 2014). Implementation of the remedy and its performance evaluation followed the design objectives established in the design-basis report (Tetra Tech, 2013) and the modifications summarized in the *Groundwater Response Action Plan Addendum 3: Remedy Modifications for Block I* (Tetra Tech, 2017). The third injection in Block I was performed in two phases:

- The first phase (pumping) took place from June 16 to July 31, 2017, with pumping at wells IWN-3 and IWN-6. Only groundwater extraction occurred during this phase. The purpose of this step was to dewater the subsurface formation as much as possible before

injection began. Approximately 29,000 gallons of groundwater were extracted during the first phase.

- Injection (the second phase) began on July 31, 2017, and was finished on September 8, 2017. During this phase, wells IWN-3 and IWN-6 continued to operate and extract groundwater, and substrate solution was injected into the remaining six injection wells. Approximately 25,000 gallons of groundwater were extracted during the second phase.

The injection at Block I began on July 31, 2017, and ran until September 8, 2017. Six injection wells were used simultaneously for injection. All six injection wells received flow, and 38,300 gallons of amendment were injected into the subsurface. On average, each well received approximately 6,380 gallons of amendment solution, a volume slightly higher than the design goal (5,030 gallons per well). The rates and volumes of individual injection wells were similar; no major differences in the injection volumes occurred between wells. Approximately 2,670 lbs of 60% sodium lactate substrate (1,600 lbs as pure ingredient) were injected, and approximately 500 lbs of sodium bicarbonate were directly placed (as solid material) into the injection wells. The average lactate concentration (as pure ingredient) was 0.5% by weight. The average injected sodium lactate and sodium bicarbonate quantities per well were 267 lbs and 83 lbs, respectively. Injection volumes, amendment dosages, and concentrations were close to Block I target values, as determined in *Groundwater Response Action Plan Addendum 3: Remedy Modifications for Block I* (Tetra Tech, 2017). Table 2-1 contains a summary of the injection parameters, and Table 2-2 contains parameters associated with the pumping component used during the third injection.

As stated earlier, baseline sampling at Block I was conducted in February 2014; two rounds of sampling were conducted following the first injection, three rounds of sampling were conducted after the second injection, and five post-injection monitoring rounds were completed after the third injection as follows:

- First monitoring round: October 2017 (one month after third injection)
- Second monitoring round: December 2017 (three months after third injection)
- Third monitoring round: February 2018 (six months after third injection)
- Fourth monitoring round: June 2018 (eleven months after third injection)

- Fifth monitoring round: May 2019 (two years after third injection)

The same parameters evaluated after the first and second injections were also evaluated after the third injection, and included VOCs, TOC, DHC, ORP, DO, and pH.

# SECTION 3
# PERFORMANCE EVALUATION

Tables 3-1 through 3-4 provide a summary of results obtained from sampling during all performance monitoring rounds (i.e., for three injections), including the final sampling round conducted two years after the third injection (fifth monitoring event). The analytical laboratory results, and the recorded field parameters for the fifth monitoring event after the third injection, are presented in Appendices A and B, respectively.

Some remedial design objectives were met after the first injection; trichloroethene (TCE) and volatile organic compound (VOC) concentrations were reduced as compared to the baseline levels (see Table 3-1). The amendment substrate was partially distributed throughout the subsurface at Block I, as evidenced by the increased total organic carbon (TOC) concentrations at several monitoring wells (see Table 3-2). *Dehalococcoides ethenogenes* (DHC) cultures and ethene were also present in significant numbers at two sampling locations (NMW-3I and MW-81B) following the first injection (Table 3-3). Table 3-4 indicates that after the first injection, the design goal of creating a sufficiently reducing environment (i.e., an oxidation-reduction potential [ORP] of less than -50 millivolts [mV]) was met. Groundwater conditions in Block I after the first injection were not optimal, however, as substrate was not delivered to a significant portion of the injection area and sodium bicarbonate pH buffering (Table 3-4) was not effective enough to raise groundwater pH to meet the design goal (pH of 6.8). As a result, following the first injection, complete TCE degradation was occurring at only two of five locations.

The dosage of substrate and pH buffering were increased for the second injection, based on the results obtained during the first injection. Bioaugmentation with DHC cultures was not considered necessary, as a sufficient existing DHC population existed in Block I after the first injection.

As with the first injection, some remedial design objectives were met after the second injection. TCE and VOC concentrations were reduced compared to the baseline levels (Table 3-1). However, again, insufficient distribution of the amendment fluid (substrate and sodium bicarbonate buffering solution) was observed through the treatment area, although a partial distribution of substrate was achieved (see Tables 3-2 and 3-4) and the design goal of creating a reducing environment (ORP < - 50 mV) was met in the performance wells (Table 3-4). DHC cultures were also present in significant numbers at several sampling locations following the second injection, but at lower levels as compared to the first injection (Table 3-3). Ethene concentrations were similar to those detected after the first injection (Table 3-3). However, non-optimal conditions remained after the second injection, including insufficient distribution of amendment substrate throughout Block I and ineffective groundwater buffering (i.e., a groundwater pH below the design goal of 6.8). Thus, the overall results for the second injection were similar to the results of the first injection.

During the third injection, a groundwater pumping component was added to improve substrate delivery and resulted in the greatest reduction of TCE and VOC concentrations, as compared to the first and second injections. The fifth monitoring round (conducted two years after the third injection) was conducted to determine whether VOC concentrations and Block I geochemical conditions would rebound to the baseline conditions after time had elapsed. As expected, some rebound of VOC concentrations was observed, as shown in Table 3-1. In general, TCE and VOCs concentrations are slightly higher in May 2019 (two years after the third injection) as compared to June 2018 (11 months after third injection). However, the average TCE concentration (364 micrograms per liter [µg/L]) two years after the third injection is a reduction of 85% from the baseline concentration (2,358 µg/L). The average total VOC concentration[1] two years after the third injection is 1,228 µg/L, a 68% reduction as compared to baseline (3,875 µg/L). Overall reductions in TCE and VOCs after the third injection are greater than those resulting from the first and second injections, suggesting that the pumping component had a net positive effect on the remedy performance, even though this effect could not be readily observed or measured via all bioremediation performance parameters (e.g., substrate distribution). Several

[1] Total volatile organic compounds (VOCs) as defined here are a sum of trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) concentrations.

bioremediation performance indicators measured during the fifth monitoring round (i.e., two years after the third injection), such as ORP, dissolved oxygen (DO), and pH, remain favorable for continued bioremediation. Reducing conditions were maintained and even slightly improved, as compared to the previous monitoring event, and groundwater pH remained in the favorable range for anaerobic degradation of TCE. Also, DHC concentrations remained relatively high, as did ethene concentrations, when compared to the previous monitoring event (Table 3-3). These observations indicate that complete TCE degradation (to innocuous by-products) is ongoing at Block I, even two years after the third injection was completed.

# SECTION 4
# RECOMMENDATIONS FOR PATH FORWARD

Three injection events and multiple, long-duration performance monitoring rounds have been conducted in Block I. Subsurface conditions in Block I are challenging for the groundwater remedial effort. Significant experience has been accumulated during this groundwater response action, leading us to conclude that the low permeability and heterogeneous geology of the subsurface at Block I prevented a thorough distribution of the injected amendments during the initial (first and second) injection events. Underground utilities present in the area further complicated the groundwater response action and likely caused some preferential channeling of the injected fluid. This resulted in non-attainment of some performance goals stated in the *Groundwater Response Action Plan* (Tetra Tech, Inc. [Tetra Tech], 2012). In particular, electron donor concentrations were below targeted goals even after three injections had been performed.

However, the groundwater response action in Block I met the most important design objective: a reduction in trichloroethene (TCE). The performance goal for the Middle River Complex response action, as specified in the *Groundwater Response Action Plan* (Tetra Tech, 2012), was to reduce trichloroethene mass by 70% in active remediation areas and subsequent amendments to the Response Action Plan stated the goal as:

- Conduct active remediation with the objective of reducing the mass of trichloroethene in the subsurface of the active remediation areas and reducing the mass of trichloroethene daughter products, including primarily *cis*-1,2-dichloroethene and vinyl chloride.

These goals have been achieved. The average trichloroethene concentration two years after the third injection was 364 micrograms per liter (µg/L); this is a reduction of 85% as compared to baseline (2,358 µg/L). In addition, the average total volatile organic compound concentration (1,228 µg/L) two years after the third injection is a 68% reduction from baseline (3,875 µg/L). *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) and vinyl chloride (VC) concentrations have also been reduced from baseline (despite some interim increases due to the degradation of trichloroethene).

Also, complete trichloroethene degradation to innocuous by-products is ongoing at Block I, even two years after the third and final injection.

Based on these results, Lockheed Martin Corporation (Lockheed Martin) is submitting this closure documentation in accordance with Section VI.22 of ACO-SAR-MDE0746-2015-1-01 and is requesting a "No Further Action" letter (or equivalent) from the Maryland Department of the Environment (MDE) for the Block I groundwater treatment area. Lockheed Martin will continue to assess groundwater throughout Block I (outside of the treatment area addressed in this report) and address as appropriate. Annual groundwater monitoring continues at the site, and Lockheed Martin will continue to monitor groundwater conditions in this area and throughout Block I.

# SECTION 5
# REFERENCES


Maryland Department of the Environment (MDE), 2006. *Maryland Department of the Environment Voluntary Cleanup Program.* Revision 03/17/06. March.

Tetra Tech Inc. (Tetra Tech), 2012. *Groundwater Response Action Plan Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland.* August.

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Tetra Tech Inc. (Tetra Tech), 2018. *Third Injection-Event Completion Report, Block I Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland.* December.

# FIGURES

**Figure 1-1 Middle River Complex Location Map**

**Figure 1-2 Middle River Complex Site Layout and Tax Blocks**

**Figure 1-3 MRC Groundwater Remedy Layout**

**Figure 2-1 Block I Remedy Layout for 1st and 2nd Injection Events**

**Figure 2-2 Modified Block I Remedy Layout**

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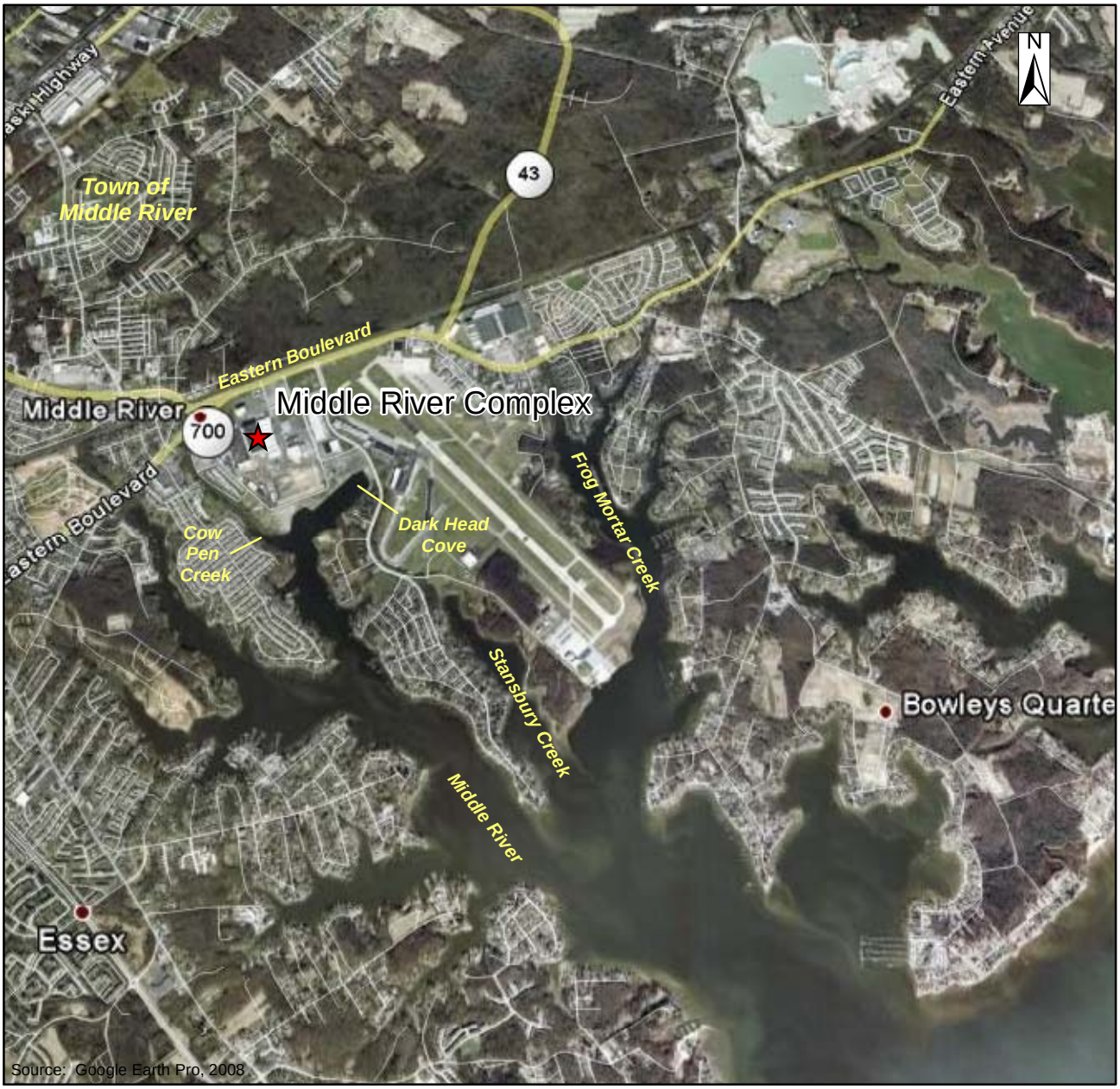


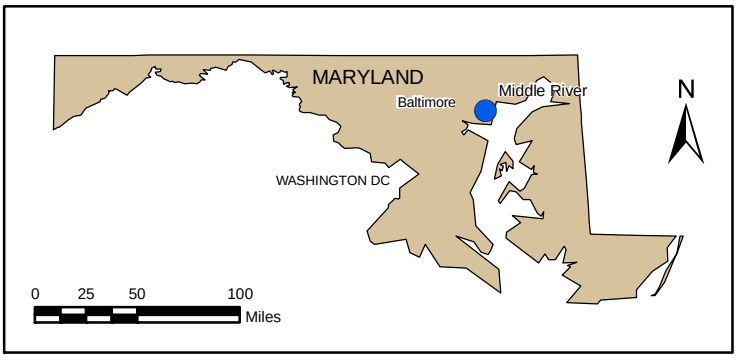


**Figure 1-1**

**Middle River Complex Location Map**

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

| DATE MODIFIED: | CREATED BY: |
|---|---|
| 12/15/08 | BJ |

**Tetra Tech, Inc.**

Town of Middle River

Martin State Airport

AMTRAK RAILROAD

EASTERN BOULEVARD

MARTIN BLVD.

CHESAPEAKE PLAZA

WILSON POINT ROAD

DARK HEAD COVE ROAD

CHESAPEAKE PARK PLAZA

DARK HEAD COVE

COW PEN CREEK

BLOCK 'A'

BLOCK 'A'

BLOCK 'B'

BLOCK 'D'

BLOCK 'E'

BLOCK 'F'

BLOCK 'G'

BLOCK 'H'

BLOCK 'I'

ATHLETIC FIELD

PARKING LOT NO. 4

PARKING LOT NO. 5

BUILDING "G"

PARKING LOT NO. 1

BUILDING "M"

BUILDING "P"

GATE "A"

BUILDING "L"

PARKING LOT NO. 2

MAINTENANCE OFFICE AND SHOP

BUILDING "C"

BUILDING "B"

BUILDING "A"

FIRECOAT BUILDING

FOUR #2 FUEL OIL USTs ABANDONED IN-PLACE

DROP HAMMER BUILDING ACTIVE FIRING RANGE

MAINTENANCE GARAGE

POWER HOUSE

DRUM STORAGE FACILITY

FLAME CUT

DIE STORAGE

HAZARDOUS WASTE STORAGE BUILDING

PARKING LOT NO. 3

CONSERVATION BUILDING

TILLEY CHEMICAL COMPANY

FORMER SEWAGE TREATMENT PLANT

NORTH AMERICAN ELECTRIC

FORMER AERO PYHSICS LAB./WIND TUNNEL TEST BUILDING

FORMER HYDRAULIC AND FIELD TEST BUILDING

FORMER TRAINING SCHOOL

FORMER RAMP STORAGE BUILDING

FORMER BOAT HOUSE

SEVEN 1,000-GAL. AVIATION FUEL USTs ABANDONED IN-PLACE

ENG. DEV. LAB BLDG.

ANNEX BUILDING

PROGRAM BUILDING

VERTICAL ASSEMBLY BUILDING

JOHNSON AND TOWERS

PARKING LOT NO. 6

500,000-GAL. WATER TANK

TRANSFER SHED

FIRE PUMP BUILDING WITH 275-GAL DIESEL FUEL AST

FORMER 500-GAL. UST

FORMER 500,000-GAL. DIESEL FUEL AST

FORMER BUILDING "D"

WATERFRONT LOT

**FIGURE 1-2**

**MIDDLE RIVER COMPLEX**
**SITE LAYOUT AND TAX BLOCKS**

**LEGEND**

MIDDLE RIVER COMPLEX TAX BLOCK BOUNDARY

STRUCTURE

RAILROAD TRACKS

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 150 300 600 Feet

N

DATE MODIFIED: 11/30/11

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\Tax Blocks_30Nov11.mxd)
11/30/2011 -- 6:20:16 PM

PROGRAM BUILDING

POST #4

DROP HAMMER BUILDING

MAINTENANCE GARAGE

DIE STORAGE

FIRECOAT BUILDING

BLOCK I PLUME

VERTICAL ASSEMBLY BUILDING

ABLATIVE FACILITY

EX. PARKING

1 STORY EXISTING INDUSTRIAL BUILDING

EX. PARKING

LOT-3

CONSERVATION

FLAME CUT

POWER HOUSE

INJECTION EQUIPMENT

DRUM STORAGE FACILITY

1000

GRIT BLAST

LOT-B

DAY TANK

BLOCK G PLUME

INJECTION EQUIPMENT

EXISTING INDUSTRIAL BUILDING 1 STORY

1000

LOT-D
EX. ABANDONED SLAB FOUNDATION

LOT-6

COW PEN CREEK

EXISTING OFFICE BUILDING 1 STORY

INJECTION EQUIPMENT

BLOCK E PLUME

1000

NORTH AMERICAN RIGGING

18" RCP

21" RCP

24" RCP

30"

CHESAPEAKE PARK PLAZA

30"

30" CONC

30"

DARK HEAD ROAD

DARK HEAD CREEK PARK

DARK HEAD CREEK

## LEGEND

- PIPING BUNDLE
- INJECTION WELL
- PIPING TO INJECTION WELLS
- 1000 — 1000 ug/L TCE CONTOUR BASED ON 2012 GW RAP

BASE MAP: BASED ON DRAWING PREPARED BY TAI CONSULTING ENGINEERS, INC.

TOPOGRAPHY: TOPOGRAPHY WITHIN AREA OF DISTURBANCE FROM FIELD RUN SURVEY CONDUCTED BY DMW, INC. IN JUNE 1999 FLOATED TO STATE GRID.

HORIZONTAL INFORMATION OUTSIDE OF LIMIT OF DISTURBANCE FROM BALTIMORE COUINTY OFFICE OF INFORMATION TECHNOLOGY GIS SERVICES UNIT. DATE OF CAPTURE: MARCH 1995

EXISTING UTILITIES: FIELD INFORMATION OBTAINED FROM DMW FIELD RUN SURVEY AND LOCKHEED MARTIN ENTITLED "EXHIBIT #6 EXISTING UTILITIES PLAN."

BOUNDARY LINES: BOUNDARY INFORMATION TAKEN FROM RECORDED PLAT E.H.K., JR. 51 FOLIO 43 "1ST AMENDED CHESAPEAKE PARK RE-SUBDIVISION" PREPARED BY MARYLAND SURVEYING AND ENGINEERING CO., INC. 4/24/84. BOUNDARY HAS BEEN ORIENTED TO THE BALTIMORE COUNTY METROPOLITAN DISTRICT GRID, BUT SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY.

SCALE

0' 125' 250' 500'

TETRA TECH

MRC GROUNDWATER REMEDY LAYOUT

LOCKHEED MARTIN MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| DATE: | 9-29-2015 |
| PROJECT NO.: | |
| DESIGNED BY: | BD |
| DRAWN BY: | BD |
| CHECKED BY: | CP |

FIGURE 1-3

APPROXIMATE
1,000 ug/L VOC
CONTOUR

GRAPHIC SCALE
0' 7.5' 15'

NOTE 2: ALL TRENCHES ARE LOCATED ON PAVED AREAS

IWN-1
IWN-2
IWN-3
IWN-4
IWN-5
IWN-6
IWN-7
IWN-8

HISTORIC STORM SEWER

21" RCP STORM

PIPE END
RET.WALL
(APPROX.)

HISTORIC 15" CONC STORM SEWER

12" RCP STORM

RCP
STRM.MH-10B(BURIED)
31.89
RCP

20"X29"
ERCP STORM

MPN-2
GRATE
IW-N
NMW-2I/S
NMW-1I
MW-81B
OW-1
NMW-3I
5

4" DIP SAN SEWER
4" DIP SAN
4" DIP SANITARY
4" DIP SAN SEWER
RUNS TO LIFT STATION?

CO4
22.60

MH-10
22.98
INV.19.98

18" RCP STORM
STRM FES
23.92

12" RCP
CB-10A
22.24
INV.20.54

24" RCP STORM
PIV
PIV

10" FIRE

LEGEND

PROPERTY LINE W/ MONUMENTS
TREELINE
BUILDING - MAJOR

EXISTING UTILITIES
WATER LINE W/ VALVE & HYDRANT
GAS LINE W/ METER & VALVE
UNDERGROUND ELECTRIC
ABOVE-GROUND ELECTRIC W/ POLE
COMMUNICATIONS W/ BOX
STORM PIPE W/ INLET & MANHOLE
HISTORICAL FLOOR DRAIN W/ CLEANOUT
SANITARY LINE W/ MANHOLE
FORCE MAIN
CHAIN LINK FENCE W/ GATE
UNKNOWN UTILITIES- GEOPHYSICAL SURVEY
HISTORICAL UTILITIES OR STRUCTURES (LINETYPES VARY)

REMEDIAL SYSTEM FEATURES
4" INJECTION WELL
NMW-2I/S
2" PERFORMANCE MONITORING WELL
I - INTERMEDIATE DEPTH
S - SHALLOW DEPTH
EXISTING MONITORING WELL
1000 ug/L TCE CONTOUR BASED ON 2012 GW RAP
INJECTION PIPING BUNDLE
2" PVC ELECTRICAL CONDUIT
1" POTABLE WATER LINE
EXTENT OF TRENCH (3-FT WIDTH SHOWN)'
PILOT TEST INJECTION WELL

**REFERENCE PLANS & DATA:**

1. UTILITY CROSS CONNECTION SURVEY PERFORMED BY TETRA TECH CREW: RAB & AN, DATED 10/6,10/10 & 10/11/2011
2. SURVEYED LOCATIONS OF UNDERGROUND ELECTRIC, WATER, COMMUNICATION LINES, ARE BASED ON GEOPHYSICAL SURVEYS CONDUCTED BY ENVIROSCAN, INC. LANCASTER, PA, AND UNKNOWN FEATURES.
3. SEWER PIPE CCTV REPORTS PREPARED BY VIDEO PIPE SERVICES, INC. DATED 9/26 & 10/12/2011
4. PRE-CONSTRUCTION SURVEY OF STORM DRAIN LINES FOR BLOCK E PREPARED BY TETRA TECH CREW: RAB & AN, DATED 08/15 & 08/16/ 2011.
5. BACKGROUND BASEMAP AND PROPERTY LINES ARE FROM CHESAPEAKE PARK SITE PLAN - LMC PROPERTIES, INC PREPARED BY TAI CONSULTING ENGINEERS, DATED 4/15/01. BACKGROUND DATA IS NOT FIELD VERIFIED AND FOR REFERENCE ONLY.

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| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

BLOCK I REMEDY LAYOUT
1ST AND 2ND INJECTION EVENTS

LOCKHEED MARTIN CORPORATION
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

| | |
|---|---|
| DATE: | 8/28/2019 |
| PROJECT NO.: | 112IC03835 |
| DRAWING SIZE: | ARCH B |
| DRAWN BY: | DWM |
| CHECKED BY: | BD |

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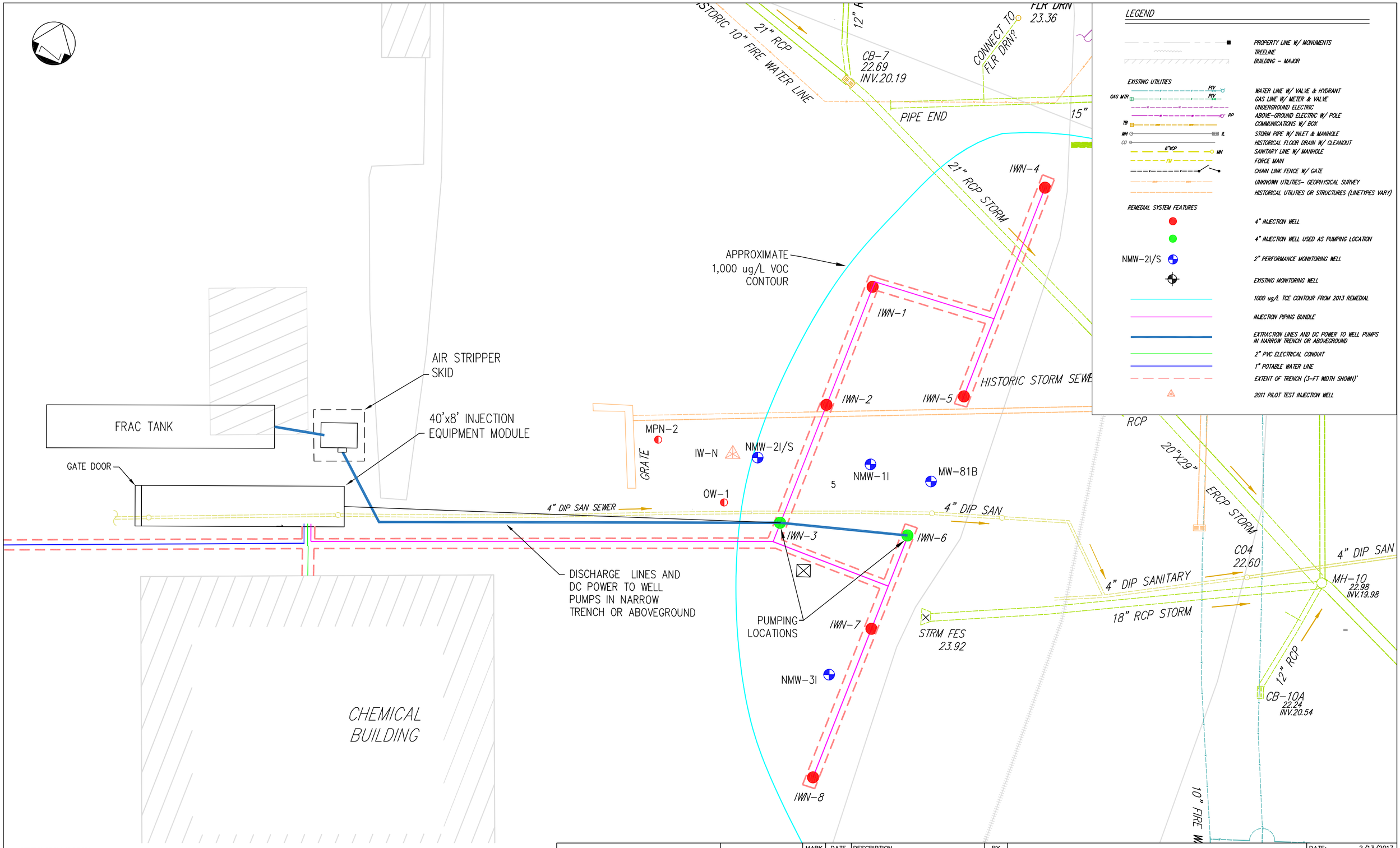
**FIGURE 2-1**

C:\USERS\BORIS.DYNKIN\DOCUMENTS\LMC MRC\BLOCK I RACR\FIGURES\FIGURE 2-1.DWG DWM 8/28/19




LEGEND

- PROPERTY LINE W/ MONUMENTS
- TREELINE
- BUILDING – MAJOR

EXISTING UTILITIES

- WATER LINE W/ VALVE & HYDRANT
- GAS LINE W/ METER & VALVE
- UNDERGROUND ELECTRIC
- ABOVE-GROUND ELECTRIC W/ POLE
- COMMUNICATIONS W/ BOX
- STORM PIPE W/ INLET & MANHOLE
- HISTORICAL FLOOR DRAIN W/ CLEANOUT
- SANITARY LINE W/ MANHOLE
- FORCE MAIN
- CHAIN LINK FENCE W/ GATE
- UNKNOWN UTILITIES- GEOPHYSICAL SURVEY
- HISTORICAL UTILITIES OR STRUCTURES (LINETYPES VARY)

REMEDIAL SYSTEM FEATURES

- 4" INJECTION WELL
- 4" INJECTION WELL USED AS PUMPING LOCATION
- NMW-2I/S — 2" PERFORMANCE MONITORING WELL
- EXISTING MONITORING WELL
- 1000 ug/L TCE CONTOUR FROM 2013 REMEDIAL
- INJECTION PIPING BUNDLE
- EXTRACTION LINES AND DC POWER TO WELL PUMPS IN NARROW TRENCH OR ABOVEGROUND
- 2" PVC ELECTRICAL CONDUIT
- 1" POTABLE WATER LINE
- EXTENT OF TRENCH (3-FT WIDTH SHOWN)'
- 2011 PILOT TEST INJECTION WELL

**REFERENCE PLANS & DATA:**

1. UTILITY CROSS CONNECTION SURVEY PERFORMED BY TETRA TECH CREW: RAB & AN, DATED 10/6,10/10 & 10/11/2011
2. SURVEYED LOCATIONS OF UNDERGROUND ELECTRIC, WATER, COMMUNICATION LINES, ARE BASED ON GEOPHYSICAL SURVEYS CONDUCTED BY ENVIROSCAN, INC. LANCASTER, PA, AND UNKNOWN FEATURES.
3. SEWER PIPE CCTV REPORTS PREPARED BY VIDEO PIPE SERVICES, INC. DATED 9/26 & 10/12/2011

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| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

MODIFIED BLOCK I REMEDY LAYOUT

LOCKHEED MARTIN CORPORATION
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

| | |
|---|---|
| DATE: | 2/13/2017 |
| PROJECT NO.: | 112IC03835 |
| DRAWING SIZE: | ARCH D |
| DRAWN BY: | DWM |
| CHECKED BY: | BD |

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FIGURE 2-2

C:\USERS\BORIS.DYNKIN\DOCUMENTS\LMC MRC\BIO SYSTEM OPERATION\BLOCK I 3RD INJECTION REPORT\FIGURES\FIGURE 2-1 MODIFIED BLOCK I LAYOUT.DWG DWM 9/9/18

# TABLES

**Table 2-1 Block I Injection Parameters for Three Injection Events**

**Table 2-2 Summary of Injection Event #3**

**Table 3-1 Block I Injections, including 2nd-year Monitoring Event after 3rd Injection– Volatile Organic Compounds**

**Table 3-2 Block I Injections, including 2nd-year Monitoring Event after 3rd Injection– Total Organic Carbon**

**Table 3-3 Block I Injections, including 2nd-year Monitoring Event after 3rd Injection– Dehalococcoides ethenogenes and Ethene**

**Table 3-4 Block I Injections, including 2nd-year Monitoring Event after 3rd Injection – Field Parameters**

**Table 2-1**
**Block I Injection Parameters for Three Injection Events**
**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Parameter | 1st Injection | 2nd Injection | 3rd Injection | Units |
|---|---|---|---|---|
| Injection start | 3/13/2015 | 10/5/2015 | 7/31/2017 | |
| Injection end | 4/15/2015 | 12/22/2015 | 9/8/2017 | |
| Total injection wells | 8 | 8 | 6 | |
| Injection wells that did not accepted flow | 0 | 0 | 0 | |
| Total injected volume | 39,607 | 39,300 | 38,300 | gallons |
| Average injected volume per well | 4,950 | 4,910 | 6,380 | gallons |
| Design injection volume per well | 5,030 | 5,030 | 5,030 | gallons |
| Total design sodium lactate | | 1,460 | 1,460 | pounds (as 100% active ingredients) |
| Total injected sodium lactate | 730 | 1,470 | 1,600 | pounds (as 100% active ingredients) |
| Average sodium lactate per well | 91 | 184 | 267 | pounds (as 100% active ingredients) |
| Average lactate concentration as injected | 0.22% | 0.45% | 0.50% | |
| Design lactate concentration | | 0.50% | 0.58% | |
| Total injected sodium bicarbonate | 465 | 510 | 500 | pounds |
| Total design sodium bicarbonate | 360 | 450 | 450 | pounds |
| Average sodium bicarbonate per well | 58 | 64 | 83 | pounds |
| Average sodium bicarbonate as injected | 1.4 | 1.56 | 1.57 | grams per liter |

**Table 2-2. Summary of Injection Event #3**
**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Date | System status | Pumping rate (gpd) | Injection rate (gpd) | Lactate conc (mg/L) | IWN-3 | | | | | | IWN-6 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | TOC (mg/L) | TCE (µg/L) | VC (µg/L) | cis-1,2-DCE (µg/L) | Total (gallons) | Total VOCs (lbs) | TOC (mg/L) | TCE (µg/L) | VC (µg/L) | cis-1,2-DCE (µg/L) | Total (gallons) | VOCs (lbs) |
| 6/16/2017 | Started pumping from IWN-3 and IWN-6 | 500 | 0 | 0 | | | | | 0 | | | | | | 0 | |
| 7/7/2017 | Pumping from IWN-3 and IWN-6 | 550 | 0 | 0 | NS | 900 | 490 | 2,100 | 16,000 | 0.47 | NS | 2.4 | 10 | 79 | 1,000 | 0.00 |
| 7/31/2017 | Injection started; Continued pumping | 850 | 1,400 | 5,500 | 11 | 560 | 550 | 1,800 | 26,280 | 0.72 | NS | NS | NS | NS | 2,920 | 0.00223 |
| 8/10/2017 | Injection and | 850 | 1,400 | 5,500 | 300 | NS | NS | NS | 33,750 | 0.90 | 290 | NS | NS | NS | 3,750 | 0.00286 |
| 8/16/2017 | Shut down due to water line leak | 850 | 1,400 | 5,500 | | | | | 38,250 | 1.01 | | | | | 4,250 | 0.003 |
| 8/22/2017 | Restarted pumping | 710 | 0 | 0 | 50 | 21 | 380 | 990 | 38,250 | 1.01 | 39 | 2 | 27 | 48 | 4,250 | 0.003 |
| 8/24/2017 | Restarted injection | 710 | 1,400 | 5,500 | | | | | 39,600 | 1.02 | | | | | 4,400 | 0.003 |
| 8/30/2017 | Injection and | 735 | 1,400 | 5,500 | 260 | 99 | 460 | 1,500 | 43,470 | 1.09 | 190 | 1 | 17 | 38 | 4,830 | 0.004 |
| 9/7/2017 | Pumping stopped | 730 | 1,400 | 5,500 | | | | | 48,600 | 1.18 | | | | | 5,400 | 0.004 |
| 9/8/2017 | Injection stopped | 0 | 0 | 0 | | | | | 48,600 | 1.18 | | | | | 5,400 | 0.004 |

| | | | |
|---|---|---|---|
| conc | concentration | µg/L | micrograms per liter |
| cis-1,2-DCE | cis-1,2-dichloroethene | TOC | total organic carbon |
| gpd | gallons per day | TCE | trichloroethene |
| lbs | pounds | VC | vinyl chloride |
| mg/L | milligrams per liter | VOCs | volatile organic compounds |

**Table 3-1**
**Block I Injections, including 2nd-year Monitoring Event after 3rd Injection-- Volatile Organic Compounds**
**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Well ID | Trichloroethene (µg/L) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | 2400 | 42 | 10 | 10 | 4 | 390 | 14 | 63 | 7 | 26 | 120 |
| NMW-1I | 130 | 660 | 160 | 510 | 71 | 300 | 29 | 41 | 110 | 67 | 89 |
| NMW-2I | 9100 | 2300 | 4900 | 850 | 2300 | 3500 | 140 | 480 | 710 | 370 | 1200 |
| NMW-2S | 59 | 1000 | 480 | 23 | 140 | 74 | 14 | 7 | 40 | 8 | 23 |
| NMW-3I | 100 | 88 | 230 | 39 | 18 | 0 | 650 | 430 | 320 | 270 | 390 |
| *Averages* | *2358* | *818* | *1156* | *286* | *507* | *853* | *169* | *204* | *237* | *148* | *364* |
| *% change from baseline* | *0%* | *-65%* | *-51%* | *-88%* | *-79%* | *-64%* | *-93%* | *-91%* | *-90%* | *-94%* | *-85%* |

| Well ID | cis-1,2-Dichloroethene (µg/L) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | 710 | 5600 | 120 | 110 | 46 | 590 | 270 | 310 | 34 | 140 | 680 |
| NMW-1I | 890 | 780 | 170 | 1000 | 1100 | 920 | 140 | 190 | 360 | 210 | 280 |
| NMW-2I | 3900 | 2800 | 2800 | 5800 | 6500 | 3100 | 640 | 1000 | 1100 | 1000 | 1300 |
| NMW-2S | 700 | 980 | 880 | 540 | 930 | 520 | 130 | 190 | 160 | 34 | 30 |
| NMW-3I | 640 | 360 | 1300 | 140 | 620 | 1100 | 2300 | 2100 | 1900 | 1600 | 1400 |
| *Averages* | *1368* | *2104* | *1054* | *1518* | *1839* | *1246* | *696* | *758* | *711* | *597* | *738* |
| *% change from baseline* | *0%* | *54%* | *-23%* | *11%* | *34%* | *-9%* | *-49%* | *-45%* | *-48%* | *-56%* | *-46%* |

| Vinyl Chloride (µg/L) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Well ID | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | 85 | 560 | 250 | 76 | 48 | 290 | 310 | 180 | 11 | 42 | 190 |
| NMW-1I | 120 | 41 | 9 | 38 | 42 | 37 | 5 | 4 | 14 | 10 | 17 |
| NMW-2I | 150 | 97 | 94 | 1300 | 530 | 290 | 200 | 120 | 170 | 220 | 150 |
| NMW-2S | 220 | 99 | 180 | 200 | 210 | 130 | 70 | 81 | 41 | 31 | 13 |
| NMW-3I | 170 | 110 | 310 | 27 | 220 | 250 | 360 | 260 | 320 | 290 | 260 |
| *Averages* | *149* | *181.4* | *169* | *328* | *210* | *200* | *189* | *129* | *111* | *119* | *126* |
| *% change from baseline* | *0%* | *22%* | *13%* | *120%* | *41%* | *34%* | *27%* | *-13%* | *-25%* | *-20%* | *-15%* |

| *Parameter* | Baseline (Feb-14) | Post-1st Injection (May-15) | Post-1st Injection (July-15) | Post-2nd Injection (Jan-16) | Post-2nd Injection (March-16) | Post-2nd Injection (June-16) | Post-3rd Injection (Oct-17) | Post-3rd Injection (Dec-17) | Post-3rd Injection (Feb-18) | Post-3rd Injection (June-18) | Post-3rd Injection (May 19) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Average VOCs (µg/L) | 3875 | 3103 | 2379 | 2133 | 2556 | 2298 | 1054 | 1091 | 1059 | 864 | 1228 |
| Average VOCs (% change from baseline) | 0% | -20% | -39% | -45% | -34% | -41% | -73% | -72% | -73% | -78% | -68% |

µg/L - micrograms per liter
VOCs - volatile organic compounds

**Table 3-2**

**Block I Injections, including 2nd-year Monitoring Event after 3rd Injection- Total Organic Carbon**

**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Location ID | Total organic carbon (mg/L) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-1st Injection Event 3 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| te (month-year) | Feb-14 | May-15 | Jul-15 | Dec-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | 1.3 | 95 | 71 | NS | 30 | 8.6 | 0.31 | 1.3 | 2.6 | 4.3 | 4 | 3.1 |
| NMW-1I | 2.9 | 1.4 | 2 | NS | 31 | 2.7 | 0.7 | 7.1 | 6.9 | 7.3 | 7.4 | 9.1 |
| NMW-2I | 2.8 | 8.7 | 8.3 | NS | 3.1 | 1.3 | 0.84 | 63 | 11 | 1.9 | 0.58 | 2 |
| NMW-2S | 12 | 5.4 | 6.1 | NS | 5.3 | 5.9 | 7.7 | 7.4 | 6.6 | 6 | 8.7 | 8.8 |
| NMW-3I | 6.8 | 23 | 8.8 | NS | 13 | 5.4 | 8.8 | 7.3 | 7.6 | 7.3 | 7 | 8.6 |
| | | | | | | | | | | | | |
| Outfall-9 | 1.6 | 2.6 | 3.1 | 3.2 | 1.1 | 1.3 | 1.1 | 1 | 1.6 | 2 | | |
| CB-10A | 2.8 | 2.4 | | 2.5 | | | | | 4.1 | 2.3 | | |
| MH-10 | 2.4 | 16 | | 3.1 | | | | | 2.2 | 2.1 | | |
| CB-8 | | | | | | | | | | 1.6 | | |
| CB-8B | | | | | | | | | | 0.33 | | |
| *Monitoring well averages* | *5.16* | *26.7* | *19.2* | *NA* | *16.5* | *4.8* | *3.7* | *17.2* | *6.9* | *5.4* | *5.5* | *6.3* |

mg/L - milligrams per liter

NA - not applicable

NS - not sampled

**Table 3-3 Block I 3rd Injection, 2nd Year Monitoring Event - DHC and Ethene**
**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Well ID | Dehalococcoides (cells/mL) | | | | | | | | | | Ethene (µg/L) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline (Feb-14) | Post-1st Injection (July-15) | Post-2nd Injection (Jan-16) | Post-2nd Injection (March-16) | Post-2nd Injection (June-16) | Post-3rd Injection (Oct-17) | Post-3rd Injection (Dec-17) | Post-3rd Injection (Feb-18) | Post-3rd Injection (June-18) | Post-3rd Injection (May -19) | Post-1st injection (July-15) | Post-2nd Injection (Jan-16) | Post-2nd Injection (March-16) | Post-2nd Injection (June-16) | Post-2nd Injection (June-16) | Post-3rd Injection (Oct-17) | Post-3rd Injection (Dec-17) | Post-3rd Injection (Feb-18) | Post-3rd Injection (June-18) | Post-3rd Injection (May -19) |
| NMW-3I | 1.58E+03 | 3.09E+06 | 9.26E+04 | 2.87E+05 | 9.22E+03 | 5.83E+03 | 4.61E+03 | 3.50E+02 | 1.62E+02 | 7.20E+02 | 270 | 11 | 83 | | | 160 | 230 | 190 | 170 | 130 |
| MW-81B | | 1.96E+06 | 3.74E+05 | | 1.16E+05 | 1.22E+04 | 1.46E+04 | | | 8.19E+02 | 670 | 1000 | | 320 | 320 | 160 | 59 | 3.5 | 9.9 | 50.0 |
| NMW-1I | 4.10E+01 | | 1.58E+03 | 1.72E+03 | 2.99E+02 | | | | | | | 6.2 | 2.5 | 3.6 | 3.6 | | 1.3 | 2.9 | 2.0 | 3.2 |
| NMW-2I | | | | | | | | 2.40E+04 | 4.64E+03 | | | | | | | | 180 | | 190 | 110 |
| NMW-2S | | | | | | | | | | | | | | | | | 81 | | 70 | 17 |

cells/mL - cells per milliliter
µg/L - micrograms per liter

**Table 3-4**

**Block I Injections, including 2nd-year Monitoring Event after 3rd Injection-- Field Parameters**

**Lockheed Martin Middle River Complex, Middle River, Maryland**

| Well ID | Oxidation-reduction potential (mV) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | -93 | -166 | -130 | -120 | -162 | -151 | -115 | -23 | 129 | -55 | -81 |
| NMW-1I | 18 | 95 | 141 | 5 | -31 | 2 | 24 | 38 | 0 | 19 | 10 |
| NMW-2I | 74 | -5 | 47 | -61 | -56 | 9 | -102 | -96 | -49 | -19 | 56 |
| NMW-2S | -43 | -81 | -66 | -55 | -93 | -80 | -79 | -62 | -33 | -65 | -28 |
| NMW-3I | -37 | -137 | -118 | -132 | -148 | -132 | -76 | -81 | -32 | -67 | -58 |
| *Averages* | *-16.2* | *-58.8* | *-25.2* | *-72.6* | *-98* | *-70.4* | *-69.6* | *-44.8* | *3* | *-37.4* | *-20.2* |

| Well ID | Dissolved oxygen (mg/L) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | | 1.21 | 1.23 | | 2.17 | 1.56 | 2.16 | 1.22 | 0.9 | 1.18 | 0.23 |
| NMW-1I | | | 0.92 | | | 1.18 | 0.91 | 0.95 | 1.9 | 0 | 0.15 |
| NMW-2I | | | 0.81 | | | 1.9 | 1.72 | 0.46 | 1.16 | 0 | 0.13 |
| NMW-2S | | 0.52 | 0.98 | | | 1.84 | 1.88 | 0.43 | 5.63 | 0.1 | 0.1 |
| NMW-3I | | 0.02 | 1.05 | | | 1.68 | 1.72 | 0.42 | 3.5 | 0 | 0.22 |
| *Averages* | | *0.583* | *0.998* | | *2.17* | *1.632* | *1.678* | *0.696* | *2.618* | *0.256* | *0.166* |

| Well ID | pH | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline | Post-1st Injection Event 1 | Post-1st Injection Event 2 | Post-2nd Injection Event 1 | Post-2nd Injection Event 2 | Post-2nd Injection Event 3 | Post-3rd Injection Event 1 | Post-3rd Injection Event 2 | Post-3rd Injection Event 3 | Post-3rd Injection Event 4 | Post-3rd Injection Event 5 |
| Date (month-year) | Feb-14 | May-15 | Jul-15 | Jan-16 | Mar-16 | Jun-16 | Oct-17 | Dec-17 | Feb-18 | Jun-18 | May-19 |
| MW-81B | 6.6 | 6.63 | 6.44 | 6.68 | 6.83 | 6.78 | 6.5 | 6.55 | 9.6 | 7.21 | 6.74 |
| NMW-1I | 5.75 | 5.52 | 5.16 | 5.56 | 5.77 | 5.73 | 4 | 5.75 | 6.04 | 6.02 | 6.26 |
| NMW-2I | 5.47 | 5.5 | 5.7 | 6.14 | 5.88 | 5.7 | 4.78 | 6.34 | 6.28 | 5.96 | 5.79 |
| NMW-2S | 6.24 | 5.99 | 6.1 | 6.15 | 6.09 | 6.18 | 4.57 | 6.15 | 6.02 | 6.28 | 6.51 |
| NMW-3I | 6.21 | 6.65 | 6.27 | 6.85 | 6.43 | 6.44 | 6.24 | 6.27 | 6.54 | 6.25 | 6.41 |
| *Averages* | *6.054* | *6.058* | *5.934* | *6.276* | *6.2* | *6.166* | *5.218* | *6.212* | *6.896* | *6.344* | *6.342* |

mg/L - milligrams per liter

mV - millivolts

# APPENDICES

## Appendix A—Analytical Data (5th Monitoring Event)

## Appendix B—Field Data (5th Monitoring Event)

# APPENDIX A— ANALYTICAL DATA (5TH MONITORING EVENT)

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Job Number: 240-112111-1

Job Description: MRC Block I GW Sampling

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Mike Martin



Approved for release.
John McFadden
Project Manager I
5/22/2019 2:06 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
john.mcfadden@testamericainc.com
05/22/2019

cc: Tony Apanavage
Samantha Brenner
Final Data Tracking

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

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

# CASE NARRATIVE

## Client: Tetra Tech, Inc.

## Project: MRC Block I GW Sampling

## Report Number: 240-112111-1

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

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

The 9060A Total Organic Carbon analysis was performed at the Eurofins TestAmerica, Nashville laboratory.

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

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

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

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

**RECEIPT**
The samples were received on 5/7/2019 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6º C.

**VOLATILE ORGANIC COMPOUNDS (GCMS)**
Samples TB-050619 (240-112111-1), MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 05/08/2019 and 05/09/2019.

Samples MRC-MW-81B-050619 (240-112111-2)[20X], MRC-NMW-1I-050619 (240-112111-3)[10X], MRC-NMW-3I-050619 (240-112111-4)[40X] and MRC-NMW-2I-050619 (240-112111-5)[25X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) associated with batch 240-380285 recovered above the upper control limit for 1,1,2,2-tetrachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TB-050619 (240-112111-1), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4), MRC-NMW-2I-050619 (240-112111-5) and (CCVIS 240-380285/4).

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

**DISSOLVED GASES**
Samples MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 05/16/2019 and 05/17/2019.

Samples MRC-MW-81B-050619 (240-112111-2)[5X], MRC-NMW-3I-050619 (240-112111-4)[10X] and MRC-NMW-2I-050619 (240-112111-5)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

**TOTAL RECOVERABLE METALS (ICP)**
Samples MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C.

The samples were prepared on 05/08/2019 and analyzed on 05/09/2019.

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

**ALKALINITY**

Samples MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 05/15/2019.

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

**ANIONS**

Samples MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 05/17/2019.

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

**TOTAL ORGANIC CARBON**

Samples MRC-MW-81B-050619 (240-112111-2), MRC-NMW-1I-050619 (240-112111-3), MRC-NMW-3I-050619 (240-112111-4) and MRC-NMW-2I-050619 (240-112111-5) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 05/10/2019.

Total Organic Carbon was detected in method blank MB 490-594412/3 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The method blank for analytical batch 490-594412 contained Total Organic Carbon above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

# Detection Summary

Client: Tetra Tech, Inc.
Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Client Sample ID: TB-050619
## Lab Sample ID: 240-112111-1

No Detections.

## Client Sample ID: MRC-MW-81B-050619
## Lab Sample ID: 240-112111-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 4.9 | J | 20 | 3.4 | ug/L | 20 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 11 | J | 20 | 3.8 | ug/L | 20 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 680 | | 20 | 3.2 | ug/L | 20 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 5.2 | J | 20 | 3.8 | ug/L | 20 | | 8260C | Total/NA |
| Trichloroethene | 120 | | 20 | 2.0 | ug/L | 20 | | 8260C | Total/NA |
| Vinyl chloride | 190 | | 20 | 4.0 | ug/L | 20 | | 8260C | Total/NA |
| Ethene | 50 | | 1.0 | 0.11 | ug/L | 1 | | RSK-175 | Total/NA |
| Ethane | 4.8 | | 1.0 | 0.10 | ug/L | 1 | | RSK-175 | Total/NA |
| Methane | 7500 | | 5.0 | 0.87 | ug/L | 5 | | RSK-175 | Total/NA |
| Iron | 28000 | | 200 | 26 | ug/L | 1 | | 6010C | Total Recoverable |
| Manganese | 1700 | | 15 | 2.1 | ug/L | 1 | | 6010C | Total Recoverable |
| Alkalinity | 140 | | 5.0 | 2.6 | mg/L | 1 | | 2320B-1997 | Total/NA |
| Sulfate | 12 | | 1.0 | 0.35 | mg/L | 1 | | 300.0 | Total/NA |
| Total Organic Carbon | 3.1 | B | 1.0 | 0.50 | mg/L | 1 | | 9060A | Total/NA |

## Client Sample ID: MRC-NMW-1I-050619
## Lab Sample ID: 240-112111-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 2.8 | J | 10 | 1.7 | ug/L | 10 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 9.0 | J | 10 | 1.9 | ug/L | 10 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 280 | | 10 | 1.6 | ug/L | 10 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 1.9 | J | 10 | 1.9 | ug/L | 10 | | 8260C | Total/NA |
| Trichloroethene | 89 | | 10 | 1.0 | ug/L | 10 | | 8260C | Total/NA |
| Vinyl chloride | 17 | | 10 | 2.0 | ug/L | 10 | | 8260C | Total/NA |
| Ethene | 3.2 | | 1.0 | 0.11 | ug/L | 1 | | RSK-175 | Total/NA |
| Methane | 630 | | 1.0 | 0.17 | ug/L | 1 | | RSK-175 | Total/NA |
| Iron | 20000 | | 200 | 26 | ug/L | 1 | | 6010C | Total Recoverable |
| Manganese | 4800 | | 15 | 2.1 | ug/L | 1 | | 6010C | Total Recoverable |
| Alkalinity | 260 | | 5.0 | 2.6 | mg/L | 1 | | 2320B-1997 | Total/NA |
| Sulfate | 77 | | 1.0 | 0.35 | mg/L | 1 | | 300.0 | Total/NA |
| Total Organic Carbon | 9.1 | B | 1.0 | 0.50 | mg/L | 1 | | 9060A | Total/NA |

## Client Sample ID: MRC-NMW-3I-050619
## Lab Sample ID: 240-112111-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 9.7 | J | 40 | 7.6 | ug/L | 40 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 1400 | | 40 | 6.4 | ug/L | 40 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 13 | J | 40 | 7.6 | ug/L | 40 | | 8260C | Total/NA |
| Trichloroethene | 390 | | 40 | 4.0 | ug/L | 40 | | 8260C | Total/NA |
| Vinyl chloride | 260 | | 40 | 8.0 | ug/L | 40 | | 8260C | Total/NA |
| Ethene | 130 | | 1.0 | 0.11 | ug/L | 1 | | RSK-175 | Total/NA |
| Ethane | 63 | | 1.0 | 0.10 | ug/L | 1 | | RSK-175 | Total/NA |
| Methane | 9600 | | 10 | 1.7 | ug/L | 10 | | RSK-175 | Total/NA |
| Iron | 130000 | | 200 | 26 | ug/L | 1 | | 6010C | Total Recoverable |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MRC-NMW-3I-050619 (Continued) Lab Sample ID: 240-112111-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Manganese | 5200 | | 15 | 2.1 | ug/L | 1 | | 6010C | Total Recoverable |
| Alkalinity | 100 | | 5.0 | 2.6 | mg/L | 1 | | 2320B-1997 | Total/NA |
| Sulfate | 11 | | 1.0 | 0.35 | mg/L | 1 | | 300.0 | Total/NA |
| Total Organic Carbon | 8.6 | B | 1.0 | 0.50 | mg/L | 1 | | 9060A | Total/NA |

## Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 29 | | 25 | 4.8 | ug/L | 25 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 1300 | | 25 | 4.0 | ug/L | 25 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 17 | J | 25 | 4.8 | ug/L | 25 | | 8260C | Total/NA |
| Trichloroethene | 1200 | | 25 | 2.5 | ug/L | 25 | | 8260C | Total/NA |
| Vinyl chloride | 150 | | 25 | 5.0 | ug/L | 25 | | 8260C | Total/NA |
| Ethene | 110 | | 1.0 | 0.11 | ug/L | 1 | | RSK-175 | Total/NA |
| Ethane | 120 | | 1.0 | 0.10 | ug/L | 1 | | RSK-175 | Total/NA |
| Methane | 9500 | | 10 | 1.7 | ug/L | 10 | | RSK-175 | Total/NA |
| Iron | 18000 | | 200 | 26 | ug/L | 1 | | 6010C | Total Recoverable |
| Manganese | 2200 | | 15 | 2.1 | ug/L | 1 | | 6010C | Total Recoverable |
| Alkalinity | 49 | | 5.0 | 2.6 | mg/L | 1 | | 2320B-1997 | Total/NA |
| Sulfate | 5.4 | | 1.0 | 0.35 | mg/L | 1 | | 300.0 | Total/NA |
| Total Organic Carbon | 2.0 | B | 1.0 | 0.50 | mg/L | 1 | | 9060A | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: TB-050619 Lab Sample ID: 240-112111-1

**Date Collected: 05/06/19 00:00** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/08/19 18:32 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 18:32 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/08/19 18:32 | 1 |
| 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 | ug/L | | | 05/08/19 18:32 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/08/19 18:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/08/19 18:32 | 1 |
| Acetone | 5.4 | U | 10 | 5.4 | ug/L | | | 05/08/19 18:32 | 1 |
| Benzene | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 18:32 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/08/19 18:32 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/08/19 18:32 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/08/19 18:32 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/08/19 18:32 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/08/19 18:32 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/08/19 18:32 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/08/19 18:32 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 18:32 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/08/19 18:32 | 1 |
| cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/08/19 18:32 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/08/19 18:32 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/08/19 18:32 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/08/19 18:32 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/08/19 18:32 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/08/19 18:32 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/08/19 18:32 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/08/19 18:32 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/08/19 18:32 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/08/19 18:32 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/08/19 18:32 | 1 |
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/08/19 18:32 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 18:32 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/08/19 18:32 | 1 |
| trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/08/19 18:32 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/08/19 18:32 | 1 |
| Trichloroethene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/08/19 18:32 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/08/19 18:32 | 1 |
| Vinyl chloride | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/08/19 18:32 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/08/19 18:32 | 1 |

## Client Sample ID: TB-050619 — Lab Sample ID: 240-112111-1

**Date Collected: 05/06/19 00:00** — **Matrix: Water**
**Date Received: 05/07/19 09:25**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *99* | | *70 - 123* | | *05/08/19 18:32* | *1* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 128* | | *05/08/19 18:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *93* | | *59 - 120* | | *05/08/19 18:32* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *91* | | *70 - 121* | | *05/08/19 18:32* | *1* |

## Client Sample ID: MRC-MW-81B-050619 — Lab Sample ID: 240-112111-2

**Date Collected: 05/06/19 09:29** — **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 4.8 | U | 20 | 4.8 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,1,2,2-Tetrachloroethane | 2.6 | U | 20 | 2.6 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 8.2 | U | 20 | 8.2 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,1,2-Trichloroethane | 1.8 | U | 20 | 1.8 | ug/L | | | 05/09/19 19:26 | 20 |
| **1,1-Dichloroethane** | **4.9** | **J** | 20 | 3.4 | ug/L | | | 05/09/19 19:26 | 20 |
| **1,1-Dichloroethene** | **11** | **J** | 20 | 3.8 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,2,4-Trichlorobenzene | 5.2 | U | 20 | 5.2 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,2-Dibromo-3-Chloropropane | 18 | U | 40 | 18 | ug/L | | | 05/09/19 19:26 | 20 |
| Ethylene Dibromide | 2.4 | U | 20 | 2.4 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,2-Dichlorobenzene | 3.0 | U | 20 | 3.0 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,2-Dichloroethane | 4.2 | U | 20 | 4.2 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,2-Dichloropropane | 3.0 | U | 20 | 3.0 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,3-Dichlorobenzene | 3.0 | U | 20 | 3.0 | ug/L | | | 05/09/19 19:26 | 20 |
| 1,4-Dichlorobenzene | 3.2 | U | 20 | 3.2 | ug/L | | | 05/09/19 19:26 | 20 |
| 2-Butanone (MEK) | 23 | U | 200 | 23 | ug/L | | | 05/09/19 19:26 | 20 |
| 2-Hexanone | 11 | U | 200 | 11 | ug/L | | | 05/09/19 19:26 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 8.4 | U | 200 | 8.4 | ug/L | | | 05/09/19 19:26 | 20 |
| Acetone | 110 | U | 200 | 110 | ug/L | | | 05/09/19 19:26 | 20 |
| Benzene | 2.6 | U | 20 | 2.6 | ug/L | | | 05/09/19 19:26 | 20 |
| Dichlorobromomethane | 3.4 | U | 20 | 3.4 | ug/L | | | 05/09/19 19:26 | 20 |
| Bromoform | 15 | U | 20 | 15 | ug/L | | | 05/09/19 19:26 | 20 |
| Bromomethane | 8.4 | U | 20 | 8.4 | ug/L | | | 05/09/19 19:26 | 20 |
| Carbon disulfide | 5.6 | U | 20 | 5.6 | ug/L | | | 05/09/19 19:26 | 20 |
| Carbon tetrachloride | 5.2 | U | 20 | 5.2 | ug/L | | | 05/09/19 19:26 | 20 |
| Chlorobenzene | 2.8 | U | 20 | 2.8 | ug/L | | | 05/09/19 19:26 | 20 |
| Chloroethane | 17 | U | 20 | 17 | ug/L | | | 05/09/19 19:26 | 20 |
| Chloroform | 2.6 | U | 20 | 2.6 | ug/L | | | 05/09/19 19:26 | 20 |
| Chloromethane | 4.0 | U | 20 | 4.0 | ug/L | | | 05/09/19 19:26 | 20 |
| **cis-1,2-Dichloroethene** | **680** | | 20 | 3.2 | ug/L | | | 05/09/19 19:26 | 20 |
| cis-1,3-Dichloropropene | 12 | U | 20 | 12 | ug/L | | | 05/09/19 19:26 | 20 |
| Cyclohexane | 4.8 | U | 20 | 4.8 | ug/L | | | 05/09/19 19:26 | 20 |
| Chlorodibromomethane | 7.8 | U | 20 | 7.8 | ug/L | | | 05/09/19 19:26 | 20 |
| Dichlorodifluoromethane | 7.0 | U | 20 | 7.0 | ug/L | | | 05/09/19 19:26 | 20 |
| Ethylbenzene | 2.2 | U | 20 | 2.2 | ug/L | | | 05/09/19 19:26 | 20 |
| Isopropylbenzene | 1.8 | U | 20 | 1.8 | ug/L | | | 05/09/19 19:26 | 20 |
| Methyl acetate | 34 | U | 200 | 34 | ug/L | | | 05/09/19 19:26 | 20 |
| Methyl tert-butyl ether | 1.4 | U | 20 | 1.4 | ug/L | | | 05/09/19 19:26 | 20 |
| Methylcyclohexane | 6.6 | U | 20 | 6.6 | ug/L | | | 05/09/19 19:26 | 20 |
| Methylene Chloride | 52 | U | 100 | 52 | ug/L | | | 05/09/19 19:26 | 20 |

## Client Sample ID: MRC-MW-81B-050619 Lab Sample ID: 240-112111-2

**Date Collected: 05/06/19 09:29** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Styrene | 2.0 | U | 20 | 2.0 | ug/L | | | 05/09/19 19:26 | 20 |
| Tetrachloroethene | 3.0 | U | 20 | 3.0 | ug/L | | | 05/09/19 19:26 | 20 |
| Toluene | 2.8 | U | 20 | 2.8 | ug/L | | | 05/09/19 19:26 | 20 |
| **trans-1,2-Dichloroethene** | **5.2** | **J** | 20 | 3.8 | ug/L | | | 05/09/19 19:26 | 20 |
| trans-1,3-Dichloropropene | 13 | U | 20 | 13 | ug/L | | | 05/09/19 19:26 | 20 |
| **Trichloroethene** | **120** | | 20 | 2.0 | ug/L | | | 05/09/19 19:26 | 20 |
| Trichlorofluoromethane | 9.0 | U | 20 | 9.0 | ug/L | | | 05/09/19 19:26 | 20 |
| **Vinyl chloride** | **190** | | 20 | 4.0 | ug/L | | | 05/09/19 19:26 | 20 |
| Xylenes, Total | 3.0 | U | 40 | 3.0 | ug/L | | | 05/09/19 19:26 | 20 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 123* | | *05/09/19 19:26* | *20* |
| *Dibromofluoromethane (Surr)* | *101* | | *75 - 128* | | *05/09/19 19:26* | *20* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *59 - 120* | | *05/09/19 19:26* | *20* |
| *1,2-Dichloroethane-d4 (Surr)* | *92* | | *70 - 121* | | *05/09/19 19:26* | *20* |

### Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Ethene** | **50** | | 1.0 | 0.11 | ug/L | | | 05/16/19 20:03 | 1 |
| **Ethane** | **4.8** | | 1.0 | 0.10 | ug/L | | | 05/16/19 20:03 | 1 |
| **Methane** | **7500** | | 5.0 | 0.87 | ug/L | | | 05/17/19 16:10 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *82* | | *60 - 140* | | *05/16/19 20:03* | *1* |
| *1,1,1-Trifluoroethane* | *87* | | *60 - 140* | | *05/17/19 16:10* | *5* |

### Method: 6010C - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Iron** | **28000** | | 200 | 26 | ug/L | | 05/08/19 14:00 | 05/09/19 16:46 | 1 |
| **Manganese** | **1700** | | 15 | 2.1 | ug/L | | 05/08/19 14:00 | 05/09/19 16:46 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity** | **140** | | 5.0 | 2.6 | mg/L | | | 05/15/19 13:51 | 1 |
| **Sulfate** | **12** | | 1.0 | 0.35 | mg/L | | | 05/17/19 22:06 | 1 |
| **Total Organic Carbon** | **3.1** | **B** | 1.0 | 0.50 | mg/L | | | 05/10/19 15:29 | 1 |

## Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

**Date Collected: 05/06/19 10:53** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 2.4 | U | 10 | 2.4 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,1,2,2-Tetrachloroethane | 1.3 | U | 10 | 1.3 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.1 | U | 10 | 4.1 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,1,2-Trichloroethane | 0.90 | U | 10 | 0.90 | ug/L | | | 05/08/19 19:16 | 10 |
| **1,1-Dichloroethane** | **2.8** | **J** | 10 | 1.7 | ug/L | | | 05/08/19 19:16 | 10 |
| **1,1-Dichloroethene** | **9.0** | **J** | 10 | 1.9 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,2,4-Trichlorobenzene | 2.6 | U | 10 | 2.6 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,2-Dibromo-3-Chloropropane | 9.1 | U | 20 | 9.1 | ug/L | | | 05/08/19 19:16 | 10 |

## Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

**Date Collected: 05/06/19 10:53** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethylene Dibromide | 1.2 | U | 10 | 1.2 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,2-Dichlorobenzene | 1.5 | U | 10 | 1.5 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,2-Dichloroethane | 2.1 | U | 10 | 2.1 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,2-Dichloropropane | 1.5 | U | 10 | 1.5 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,3-Dichlorobenzene | 1.5 | U | 10 | 1.5 | ug/L | | | 05/08/19 19:16 | 10 |
| 1,4-Dichlorobenzene | 1.6 | U | 10 | 1.6 | ug/L | | | 05/08/19 19:16 | 10 |
| 2-Butanone (MEK) | 12 | U | 100 | 12 | ug/L | | | 05/08/19 19:16 | 10 |
| 2-Hexanone | 5.4 | U | 100 | 5.4 | ug/L | | | 05/08/19 19:16 | 10 |
| 4-Methyl-2-pentanone (MIBK) | 4.2 | U | 100 | 4.2 | ug/L | | | 05/08/19 19:16 | 10 |
| Acetone | 54 | U | 100 | 54 | ug/L | | | 05/08/19 19:16 | 10 |
| Benzene | 1.3 | U | 10 | 1.3 | ug/L | | | 05/08/19 19:16 | 10 |
| Dichlorobromomethane | 1.7 | U | 10 | 1.7 | ug/L | | | 05/08/19 19:16 | 10 |
| Bromoform | 7.6 | U | 10 | 7.6 | ug/L | | | 05/08/19 19:16 | 10 |
| Bromomethane | 4.2 | U | 10 | 4.2 | ug/L | | | 05/08/19 19:16 | 10 |
| Carbon disulfide | 2.8 | U | 10 | 2.8 | ug/L | | | 05/08/19 19:16 | 10 |
| Carbon tetrachloride | 2.6 | U | 10 | 2.6 | ug/L | | | 05/08/19 19:16 | 10 |
| Chlorobenzene | 1.4 | U | 10 | 1.4 | ug/L | | | 05/08/19 19:16 | 10 |
| Chloroethane | 8.3 | U | 10 | 8.3 | ug/L | | | 05/08/19 19:16 | 10 |
| Chloroform | 1.3 | U | 10 | 1.3 | ug/L | | | 05/08/19 19:16 | 10 |
| Chloromethane | 2.0 | U | 10 | 2.0 | ug/L | | | 05/08/19 19:16 | 10 |
| **cis-1,2-Dichloroethene** | **280** | | 10 | 1.6 | ug/L | | | 05/08/19 19:16 | 10 |
| cis-1,3-Dichloropropene | 6.1 | U | 10 | 6.1 | ug/L | | | 05/08/19 19:16 | 10 |
| Cyclohexane | 2.4 | U | 10 | 2.4 | ug/L | | | 05/08/19 19:16 | 10 |
| Chlorodibromomethane | 3.9 | U | 10 | 3.9 | ug/L | | | 05/08/19 19:16 | 10 |
| Dichlorodifluoromethane | 3.5 | U | 10 | 3.5 | ug/L | | | 05/08/19 19:16 | 10 |
| Ethylbenzene | 1.1 | U | 10 | 1.1 | ug/L | | | 05/08/19 19:16 | 10 |
| Isopropylbenzene | 0.90 | U | 10 | 0.90 | ug/L | | | 05/08/19 19:16 | 10 |
| Methyl acetate | 17 | U | 100 | 17 | ug/L | | | 05/08/19 19:16 | 10 |
| Methyl tert-butyl ether | 0.70 | U | 10 | 0.70 | ug/L | | | 05/08/19 19:16 | 10 |
| Methylcyclohexane | 3.3 | U | 10 | 3.3 | ug/L | | | 05/08/19 19:16 | 10 |
| Methylene Chloride | 26 | U | 50 | 26 | ug/L | | | 05/08/19 19:16 | 10 |
| Styrene | 1.0 | U | 10 | 1.0 | ug/L | | | 05/08/19 19:16 | 10 |
| Tetrachloroethene | 1.5 | U | 10 | 1.5 | ug/L | | | 05/08/19 19:16 | 10 |
| Toluene | 1.4 | U | 10 | 1.4 | ug/L | | | 05/08/19 19:16 | 10 |
| **trans-1,2-Dichloroethene** | **1.9** | **J** | 10 | 1.9 | ug/L | | | 05/08/19 19:16 | 10 |
| trans-1,3-Dichloropropene | 6.7 | U | 10 | 6.7 | ug/L | | | 05/08/19 19:16 | 10 |
| **Trichloroethene** | **89** | | 10 | 1.0 | ug/L | | | 05/08/19 19:16 | 10 |
| Trichlorofluoromethane | 4.5 | U | 10 | 4.5 | ug/L | | | 05/08/19 19:16 | 10 |
| **Vinyl chloride** | **17** | | 10 | 2.0 | ug/L | | | 05/08/19 19:16 | 10 |
| Xylenes, Total | 1.5 | U | 20 | 1.5 | ug/L | | | 05/08/19 19:16 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *70 - 123* | | *05/08/19 19:16* | *10* |
| *Dibromofluoromethane (Surr)* | *97* | | *75 - 128* | | *05/08/19 19:16* | *10* |
| *4-Bromofluorobenzene (Surr)* | *91* | | *59 - 120* | | *05/08/19 19:16* | *10* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *70 - 121* | | *05/08/19 19:16* | *10* |

### Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Ethene** | **3.2** | | 1.0 | 0.11 | ug/L | | | 05/16/19 20:21 | 1 |

## Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

**Date Collected: 05/06/19 10:53** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: RSK-175 - Dissolved Gases (GC) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethane | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/16/19 20:21 | 1 |
| **Methane** | **630** | | 1.0 | 0.17 | ug/L | | | 05/16/19 20:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *80* | | *60 - 140* | | *05/16/19 20:21* | *1* |

### Method: 6010C - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Iron** | **20000** | | 200 | 26 | ug/L | | 05/08/19 14:00 | 05/09/19 16:59 | 1 |
| **Manganese** | **4800** | | 15 | 2.1 | ug/L | | 05/08/19 14:00 | 05/09/19 16:59 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity** | **260** | | 5.0 | 2.6 | mg/L | | | 05/15/19 13:56 | 1 |
| **Sulfate** | **77** | | 1.0 | 0.35 | mg/L | | | 05/17/19 23:08 | 1 |
| **Total Organic Carbon** | **9.1** | **B** | 1.0 | 0.50 | mg/L | | | 05/10/19 15:53 | 1 |

## Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

**Date Collected: 05/06/19 13:32** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 9.6 | U | 40 | 9.6 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,1,2,2-Tetrachloroethane | 5.2 | U | 40 | 5.2 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 16 | U | 40 | 16 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,1,2-Trichloroethane | 3.6 | U | 40 | 3.6 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,1-Dichloroethane | 6.8 | U | 40 | 6.8 | ug/L | | | 05/08/19 19:39 | 40 |
| **1,1-Dichloroethene** | **9.7** | **J** | 40 | 7.6 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,2,4-Trichlorobenzene | 10 | U | 40 | 10 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,2-Dibromo-3-Chloropropane | 36 | U | 80 | 36 | ug/L | | | 05/08/19 19:39 | 40 |
| Ethylene Dibromide | 4.8 | U | 40 | 4.8 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,2-Dichlorobenzene | 6.0 | U | 40 | 6.0 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,2-Dichloroethane | 8.4 | U | 40 | 8.4 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,2-Dichloropropane | 6.0 | U | 40 | 6.0 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,3-Dichlorobenzene | 6.0 | U | 40 | 6.0 | ug/L | | | 05/08/19 19:39 | 40 |
| 1,4-Dichlorobenzene | 6.4 | U | 40 | 6.4 | ug/L | | | 05/08/19 19:39 | 40 |
| 2-Butanone (MEK) | 46 | U | 400 | 46 | ug/L | | | 05/08/19 19:39 | 40 |
| 2-Hexanone | 22 | U | 400 | 22 | ug/L | | | 05/08/19 19:39 | 40 |
| 4-Methyl-2-pentanone (MIBK) | 17 | U | 400 | 17 | ug/L | | | 05/08/19 19:39 | 40 |
| Acetone | 220 | U | 400 | 220 | ug/L | | | 05/08/19 19:39 | 40 |
| Benzene | 5.2 | U | 40 | 5.2 | ug/L | | | 05/08/19 19:39 | 40 |
| Dichlorobromomethane | 6.8 | U | 40 | 6.8 | ug/L | | | 05/08/19 19:39 | 40 |
| Bromoform | 30 | U | 40 | 30 | ug/L | | | 05/08/19 19:39 | 40 |
| Bromomethane | 17 | U | 40 | 17 | ug/L | | | 05/08/19 19:39 | 40 |
| Carbon disulfide | 11 | U | 40 | 11 | ug/L | | | 05/08/19 19:39 | 40 |
| Carbon tetrachloride | 10 | U | 40 | 10 | ug/L | | | 05/08/19 19:39 | 40 |
| Chlorobenzene | 5.6 | U | 40 | 5.6 | ug/L | | | 05/08/19 19:39 | 40 |
| Chloroethane | 33 | U | 40 | 33 | ug/L | | | 05/08/19 19:39 | 40 |
| Chloroform | 5.2 | U | 40 | 5.2 | ug/L | | | 05/08/19 19:39 | 40 |
| Chloromethane | 8.0 | U | 40 | 8.0 | ug/L | | | 05/08/19 19:39 | 40 |

## Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

**Date Collected: 05/06/19 13:32** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **cis-1,2-Dichloroethene** | **1400** | | 40 | 6.4 | ug/L | | | 05/08/19 19:39 | 40 |
| cis-1,3-Dichloropropene | 24 | U | 40 | 24 | ug/L | | | 05/08/19 19:39 | 40 |
| Cyclohexane | 9.6 | U | 40 | 9.6 | ug/L | | | 05/08/19 19:39 | 40 |
| Chlorodibromomethane | 16 | U | 40 | 16 | ug/L | | | 05/08/19 19:39 | 40 |
| Dichlorodifluoromethane | 14 | U | 40 | 14 | ug/L | | | 05/08/19 19:39 | 40 |
| Ethylbenzene | 4.4 | U | 40 | 4.4 | ug/L | | | 05/08/19 19:39 | 40 |
| Isopropylbenzene | 3.6 | U | 40 | 3.6 | ug/L | | | 05/08/19 19:39 | 40 |
| Methyl acetate | 69 | U | 400 | 69 | ug/L | | | 05/08/19 19:39 | 40 |
| Methyl tert-butyl ether | 2.8 | U | 40 | 2.8 | ug/L | | | 05/08/19 19:39 | 40 |
| Methylcyclohexane | 13 | U | 40 | 13 | ug/L | | | 05/08/19 19:39 | 40 |
| Methylene Chloride | 100 | U | 200 | 100 | ug/L | | | 05/08/19 19:39 | 40 |
| Styrene | 4.0 | U | 40 | 4.0 | ug/L | | | 05/08/19 19:39 | 40 |
| Tetrachloroethene | 6.0 | U | 40 | 6.0 | ug/L | | | 05/08/19 19:39 | 40 |
| Toluene | 5.6 | U | 40 | 5.6 | ug/L | | | 05/08/19 19:39 | 40 |
| **trans-1,2-Dichloroethene** | **13** | **J** | 40 | 7.6 | ug/L | | | 05/08/19 19:39 | 40 |
| trans-1,3-Dichloropropene | 27 | U | 40 | 27 | ug/L | | | 05/08/19 19:39 | 40 |
| **Trichloroethene** | **390** | | 40 | 4.0 | ug/L | | | 05/08/19 19:39 | 40 |
| Trichlorofluoromethane | 18 | U | 40 | 18 | ug/L | | | 05/08/19 19:39 | 40 |
| **Vinyl chloride** | **260** | | 40 | 8.0 | ug/L | | | 05/08/19 19:39 | 40 |
| Xylenes, Total | 6.0 | U | 80 | 6.0 | ug/L | | | 05/08/19 19:39 | 40 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *70 - 123* | | *05/08/19 19:39* | *40* |
| *Dibromofluoromethane (Surr)* | *97* | | *75 - 128* | | *05/08/19 19:39* | *40* |
| *4-Bromofluorobenzene (Surr)* | *91* | | *59 - 120* | | *05/08/19 19:39* | *40* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *70 - 121* | | *05/08/19 19:39* | *40* |

### Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Ethene** | **130** | | 1.0 | 0.11 | ug/L | | | 05/16/19 20:38 | 1 |
| **Ethane** | **63** | | 1.0 | 0.10 | ug/L | | | 05/16/19 20:38 | 1 |
| **Methane** | **9600** | | 10 | 1.7 | ug/L | | | 05/17/19 16:27 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *82* | | *60 - 140* | | *05/16/19 20:38* | *1* |
| *1,1,1-Trifluoroethane* | *86* | | *60 - 140* | | *05/17/19 16:27* | *10* |

### Method: 6010C - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Iron** | **130000** | | 200 | 26 | ug/L | | 05/08/19 14:00 | 05/09/19 17:04 | 1 |
| **Manganese** | **5200** | | 15 | 2.1 | ug/L | | 05/08/19 14:00 | 05/09/19 17:04 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity** | **100** | | 5.0 | 2.6 | mg/L | | | 05/15/19 14:01 | 1 |
| **Sulfate** | **11** | | 1.0 | 0.35 | mg/L | | | 05/17/19 23:29 | 1 |
| **Total Organic Carbon** | **8.6** | **B** | 1.0 | 0.50 | mg/L | | | 05/10/19 16:19 | 1 |

## Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

**Date Collected: 05/06/19 14:57** **Matrix: Water**
**Date Received: 05/07/19 09:25**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 6.0 | U | 25 | 6.0 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,1,2,2-Tetrachloroethane | 3.3 | U | 25 | 3.3 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10 | U | 25 | 10 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,1,2-Trichloroethane | 2.3 | U | 25 | 2.3 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,1-Dichloroethane | 4.3 | U | 25 | 4.3 | ug/L | | | 05/08/19 20:01 | 25 |
| **1,1-Dichloroethene** | **29** | | 25 | 4.8 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,2,4-Trichlorobenzene | 6.5 | U | 25 | 6.5 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,2-Dibromo-3-Chloropropane | 23 | U | 50 | 23 | ug/L | | | 05/08/19 20:01 | 25 |
| Ethylene Dibromide | 3.0 | U | 25 | 3.0 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,2-Dichlorobenzene | 3.8 | U | 25 | 3.8 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,2-Dichloroethane | 5.3 | U | 25 | 5.3 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,2-Dichloropropane | 3.8 | U | 25 | 3.8 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,3-Dichlorobenzene | 3.8 | U | 25 | 3.8 | ug/L | | | 05/08/19 20:01 | 25 |
| 1,4-Dichlorobenzene | 4.0 | U | 25 | 4.0 | ug/L | | | 05/08/19 20:01 | 25 |
| 2-Butanone (MEK) | 29 | U | 250 | 29 | ug/L | | | 05/08/19 20:01 | 25 |
| 2-Hexanone | 14 | U | 250 | 14 | ug/L | | | 05/08/19 20:01 | 25 |
| 4-Methyl-2-pentanone (MIBK) | 11 | U | 250 | 11 | ug/L | | | 05/08/19 20:01 | 25 |
| Acetone | 140 | U | 250 | 140 | ug/L | | | 05/08/19 20:01 | 25 |
| Benzene | 3.3 | U | 25 | 3.3 | ug/L | | | 05/08/19 20:01 | 25 |
| Dichlorobromomethane | 4.3 | U | 25 | 4.3 | ug/L | | | 05/08/19 20:01 | 25 |
| Bromoform | 19 | U | 25 | 19 | ug/L | | | 05/08/19 20:01 | 25 |
| Bromomethane | 11 | U | 25 | 11 | ug/L | | | 05/08/19 20:01 | 25 |
| Carbon disulfide | 7.0 | U | 25 | 7.0 | ug/L | | | 05/08/19 20:01 | 25 |
| Carbon tetrachloride | 6.5 | U | 25 | 6.5 | ug/L | | | 05/08/19 20:01 | 25 |
| Chlorobenzene | 3.5 | U | 25 | 3.5 | ug/L | | | 05/08/19 20:01 | 25 |
| Chloroethane | 21 | U | 25 | 21 | ug/L | | | 05/08/19 20:01 | 25 |
| Chloroform | 3.3 | U | 25 | 3.3 | ug/L | | | 05/08/19 20:01 | 25 |
| Chloromethane | 5.0 | U | 25 | 5.0 | ug/L | | | 05/08/19 20:01 | 25 |
| **cis-1,2-Dichloroethene** | **1300** | | 25 | 4.0 | ug/L | | | 05/08/19 20:01 | 25 |
| cis-1,3-Dichloropropene | 15 | U | 25 | 15 | ug/L | | | 05/08/19 20:01 | 25 |
| Cyclohexane | 6.0 | U | 25 | 6.0 | ug/L | | | 05/08/19 20:01 | 25 |
| Chlorodibromomethane | 9.8 | U | 25 | 9.8 | ug/L | | | 05/08/19 20:01 | 25 |
| Dichlorodifluoromethane | 8.8 | U | 25 | 8.8 | ug/L | | | 05/08/19 20:01 | 25 |
| Ethylbenzene | 2.8 | U | 25 | 2.8 | ug/L | | | 05/08/19 20:01 | 25 |
| Isopropylbenzene | 2.3 | U | 25 | 2.3 | ug/L | | | 05/08/19 20:01 | 25 |
| Methyl acetate | 43 | U | 250 | 43 | ug/L | | | 05/08/19 20:01 | 25 |
| Methyl tert-butyl ether | 1.8 | U | 25 | 1.8 | ug/L | | | 05/08/19 20:01 | 25 |
| Methylcyclohexane | 8.3 | U | 25 | 8.3 | ug/L | | | 05/08/19 20:01 | 25 |
| Methylene Chloride | 66 | U | 130 | 66 | ug/L | | | 05/08/19 20:01 | 25 |
| Styrene | 2.5 | U | 25 | 2.5 | ug/L | | | 05/08/19 20:01 | 25 |
| Tetrachloroethene | 3.8 | U | 25 | 3.8 | ug/L | | | 05/08/19 20:01 | 25 |
| Toluene | 3.5 | U | 25 | 3.5 | ug/L | | | 05/08/19 20:01 | 25 |
| **trans-1,2-Dichloroethene** | **17** | **J** | 25 | 4.8 | ug/L | | | 05/08/19 20:01 | 25 |
| trans-1,3-Dichloropropene | 17 | U | 25 | 17 | ug/L | | | 05/08/19 20:01 | 25 |
| **Trichloroethene** | **1200** | | 25 | 2.5 | ug/L | | | 05/08/19 20:01 | 25 |
| Trichlorofluoromethane | 11 | U | 25 | 11 | ug/L | | | 05/08/19 20:01 | 25 |
| **Vinyl chloride** | **150** | | 25 | 5.0 | ug/L | | | 05/08/19 20:01 | 25 |
| Xylenes, Total | 3.8 | U | 50 | 3.8 | ug/L | | | 05/08/19 20:01 | 25 |

## Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

**Date Collected: 05/06/19 14:57** **Matrix: Water**
**Date Received: 05/07/19 09:25**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 123* | | *05/08/19 20:01* | *25* |
| *Dibromofluoromethane (Surr)* | *102* | | *75 - 128* | | *05/08/19 20:01* | *25* |
| *4-Bromofluorobenzene (Surr)* | *97* | | *59 - 120* | | *05/08/19 20:01* | *25* |
| *1,2-Dichloroethane-d4 (Surr)* | *93* | | *70 - 121* | | *05/08/19 20:01* | *25* |

### Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Ethene** | **110** | | 1.0 | 0.11 | ug/L | | | 05/16/19 20:55 | 1 |
| **Ethane** | **120** | | 1.0 | 0.10 | ug/L | | | 05/16/19 20:55 | 1 |
| **Methane** | **9500** | | 10 | 1.7 | ug/L | | | 05/17/19 16:45 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *81* | | *60 - 140* | | *05/16/19 20:55* | *1* |
| *1,1,1-Trifluoroethane* | *87* | | *60 - 140* | | *05/17/19 16:45* | *10* |

### Method: 6010C - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Iron** | **18000** | | 200 | 26 | ug/L | | 05/08/19 14:00 | 05/09/19 17:09 | 1 |
| **Manganese** | **2200** | | 15 | 2.1 | ug/L | | 05/08/19 14:00 | 05/09/19 17:09 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity** | **49** | | 5.0 | 2.6 | mg/L | | | 05/15/19 14:05 | 1 |
| **Sulfate** | **5.4** | | 1.0 | 0.35 | mg/L | | | 05/17/19 23:49 | 1 |
| **Total Organic Carbon** | **2.0** | **B** | 1.0 | 0.50 | mg/L | | | 05/10/19 16:45 | 1 |

# Default Detection Limits

Client: Tetra Tech, Inc.
Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | RL | MDL | Units |
|---|---|---|---|
| 1,1,1-Trichloroethane | 1.0 | 0.24 | ug/L |
| 1,1,2,2-Tetrachloroethane | 1.0 | 0.13 | ug/L |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.0 | 0.41 | ug/L |
| 1,1,2-Trichloroethane | 1.0 | 0.090 | ug/L |
| 1,1-Dichloroethane | 1.0 | 0.17 | ug/L |
| 1,1-Dichloroethene | 1.0 | 0.19 | ug/L |
| 1,2,4-Trichlorobenzene | 1.0 | 0.26 | ug/L |
| 1,2-Dibromo-3-Chloropropane | 2.0 | 0.91 | ug/L |
| 1,2-Dichlorobenzene | 1.0 | 0.15 | ug/L |
| 1,2-Dichloroethane | 1.0 | 0.21 | ug/L |
| 1,2-Dichloropropane | 1.0 | 0.15 | ug/L |
| 1,3-Dichlorobenzene | 1.0 | 0.15 | ug/L |
| 1,4-Dichlorobenzene | 1.0 | 0.16 | ug/L |
| 2-Butanone (MEK) | 10 | 1.2 | ug/L |
| 2-Hexanone | 10 | 0.54 | ug/L |
| 4-Methyl-2-pentanone (MIBK) | 10 | 0.42 | ug/L |
| Acetone | 10 | 5.4 | ug/L |
| Benzene | 1.0 | 0.13 | ug/L |
| Bromoform | 1.0 | 0.76 | ug/L |
| Bromomethane | 1.0 | 0.42 | ug/L |
| Carbon disulfide | 1.0 | 0.28 | ug/L |
| Carbon tetrachloride | 1.0 | 0.26 | ug/L |
| Chlorobenzene | 1.0 | 0.14 | ug/L |
| Chlorodibromomethane | 1.0 | 0.39 | ug/L |
| Chloroethane | 1.0 | 0.83 | ug/L |
| Chloroform | 1.0 | 0.13 | ug/L |
| Chloromethane | 1.0 | 0.20 | ug/L |
| cis-1,2-Dichloroethene | 1.0 | 0.16 | ug/L |
| cis-1,3-Dichloropropene | 1.0 | 0.61 | ug/L |
| Cyclohexane | 1.0 | 0.24 | ug/L |
| Dichlorobromomethane | 1.0 | 0.17 | ug/L |
| Dichlorodifluoromethane | 1.0 | 0.35 | ug/L |
| Ethylbenzene | 1.0 | 0.11 | ug/L |
| Ethylene Dibromide | 1.0 | 0.12 | ug/L |
| Isopropylbenzene | 1.0 | 0.090 | ug/L |
| Methyl acetate | 10 | 1.7 | ug/L |
| Methyl tert-butyl ether | 1.0 | 0.070 | ug/L |
| Methylcyclohexane | 1.0 | 0.33 | ug/L |
| Methylene Chloride | 5.0 | 2.6 | ug/L |
| Styrene | 1.0 | 0.10 | ug/L |
| Tetrachloroethene | 1.0 | 0.15 | ug/L |
| Toluene | 1.0 | 0.14 | ug/L |
| trans-1,2-Dichloroethene | 1.0 | 0.19 | ug/L |
| trans-1,3-Dichloropropene | 1.0 | 0.67 | ug/L |
| Trichloroethene | 1.0 | 0.10 | ug/L |
| Trichlorofluoromethane | 1.0 | 0.45 | ug/L |
| Vinyl chloride | 1.0 | 0.20 | ug/L |
| Xylenes, Total | 2.0 | 0.15 | ug/L |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Ethane | 1.0 | 0.10 | ug/L |

# Default Detection Limits

Client: Tetra Tech, Inc. Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Ethene | 1.0 | 0.11 | ug/L |
| Methane | 1.0 | 0.17 | ug/L |

## Method: 6010C - Metals (ICP) - Total Recoverable

### Prep: 3005A

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Iron | 200 | 26 | ug/L |
| Manganese | 15 | 2.1 | ug/L |

## General Chemistry

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Alkalinity | 5.0 | 2.6 | mg/L |
| Sulfate | 1.0 | 0.35 | mg/L |
| Total Organic Carbon | 1.0 | 0.50 | mg/L |

# Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block I GW Sampling

Job ID: 240-112111-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TOL | DBFM | BFB | DCA |
| Lab Sample ID | Client Sample ID | (70-123) | (75-128) | (59-120) | (70-121) |
| 240-112111-1 | TB-050619 | 99 | 96 | 93 | 91 |
| 240-112111-2 | MRC-MW-81B-050619 | 98 | 101 | 92 | 92 |
| 240-112111-2 MS | MRC-MW-81B-050619 | 104 | 97 | 101 | 91 |
| 240-112111-2 MSD | MRC-MW-81B-050619 | 100 | 100 | 100 | 90 |
| 240-112111-3 | MRC-NMW-1I-050619 | 96 | 97 | 91 | 89 |
| 240-112111-4 | MRC-NMW-3I-050619 | 96 | 97 | 91 | 90 |
| 240-112111-4 MS | MRC-NMW-3I-050619 | 102 | 96 | 99 | 89 |
| 240-112111-4 MSD | MRC-NMW-3I-050619 | 96 | 94 | 95 | 85 |
| 240-112111-5 | MRC-NMW-2I-050619 | 100 | 102 | 97 | 93 |
| LCS 240-380285/5 | Lab Control Sample | 103 | 99 | 100 | 90 |
| LCS 240-380508/5 | Lab Control Sample | 101 | 96 | 99 | 90 |
| MB 240-380285/8 | Method Blank | 95 | 99 | 93 | 90 |
| MB 240-380508/8 | Method Blank | 98 | 98 | 93 | 91 |

**Surrogate Legend**

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

## Method: RSK-175 - Dissolved Gases (GC)

**Matrix: Water**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | TFE2 |
| Lab Sample ID | Client Sample ID | (60-140) |
| 240-111881-F-3 MS | Matrix Spike | 84 |
| 240-111881-F-3 MSD | Matrix Spike Duplicate | 84 |
| 240-112111-2 | MRC-MW-81B-050619 | 82 |
| 240-112111-2 | MRC-MW-81B-050619 | 87 |
| 240-112111-3 | MRC-NMW-1I-050619 | 80 |
| 240-112111-4 | MRC-NMW-3I-050619 | 82 |
| 240-112111-4 | MRC-NMW-3I-050619 | 86 |
| 240-112111-5 | MRC-NMW-2I-050619 | 81 |
| 240-112111-5 | MRC-NMW-2I-050619 | 87 |
| 240-112111-5 MS | MRC-NMW-2I-050619 | 86 |
| 240-112111-5 MSD | MRC-NMW-2I-050619 | 87 |
| LCS 240-381636/5 | Lab Control Sample | 85 |
| LCS 240-381892/5 | Lab Control Sample | 87 |
| MB 240-381636/4 | Method Blank | 85 |
| MB 240-381892/4 | Method Blank | 86 |

**Surrogate Legend**

TFE = 1,1,1-Trifluoroethane

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 240-380285/8** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/08/19 17:48 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 17:48 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/08/19 17:48 | 1 |
| 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 | ug/L | | | 05/08/19 17:48 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/08/19 17:48 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/08/19 17:48 | 1 |
| Acetone | 5.4 | U | 10 | 5.4 | ug/L | | | 05/08/19 17:48 | 1 |
| Benzene | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 17:48 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/08/19 17:48 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/08/19 17:48 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/08/19 17:48 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/08/19 17:48 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/08/19 17:48 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/08/19 17:48 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/08/19 17:48 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/08/19 17:48 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/08/19 17:48 | 1 |
| cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/08/19 17:48 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/08/19 17:48 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/08/19 17:48 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/08/19 17:48 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/08/19 17:48 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/08/19 17:48 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/08/19 17:48 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/08/19 17:48 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/08/19 17:48 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/08/19 17:48 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/08/19 17:48 | 1 |
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/08/19 17:48 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/08/19 17:48 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/08/19 17:48 | 1 |
| trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/08/19 17:48 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/08/19 17:48 | 1 |
| Trichloroethene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/08/19 17:48 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/08/19 17:48 | 1 |
| Vinyl chloride | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/08/19 17:48 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/08/19 17:48 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 240-380285/8**
**Matrix: Water**
**Analysis Batch: 380285**

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

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *95* | | *70 - 123* | | *05/08/19 17:48* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *75 - 128* | | *05/08/19 17:48* | *1* |
| *4-Bromofluorobenzene (Surr)* | *93* | | *59 - 120* | | *05/08/19 17:48* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *70 - 121* | | *05/08/19 17:48* | *1* |

**Lab Sample ID: LCS 240-380285/5**
**Matrix: Water**
**Analysis Batch: 380285**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 18.7 | | ug/L | | 93 | 69 - 134 |
| 1,1,2,2-Tetrachloroethane | 20.0 | 23.7 | | ug/L | | 119 | 65 - 139 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 21.3 | | ug/L | | 107 | 50 - 156 |
| 1,1,2-Trichloroethane | 20.0 | 21.3 | | ug/L | | 106 | 78 - 133 |
| 1,1-Dichloroethane | 20.0 | 22.0 | | ug/L | | 110 | 75 - 133 |
| 1,1-Dichloroethene | 20.0 | 21.3 | | ug/L | | 106 | 65 - 139 |
| 1,2,4-Trichlorobenzene | 20.0 | 16.6 | | ug/L | | 83 | 42 - 133 |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 19.6 | | ug/L | | 98 | 46 - 132 |
| Ethylene Dibromide | 20.0 | 19.2 | | ug/L | | 96 | 77 - 123 |
| 1,2-Dichlorobenzene | 20.0 | 20.1 | | ug/L | | 101 | 78 - 120 |
| 1,2-Dichloroethane | 20.0 | 17.2 | | ug/L | | 86 | 71 - 135 |
| 1,2-Dichloropropane | 20.0 | 22.2 | | ug/L | | 111 | 78 - 133 |
| 1,3-Dichlorobenzene | 20.0 | 19.2 | | ug/L | | 96 | 78 - 120 |
| 1,4-Dichlorobenzene | 20.0 | 19.3 | | ug/L | | 96 | 78 - 120 |
| 2-Butanone (MEK) | 40.0 | 45.5 | | ug/L | | 114 | 39 - 163 |
| 2-Hexanone | 40.0 | 40.0 | | ug/L | | 100 | 43 - 148 |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 40.6 | | ug/L | | 101 | 49 - 143 |
| Acetone | 40.0 | 52.8 | | ug/L | | 132 | 21 - 162 |
| Benzene | 20.0 | 22.3 | | ug/L | | 112 | 80 - 123 |
| Dichlorobromomethane | 20.0 | 18.6 | | ug/L | | 93 | 77 - 125 |
| Bromoform | 20.0 | 17.4 | | ug/L | | 87 | 49 - 141 |
| Bromomethane | 20.0 | 21.1 | | ug/L | | 106 | 41 - 175 |
| Carbon disulfide | 20.0 | 22.2 | | ug/L | | 111 | 60 - 138 |
| Carbon tetrachloride | 20.0 | 17.4 | | ug/L | | 87 | 63 - 140 |
| Chlorobenzene | 20.0 | 19.2 | | ug/L | | 96 | 80 - 121 |
| Chloroethane | 20.0 | 23.1 | | ug/L | | 116 | 33 - 173 |
| Chloroform | 20.0 | 20.2 | | ug/L | | 101 | 79 - 127 |
| Chloromethane | 20.0 | 23.2 | | ug/L | | 116 | 54 - 143 |
| cis-1,2-Dichloroethene | 20.0 | 21.6 | | ug/L | | 108 | 76 - 128 |
| cis-1,3-Dichloropropene | 20.0 | 20.0 | | ug/L | | 100 | 64 - 132 |
| Cyclohexane | 20.0 | 22.7 | | ug/L | | 113 | 58 - 145 |
| Chlorodibromomethane | 20.0 | 18.5 | | ug/L | | 93 | 70 - 132 |
| Dichlorodifluoromethane | 20.0 | 17.4 | | ug/L | | 87 | 29 - 148 |
| Ethylbenzene | 20.0 | 20.4 | | ug/L | | 102 | 80 - 120 |
| Isopropylbenzene | 20.0 | 20.7 | | ug/L | | 103 | 74 - 120 |
| Methyl acetate | 40.0 | 44.2 | | ug/L | | 110 | 52 - 145 |
| Methyl tert-butyl ether | 20.0 | 20.3 | | ug/L | | 101 | 51 - 133 |
| Methylcyclohexane | 20.0 | 21.2 | | ug/L | | 106 | 60 - 125 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 240-380285/5** **Client Sample ID: Lab Control Sample**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 20.0 | 21.8 | | ug/L | | 109 | 70 - 134 |
| Styrene | 20.0 | 19.9 | | ug/L | | 99 | 79 - 120 |
| Tetrachloroethene | 20.0 | 18.3 | | ug/L | | 91 | 74 - 130 |
| Toluene | 20.0 | 20.6 | | ug/L | | 103 | 78 - 129 |
| trans-1,2-Dichloroethene | 20.0 | 21.2 | | ug/L | | 106 | 78 - 133 |
| trans-1,3-Dichloropropene | 20.0 | 17.6 | | ug/L | | 88 | 55 - 128 |
| Trichloroethene | 20.0 | 18.8 | | ug/L | | 94 | 76 - 125 |
| Trichlorofluoromethane | 20.0 | 18.0 | | ug/L | | 90 | 51 - 164 |
| Vinyl chloride | 20.0 | 23.9 | | ug/L | | 120 | 58 - 143 |
| Xylenes, Total | 40.0 | 41.4 | | ug/L | | 104 | 80 - 120 |
| m-Xylene & p-Xylene | 20.0 | 20.3 | | ug/L | | 102 | 80 - 120 |
| o-Xylene | 20.0 | 21.1 | | ug/L | | 105 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *99* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *70 - 121* |

**Lab Sample ID: 240-112111-4 MS** **Client Sample ID: MRC-NMW-3I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 9.6 | U | 800 | 720 | | ug/L | | 90 | 51 - 138 |
| 1,1,2,2-Tetrachloroethane | 5.2 | U | 800 | 973 | | ug/L | | 122 | 60 - 137 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 16 | U | 800 | 771 | | ug/L | | 96 | 31 - 156 |
| 1,1,2-Trichloroethane | 3.6 | U | 800 | 840 | | ug/L | | 105 | 76 - 132 |
| 1,1-Dichloroethane | 6.8 | U | 800 | 834 | | ug/L | | 104 | 63 - 136 |
| 1,1-Dichloroethene | 9.7 | J | 800 | 791 | | ug/L | | 98 | 53 - 140 |
| 1,2,4-Trichlorobenzene | 10 | U | 800 | 628 | | ug/L | | 79 | 30 - 126 |
| 1,2-Dibromo-3-Chloropropane | 36 | U | 800 | 732 | | ug/L | | 91 | 38 - 124 |
| Ethylene Dibromide | 4.8 | U | 800 | 754 | | ug/L | | 94 | 71 - 123 |
| 1,2-Dichlorobenzene | 6.0 | U | 800 | 811 | | ug/L | | 101 | 64 - 120 |
| 1,2-Dichloroethane | 8.4 | U | 800 | 683 | | ug/L | | 85 | 65 - 135 |
| 1,2-Dichloropropane | 6.0 | U | 800 | 860 | | ug/L | | 108 | 70 - 132 |
| 1,3-Dichlorobenzene | 6.0 | U | 800 | 797 | | ug/L | | 100 | 62 - 120 |
| 1,4-Dichlorobenzene | 6.4 | U | 800 | 773 | | ug/L | | 97 | 63 - 120 |
| 2-Butanone (MEK) | 46 | U | 1600 | 1890 | | ug/L | | 118 | 37 - 156 |
| 2-Hexanone | 22 | U | 1600 | 1600 | | ug/L | | 100 | 42 - 150 |
| 4-Methyl-2-pentanone (MIBK) | 17 | U | 1600 | 1600 | | ug/L | | 100 | 44 - 143 |
| Acetone | 220 | U | 1600 | 2310 | | ug/L | | 144 | 10 - 168 |
| Benzene | 5.2 | U | 800 | 859 | | ug/L | | 107 | 71 - 122 |
| Dichlorobromomethane | 6.8 | U | 800 | 718 | | ug/L | | 90 | 64 - 125 |
| Bromoform | 30 | U | 800 | 680 | | ug/L | | 85 | 44 - 129 |
| Bromomethane | 17 | U | 800 | 793 | | ug/L | | 99 | 19 - 187 |
| Carbon disulfide | 11 | U | 800 | 824 | | ug/L | | 103 | 43 - 144 |
| Carbon tetrachloride | 10 | U | 800 | 657 | | ug/L | | 82 | 41 - 143 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 240-112111-4 MS** **Client Sample ID: MRC-NMW-3I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 5.6 | U | 800 | 770 | | ug/L | | 96 | 70 - 123 |
| Chloroethane | 33 | U | 800 | 883 | | ug/L | | 110 | 11 - 189 |
| Chloroform | 5.2 | U | 800 | 784 | | ug/L | | 98 | 68 - 130 |
| Chloromethane | 8.0 | U | 800 | 885 | | ug/L | | 111 | 31 - 154 |
| cis-1,2-Dichloroethene | 1400 | | 800 | 2200 | | ug/L | | 97 | 64 - 130 |
| cis-1,3-Dichloropropene | 24 | U | 800 | 755 | | ug/L | | 94 | 48 - 127 |
| Cyclohexane | 9.6 | U | 800 | 836 | | ug/L | | 105 | 42 - 135 |
| Chlorodibromomethane | 16 | U | 800 | 724 | | ug/L | | 90 | 60 - 129 |
| Dichlorodifluoromethane | 14 | U | 800 | 649 | | ug/L | | 81 | 28 - 136 |
| Ethylbenzene | 4.4 | U | 800 | 793 | | ug/L | | 99 | 66 - 120 |
| Isopropylbenzene | 3.6 | U | 800 | 809 | | ug/L | | 101 | 59 - 120 |
| Methyl acetate | 69 | U | 1600 | 1770 | | ug/L | | 111 | 41 - 142 |
| Methyl tert-butyl ether | 2.8 | U | 800 | 738 | | ug/L | | 92 | 41 - 136 |
| Methylcyclohexane | 13 | U | 800 | 783 | | ug/L | | 98 | 37 - 123 |
| Methylene Chloride | 100 | U | 800 | 811 | | ug/L | | 101 | 61 - 130 |
| Styrene | 4.0 | U | 800 | 789 | | ug/L | | 99 | 68 - 120 |
| Tetrachloroethene | 6.0 | U | 800 | 699 | | ug/L | | 87 | 51 - 136 |
| Toluene | 5.6 | U | 800 | 817 | | ug/L | | 102 | 62 - 132 |
| trans-1,2-Dichloroethene | 13 | J | 800 | 835 | | ug/L | | 103 | 68 - 133 |
| trans-1,3-Dichloropropene | 27 | U | 800 | 694 | | ug/L | | 87 | 40 - 125 |
| Trichloroethene | 390 | | 800 | 1110 | | ug/L | | 90 | 55 - 131 |
| Trichlorofluoromethane | 18 | U | 800 | 692 | | ug/L | | 86 | 37 - 174 |
| Vinyl chloride | 260 | | 800 | 1170 | | ug/L | | 114 | 43 - 154 |
| Xylenes, Total | 6.0 | U | 1600 | 1670 | | ug/L | | 105 | 67 - 120 |
| m-Xylene & p-Xylene | 3.2 | U | 800 | 830 | | ug/L | | 104 | 63 - 121 |
| o-Xylene | 3.6 | U | 800 | 843 | | ug/L | | 105 | 69 - 120 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *102* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *70 - 121* |

**Lab Sample ID: 240-112111-4 MSD** **Client Sample ID: MRC-NMW-3I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 9.6 | U | 800 | 717 | | ug/L | | 90 | 51 - 138 | 0 | 27 |
| 1,1,2,2-Tetrachloroethane | 5.2 | U | 800 | 962 | | ug/L | | 120 | 60 - 137 | 1 | 31 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 16 | U | 800 | 809 | | ug/L | | 101 | 31 - 156 | 5 | 35 |
| 1,1,2-Trichloroethane | 3.6 | U | 800 | 839 | | ug/L | | 105 | 76 - 132 | 0 | 25 |
| 1,1-Dichloroethane | 6.8 | U | 800 | 861 | | ug/L | | 108 | 63 - 136 | 3 | 23 |
| 1,1-Dichloroethene | 9.7 | J | 800 | 814 | | ug/L | | 101 | 53 - 140 | 3 | 35 |
| 1,2,4-Trichlorobenzene | 10 | U | 800 | 645 | | ug/L | | 81 | 30 - 126 | 3 | 35 |
| 1,2-Dibromo-3-Chloropropane | 36 | U | 800 | 726 | | ug/L | | 91 | 38 - 124 | 1 | 35 |
| Ethylene Dibromide | 4.8 | U | 800 | 753 | | ug/L | | 94 | 71 - 123 | 0 | 27 |
| 1,2-Dichlorobenzene | 6.0 | U | 800 | 803 | | ug/L | | 100 | 64 - 120 | 1 | 30 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 240-112111-4 MSD** **Client Sample ID: MRC-NMW-3I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380285**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 8.4 | U | 800 | 687 | | ug/L | | 86 | 65 - 135 | 1 | 24 |
| 1,2-Dichloropropane | 6.0 | U | 800 | 859 | | ug/L | | 107 | 70 - 132 | 0 | 26 |
| 1,3-Dichlorobenzene | 6.0 | U | 800 | 788 | | ug/L | | 98 | 62 - 120 | 1 | 31 |
| 1,4-Dichlorobenzene | 6.4 | U | 800 | 771 | | ug/L | | 96 | 63 - 120 | 0 | 28 |
| 2-Butanone (MEK) | 46 | U | 1600 | 1830 | | ug/L | | 114 | 37 - 156 | 3 | 35 |
| 2-Hexanone | 22 | U | 1600 | 1590 | | ug/L | | 99 | 42 - 150 | 1 | 35 |
| 4-Methyl-2-pentanone (MIBK) | 17 | U | 1600 | 1570 | | ug/L | | 98 | 44 - 143 | 2 | 35 |
| Acetone | 220 | U | 1600 | 2310 | | ug/L | | 145 | 10 - 168 | 0 | 35 |
| Benzene | 5.2 | U | 800 | 863 | | ug/L | | 108 | 71 - 122 | 1 | 22 |
| Dichlorobromomethane | 6.8 | U | 800 | 718 | | ug/L | | 90 | 64 - 125 | 0 | 27 |
| Bromoform | 30 | U | 800 | 696 | | ug/L | | 87 | 44 - 129 | 2 | 28 |
| Bromomethane | 17 | U | 800 | 819 | | ug/L | | 102 | 19 - 187 | 3 | 35 |
| Carbon disulfide | 11 | U | 800 | 845 | | ug/L | | 106 | 43 - 144 | 3 | 33 |
| Carbon tetrachloride | 10 | U | 800 | 671 | | ug/L | | 84 | 41 - 143 | 2 | 30 |
| Chlorobenzene | 5.6 | U | 800 | 773 | | ug/L | | 97 | 70 - 123 | 0 | 23 |
| Chloroethane | 33 | U | 800 | 904 | | ug/L | | 113 | 11 - 189 | 2 | 35 |
| Chloroform | 5.2 | U | 800 | 803 | | ug/L | | 100 | 68 - 130 | 2 | 23 |
| Chloromethane | 8.0 | U | 800 | 885 | | ug/L | | 111 | 31 - 154 | 0 | 35 |
| cis-1,2-Dichloroethene | 1400 | | 800 | 2270 | | ug/L | | 105 | 64 - 130 | 3 | 21 |
| cis-1,3-Dichloropropene | 24 | U | 800 | 751 | | ug/L | | 94 | 48 - 127 | 1 | 30 |
| Cyclohexane | 9.6 | U | 800 | 853 | | ug/L | | 107 | 42 - 135 | 2 | 35 |
| Chlorodibromomethane | 16 | U | 800 | 729 | | ug/L | | 91 | 60 - 129 | 1 | 26 |
| Dichlorodifluoromethane | 14 | U | 800 | 670 | | ug/L | | 84 | 28 - 136 | 3 | 35 |
| Ethylbenzene | 4.4 | U | 800 | 800 | | ug/L | | 100 | 66 - 120 | 1 | 24 |
| Isopropylbenzene | 3.6 | U | 800 | 814 | | ug/L | | 102 | 59 - 120 | 1 | 31 |
| Methyl acetate | 69 | U | 1600 | 1760 | | ug/L | | 110 | 41 - 142 | 1 | 35 |
| Methyl tert-butyl ether | 2.8 | U | 800 | 762 | | ug/L | | 95 | 41 - 136 | 3 | 29 |
| Methylcyclohexane | 13 | U | 800 | 791 | | ug/L | | 99 | 37 - 123 | 1 | 35 |
| Methylene Chloride | 100 | U | 800 | 844 | | ug/L | | 105 | 61 - 130 | 4 | 29 |
| Styrene | 4.0 | U | 800 | 786 | | ug/L | | 98 | 68 - 120 | 0 | 26 |
| Tetrachloroethene | 6.0 | U | 800 | 693 | | ug/L | | 87 | 51 - 136 | 1 | 23 |
| Toluene | 5.6 | U | 800 | 822 | | ug/L | | 103 | 62 - 132 | 1 | 23 |
| trans-1,2-Dichloroethene | 13 | J | 800 | 841 | | ug/L | | 103 | 68 - 133 | 1 | 24 |
| trans-1,3-Dichloropropene | 27 | U | 800 | 692 | | ug/L | | 86 | 40 - 125 | 0 | 27 |
| Trichloroethene | 390 | | 800 | 1090 | | ug/L | | 88 | 55 - 131 | 1 | 23 |
| Trichlorofluoromethane | 18 | U | 800 | 702 | | ug/L | | 88 | 37 - 174 | 1 | 35 |
| Vinyl chloride | 260 | | 800 | 1190 | | ug/L | | 116 | 43 - 154 | 1 | 29 |
| Xylenes, Total | 6.0 | U | 1600 | 1680 | | ug/L | | 105 | 67 - 120 | 0 | 25 |
| m-Xylene & p-Xylene | 3.2 | U | 800 | 828 | | ug/L | | 104 | 63 - 121 | 0 | 25 |
| o-Xylene | 3.6 | U | 800 | 847 | | ug/L | | 106 | 69 - 120 | 1 | 25 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *96* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *94* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *85* | | *70 - 121* |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 240-380508/8** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/09/19 19:03 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/09/19 19:03 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/09/19 19:03 | 1 |
| 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 | ug/L | | | 05/09/19 19:03 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/09/19 19:03 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/09/19 19:03 | 1 |
| Acetone | 5.4 | U | 10 | 5.4 | ug/L | | | 05/09/19 19:03 | 1 |
| Benzene | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/09/19 19:03 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/09/19 19:03 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/09/19 19:03 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/09/19 19:03 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/09/19 19:03 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/09/19 19:03 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/09/19 19:03 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/09/19 19:03 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/09/19 19:03 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/09/19 19:03 | 1 |
| cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/09/19 19:03 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/09/19 19:03 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/09/19 19:03 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/09/19 19:03 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/09/19 19:03 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/09/19 19:03 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/09/19 19:03 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/09/19 19:03 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/09/19 19:03 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/09/19 19:03 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/09/19 19:03 | 1 |
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/09/19 19:03 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/09/19 19:03 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/09/19 19:03 | 1 |
| trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/09/19 19:03 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/09/19 19:03 | 1 |
| Trichloroethene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/09/19 19:03 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/09/19 19:03 | 1 |
| Vinyl chloride | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/09/19 19:03 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/09/19 19:03 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 240-380508/8**
**Matrix: Water**
**Analysis Batch: 380508**

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

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *98* | | *70 - 123* | | *05/09/19 19:03* | *1* |
| *Dibromofluoromethane (Surr)* | *98* | | *75 - 128* | | *05/09/19 19:03* | *1* |
| *4-Bromofluorobenzene (Surr)* | *93* | | *59 - 120* | | *05/09/19 19:03* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *91* | | *70 - 121* | | *05/09/19 19:03* | *1* |

**Lab Sample ID: LCS 240-380508/5**
**Matrix: Water**
**Analysis Batch: 380508**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 18.0 | | ug/L | | 90 | 69 - 134 |
| 1,1,2,2-Tetrachloroethane | 20.0 | 23.6 | | ug/L | | 118 | 65 - 139 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 20.2 | | ug/L | | 101 | 50 - 156 |
| 1,1,2-Trichloroethane | 20.0 | 21.0 | | ug/L | | 105 | 78 - 133 |
| 1,1-Dichloroethane | 20.0 | 21.0 | | ug/L | | 105 | 75 - 133 |
| 1,1-Dichloroethene | 20.0 | 19.7 | | ug/L | | 98 | 65 - 139 |
| 1,2,4-Trichlorobenzene | 20.0 | 16.8 | | ug/L | | 84 | 42 - 133 |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 19.2 | | ug/L | | 96 | 46 - 132 |
| Ethylene Dibromide | 20.0 | 18.7 | | ug/L | | 94 | 77 - 123 |
| 1,2-Dichlorobenzene | 20.0 | 20.5 | | ug/L | | 103 | 78 - 120 |
| 1,2-Dichloroethane | 20.0 | 17.1 | | ug/L | | 86 | 71 - 135 |
| 1,2-Dichloropropane | 20.0 | 22.0 | | ug/L | | 110 | 78 - 133 |
| 1,3-Dichlorobenzene | 20.0 | 19.7 | | ug/L | | 99 | 78 - 120 |
| 1,4-Dichlorobenzene | 20.0 | 20.0 | | ug/L | | 100 | 78 - 120 |
| 2-Butanone (MEK) | 40.0 | 46.2 | | ug/L | | 116 | 39 - 163 |
| 2-Hexanone | 40.0 | 40.0 | | ug/L | | 100 | 43 - 148 |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 40.7 | | ug/L | | 102 | 49 - 143 |
| Acetone | 40.0 | 56.3 | | ug/L | | 141 | 21 - 162 |
| Benzene | 20.0 | 21.8 | | ug/L | | 109 | 80 - 123 |
| Dichlorobromomethane | 20.0 | 18.6 | | ug/L | | 93 | 77 - 125 |
| Bromoform | 20.0 | 16.8 | | ug/L | | 84 | 49 - 141 |
| Bromomethane | 20.0 | 20.2 | | ug/L | | 101 | 41 - 175 |
| Carbon disulfide | 20.0 | 20.4 | | ug/L | | 102 | 60 - 138 |
| Carbon tetrachloride | 20.0 | 17.1 | | ug/L | | 85 | 63 - 140 |
| Chlorobenzene | 20.0 | 19.5 | | ug/L | | 97 | 80 - 121 |
| Chloroethane | 20.0 | 22.6 | | ug/L | | 113 | 33 - 173 |
| Chloroform | 20.0 | 19.5 | | ug/L | | 98 | 79 - 127 |
| Chloromethane | 20.0 | 22.0 | | ug/L | | 110 | 54 - 143 |
| cis-1,2-Dichloroethene | 20.0 | 20.8 | | ug/L | | 104 | 76 - 128 |
| cis-1,3-Dichloropropene | 20.0 | 20.1 | | ug/L | | 101 | 64 - 132 |
| Cyclohexane | 20.0 | 21.4 | | ug/L | | 107 | 58 - 145 |
| Chlorodibromomethane | 20.0 | 18.5 | | ug/L | | 93 | 70 - 132 |
| Dichlorodifluoromethane | 20.0 | 16.6 | | ug/L | | 83 | 29 - 148 |
| Ethylbenzene | 20.0 | 20.3 | | ug/L | | 102 | 80 - 120 |
| Isopropylbenzene | 20.0 | 20.6 | | ug/L | | 103 | 74 - 120 |
| Methyl acetate | 40.0 | 44.9 | | ug/L | | 112 | 52 - 145 |
| Methyl tert-butyl ether | 20.0 | 19.1 | | ug/L | | 96 | 51 - 133 |
| Methylcyclohexane | 20.0 | 20.8 | | ug/L | | 104 | 60 - 125 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 240-380508/5** **Client Sample ID: Lab Control Sample**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 20.0 | 20.5 | | ug/L | | 102 | 70 - 134 |
| Styrene | 20.0 | 19.9 | | ug/L | | 99 | 79 - 120 |
| Tetrachloroethene | 20.0 | 17.3 | | ug/L | | 87 | 74 - 130 |
| Toluene | 20.0 | 20.4 | | ug/L | | 102 | 78 - 129 |
| trans-1,2-Dichloroethene | 20.0 | 20.4 | | ug/L | | 102 | 78 - 133 |
| trans-1,3-Dichloropropene | 20.0 | 17.6 | | ug/L | | 88 | 55 - 128 |
| Trichloroethene | 20.0 | 19.0 | | ug/L | | 95 | 76 - 125 |
| Trichlorofluoromethane | 20.0 | 17.9 | | ug/L | | 89 | 51 - 164 |
| Vinyl chloride | 20.0 | 22.6 | | ug/L | | 113 | 58 - 143 |
| Xylenes, Total | 40.0 | 42.1 | | ug/L | | 105 | 80 - 120 |
| m-Xylene & p-Xylene | 20.0 | 21.0 | | ug/L | | 105 | 80 - 120 |
| o-Xylene | 20.0 | 21.1 | | ug/L | | 106 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *101* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *96* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *70 - 121* |

**Lab Sample ID: 240-112111-2 MS** **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 4.8 | U | 400 | 344 | | ug/L | | 86 | 51 - 138 |
| 1,1,2,2-Tetrachloroethane | 2.6 | U | 400 | 474 | | ug/L | | 119 | 60 - 137 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 8.2 | U | 400 | 356 | | ug/L | | 89 | 31 - 156 |
| 1,1,2-Trichloroethane | 1.8 | U | 400 | 434 | | ug/L | | 108 | 76 - 132 |
| 1,1-Dichloroethane | 4.9 | J | 400 | 417 | | ug/L | | 103 | 63 - 136 |
| 1,1-Dichloroethene | 11 | J | 400 | 393 | | ug/L | | 95 | 53 - 140 |
| 1,2,4-Trichlorobenzene | 5.2 | U | 400 | 289 | | ug/L | | 72 | 30 - 126 |
| 1,2-Dibromo-3-Chloropropane | 18 | U | 400 | 371 | | ug/L | | 93 | 38 - 124 |
| Ethylene Dibromide | 2.4 | U | 400 | 379 | | ug/L | | 95 | 71 - 123 |
| 1,2-Dichlorobenzene | 3.0 | U | 400 | 383 | | ug/L | | 96 | 64 - 120 |
| 1,2-Dichloroethane | 4.2 | U | 400 | 336 | | ug/L | | 84 | 65 - 135 |
| 1,2-Dichloropropane | 3.0 | U | 400 | 428 | | ug/L | | 107 | 70 - 132 |
| 1,3-Dichlorobenzene | 3.0 | U | 400 | 370 | | ug/L | | 92 | 62 - 120 |
| 1,4-Dichlorobenzene | 3.2 | U | 400 | 363 | | ug/L | | 91 | 63 - 120 |
| 2-Butanone (MEK) | 23 | U | 800 | 913 | | ug/L | | 114 | 37 - 156 |
| 2-Hexanone | 11 | U | 800 | 809 | | ug/L | | 101 | 42 - 150 |
| 4-Methyl-2-pentanone (MIBK) | 8.4 | U | 800 | 807 | | ug/L | | 101 | 44 - 143 |
| Acetone | 110 | U | 800 | 1120 | | ug/L | | 140 | 10 - 168 |
| Benzene | 2.6 | U | 400 | 426 | | ug/L | | 107 | 71 - 122 |
| Dichlorobromomethane | 3.4 | U | 400 | 364 | | ug/L | | 91 | 64 - 125 |
| Bromoform | 15 | U | 400 | 334 | | ug/L | | 83 | 44 - 129 |
| Bromomethane | 8.4 | U | 400 | 397 | | ug/L | | 99 | 19 - 187 |
| Carbon disulfide | 5.6 | U | 400 | 383 | | ug/L | | 96 | 43 - 144 |
| Carbon tetrachloride | 5.2 | U | 400 | 315 | | ug/L | | 79 | 41 - 143 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 240-112111-2 MS** **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 2.8 | U | 400 | 373 | | ug/L | | 93 | 70 - 123 |
| Chloroethane | 17 | U | 400 | 438 | | ug/L | | 110 | 11 - 189 |
| Chloroform | 2.6 | U | 400 | 395 | | ug/L | | 99 | 68 - 130 |
| Chloromethane | 4.0 | U | 400 | 440 | | ug/L | | 110 | 31 - 154 |
| cis-1,2-Dichloroethene | 680 | | 400 | 1040 | | ug/L | | 91 | 64 - 130 |
| cis-1,3-Dichloropropene | 12 | U | 400 | 367 | | ug/L | | 92 | 48 - 127 |
| Cyclohexane | 4.8 | U | 400 | 368 | | ug/L | | 92 | 42 - 135 |
| Chlorodibromomethane | 7.8 | U | 400 | 367 | | ug/L | | 92 | 60 - 129 |
| Dichlorodifluoromethane | 7.0 | U | 400 | 288 | | ug/L | | 72 | 28 - 136 |
| Ethylbenzene | 2.2 | U | 400 | 375 | | ug/L | | 94 | 66 - 120 |
| Isopropylbenzene | 1.8 | U | 400 | 381 | | ug/L | | 95 | 59 - 120 |
| Methyl acetate | 34 | U | 800 | 887 | | ug/L | | 111 | 41 - 142 |
| Methyl tert-butyl ether | 1.4 | U | 400 | 369 | | ug/L | | 92 | 41 - 136 |
| Methylcyclohexane | 6.6 | U | 400 | 349 | | ug/L | | 87 | 37 - 123 |
| Methylene Chloride | 52 | U | 400 | 409 | | ug/L | | 102 | 61 - 130 |
| Styrene | 2.0 | U | 400 | 378 | | ug/L | | 95 | 68 - 120 |
| Tetrachloroethene | 3.0 | U | 400 | 327 | | ug/L | | 82 | 51 - 136 |
| Toluene | 2.8 | U | 400 | 394 | | ug/L | | 99 | 62 - 132 |
| trans-1,2-Dichloroethene | 5.2 | J | 400 | 399 | | ug/L | | 99 | 68 - 133 |
| trans-1,3-Dichloropropene | 13 | U | 400 | 336 | | ug/L | | 84 | 40 - 125 |
| Trichloroethene | 120 | | 400 | 460 | | ug/L | | 84 | 55 - 131 |
| Trichlorofluoromethane | 9.0 | U | 400 | 328 | | ug/L | | 82 | 37 - 174 |
| Vinyl chloride | 190 | | 400 | 607 | | ug/L | | 105 | 43 - 154 |
| Xylenes, Total | 3.0 | U | 800 | 793 | | ug/L | | 99 | 67 - 120 |
| m-Xylene & p-Xylene | 1.6 | U | 400 | 388 | | ug/L | | 97 | 63 - 121 |
| o-Xylene | 1.8 | U | 400 | 405 | | ug/L | | 101 | 69 - 120 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *104* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *97* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *91* | | *70 - 121* |

**Lab Sample ID: 240-112111-2 MSD** **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 4.8 | U | 400 | 356 | | ug/L | | 89 | 51 - 138 | 3 | 27 |
| 1,1,2,2-Tetrachloroethane | 2.6 | U | 400 | 492 | | ug/L | | 123 | 60 - 137 | 4 | 31 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 8.2 | U | 400 | 360 | | ug/L | | 90 | 31 - 156 | 1 | 35 |
| 1,1,2-Trichloroethane | 1.8 | U | 400 | 414 | | ug/L | | 104 | 76 - 132 | 5 | 25 |
| 1,1-Dichloroethane | 4.9 | J | 400 | 439 | | ug/L | | 109 | 63 - 136 | 5 | 23 |
| 1,1-Dichloroethene | 11 | J | 400 | 407 | | ug/L | | 99 | 53 - 140 | 3 | 35 |
| 1,2,4-Trichlorobenzene | 5.2 | U | 400 | 315 | | ug/L | | 79 | 30 - 126 | 9 | 35 |
| 1,2-Dibromo-3-Chloropropane | 18 | U | 400 | 390 | | ug/L | | 98 | 38 - 124 | 5 | 35 |
| Ethylene Dibromide | 2.4 | U | 400 | 371 | | ug/L | | 93 | 71 - 123 | 2 | 27 |
| 1,2-Dichlorobenzene | 3.0 | U | 400 | 401 | | ug/L | | 100 | 64 - 120 | 5 | 30 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: 240-112111-2 MSD** **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 380508**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 4.2 | U | 400 | 339 | | ug/L | | 85 | 65 - 135 | 1 | 24 |
| 1,2-Dichloropropane | 3.0 | U | 400 | 427 | | ug/L | | 107 | 70 - 132 | 0 | 26 |
| 1,3-Dichlorobenzene | 3.0 | U | 400 | 378 | | ug/L | | 94 | 62 - 120 | 2 | 31 |
| 1,4-Dichlorobenzene | 3.2 | U | 400 | 376 | | ug/L | | 94 | 63 - 120 | 3 | 28 |
| 2-Butanone (MEK) | 23 | U | 800 | 890 | | ug/L | | 111 | 37 - 156 | 3 | 35 |
| 2-Hexanone | 11 | U | 800 | 787 | | ug/L | | 98 | 42 - 150 | 3 | 35 |
| 4-Methyl-2-pentanone (MIBK) | 8.4 | U | 800 | 782 | | ug/L | | 98 | 44 - 143 | 3 | 35 |
| Acetone | 110 | U | 800 | 1140 | | ug/L | | 143 | 10 - 168 | 2 | 35 |
| Benzene | 2.6 | U | 400 | 428 | | ug/L | | 107 | 71 - 122 | 0 | 22 |
| Dichlorobromomethane | 3.4 | U | 400 | 364 | | ug/L | | 91 | 64 - 125 | 0 | 27 |
| Bromoform | 15 | U | 400 | 334 | | ug/L | | 84 | 44 - 129 | 0 | 28 |
| Bromomethane | 8.4 | U | 400 | 417 | | ug/L | | 104 | 19 - 187 | 5 | 35 |
| Carbon disulfide | 5.6 | U | 400 | 404 | | ug/L | | 101 | 43 - 144 | 5 | 33 |
| Carbon tetrachloride | 5.2 | U | 400 | 323 | | ug/L | | 81 | 41 - 143 | 3 | 30 |
| Chlorobenzene | 2.8 | U | 400 | 375 | | ug/L | | 94 | 70 - 123 | 1 | 23 |
| Chloroethane | 17 | U | 400 | 463 | | ug/L | | 116 | 11 - 189 | 6 | 35 |
| Chloroform | 2.6 | U | 400 | 402 | | ug/L | | 101 | 68 - 130 | 2 | 23 |
| Chloromethane | 4.0 | U | 400 | 454 | | ug/L | | 114 | 31 - 154 | 3 | 35 |
| cis-1,2-Dichloroethene | 680 | | 400 | 1100 | | ug/L | | 107 | 64 - 130 | 6 | 21 |
| cis-1,3-Dichloropropene | 12 | U | 400 | 364 | | ug/L | | 91 | 48 - 127 | 1 | 30 |
| Cyclohexane | 4.8 | U | 400 | 387 | | ug/L | | 97 | 42 - 135 | 5 | 35 |
| Chlorodibromomethane | 7.8 | U | 400 | 367 | | ug/L | | 92 | 60 - 129 | 0 | 26 |
| Dichlorodifluoromethane | 7.0 | U | 400 | 298 | | ug/L | | 75 | 28 - 136 | 4 | 35 |
| Ethylbenzene | 2.2 | U | 400 | 377 | | ug/L | | 94 | 66 - 120 | 1 | 24 |
| Isopropylbenzene | 1.8 | U | 400 | 381 | | ug/L | | 95 | 59 - 120 | 0 | 31 |
| Methyl acetate | 34 | U | 800 | 900 | | ug/L | | 113 | 41 - 142 | 1 | 35 |
| Methyl tert-butyl ether | 1.4 | U | 400 | 399 | | ug/L | | 100 | 41 - 136 | 8 | 29 |
| Methylcyclohexane | 6.6 | U | 400 | 361 | | ug/L | | 90 | 37 - 123 | 3 | 35 |
| Methylene Chloride | 52 | U | 400 | 417 | | ug/L | | 104 | 61 - 130 | 2 | 29 |
| Styrene | 2.0 | U | 400 | 374 | | ug/L | | 94 | 68 - 120 | 1 | 26 |
| Tetrachloroethene | 3.0 | U | 400 | 331 | | ug/L | | 83 | 51 - 136 | 1 | 23 |
| Toluene | 2.8 | U | 400 | 395 | | ug/L | | 99 | 62 - 132 | 0 | 23 |
| trans-1,2-Dichloroethene | 5.2 | J | 400 | 421 | | ug/L | | 104 | 68 - 133 | 5 | 24 |
| trans-1,3-Dichloropropene | 13 | U | 400 | 333 | | ug/L | | 83 | 40 - 125 | 1 | 27 |
| Trichloroethene | 120 | | 400 | 468 | | ug/L | | 86 | 55 - 131 | 2 | 23 |
| Trichlorofluoromethane | 9.0 | U | 400 | 343 | | ug/L | | 86 | 37 - 174 | 4 | 35 |
| Vinyl chloride | 190 | | 400 | 643 | | ug/L | | 114 | 43 - 154 | 6 | 29 |
| Xylenes, Total | 3.0 | U | 800 | 793 | | ug/L | | 99 | 67 - 120 | 0 | 25 |
| m-Xylene & p-Xylene | 1.6 | U | 400 | 391 | | ug/L | | 98 | 63 - 121 | 1 | 25 |
| o-Xylene | 1.8 | U | 400 | 402 | | ug/L | | 101 | 69 - 120 | 1 | 25 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *100* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *100* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *90* | | *70 - 121* |

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID: MB 240-381636/4** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381636**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/16/19 14:34 | 1 |
| Ethane | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/16/19 14:34 | 1 |
| Methane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/16/19 14:34 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *85* | | *60 - 140* | | *05/16/19 14:34* | *1* |

**Lab Sample ID: LCS 240-381636/5** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381636**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Ethene | 387 | 374 | | ug/L | | 97 | 80 - 120 |
| Ethane | 475 | 430 | | ug/L | | 90 | 80 - 120 |
| Methane | 480 | 448 | | ug/L | | 93 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *85* | | *60 - 140* |

**Lab Sample ID: MB 240-381892/4** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/17/19 15:00 | 1 |
| Ethane | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/17/19 15:00 | 1 |
| Methane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/17/19 15:00 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *86* | | *60 - 140* | | *05/17/19 15:00* | *1* |

**Lab Sample ID: LCS 240-381892/5** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Ethene | 387 | 338 | | ug/L | | 87 | 80 - 120 |
| Ethane | 475 | 387 | | ug/L | | 81 | 80 - 120 |
| Methane | 480 | 399 | | ug/L | | 83 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *87* | | *60 - 140* |

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

**Lab Sample ID: 240-112111-5 MS** **Client Sample ID: MRC-NMW-2I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Ethene | 100 | | 5010 | 4870 | | ug/L | | 95 | 50 - 150 |
| Ethane | 110 | | 5360 | 5140 | | ug/L | | 94 | 50 - 150 |
| Methane | 9500 | | 2850 | 12600 | | ug/L | | 106 | 50 - 150 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *86* | | *60 - 140* |

**Lab Sample ID: 240-112111-5 MSD** **Client Sample ID: MRC-NMW-2I-050619**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethene | 100 | | 5010 | 4920 | | ug/L | | 96 | 50 - 150 | 1 | 30 |
| Ethane | 110 | | 5360 | 5190 | | ug/L | | 95 | 50 - 150 | 1 | 30 |
| Methane | 9500 | | 2850 | 12500 | | ug/L | | 103 | 50 - 150 | 1 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *87* | | *60 - 140* |

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 240-380224/1-A** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total Recoverable**
**Analysis Batch: 380467** **Prep Batch: 380224**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 26 | U | 200 | 26 | ug/L | | 05/08/19 14:00 | 05/09/19 12:16 | 1 |
| Manganese | 2.1 | U | 15 | 2.1 | ug/L | | 05/08/19 14:00 | 05/09/19 12:16 | 1 |

**Lab Sample ID: LCS 240-380224/2-A** **Client Sample ID: Lab Control Sample**
**Matrix: Water** **Prep Type: Total Recoverable**
**Analysis Batch: 380467** **Prep Batch: 380224**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Iron | 1000 | 1080 | | ug/L | | 108 | 80 - 120 |
| Manganese | 500 | 526 | | ug/L | | 105 | 80 - 120 |

## Method: 2320B-1997 - Alkalinity, Total

**Lab Sample ID: MB 240-381502/30** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381502**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 2.6 | U | 5.0 | 2.6 | mg/L | | | 05/15/19 13:39 | 1 |

## Method: 2320B-1997 - Alkalinity, Total (Continued)

**Lab Sample ID: LCS 240-381502/29** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381502**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | | | 168 | 164 | | mg/L | | 98 | 86 - 123 | | |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 240-381916/3** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381916**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.35 | U | 1.0 | 0.35 | mg/L | | | 05/17/19 13:28 | 1 |

**Lab Sample ID: LCS 240-381916/4** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381916**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | | | 50.0 | 52.2 | | mg/L | | 104 | 90 - 110 | | |

**Lab Sample ID: 240-112111-2 MS** — **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381916**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 12 | | 50.0 | 64.9 | | mg/L | | 105 | 80 - 120 | | |

**Lab Sample ID: 240-112111-2 MSD** — **Client Sample ID: MRC-MW-81B-050619**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 381916**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 12 | | 50.0 | 65.4 | | mg/L | | 107 | 80 - 120 | 1 | 15 |

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 490-594412/3** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 594412**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | 0.910 | J | 1.0 | 0.50 | mg/L | | | 05/10/19 12:44 | 1 |

**Lab Sample ID: LCS 490-594412/6** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 594412**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | | | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 | | |

## Method: 9060A - Organic Carbon, Total (TOC) (Continued)

**Lab Sample ID: LCSD 490-594412/7**
**Matrix: Water**
**Analysis Batch: 594412**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | | | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 | 0 | 20 |

# QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block I GW Sampling

Job ID: 240-112111-1

## GC/MS VOA

### Analysis Batch: 380285

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-1 | TB-050619 | Total/NA | Water | 8260C | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total/NA | Water | 8260C | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | 8260C | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | 8260C | |
| MB 240-380285/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 240-380285/5 | Lab Control Sample | Total/NA | Water | 8260C | |
| 240-112111-4 MS | MRC-NMW-3I-050619 | Total/NA | Water | 8260C | |
| 240-112111-4 MSD | MRC-NMW-3I-050619 | Total/NA | Water | 8260C | |

### Analysis Batch: 380508

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | 8260C | |
| MB 240-380508/8 | Method Blank | Total/NA | Water | 8260C | |
| LCS 240-380508/5 | Lab Control Sample | Total/NA | Water | 8260C | |
| 240-112111-2 MS | MRC-MW-81B-050619 | Total/NA | Water | 8260C | |
| 240-112111-2 MSD | MRC-MW-81B-050619 | Total/NA | Water | 8260C | |

## GC VOA

### Analysis Batch: 381636

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | RSK-175 | |
| MB 240-381636/4 | Method Blank | Total/NA | Water | RSK-175 | |
| LCS 240-381636/5 | Lab Control Sample | Total/NA | Water | RSK-175 | |

### Analysis Batch: 381892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | RSK-175 | |
| MB 240-381892/4 | Method Blank | Total/NA | Water | RSK-175 | |
| LCS 240-381892/5 | Lab Control Sample | Total/NA | Water | RSK-175 | |
| 240-112111-5 MS | MRC-NMW-2I-050619 | Total/NA | Water | RSK-175 | |
| 240-112111-5 MSD | MRC-NMW-2I-050619 | Total/NA | Water | RSK-175 | |

## Metals

### Prep Batch: 380224

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total Recoverable | Water | 3005A | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total Recoverable | Water | 3005A | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total Recoverable | Water | 3005A | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total Recoverable | Water | 3005A | |
| MB 240-380224/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 240-380224/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |

### Analysis Batch: 380467

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total Recoverable | Water | 6010C | 380224 |

## Metals (Continued)

### Analysis Batch: 380467 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-3 | MRC-NMW-1I-050619 | Total Recoverable | Water | 6010C | 380224 |
| 240-112111-4 | MRC-NMW-3I-050619 | Total Recoverable | Water | 6010C | 380224 |
| 240-112111-5 | MRC-NMW-2I-050619 | Total Recoverable | Water | 6010C | 380224 |
| MB 240-380224/1-A | Method Blank | Total Recoverable | Water | 6010C | 380224 |
| LCS 240-380224/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 380224 |

## General Chemistry

### Analysis Batch: 381502

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | 2320B-1997 | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total/NA | Water | 2320B-1997 | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | 2320B-1997 | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | 2320B-1997 | |
| MB 240-381502/30 | Method Blank | Total/NA | Water | 2320B-1997 | |
| LCS 240-381502/29 | Lab Control Sample | Total/NA | Water | 2320B-1997 | |

### Analysis Batch: 381916

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | 300.0 | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total/NA | Water | 300.0 | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | 300.0 | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | 300.0 | |
| MB 240-381916/3 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 240-381916/4 | Lab Control Sample | Total/NA | Water | 300.0 | |
| 240-112111-2 MS | MRC-MW-81B-050619 | Total/NA | Water | 300.0 | |
| 240-112111-2 MSD | MRC-MW-81B-050619 | Total/NA | Water | 300.0 | |

### Analysis Batch: 594412

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112111-2 | MRC-MW-81B-050619 | Total/NA | Water | 9060A | |
| 240-112111-3 | MRC-NMW-1I-050619 | Total/NA | Water | 9060A | |
| 240-112111-4 | MRC-NMW-3I-050619 | Total/NA | Water | 9060A | |
| 240-112111-5 | MRC-NMW-2I-050619 | Total/NA | Water | 9060A | |
| MB 490-594412/3 | Method Blank | Total/NA | Water | 9060A | |
| LCS 490-594412/6 | Lab Control Sample | Total/NA | Water | 9060A | |
| LCSD 490-594412/7 | Lab Control Sample Dup | Total/NA | Water | 9060A | |

# Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Client Sample ID: TB-050619 Lab Sample ID: 240-112111-1

**Date Collected: 05/06/19 00:00** **Matrix: Water**
**Date Received: 05/07/19 09:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 380285 | 05/08/19 18:32 | TJL1 | TAL CAN |

## Client Sample ID: MRC-MW-81B-050619 Lab Sample ID: 240-112111-2

**Date Collected: 05/06/19 09:29** **Matrix: Water**
**Date Received: 05/07/19 09:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 20 | 380508 | 05/09/19 19:26 | TJL1 | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 1 | 381636 | 05/16/19 20:03 | BPM | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 5 | 381892 | 05/17/19 16:10 | BPM | TAL CAN |
| Total Recoverable | Prep | 3005A | | | 380224 | 05/08/19 14:00 | MBB | TAL CAN |
| Total Recoverable | Analysis | 6010C | | 1 | 380467 | 05/09/19 16:46 | WKD | TAL CAN |
| Total/NA | Analysis | 2320B-1997 | | 1 | 381502 | 05/15/19 13:51 | MMM | TAL CAN |
| Total/NA | Analysis | 300.0 | | 1 | 381916 | 05/17/19 22:06 | JWW | TAL CAN |
| Total/NA | Analysis | 9060A | | 1 | 594412 | 05/10/19 15:29 | VRP | TAL NSH |

## Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

**Date Collected: 05/06/19 10:53** **Matrix: Water**
**Date Received: 05/07/19 09:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 10 | 380285 | 05/08/19 19:16 | TJL1 | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 1 | 381636 | 05/16/19 20:21 | BPM | TAL CAN |
| Total Recoverable | Prep | 3005A | | | 380224 | 05/08/19 14:00 | MBB | TAL CAN |
| Total Recoverable | Analysis | 6010C | | 1 | 380467 | 05/09/19 16:59 | WKD | TAL CAN |
| Total/NA | Analysis | 2320B-1997 | | 1 | 381502 | 05/15/19 13:56 | MMM | TAL CAN |
| Total/NA | Analysis | 300.0 | | 1 | 381916 | 05/17/19 23:08 | JWW | TAL CAN |
| Total/NA | Analysis | 9060A | | 1 | 594412 | 05/10/19 15:53 | VRP | TAL NSH |

## Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

**Date Collected: 05/06/19 13:32** **Matrix: Water**
**Date Received: 05/07/19 09:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 40 | 380285 | 05/08/19 19:39 | TJL1 | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 1 | 381636 | 05/16/19 20:38 | BPM | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 10 | 381892 | 05/17/19 16:27 | BPM | TAL CAN |
| Total Recoverable | Prep | 3005A | | | 380224 | 05/08/19 14:00 | MBB | TAL CAN |
| Total Recoverable | Analysis | 6010C | | 1 | 380467 | 05/09/19 17:04 | WKD | TAL CAN |
| Total/NA | Analysis | 2320B-1997 | | 1 | 381502 | 05/15/19 14:01 | MMM | TAL CAN |
| Total/NA | Analysis | 300.0 | | 1 | 381916 | 05/17/19 23:29 | JWW | TAL CAN |
| Total/NA | Analysis | 9060A | | 1 | 594412 | 05/10/19 16:19 | VRP | TAL NSH |

# Lab Chronicle

Client: Tetra Tech, Inc.
Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Client Sample ID: MRC-NMW-2I-050619
## Lab Sample ID: 240-112111-5

**Date Collected: 05/06/19 14:57**
**Matrix: Water**
**Date Received: 05/07/19 09:25**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 25 | 380285 | 05/08/19 20:01 | TJL1 | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 1 | 381636 | 05/16/19 20:55 | BPM | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 10 | 381892 | 05/17/19 16:45 | BPM | TAL CAN |
| Total Recoverable | Prep | 3005A | | | 380224 | 05/08/19 14:00 | MBB | TAL CAN |
| Total Recoverable | Analysis | 6010C | | 1 | 380467 | 05/09/19 17:09 | WKD | TAL CAN |
| Total/NA | Analysis | 2320B-1997 | | 1 | 381502 | 05/15/19 14:05 | MMM | TAL CAN |
| Total/NA | Analysis | 300.0 | | 1 | 381916 | 05/17/19 23:49 | JWW | TAL CAN |
| Total/NA | Analysis | 9060A | | 1 | 594412 | 05/10/19 16:45 | VRP | TAL NSH |

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Laboratory: Eurofins TestAmerica, Canton

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| California | State Program | 9 | 2927 | 02-23-20 |
| Connecticut | State Program | 1 | PH-0590 | 12-31-19 |
| Florida | NELAP | 4 | E87225 | 06-30-19 * |
| Illinois | NELAP | 5 | 200004 | 07-31-19 * |
| Kansas | NELAP | 7 | E-10336 | 04-30-20 |
| Kentucky (UST) | State Program | 4 | 58 | 02-23-20 |
| Kentucky (WW) | State Program | 4 | 98016 | 12-31-19 |
| Minnesota | NELAP | 5 | 039-999-348 | 12-31-19 * |
| Minnesota (Petrofund) | State Program | 1 | 3506 | 07-31-19 * |
| Nevada | State Program | 9 | OH00048 | 07-31-19 |
| New Jersey | NELAP | 2 | OH001 | 06-30-19 * |
| New York | NELAP | 2 | 10975 | 03-31-20 |
| Ohio VAP | State Program | 5 | CL0024 | 09-06-19 |
| Oregon | NELAP | 10 | 4062 | 02-23-20 |
| Pennsylvania | NELAP | 3 | 68-00340 | 08-31-19 * |
| Texas | NELAP | 6 | T104704517-18-10 | 08-31-19 |
| USDA | Federal | | P330-16-00404 | 12-28-19 |
| Virginia | NELAP | 3 | 460175 | 09-14-19 |
| Washington | State Program | 10 | C971 | 01-12-20 * |
| West Virginia DEP | State Program | 3 | 210 | 12-31-19 |

## Laboratory: Eurofins TestAmerica, Nashville

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-19 |
| Alaska (UST) | State Program | 10 | UST-087 | 06-30-19 |
| Arizona | State Program | 9 | AZ0473 | 05-05-20 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-20 |
| California | State Program | 9 | 2938 | 06-30-19 |
| Connecticut | State Program | 1 | PH-0220 | 12-31-19 |
| Florida | NELAP | 4 | E87358 | 06-30-19 |
| Georgia | State Program | 4 | NA: NELAP & A2LA | 12-31-19 |
| Illinois | NELAP | 5 | 200010 | 12-09-19 |
| Iowa | State Program | 7 | 131 | 04-01-20 |
| Kansas | NELAP | 7 | E-10229 | 10-31-19 |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-19 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-19 |
| Louisiana | NELAP | 6 | 30613 | 06-30-19 |
| Maine | State Program | 1 | TN00032 | 11-03-19 |
| Maryland | State Program | 3 | 316 | 03-31-20 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-19 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-19 |
| Mississippi | State Program | 4 | N/A | 06-30-19 |
| Nevada | State Program | 9 | TN00032 | 07-31-19 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-19 |
| New Jersey | NELAP | 2 | TN965 | 06-30-19 |
| New York | NELAP | 2 | 11342 | 03-31-20 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-19 |
| North Dakota | State Program | 8 | R-146 | 06-30-19 |

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

# Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

## Laboratory: Eurofins TestAmerica, Nashville (Continued)

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| Oklahoma | State Program | 6 | 9412 | 08-31-19 |
| Oregon | NELAP | 10 | TN200001 | 04-26-19 * |
| Pennsylvania | NELAP | 3 | 68-00585 | 07-31-19 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-19 |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-19 * |
| Tennessee | State Program | 4 | 2008 | 02-23-20 |
| Texas | NELAP | 6 | T104704077 | 08-31-19 |
| USDA | Federal | | P330-13-00306 | 04-10-20 |
| Utah | NELAP | 8 | TN00032 | 07-31-19 |
| Virginia | NELAP | 3 | 460152 | 06-14-19 |
| Washington | State Program | 10 | C789 | 07-19-19 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-20 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-19 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-19 |

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

# Method Summary

Client: Tetra Tech, Inc. Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL CAN |
| RSK-175 | Dissolved Gases (GC) | RSK | TAL CAN |
| 6010C | Metals (ICP) | SW846 | TAL CAN |
| 2320B-1997 | Alkalinity, Total | SM | TAL CAN |
| 300.0 | Anions, Ion Chromatography | MCAWW | TAL CAN |
| 9060A | Organic Carbon, Total (TOC) | SW846 | TAL NSH |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | SW846 | TAL CAN |
| 5030C | Purge and Trap | SW846 | TAL CAN |

**Protocol References:**

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

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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

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

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: Tetra Tech, Inc.
Job ID: 240-112111-1
Project/Site: MRC Block I GW Sampling

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Assest ID |
|---|---|---|---|---|---|
| 240-112111-1 | TB-050619 | Water | 05/06/19 00:00 | 05/07/19 09:25 | |
| 240-112111-2 | MRC-MW-81B-050619 | Water | 05/06/19 09:29 | 05/07/19 09:25 | |
| 240-112111-3 | MRC-NMW-1I-050619 | Water | 05/06/19 10:53 | 05/07/19 09:25 | |
| 240-112111-4 | MRC-NMW-3I-050619 | Water | 05/06/19 13:32 | 05/07/19 09:25 | |
| 240-112111-5 | MRC-NMW-2I-050619 | Water | 05/06/19 14:57 | 05/07/19 09:25 | |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Analysis Batch Number: 337766

Lab Sample ID: STD8260 240-337766/13 I  Client Sample ID:

Date Analyzed: 07/24/18 20:04  Lab File ID: U1900794.d  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | | Invalid Compound ID | laveyt | 07/25/18 10:11 |
| 2-Methyl-2-propanol | | Invalid Compound ID | laveyt | 07/25/18 09:53 |
| Acetone | | Invalid Compound ID | laveyt | 07/25/18 09:52 |
| Bromoform | | Invalid Compound ID | laveyt | 07/25/18 09:54 |
| Methylene Chloride | | Invalid Compound ID | laveyt | 07/25/18 09:52 |
| n-Heptane | | Invalid Compound ID | laveyt | 07/25/18 09:54 |
| 1,3-Dichlorobenzene | 10.81 | Peak assignment corrected | laveyt | 07/25/18 09:51 |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Analysis Batch Number: 342719

Lab Sample ID: STD8260 240-342719/13 I  Client Sample ID:

Date Analyzed: 08/27/18 19:23  Lab File ID: U1901329.d  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | | Invalid Compound ID | laveyt | 08/27/18 19:49 |
| Acetone | | Invalid Compound ID | laveyt | 08/27/18 19:48 |
| Methylene Chloride | | Invalid Compound ID | laveyt | 08/27/18 19:48 |
| Naphthalene | | Invalid Compound ID | laveyt | 08/27/18 20:00 |
| n-Heptane | | Invalid Compound ID | laveyt | 08/27/18 19:48 |
| Tetrahydrofuran | | Invalid Compound ID | laveyt | 08/27/18 19:48 |
| trans-1,4-Dichloro-2-butene | | Invalid Compound ID | laveyt | 08/27/18 19:50 |
| 1,3-Dichlorobenzene | 10.82 | Peak assignment corrected | laveyt | 08/27/18 19:47 |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19 Analysis Batch Number: 380285

Lab Sample ID: MB 240-380285/8 Client Sample ID:

Date Analyzed: 05/08/19 17:48 Lab File ID: U1907220.d GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methyl acetate | | Invalid Compound ID | laveyt | 05/08/19 18:59 |

Lab Sample ID: 240-112111-3 Client Sample ID: MRC-NMW-1I-050619

Date Analyzed: 05/08/19 19:16 Lab File ID: U1907224.d GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methyl acetate | | Invalid Compound ID | laveyt | 05/08/19 19:40 |

Lab Sample ID: 240-112111-4 Client Sample ID: MRC-NMW-3I-050619

Date Analyzed: 05/08/19 19:39 Lab File ID: U1907225.d GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methyl acetate | | Invalid Compound ID | laveyt | 05/08/19 20:04 |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Analysis Batch Number: 380508

Lab Sample ID: MB 240-380508/8  Client Sample ID:

Date Analyzed: 05/09/19 19:03  Lab File ID: U1907251.d  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methyl acetate | | Invalid Compound ID | laveyt | 05/09/19 19:24 |

Lab Sample ID: 240-112111-2  Client Sample ID: MRC-MW-81B-050619

Date Analyzed: 05/09/19 19:26  Lab File ID: U1907252.d  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chloroethane | | Invalid Compound ID | laveyt | 05/09/19 20:15 |

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 373146

Lab Sample ID: STD 240-373146/3 IC  Client Sample ID:

Date Analyzed: 03/25/19 14:32  Lab File ID: Z0325003.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methane | 1.18 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Acetylene | 2.00 | Incomplete Integration | matthewsb | 03/26/19 07:52 |
| Ethane | 2.20 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:47 |

Lab Sample ID: STD 240-373146/4 IC  Client Sample ID:

Date Analyzed: 03/25/19 14:49  Lab File ID: Z0325004.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Acetylene | 2.00 | Incomplete Integration | matthewsb | 03/26/19 07:48 |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

Lab Sample ID: STD 240-373146/5 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:06  Lab File ID: Z0325005.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

Lab Sample ID: STD 240-373146/6 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:23  Lab File ID: Z0325006.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 373146

Lab Sample ID: STD 240-373146/7 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:40  Lab File ID: Z0325007.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.54 | Split Peak | matthewsb | 03/26/19 07:49 |

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 381636

Lab Sample ID: 240-112111-2  Client Sample ID: MRC-MW-81B-050619

Date Analyzed: 05/16/19 20:03  Lab File ID: Z0516023.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 05/17/19 07:18 |
| Ethane | 2.21 | Incomplete Integration | matthewsb | 05/17/19 07:18 |

Lab Sample ID: 240-112111-4  Client Sample ID: MRC-NMW-3I-050619

Date Analyzed: 05/16/19 20:38  Lab File ID: Z0516025.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 05/17/19 07:19 |
| Ethane | 2.20 | Incomplete Integration | matthewsb | 05/17/19 07:19 |

Lab Sample ID: 240-112111-5  Client Sample ID: MRC-NMW-2I-050619

Date Analyzed: 05/16/19 20:55  Lab File ID: Z0516026.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 05/17/19 07:19 |
| Ethane | 2.20 | Incomplete Integration | matthewsb | 05/17/19 07:19 |

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: THOR  Analysis Batch Number: 339523

Lab Sample ID: STD1 240-339523/1 IC  Client Sample ID:

Date Analyzed: 08/07/18 12:13  Lab File ID: 240-0078648-001_02_CD.d  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 3.75 | Peak not integrated | grossmanl | 08/09/18 08:19 |

Lab Sample ID: STD2 240-339523/2 IC  Client Sample ID:

Date Analyzed: 08/07/18 12:34  Lab File ID: 240-0078648-002_03_CD.d  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 3.75 | Peak not integrated | grossmanl | 08/09/18 08:19 |

Lab Sample ID: STD4 240-339523/4 IC  Client Sample ID:

Date Analyzed: 08/07/18 13:16  Lab File ID: 240-0078648-004_05_CD.d  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 3.75 | Peak not integrated | grossmanl | 08/09/18 08:20 |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **MEEP LCS_00026** | 05/22/19 | 05/08/19 | DIWATER, Lot 1 | 43 mL | MEEP_00013 | 4 mL | Ethane | 475.349 ug/L |
| | | | | | | | Ethene | 386.977 ug/L |
| | | | | | | | Methane | 480 ug/L |
| .MEEP_00013 | 06/26/19 | | LGC, Lot 1005981 | | (Purchased Reagent) | | Ethane | 5.11 mg/L |
| | | | | | | | Ethene | 4.16 mg/L |
| | | | | | | | Methane | 5.16 mg/L |
| **MT6500ICV_00054** | 06/20/19 | 04/29/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRICV1_00009 | 5 mL | Iron | 12500 ug/L |
| | | | | | MTTRICV3_00011 | 6 mL | Manganese | 1500 ug/L |
| .MTTRICV1_00009 | 06/20/19 | | CPI, Lot 10072207-1 | | (Purchased Reagent) | | Iron | 2500 mg/L |
| .MTTRICV3_00011 | 11/30/19 | | CPI, Lot 10075909-3 | | (Purchased Reagent) | | Manganese | 250 mg/L |
| **MTAGSPIKEW_00091** | 10/16/19 | 04/16/19 | DIWATER, Lot DIWATER | 1000 mL | MTAG_00008 | 2.5 mL | Ag | 2500 ug/L |
| | | | | | MTTMHNO3_00186 | 50 mL | Nitric acid | 50000000 ug/L |
| .MTAG_00008 | 02/28/20 | | HIGH PURITY STANDARDS, Lot 1817921 | | (Purchased Reagent) | | Ag | 1000 ug/mL |
| .MTTMHNO3_00186 | 04/08/21 | | Macron, Lot 0000216908 | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTICP1_00084** | 11/02/19 | 05/02/19 | DIWATER, Lot DI WATER | 1000 mL | MTICPSPIKE1A_00014 | 50 mL | Al | 100000 ug/L |
| | | | | | | | As | 100000 ug/L |
| | | | | | | | B | 50000 ug/L |
| | | | | | | | Ba | 100000 ug/L |
| | | | | | | | Be | 2500 ug/L |
| | | | | | | | Cd | 2500 ug/L |
| | | | | | | | Co | 25000 ug/L |
| | | | | | | | Cr | 10000 ug/L |
| | | | | | | | Cu | 12500 ug/L |
| | | | | | | | Iron | 50000 ug/L |
| | | | | | | | Manganese | 25000 ug/L |
| | | | | | | | Ni | 25000 ug/L |
| | | | | | | | Pb | 25000 ug/L |
| | | | | | | | Se | 100000 ug/L |
| | | | | | | | Tl | 100000 ug/L |
| | | | | | | | V | 25000 ug/L |
| | | | | | | | Zn | 25000 ug/L |
| | | | | | MTICPSPIKEB_00013 | 50 mL | Mo | 50000 ug/L |
| | | | | | | | Sb | 25000 ug/L |
| | | | | | | | Sn | 100000 ug/L |
| | | | | | | | Ti | 50000 ug/L |
| | | | | | MTICPSpikeOdd_00010 | 50 mL | Li | 50000 ug/L |
| | | | | | | | Si | 50000 ug/L |
| | | | | | | | SiO2 | 107000 ug/L |
| | | | | | | | Sr | 50000 ug/L |
| | | | | | MTTMHNO3_00188 | 50 mL | Nitric acid | 50000000 ug/L |
| .MTICPSPIKE1A_00014 | 11/30/19 | | High Purity Standards, Lot 1831255 | | (Purchased Reagent) | | Al | 2000 ug/mL |
| | | | | | | | As | 2000 ug/mL |
| | | | | | | | B | 1000 ug/mL |
| | | | | | | | Ba | 2000 ug/mL |
| | | | | | | | Be | 50 ug/mL |
| | | | | | | | Cd | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Co | 500 ug/mL |
| | | | | | | | Cr | 200 ug/mL |
| | | | | | | | Cu | 250 ug/mL |
| | | | | | | | Iron | 1000 ug/mL |
| | | | | | | | Manganese | 500 ug/mL |
| | | | | | | | Ni | 500 ug/mL |
| | | | | | | | Pb | 500 ug/mL |
| | | | | | | | Se | 2000 ug/mL |
| | | | | | | | Tl | 2000 ug/mL |
| | | | | | | | V | 500 ug/mL |
| | | | | | | | Zn | 500 ug/mL |
| .MTICPSPIKEB_00013 | 11/30/19 | High Purity Standards, Lot 1831330 | | | (Purchased Reagent) | | Mo | 1000 ug/mL |
| | | | | | | | Sb | 500 ug/mL |
| | | | | | | | Sn | 2000 ug/mL |
| | | | | | | | Ti | 1000 ug/mL |
| .MTICPSpikeOdd_00010 | 11/30/19 | High Purity Standards, Lot 1831608 | | | (Purchased Reagent) | | Li | 1000 ug/mL |
| | | | | | | | Si | 1000 ug/mL |
| | | | | | | | SiO2 | 2140 ug/mL |
| | | | | | | | Sr | 1000 ug/mL |
| .MTTMHNO3_00188 | 04/25/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTICP2A_00092** | 10/16/19 | 04/16/19 | DIWATER, Lot NONE | 1000 mL | MTTMHNO3_00186 | 50 mL | Nitric acid | 50000 mg/L |
| | | | | | MTTRCAL2_00021 | 250 mL | Ca | 2500 mg/L |
| | | | | | | | K | 2500 mg/L |
| | | | | | | | Mg | 2500 mg/L |
| | | | | | | | Na | 2500 mg/L |
| .MTTMHNO3_00186 | 04/08/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| .MTTRCAL2_00021 | 10/31/19 | HIGH PURITY STANDARDS, Lot 1812740 | | | (Purchased Reagent) | | Ca | 10000 ug/mL |
| | | | | | | | K | 10000 ug/mL |
| | | | | | | | Mg | 10000 ug/mL |
| | | | | | | | Na | 10000 ug/mL |
| **MTICPCCV_00153** | 10/29/19 | 04/29/19 | DIWATER, Lot DIWATER | 2000 mL | MTICPCCV1_00029 | 200 mL | Iron | 25000 ug/L |
| | | | | | | | Manganese | 2000 ug/L |
| .MTICPCCV1_00029 | 03/19/20 | INORGANIC VENTURES, Lot K2-MEB632080 | | | (Purchased Reagent) | | Iron | 250000 ug/L |
| | | | | | | | Manganese | 20000 ug/L |
| **MTICPICSABW_00021** | 08/28/19 | 04/04/19 | DIWATER, Lot DIWATER | 1000 mL | MTICPICSAB1_00008 | 100 mL | Al | 500000 ug/L |
| | | | | | | | As | 1000 ug/L |
| | | | | | | | B | 500 ug/L |
| | | | | | | | Ba | 500 ug/L |
| | | | | | | | Be | 500 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Cd | 1000 ug/L |
| | | | | | | | Co | 500 ug/L |
| | | | | | | | Cr | 500 ug/L |
| | | | | | | | Cu | 500 ug/L |
| | | | | | | | Iron | 200000 ug/L |
| | | | | | | | K | 10000 ug/L |
| | | | | | | | Li | 500 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Manganese | 500 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| | | | | | | | Na | 10000 ug/L |
| | | | | | | | Ni | 1000 ug/L |
| | | | | | | | Pb | 1000 ug/L |
| | | | | | | | Se | 1000 ug/L |
| | | | | | | | Sr | 1500 ug/L |
| | | | | | | | Tl | 1000 ug/L |
| | | | | | | | V | 500 ug/L |
| | | | | | | | Zn | 1000 ug/L |
| | | | | | MTICPICSAB2_00008 | 100 mL | Ag | 1000 ug/L |
| | | | | | | | Mo | 1000 ug/L |
| | | | | | | | Sb | 1000 ug/L |
| | | | | | | | Si | 10000 ug/L |
| | | | | | | | Sn | 500 ug/L |
| | | | | | | | Ti | 500 ug/L |
| .MTICPICSAB1_00008 | 08/28/19 | INORGANIC VENTURES, Lot N2-MEB669101 | | | (Purchased Reagent) | | Al | 5000000 ug/L |
| | | | | | | | As | 10000 ug/L |
| | | | | | | | B | 5000 ug/L |
| | | | | | | | Ba | 5000 ug/L |
| | | | | | | | Be | 5000 ug/L |
| | | | | | | | Ca | 5000000 ug/L |
| | | | | | | | Cd | 10000 ug/L |
| | | | | | | | Co | 5000 ug/L |
| | | | | | | | Cr | 5000 ug/L |
| | | | | | | | Cu | 5000 ug/L |
| | | | | | | | Iron | 2000000 ug/L |
| | | | | | | | K | 100000 ug/L |
| | | | | | | | Li | 5000 ug/L |
| | | | | | | | Manganese | 5000 ug/L |
| | | | | | | | Mg | 5000000 ug/L |
| | | | | | | | Na | 100000 ug/L |
| | | | | | | | Ni | 10000 ug/L |
| | | | | | | | Pb | 10000 ug/L |
| | | | | | | | Se | 10000 ug/L |
| | | | | | | | Sr | 15000 ug/L |
| | | | | | | | Tl | 10000 ug/L |
| | | | | | | | V | 5000 ug/L |
| | | | | | | | Zn | 10000 ug/L |
| .MTICPICSAB2_00008 | 08/28/19 | INORGANIC VENTURES, Lot N2-MEB669102 | | | (Purchased Reagent) | | Ag | 10000 ug/L |
| | | | | | | | Mo | 10000 ug/L |
| | | | | | | | Sb | 10000 ug/L |
| | | | | | | | Si | 100000 ug/L |
| | | | | | | | Sn | 5000 ug/L |
| | | | | | | | Ti | 5000 ug/L |
| **MTICPPDSB_00004** | 09/04/19 | Inorganic Ventures, Lot M2-MEB660776 | | | (Purchased Reagent) | | Iron | 100 ug/mL |
| **MTTMHCL_00246** | 04/30/21 | JT Baker(Avantor), Lot 0000221681 | | | (Purchased Reagent) | | Hydrogen Chloride | 100 % |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **MTTMHNO3_00189** | 05/06/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTTRCRIC_00069** | 10/04/19 | 04/04/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRCRI6010C_00020 | 50 mL | Iron | 200 ug/L |
| | | | | | | | Manganese | 15 ug/L |
| .MTTRCRI6010C_00020 | 11/12/19 | Inorganic Ventures, Lot N2-MEB664971 | | | (Purchased Reagent) | | Iron | 4000 ug/L |
| | | | | | | | Manganese | 300 ug/L |
| **MTTRICSAW_00045** | 08/14/19 | 02/14/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRICSA_00018 | 100 mL | Al | 500000 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Iron | 200000 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| .MTTRICSA_00018 | 02/14/20 | INORGANIC VENTURES, Lot K2-MEB643109 | | | (Purchased Reagent) | | Al | 5000 ug/mL |
| | | | | | | | Ca | 5000 ug/mL |
| | | | | | | | Iron | 2000 ug/mL |
| | | | | | | | Mg | 5000 ug/mL |
| **SAICALSURR_00015** | 07/13/20 | SynQuest Laboratories, Inc., Lot 469800 | | | (Purchased Reagent) | | 1,1,1-Trifluoroethane | 11190 ug/L |
| **SARSK2ndSourc_00001** | 12/26/22 | Matheson Trigas, Lot 109-84-03769-E2 | | | (Purchased Reagent) | | Ethane | 12338 ug/L |
| | | | | | | | Ethene | 11518 ug/L |
| | | | | | | | Methane | 6558 ug/L |
| **SARSKHighCal_00006** | 02/08/23 | Airgas, Lot CBJ-510-1 | | | (Purchased Reagent) | | Acetylene | 10657 ug/L |
| | | | | | | | Ethane | 12338 ug/L |
| | | | | | | | Ethene | 11518 ug/L |
| | | | | | | | Methane | 6558 ug/L |
| | | | | | | | Propane | 18077 ug/L |
| **SARSKLOWCAL_00013** | 03/13/22 | AirGas, Lot 160-401444112-1 | | | (Purchased Reagent) | | Acetylene | 1087 ug/L |
| | | | | | | | Ethane | 1252 ug/L |
| | | | | | | | Ethene | 1176 ug/L |
| | | | | | | | Methane | 667 ug/L |
| | | | | | | | Propane | 1835 ug/L |
| **SARSKSURR_00012** | 05/22/19 | Matheson Trigas, Lot 9302603973 | | | (Purchased Reagent) | | 1,1,1-Trifluoroethane | 11190 ug/L |
| **vm50is_stk_A_00001** | 11/14/18 | 05/14/18 | MEOH, Lot 191720 | 50 mL | vm30241_00007 | 1 mL | 1,4-Dichlorobenzene-d4 | 50 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 50 ug/mL |
| | | | | | | | Fluorobenzene | 50 ug/mL |
| .vm30241_00007 | 01/31/23 | restek, Lot A0134242 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2500 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 2500 ug/mL |
| | | | | | | | Fluorobenzene | 2500 ug/mL |
| **vm50is_stk_A_00003** | 05/19/19 | 11/19/18 | MEOH, Lot 196628 | 50 mL | vm30241_00007 | 1 mL | 1,4-Dichlorobenzene-d4 | 50 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 50 ug/mL |
| | | | | | | | Fluorobenzene | 50 ug/mL |
| .vm30241_00007 | 01/31/23 | restek, Lot A0134242 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2500 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 2500 ug/mL |
| | | | | | | | Fluorobenzene | 2500 ug/mL |
| **vm50ss_00329** | 07/27/18 | 07/20/18 | MEOH, Lot na | 4 mL | vm50ss_stk_00078 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| .vm50ss_stk_00078 | 12/20/18 | 06/20/18 | MEOH, Lot 178178 | 200 mL | VM567650_00029 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| ..VM567650_00029 | 01/31/22 | | Restek, Lot A0124069 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_00333** | 08/29/18 | 08/22/18 | MEOH, Lot na | 4 mL | vm50ss_stk_00078 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .vm50ss_stk_00078 | 12/20/18 | 06/20/18 | MEOH, Lot 178178 | 200 mL | VM567650_00029 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| ..VM567650_00029 | 01/31/22 | | Restek, Lot A0124069 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_stk_00077** | 09/27/18 | 03/27/18 | MEOH, Lot 0000136118 | 200 mL | VM567650_00027 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .VM567650_00027 | 07/31/21 | | Restek, Lot A0120212 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_stk_00080** | 08/20/19 | 02/20/19 | MEOH, Lot 0000196628 | 200 mL | VM567650_00030 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .VM567650_00030 | 01/31/22 | | Restek, Lot A0124069 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vmarolistdw_00256** | 07/26/18 | 07/19/18 | MEOH, Lot na | 4 mL | VMACROLSTD_00062 | 4 mL | Acrolein | 250 ug/mL |
| .VMACROLSTD_00062 | 08/31/18 | 06/01/18 | MEOH, Lot 178178 | 100 mL | VM568720_00028 | 1.25 mL | Acrolein | 250 ug/mL |
| ..VM568720_00028 | 08/31/18 | | restek, Lot A0135693 | | (Purchased Reagent) | | Acrolein | 20000 ug/mL |
| **vmarolistdw_00260** | 08/27/18 | 08/20/18 | MEOH, Lot na | 4 mL | VMACROLSTD_00062 | 4 mL | Acrolein | 250 ug/mL |
| .VMACROLSTD_00062 | 08/31/18 | 06/01/18 | MEOH, Lot 178178 | 100 mL | VM568720_00028 | 1.25 mL | Acrolein | 250 ug/mL |
| ..VM568720_00028 | 08/31/18 | | restek, Lot A0135693 | | (Purchased Reagent) | | Acrolein | 20000 ug/mL |
| **vmbfb_00020** | | | | | | | 1,2-Dichloroethene, Total | |
| | | | | | | | 1,3-Dichloropropene, Total | |
| | | | | | | | Tentatively Identified Compound | |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Total BTEX | |
| | | | | | | | Trihalomethanes, Total | |
| | | | | | | | Xylenes, Total | |
| | | | | | vm30026_00002 | 1.25 mL | BFB | 50 ug/mL |
| .vm30026_00002 | 07/31/21 | | restek, Lot A0120567 | | (Purchased Reagent) | | BFB | 2000 ug/mL |
| **vmbfb_00021** | | | | | | | 1,2-Dichloroethene, Total | |
| | | | | | | | 1,3-Dichloropropene, Total | |
| | | | | | | | Tentatively Identified Compound | |
| | | | | | | | Total BTEX | |
| | | | | | | | Trihalomethanes, Total | |
| | | | | | | | Xylenes, Total | |
| | | | | | vm30026_00002 | 1.25 mL | BFB | 50 ug/mL |
| .vm30026_00002 | 07/31/21 | | restek, Lot A0120567 | | (Purchased Reagent) | | BFB | 2000 ug/mL |
| **VMFASGW_00271** | 08/28/18 | 08/21/18 | MEOH, Lot NA | 4 mL | VMFASG_00074 | 4 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00074 | 09/13/18 | 08/13/18 | MEOH, Lot 0000196626 | 100 mL | vm569722S_00004 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..vm569722S_00004 | 11/30/18 | | Restek, Lot A0115484 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMFASGW_00308** | 05/14/19 | 05/07/19 | MEOH, Lot NA | 5 mL | VMFASG_00082 | 5 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00082 | 05/21/19 | 04/21/19 | MEOH, Lot 0000196628 | 100 mL | vm569722S_00005 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..vm569722S_00005 | 01/31/20 | | Restek, Lot A0124116 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMFASPW_00264** | 09/03/18 | 08/27/18 | MEOH, Lot n/a | 4 mL | VMRFASP_00049 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| .VMRFASP_00049 | 10/31/18 | 07/18/18 | MEOH, Lot 0000196626 | 100 mL | VM569721S_00003 | 0.8 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992S_00002 | 2 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721S_00003 | 03/31/19 | | Restek, Lot A0108013 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992S_00002 | 12/31/18 | | Restek, Lot A0123775 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **VMFASPW_00298** | 05/09/19 | 05/02/19 | MEOH, Lot n/a | 5 mL | VMRFASP_00055 | 5 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRFASP_00055 | 06/30/19 | 03/31/19 | MEOH, Lot 0000196628 | 100 mL | VM569721S_00005 | 0.8 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992S_00004 | 2 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721S_00005 | 12/31/20 | | Restek, Lot A0133078 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992S_00004 | 06/30/19 | | Restek, Lot A0123775 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **vmrgas_00255** | 07/30/18 | 07/23/18 | MEOH, Lot 0000196626 | 10 mL | vm569722_00011 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Butadiene | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Dichlorofluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00011 | 10/31/20 | | Restek, Lot A0131502 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Butadiene | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Dichlorofluoromethane | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **vmrgas_00259** | 08/31/18 | 08/24/18 | MEOH, Lot 0000196628 | 10 mL | vm569722_00011 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Butadiene | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Dichlorofluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00011 | 10/31/20 | | Restek, Lot A0131502 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Butadiene | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Dichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMRGAS_00292** | 05/15/19 | 05/08/19 | MEOH, Lot 0000198123 | 10 mL | vm569722_00012 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00012 | 11/30/21 | | Restek, Lot A0143158 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **vmrprimw_00292** | 07/26/18 | 07/19/18 | MEOH, Lot NA | 4 mL | VMRPRIM_00028 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | | | Vinyl acetate | 50 ug/mL |
| | | | | | | | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| .VMRPRIM_00028 | 07/29/18 | 04/29/18 | MEOH, Lot 0000177891 | 50 mL | VM569721_00002 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM569723_00003 | 2 mL | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | VM569724_00014 | 0.5 mL | Vinyl acetate | 50 ug/mL |
| | | | | | VM571992_00001 | 1 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| ..VM569721_00002 | 08/31/18 | | Restek, Lot A0113194 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM569723_00003 | 07/31/18 | | restek, Lot A0112895 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..VM569724_00014 | 07/31/18 | | Restek, Lot A0134268 | | (Purchased Reagent) | | Vinyl acetate | 5000 ug/mL |
| ..VM571992_00001 | 12/31/18 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2500 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dioxane | 50000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 25000 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 2500 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 2500 ug/mL |
| | | | | | | | Acrylonitrile | 25000 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromobenzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorobromomethane | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dibromomethane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethyl ether | 2500 ug/mL |
| | | | | | | | Ethyl methacrylate | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachlorobutadiene | 2500 ug/mL |
| | | | | | | | Hexane | 2500 ug/mL |
| | | | | | | | Iodomethane | 2500 ug/mL |
| | | | | | | | Isobutyl alcohol | 62500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | n-Butylbenzene | 2500 ug/mL |
| | | | | | | | n-Heptane | 2500 ug/mL |
| | | | | | | | N-Propylbenzene | 2500 ug/mL |
| | | | | | | | Naphthalene | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | sec-Butylbenzene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | tert-Butylbenzene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Tetrahydrofuran | 5000 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| **vmrprimw_00297** | 08/29/18 | 08/22/18 | MEOH, Lot NA | 4 mL | VMRPRIM_00029 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | | | Vinyl acetate | 50 ug/mL |
| | | | | | | | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| .VMRPRIM_00029 | 10/31/18 | 07/28/18 | MEOH, Lot 0000196626 | 50 mL | VM569721_00004 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM569723_00004 | 2 mL | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | VM569724_00016 | 0.5 mL | Vinyl acetate | 50 ug/mL |
| | | | | | VM571992_00001 | 1 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| ..VM569721_00004 | 11/30/18 | | Restek, Lot A0115554 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM569723_00004 | 11/30/18 | | restek, Lot A0115628 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2500 ug/mL |
| ..VM569724_00016 | 10/31/18 | | Restek, Lot A0137562 | | (Purchased Reagent) | | Vinyl acetate | 5000 ug/mL |
| ..VM571992_00001 | 12/31/18 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2500 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dioxane | 50000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 25000 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 2500 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 2500 ug/mL |
| | | | | | | | Acrylonitrile | 25000 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromobenzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorobromomethane | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dibromomethane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethyl ether | 2500 ug/mL |
| | | | | | | | Ethyl methacrylate | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2500 ug/mL |
| | | | | | | | Hexane | 2500 ug/mL |
| | | | | | | | Iodomethane | 2500 ug/mL |
| | | | | | | | Isobutyl alcohol | 62500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | n-Butylbenzene | 2500 ug/mL |
| | | | | | | | n-Heptane | 2500 ug/mL |
| | | | | | | | N-Propylbenzene | 2500 ug/mL |
| | | | | | | | Naphthalene | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | sec-Butylbenzene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | tert-Butylbenzene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Tetrahydrofuran | 5000 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| **VMRPRIMW_00332** | 05/08/19 | 05/01/19 | MEOH, Lot NA | 4 mL | VMRPRIM_00035 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRPRIM_00035 | 06/30/19 | 03/01/19 | MEOH, Lot 0000196628 | 50 mL | VM569721_00005 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992_00002 | 1 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721_00005 | 04/30/21 | | Restek, Lot A0137509 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992_00002 | 06/30/19 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **VMRPRIMW_00333** | 05/15/19 | 05/08/19 | MEOH, Lot NA | 4 mL | VMRPRIM_00035 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRPRIM_00035 | 06/30/19 | 03/01/19 | MEOH, Lot 0000196628 | 50 mL | VM569721_00005 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992_00002 | 1 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721_00005 | 04/30/21 | | Restek, Lot A0137509 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992_00002 | 06/30/19 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **WCICCALSOLN_00292** | 09/06/18 | 08/06/18 | ELUENT, Lot 1847588 | 20 mL | WCICSOLNA1_00018 | 1.6 mL | Bromide | 40 mg/L |
| | | | | | | | Chloride | 200 mg/L |
| | | | | | | | Fluoride | 10 mg/L |
| | | | | | | | Sulfate | 200 mg/L |
| .WCICSOLNA1_00018 | 04/04/19 | Inorganic Ventures, Lot K2-MEB653716 | | | (Purchased Reagent) | | Bromide | 500 ug/mL |
| | | | | | | | Chloride | 2500 ug/mL |
| | | | | | | | Fluoride | 125 ug/mL |
| | | | | | | | Sulfate | 2500 ug/mL |
| **WCICCCV_00874** | 05/20/19 | 05/13/19 | MOHMWATER, Lot 050619 | 50 mL | WCICSOLNA1_00020 | 1 mL | Sulfate | 50 mg/L |
| .WCICSOLNA1_00020 | 04/02/20 | Inorganic Ventures, Lot P2-MEB677588 | | | (Purchased Reagent) | | Sulfate | 2500 ug/mL |
| **WCICLCS_00669** | 08/13/18 | 08/06/18 | MOHMWATER, Lot 040618 | 50 mL | WCICSOLNA2_00018 | 5 mL | Sulfate | 50 mg/L |
| .WCICSOLNA2_00018 | 11/30/18 | High Purity Standards, Lot 1732028 | | | (Purchased Reagent) | | Sulfate | 500 ug/mL |
| **WCICLCS_00709** | 05/20/19 | 05/13/19 | MOHMWATER, Lot 050619 | 50 mL | WCICSOLNA2_00020 | 5 mL | Sulfate | 50 mg/L |
| .WCICSOLNA2_00020 | 12/31/19 | High Purity Standards, Lot 1833341 | | | (Purchased Reagent) | | Sulfate | 500 mg/L |
| **WCICSOLNA1_00020** | 04/02/20 | Inorganic Ventures, Lot P2-MEB677588 | | | (Purchased Reagent) | | Sulfate | 2500 ug/mL |
| **WCPHENOMINER_00025** | 04/30/20 | PHENOVA-WIBBY, Lot 8177--08 | | | (Purchased Reagent) | | Alkalinity | 168 mg/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112111-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **TOC_CCV@1000_00043** | 07/29/19 | RICCA, Lot 2808628 | | | (Purchased Reagent) | | TOC Result 1 | 1000 mg/L |
| | | | | | | | TOC Result 2 | 1000 mg/L |
| | | | | | | | TOC Result 3 | 1000 mg/L |
| | | | | | | | TOC Result 4 | 1000 mg/L |
| | | | | | | | Total Organic Carbon | 1000 mg/L |
| **TOC_LCS@1000_00023** | 10/24/22 | Inorganic Ventures, Lot N2-C672223 | | | (Purchased Reagent) | | Total Organic Carbon | 1000 mg/L |

# Reagent

# MEEP_00013

0.8/0.6 RCVD 4/30/19

VHG Labs, Inc [A LGC Standards Company]
276 Abby Road | Manchester, NH 03103 | USA
Tel:+1-603-206-0759 | Fax: 1-603-622-5180
www.lgcstandards.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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ISO 17034 Accredited
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Cert. No. 3031.02

Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

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| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
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| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
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## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

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## Method of Preparation

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## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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Cert. No. 3031.02

Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
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| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

# Reagent

# MTAG_00008

Recd 8-7-18 KL

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

Silver

Product Number: **100051-1**
Lot Number: **1817921**
Matrix: 2% (v/v) $HNO_3$

**Certified Value:**

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Ag | 1000 ± 3 | 3151 | 160729 |

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Density:** 1.016 g/mL ± 0.002 g/mL @ 20.0°C ± 0.3°C

**Uncertified Values:**

**Trace Metal Impurity Scan:** The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ag | | M | Cu | < | 0.02 | Li | < | 0.5 | Rb | < | 0.02 | Th | < | 0.02 |
| Al | < | 0.05 | Dy | < | 0.02 | Lu | < | 0.02 | Re | < | 0.02 | Ti | < | 0.1 |
| As | < | 0.05 | Er | < | 0.02 | Mg | < | 0.5 | Rh | < | 0.02 | Tl | < | 0.02 |
| Au | < | 0.02 | Eu | < | 0.02 | Mn | < | 0.05 | Ru | < | 0.02 | Tm | < | 0.02 |
| B | < | 1 | Fe | < | 1 | Mo | < | 0.02 | Sb | < | 0.02 | U | < | 0.05 |
| Ba | < | 0.02 | Ga | < | 0.02 | Na | < | 3 | Sc | < | 0.02 | V | < | 0.05 |
| Be | < | 0.02 | Gd | < | 0.02 | Nb | < | 0.02 | Se | < | 0.1 | W | < | 0.02 |
| Bi | < | 0.02 | Ge | < | 0.02 | Nd | < | 0.02 | Si | | 35 | Y | < | 0.02 |
| Ca | < | 1 | Hf | < | 0.02 | Ni | < | 0.02 | Sm | < | 0.02 | Yb | < | 0.02 |
| Cd | < | 0.02 | Ho | < | 0.02 | Os | < | 0.02 | Sn | < | 0.5 | Zn | < | 0.02 |
| Ce | < | 0.02 | In | < | 0.02 | Pb | < | 0.05 | Sr | < | 0.02 | Zr | < | 0.02 |
| Co | < | 0.05 | Ir | < | 0.2 | Pd | < | 0.02 | Ta | < | 0.02 | | | |
| Cr | < | 0.05 | K | < | 1 | Pr | < | 0.02 | Tb | < | 0.02 | | | |
| Cs | | 5 | La | < | 0.02 | Pt | < | 0.02 | Te | < | 0.02 | | | |

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for **eighteen** months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **August 2018**

**Certificate Issue Date:** **July 10, 2018**

Moven Mututuvari

Moven Mututuvari, Ph. D, Laboratory Manager

**Preparation Information:**

This standard is prepared using **99.992%** pure **silver metal** which was purchased from a qualified vendor per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
   The calibration of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High-Purity Standards.

# Reagent

# MTICPCCV1_00029

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 12-7-13 KL

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-CCV1 |
| Lot Number: | N2-MEB674250 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 500 000 µg/L ea: Calcium, Potassium, Magnesium, Sodium, |
| | 250 000 µg/L ea: Aluminum, Iron, |
| | 50 000 µg/L ea: Strontium, Boron, Lithium, |
| | 20 000 µg/L ea: Manganese, Nickel, Barium, Beryllium, Cobalt, Chromium, Copper, Vanadium, Zinc, |
| | 10 000 µg/L ea: Thallium, |
| | 5 000 µg/L ea: Cadmium, Arsenic, Lead, Selenium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 250 000.00 ± 900.00 µg/L | Arsenic, As | 5 002 ± 34 µg/L |
| Barium, Ba | 20 000.0 ± 100.0 µg/L | Beryllium, Be | 20 000.0 ± 120.0 µg/L |
| Boron, B | 50 010.0 ± 350.0 µg/L | Cadmium, Cd | 4 997 ± 30 µg/L |
| Calcium, Ca | 499 900.00 ± 2 000.00 µg/L | Chromium, Cr | 20 000.0 ± 100.0 µg/L |
| Cobalt, Co | 20 000.0 ± 90.0 µg/L | Copper, Cu | 20 000.0 ± 120.0 µg/L |
| Iron, Fe | 250 100.00 ± 1 000.00 µg/L | Lead, Pb | 5 001 ± 26 µg/L |
| Lithium, Li | 50 030.0 ± 180.0 µg/L | Magnesium, Mg | 500 100.00 ± 2 100.00 µg/L |
| Manganese, Mn | 20 000.0 ± 100.0 µg/L | Nickel, Ni | 20 000.0 ± 120.0 µg/L |
| Potassium, K | 500 100.00 ± 1 800.00 µg/L | Selenium, Se | 5 002 ± 26 µg/L |
| Sodium, Na | 499 600.00 ± 1 800.00 µg/L | Strontium, Sr | 50 020.0 ± 200.0 µg/L |
| Thallium, Tl | 10 000.0 ± 70.0 µg/L | Vanadium, V | 20 000.0 ± 120.0 µg/L |
| Zinc, Zn | 20 000.0 ± 120.0 µg/L | | |

**Density:** 1.038 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 110830 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 030730Cr3 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 100714 |
| Li | Gravimetric | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 140110 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Tl | ICP Assay | 3158 | 993012 |
| Tl | Calculated | | See Sec. 4.2 |
| V | ICP Assay | 3165 | 160906 |
| V | EDTA | 928 | 928 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

December 05, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- December 05, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 3-19-19 KD

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPICSAB1_00008

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Recd 6.27.18 ku

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-ICSAB1 |
| Lot Number: | N2-MEB669101 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 000 µg/L ea: Aluminum, Calcium, Magnesium, 2 000 000 µg/L ea: Iron, 100 000 µg/L ea: Potassium, Sodium, 15 000 µg/L ea: Strontium, 10 000 µg/L ea: Thallium, Zinc, Nickel, Lead, Selenium, Cadmium, Arsenic, 5 000 µg/L ea: Boron, Barium, Beryllium, Cobalt, Chromium, Copper, Lithium, Manganese, Vanadium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 5 000 000.000 ± 18 000.000 µg/L | Arsenic, As | 10 000.0 ± 60.0 µg/L |
| Barium, Ba | 5 000 ± 26 µg/L | Beryllium, Be | 5 000 ± 29 µg/L |
| Boron, B | 5 000 ± 30 µg/L | Cadmium, Cd | 10 000.0 ± 60.0 µg/L |
| Calcium, Ca | 5 000 000.000 ± 20 000.000 µg/L | Chromium, Cr | 5 000 ± 26 µg/L |
| Cobalt, Co | 5 000 ± 26 µg/L | Copper, Cu | 5 001 ± 30 µg/L |
| Iron, Fe | 2 000 000.000 ± 8 000.000 µg/L | Lead, Pb | 10 000.0 ± 40.0 µg/L |
| Lithium, Li | 5 000 ± 26 µg/L | Magnesium, Mg | 5 000 000.000 ± 20 000.000 µg/L |
| Manganese, Mn | 5 001 ± 26 µg/L | Nickel, Ni | 10 000.0 ± 60.0 µg/L |
| Potassium, K | 100 100.00 ± 400.00 µg/L | Selenium, Se | 10 000.0 ± 50.0 µg/L |
| Sodium, Na | 100 000.00 ± 400.00 µg/L | Strontium, Sr | 15 000.0 ± 90.0 µg/L |
| Thallium, Tl | 10 000.0 ± 60.0 µg/L | Vanadium, V | 5 000 ± 30 µg/L |
| Zinc, Zn | 10 000.0 ± 60.0 µg/L | | |

**Density:** 1.100 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 110830 |
| B | Calculated | | See Sec. 4.2 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 030730Cr3 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 100714 |
| Li | Gravimetric | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Tl | ICP Assay | 3158 | 993012 |
| Tl | Calculated | | See Sec. 4.2 |
| V | ICP Assay | 3165 | 160906 |
| V | EDTA | 928 | 928 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 25, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **June 25, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 8.28.18 KW

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPICSAB2_00008

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Recd 6.27.18 kw

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED - Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-ICSAB2 |
| Lot Number: | N2-MEB669102 |
| Matrix: | 5% (v/v) HNO3<br>tr. HF |
| Value / Analyte(s): | 100 000 µg/L ea:<br>Silicon,<br>10 000 µg/L ea:<br>Silver, Molybdenum, Antimony,<br>5 000 µg/L ea:<br>Tin, Titanium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Antimony, Sb | 10 000.0 ± 70.0 µg/L | Molybdenum, Mo | 10 000.0 ± 70.0 µg/L |
| Silicon, Si | 100 000.00 ± 600.00 µg/L | Silver, Ag | 10 000.0 ± 70.0 µg/L |
| Tin, Sn | 5 000 ± 38 µg/L | Titanium, Ti | 5 000 ± 30 µg/L |

**Density:** 1.024 g/mL (measured at 20 ± 4 °C)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 992212 |
| Ag | Volhard | 999c | 999c |
| Mo | ICP Assay | 3134 | 130418 |
| Mo | Calculated | | See Sec. 4.2 |
| Sb | ICP Assay | 3102a | 140911 |
| Sb | Calculated | | See Sec. 4.2 |
| Si | ICP Assay | 3150 | 130912 |
| Si | Calculated | | See Sec. 4.2 |
| Sn | ICP Assay | 3161a | 140917 |
| Ti | ICP Assay | 3162a | 130925 |
| Ti | Calculated | | See Sec. 4.2 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

**HF Note:** This standard should not be prepared or stored in glass.

**Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 25, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- June 25, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 8.28.18 KW

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPPDSB_00004

INORGANIC VENTURES
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# CERTIFICATE OF ANALYSIS

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fax: 540.585.3012
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Rec'd 8.21.13 kw

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-95B |
| Lot Number: | M2-MEB660776 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 µg/mL ea: |

| | | |
|---|---|---|
| Calcium, | Potassium, | Magnesium, |
| Sodium, | | |
| 200 µg/mL ea: | | |
| Aluminum, | Arsenic, | Barium, |
| Selenium, | Thallium, | |
| 100 µg/mL ea: | | |
| Strontium, | Iron, | Boron, |
| Lithium, | | |
| 50 µg/mL ea: | | |
| Nickel, | Lead, | Manganese, |
| Cobalt, | Vanadium, | Zinc, |
| 25 µg/mL ea: | | |
| Copper, | | |
| 20 µg/mL ea: | | |
| Chromium, | | |
| 5 µg/mL ea: | | |
| Cadmium, | Beryllium, | Silver |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 200.2 ± 0.7 µg/mL | Arsenic, As | 200.3 ± 1.7 µg/mL |
| Barium, Ba | 200.1 ± 0.8 µg/mL | Beryllium, Be | 5.003 ± 0.030 µg/mL |
| Boron, B | 100.0 ± 0.6 µg/mL | Cadmium, Cd | 5.001 ± 0.030 µg/mL |
| Calcium, Ca | 5 000 ± 20 µg/mL | Chromium, Cr | 20.00 ± 0.10 µg/mL |
| Cobalt, Co | 50.00 ± 0.23 µg/mL | Copper, Cu | 25.00 ± 0.10 µg/mL |
| Iron, Fe | 100.0 ± 0.4 µg/mL | Lead, Pb | 50.02 ± 0.28 µg/mL |
| Lithium, Li | 100.0 ± 0.3 µg/mL | Magnesium, Mg | 5 000 ± 20 µg/mL |
| Manganese, Mn | 50.02 ± 0.26 µg/mL | Nickel, Ni | 50.02 ± 0.26 µg/mL |
| Potassium, K | 5 000 ± 19 µg/mL | Selenium, Se | 200.1 ± 1.3 µg/mL |
| Silver, Ag | 5.002 ± 0.034 µg/mL | Sodium, Na | 5 000 ± 19 µg/mL |
| Strontium, Sr | 100.1 ± 0.4 µg/mL | Thallium, Tl | 200.0 ± 1.3 µg/mL |
| Vanadium, V | 50.04 ± 0.21 µg/mL | Zinc, Zn | 50.00 ± 0.22 µg/mL |

**Density:** 1.090 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 992212 |
| Ag | Volhard | 999c | 999c |
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 110830 |
| Ba | ICP Assay | 3104a | 070222 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 030730Cr3 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 100714 |
| Li | Gravimetric | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Tl | ICP Assay | 3158 | 993012 |
| V | EDTA | 928 | 928 |
| V | ICP Assay | 3165 | 992706 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

**Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

### 10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

August 14, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **August 14, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 9.4.18 ku

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPSPIKE1A_00014

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Rec'd 11-15-18ku

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike 1 |
| Part Number: | **SM-606-101 Solution A** |
| Lot Number: | **1831255** |
| Matrix: | 5% $HNO_3$ |
| Purity: | 99.99% - 99.9999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# | Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|---|---|---|---|
| Al | 2000 ± 12 | 3101a | 140903 | Fe | 1000 ± 6 | 3126a | 140812 |
| As | 2000 ± 20 | 3103a | 100818 | Pb | 500 ± 5 | 3128 | 101026 |
| Ba | 2000 ± 12 | 3104a | 140909 | Mn | 500.0 ± 7.5 | * | |
| Be | 50.0 ± 0.5 | 3105a | 090514 | Ni | 500 ± 3 | 3136 | 120619 |
| B | 1000 ± 10 | 3107 | 110830 | Se | 2000 ± 20 | 3149 | 100901 |
| Cd | 50.00 ± 0.03 | 3108 | 130116 | Tl | 2000 ± 12 | 3158 | 151215 |
| Cr | 200.0 ± 1.2 | 3112a | 170630 | V | 500 ± 5 | 3165 | 160906 |
| Co | 500 ± 3 | * | | Zn | 500 ± 3 | 3168a | 120629 |
| Cu | 250.00 ± 1.5 | 3114 | 121207 | | | | |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTICPSPIKEB_00013

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Recd 11-15-18 km

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike 1 |
| Part Number: | **SM-606-101 Solution B** |
| Lot Number: | **1831330** |
| Matrix: | 5% $HNO_3$ + 0.5% HF |
| Purity: | 99.98% - 99.9999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Sb | 500 ± 5 | 3102a | 140911 |
| Mo | 1000 ± 10 | 3134 | 130418 |
| Sn | 2000 ± 20 | 3161a | 140917 |
| Ti | 1000 ± 10 | 3162a | 130925 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTICPSpikeOdd_00010

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Recd 11-15-18 KW

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike Odds |
| Part Number: | **SM-606-121** |
| Lot Number: | **1831608** |
| Matrix: | 2% $HNO_3$ |
| Purity: | 99.999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Li | 1000 ± 10 | 3129a | 100714 |
| Si | 1000 ± 10 | 3150 | 130912 |
| Sr | 1000 ± 6 | * | |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTTRCAL2_00021

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Rec'd 10-10-18 KL

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Analytical Mixture 15 |
| Part Number: | **ICP-AM-15** |
| Lot Number: | **1812740** |
| Matrix: | 5% $HNO_3$ |
| Purity: | 99.98% - 99.999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# | Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|---|---|---|---|
| Ca | 10000 ± 60 | 3109a | 130213 | K | 10000 ± 100 | 3141a | 140813 |
| Mg | 10000 ± 60 | 3131a | 140110 | Na | 10000 ± 60 | 3152a | 120715 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Density:** 1.126 g/mL ± 0.002 g/mL @ 20.0°C ± 0.3 °C

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **October 2018**

**Certificate Issue Date:** May 9, 2018

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**

The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.

The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**

The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**

The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**

The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTTRCRI6010C_00020

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 9-3-19

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CRIC-REV3 |
| Lot Number: | N2-MEB670185 |
| Matrix: | 5% (v/v) HNO3<br>tr. HF |
| Value / Analyte(s): | 100 000 µg/L ea:<br>Calcium, Potassium, Magnesium,<br>Sodium,<br>10 000 µg/L ea:<br>Silicon,<br>4 000 µg/L ea:<br>Iron, Barium, Aluminum,<br>2 000 µg/L ea:<br>Boron, Tin,<br>1 000 µg/L ea:<br>Strontium, Titanium, Vanadium,<br>Zinc, Lithium,<br>800 µg/L ea:<br>Molybdenum, Nickel,<br>500 µg/L ea:<br>Copper,<br>400 µg/L ea:<br>Antimony, Selenium, Thallium,<br>300 µg/L ea:<br>Manganese, Arsenic,<br>200 µg/L ea:<br>Silver, Cobalt, Chromium,<br>Lead,<br>100 µg/L ea:<br>Beryllium, Cadmium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 4 002 ± 20 µg/L | Antimony, Sb | 400.2 ± 2.7 µg/L |
| Arsenic, As | 300.0 ± 2.3 µg/L | Barium, Ba | 4 001 ± 20 µg/L |
| Beryllium, Be | 100.0 ± 0.6 µg/L | Boron, B | 2 000 ± 19 µg/L |
| Cadmium, Cd | 100.0 ± 0.7 µg/L | Calcium, Ca | 100 000.00 ± 500.00 µg/L |
| Chromium, Cr | 200.0 ± 1.2 µg/L | Cobalt, Co | 200.0 ± 1.4 µg/L |
| Copper, Cu | 500.2 ± 2.2 µg/L | Iron, Fe | 4 000 ± 20 µg/L |
| Lead, Pb | 200.0 ± 1.4 µg/L | Lithium, Li | 1 000 ± 6 µg/L |
| Magnesium, Mg | 100 000.00 ± 500.00 µg/L | Manganese, Mn | 300.3 ± 1.4 µg/L |
| Molybdenum, Mo | 800 ± 5 µg/L | Nickel, Ni | 801 ± 4 µg/L |
| Potassium, K | 100 000.00 ± 500.00 µg/L | Selenium, Se | 400.2 ± 3.0 µg/L |
| Silicon, Si | 10 010.0 ± 70.0 µg/L | Silver, Ag | 200.0 ± 1.7 µg/L |
| Sodium, Na | 100 000.00 ± 500.00 µg/L | Strontium, Sr | 1 001 ± 6 µg/L |
| Thallium, Tl | 400.0 ± 3.2 µg/L | Tin, Sn | 2 001 ± 11 µg/L |
| Titanium, Ti | 1 000 ± 7 µg/L | Vanadium, V | 1 000 ± 6 µg/L |
| Zinc, Zn | 1 001 ± 6 µg/L | | |

**Density:** 1.027 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 992212 |
| Ag | Volhard | 999b | 999b |
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| As | Calculated | | See Sec. 4.2 |
| B | ICP Assay | 3107 | 110830 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Be | Calculated | | See Sec. 4.2 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 000505 |
| Li | Calculated | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Mo | ICP Assay | 3134 | 130418 |
| Mo | Calculated | | See Sec. 4.2 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Sb | Calculated | | See Sec. 4.2 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Si | ICP Assay | 3150 | 130912 |
| Si | Calculated | | See Sec. 4.2 |
| Sn | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Ti | ICP Assay | 3162a | 130925 |
| Ti | Calculated | | See Sec. 4.2 |
| Tl | Calculated | | See Sec. 4.2 |

| | | | |
|---|---|---|---|
| V | EDTA | 928 | 928 |
| V | ICP Assay | 3165 | 992706 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

**HF Note:** This standard should not be prepared or stored in glass.

**Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 31, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- July 31, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

**11.3 Period of Validity**

KD

- Sealed TCT Bag Open Date: 11-12-18

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTTRICSA_00018

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

toll: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 11-13-18 KL

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CLPP-ICS-A |
| Lot Number: | K2-MEB643109 |
| Matrix: | 2% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 µg/mL ea: Aluminum, Calcium, Magnesium, 2 000 µg/mL ea: Iron |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Aluminum, Al** | **5 000 ± 22 µg/mL** | **Calcium, Ca** | **5 000 ± 20 µg/mL** |
| **Iron, Fe** | **2 000 ± 8 µg/mL** | **Magnesium, Mg** | **5 000 ± 20 µg/mL** |

**Certified Density:** 1.085 g/mL (measured at 20 ± 1 °C)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 060502 |
| Al | EDTA | 928 | 928 |
| Ca | ICP Assay | 3109a | 050825 |
| Ca | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 051031 |
| Fe | EDTA | 928 | 928 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | Ag | < 0.000400 | M | Eu | < 0.000100 | O | Na | 0.027559 | M | Se | < 0.002091 | M | Zn | 0.008219 | | | |
| s | Al | < | s | Fe | < | M | Nb | < 0.000100 | O | Si | 0.217000 | M | Zr | < 0.001002 | | | |
| M | As | < 0.005613 | M | Ga | < 0.000100 | M | Nd | < 0.000601 | M | Sm | < 0.000100 | | | | | | |
| M | Au | < 0.000199 | M | Gd | < 0.000100 | M | Ni | < 0.005613 | M | Sn | < 0.000200 | | | | | | |
| M | B | < 0.008420 | M | Ge | < 0.000400 | M | Os | < 0.000099 | M | Sr | 0.043302 | | | | | | |
| M | Ba | < 0.001603 | M | Hf | < 0.000100 | O | P | < 0.108500 | M | Ta | < 0.000100 | | | | | | |
| O | Be | < 0.000217 | M | Hg | < 0.000597 | M | Pb | 0.003408 | M | Tb | < 0.000100 | | | | | | |
| M | Bi | < 0.000400 | M | Ho | < 0.000100 | M | Pd | < 0.000100 | M | Te | < 0.003107 | | | | | | |
| s | Ca | < | M | In | < 0.000400 | M | Pr | < 0.000200 | M | Th | < 0.000100 | | | | | | |
| M | Cd | < 0.000100 | M | Ir | < 0.000099 | M | Pt | < 0.000100 | M | Ti | < 0.000801 | | | | | | |
| M | Ce | < 0.002004 | O | K | 0.011718 | M | Rb | < 0.000100 | M | Tl | < 0.000100 | | | | | | |
| M | Co | < 0.003207 | M | La | < 0.000801 | M | Re | < 0.000100 | M | Tm | < 0.000100 | | | | | | |
| M | Cr | 0.024658 | O | Li | 0.005425 | M | Rh | < 0.000100 | M | U | < 0.000100 | | | | | | |
| M | Cs | < 0.000601 | M | Lu | < 0.000100 | M | Ru | < 0.000099 | M | V | < 0.000400 | | | | | | |
| M | Cu | < 0.004610 | s | Mg | < | O | S | 0.422173 | M | W | < 0.000100 | | | | | | |
| M | Dy | < 0.000100 | M | Mn | 0.002606 | M | Sb | < 0.000200 | M | Y | < 0.000100 | | | | | | |
| M | Er | < 0.000100 | M | Mo | < 0.000400 | M | Sc | < 0.001403 | M | Yb | < 0.000100 | | | | | | |

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

### 10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

**11.1 Certification Issue Date**

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

**11.2 Lot Expiration Date**

**- July 01, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

**11.3 Period of Validity**

- Sealed TCT Bag Open Date: 2-14-19 (CD)

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

**11.4 Revision Status**

- Revision 1 - Wednesday, Apr 26, 2017. Added TMI data

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Prepared By:**

Joseph Burns
Technical Support Technician



**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control



**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director



# Reagent

# MTTRICV1_00009

# CERTIFICATE OF ANALYSIS

Rec'd 12-26-17 KL

Multi-Element Aqueous CRM

Product #: G34-4400-080925JC01

## ISO Guide 34 Custom Standard

Lot #: 10072207-1

Matrix: 2% $HNO_3$

| Element | Certified Concentration & Uncertainty | Element | Certified Concentration & Uncertainty | Element | Certified Concentration & Uncertainty |
|---|---|---|---|---|---|
| Al | 2500 ± 13 µg/mL | Fe | 2506 ± 13 µg/mL | Mg | 5003 ± 25 µg/mL |
| Ca | 5000 ± 25 µg/mL | K | 5000 ± 25 µg/mL | Na | 5004 ± 25 µg/mL |

**Intended Use:** This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

**Certification & Traceability:** This CRM was manufactured, processed, and certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid ($HNO_3$) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

**Instructions for Use:** We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

**Period of Validity:** CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

**Chuck Goudreau, Certifying Officer**

December 20, 2017

**Certification Date**

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

USA
5580 Skylane Boulevard P: 707.525.5788
Santa Rosa, CA 95403 P: 800.878.7654
F: 707.545.7901

Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

**Health and Safety Information:** Refer to the Safety Data Sheet (SDS).

**Homogeneity:** This solution was determined to be homogeneous by procedures consistent with the requirements of ISO Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 Assessment of Homogeneity and Stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

**Quality Manual Rev:** No. 5, 03/01/2013

**Further Information:** Please contact CPI International for further information about this CRM.

**Quality Certifications:** This CRM was prepared under a quality management system that is registered/accredited to the following:

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

**This CRM is traceable to the following NIST SRMs:**

| Analyte | Aq. SRM | MO SRM | | Analyte | Aq. SRM | MO SRM | | Analyte | Aq. SRM | MO SRM |
|---|---|---|---|---|---|---|---|---|---|---|
| Ag | 3151 | 1077a | | Hf | 3122 | — | | S | 3154 | 2770 |
| Al | 3101a | 1075a | | Hg | 3133 | 3133 | | Sb | 3102a | 3102a |
| As | 3103a | 3103a | | Ho | 3123a | — | | Sc | 3148a | 3148a |
| Au | 3121 | — | | In | 3124a | 3124a | | Se | 3149 | 3149 |
| B | 3107 | 3107 | | K | 3141a | 3141a | | Si | 3150 | 1066a |
| Ba | 3104a | 1051b | | La | 3127a | 3127a | | Sm | 3147a | — |
| Be | 3105a | 3105a | | Li | 3129a | 3129a | | Sn | 3161a | 1057b |
| Bi | 3106 | 3106 | | Lu | 3130a | — | | $SO_4^{-2}$ | 3181 | — |
| $Br^-$ | 3184 | — | | Mg | 3131a | 3131a | | Sr | 3153a | 3153a |
| Ca | 3109a | 3109a | | Mn | 3132 | 3132 | | Ta | 3155 | — |
| Cd | 3108 | 1053a | | Mo | 3134 | 3134 | | Tb | 3157a | — |
| Ce | 3110 | 3110 | | Na | 3152a | 3152a | | Te | 3156 | — |
| $Cl^-$ | 3182 | 1818a | | Nb | 3137 | — | | Th | 3159 | — |
| Co | 3113 | 3113 | | Nd | 3135a | — | | Ti | 3162a | 3162a |
| Cr | 3112a | 1078b | | Ni | 3136 | 1065b | | Tl | 3158 | 3158 |
| Cs | 3111a | — | | $NO_3^-$ | 3185 | — | | Tm | 3160a | — |
| Cu | 3114 | 1080a | | P | 3139a | 3139a | | U | 3164 | — |
| Dy | 3115a | — | | Pb | 3128 | 3128 | | V | 3165 | 1052b |
| Er | 3116a | — | | Pd | 3138 | — | | W | 3163 | 3163 |
| Eu | 3117a | — | | $PO_4^{-3}$ | 3186 | — | | Y | 3167a | 3167a |
| $F^-$ | 3183 | — | | Pr | 3142a | — | | Yb | 3166a | — |
| Fe | 3126a | 1079b | | Pt | 3140 | 3140 | | Zn | 3168a | 3168a |
| Ga | 3119a | — | | Rb | 3145a | — | | Zr | 3169 | 3169 |
| Gd | 3118a | — | | Re | 3143 | — | | | | |
| Ge | 3120a | — | | Rh | 3144 | 3144 | | | | |

# Reagent

# SARSK2ndSourc_00001

RCVD 1/22/19

**MATHESON TRI-GAS INC**
**1650 Enterprise Pkwy**
**Twinsburg, OH 44087**
**1-215-648-4000**

# CERTIFICATE OF ANALYSIS

Severn Trent Lab
4101 SHUFFEL DR
NORTH CANTON, OH 44720

Ref Po# 3015289

## 17 LITER DISPOSABLE

**LOT NUMBER:** 109-84-03769-E2

| COMPONENT | CONCENTRATION | |
|---|---|---|
| ethane | 0.991 | % |
| propane | 1.007 | % |
| ethylene | 1.009 | % |
| acetylene | 0.998 | % |
| methane | 1.007 | % |
| helium | BAL | |

**ITEM NUMBER:** GMT2690244TB

**CGA:** 600

**PSIG:** 240

**FILL DATE:** 12/25/18

**EXPIRATION DATE:** 12/26/22

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is ± 2%. NIST traceable by weights or gaseous standards.

Judith M Zadravec — 1/14/2019

Judy Zadravec, Chemist — DATE

# Reagent

---

# SARSKHighCal_00006

Airgas

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Customer:** | Airgas Specialty Gases | **Cylinder Size:** | 0.6 Cu. Ft. |
| **PO Number:** | 5800098394 | **Cylinder Volume:** | 17 Liter |
| **Part Number:** | X06HE95CP170000 / 17L-510 | **Cylinder Pressure:** | 240 psig |
| **Lot Number:** | CBJ-510-1 | **Valve Outlet:** | CGA 600 |
| **Analysis Date:** | 02/08/2019 | **Blend Tolerance:** | +/-5% |

**Use Before: 02/08/2023**

## ANALYTICAL RESULTS

| Component | Requested Concentration | Actual Concentration (Mole %) | Analytical Uncertainty |
|---|---|---|---|
| Acetylene | 1% vol. | 0.998% vol. | +/- 2% |
| Ethylene | 1% vol. | 1.009% vol. | +/- 2% |
| Ethane | 1% vol. | 0.991% vol. | +/- 2% |
| Methane | 1% vol. | 1.007% vol. | +/- 2% |
| Propane | 1% vol. | 1.007% vol. | +/- 2% |
| Helium | Balance | Balance | |

**NIST Weight Certificate Number(s):** S1106, MS001, MS002, A031

The calibration gas prepared by Airgas is considered a certified standard. It is prepared by gravimetric, or partial pressure techniques. The calibration standard provided is prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

**Analyst:**



Reagent

# SARSKLOWCAL_00013

Scott

RCVD 3/22/19

**Airgas Specialty Gases**
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

4080707
ID: SARSKLOWCAL_00013
Exp: 03/13/22 Prpd: BPM
1000 PPM VARIOUS ANALYTES

# CERTIFICATE OF ANALYSIS

## Grade of Product: CERTIFIED STANDARD-SPEC

| | | | |
|---|---|---|---|
| Customer: | TESTAMERICA ANALYTICAL TESTING | | |
| Part Number: | X06HE99CP170003 | Reference Number: | 160-401444112-1 |
| Cylinder Number: | ST0000194219 | Cylinder Volume: | 1.2 CF |
| Laboratory: | 124 - Plumsteadville - PA | Cylinder Pressure: | 240 PSIG |
| Analysis Date: | Mar 13, 2019 | Valve Outlet: | 600 |
| Lot Number: | 160-401444112-1 | | |

**Expiration Date: Mar 13, 2022**

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

## ANALYTICAL RESULTS

| Component | Req Conc | Actual Concentration (Mole %) | Analytical Uncertainty |
|---|---|---|---|
| ACETYLENE | 1000 PPM | 1020 PPM | +/- 5% |
| ETHANE | 1000 PPM | 1015 PPM | +/- 5% |
| ETHYLENE | 1000 PPM | 1021 PPM | +/- 5% |
| METHANE | 1000 PPM | 1017 PPM | +/- 5% |
| PROPANE | 1000 PPM | 1015 PPM | +/- 5% |
| HELIUM | Balance | | |

**Permanent Notes:**-NA-

Approved for Release

# Reagent

# SARSKSURR_00012

MATHESON
ask. . .The Gas Professionals™

# Analysis Report

**To:** MATHESON VALLEY
151 S OLIVE ST
ELYRIA, OH 44036

**MTG Customer No:** 131676

**Manufacturing Location**
1700 SCEPTER ROAD
WAVERLY, TN 37185

**Product:** Multi-Component Mixture

**Grade:** CERTIFIED
**MTG Part No:** G2683694

**Cylinder Size:** 1L
**Valve:** CGA 350 BR

**Contents:**
**Net:** 237 ft³; 6.72 m³

**Pressure:** 2000 psig @ 70°F; 13891 kPa @ 21°C

**CYLINDER NUMBER(S)**
AX047506

| | Requested Concentration | Certified Concentration | Units | Blend Tolerance | Certified Accuracy |
|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | 0.325 | 0.325 | % | ±2% | ±2% |
| Helium | Balance | Balance | | | |

**TRACEABILITY**

**COMMENTS**

**Lot No:** 9303607373
**Fill Date:** 11/05/2013
**Expiration Date:** 11/05/2016

**Analysis Date:** 11/07/2013

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Ashley A Ellis — 11/07/2013
Ashley Ellis - Analyst — Date

Ashley A Ellis — 11/07/2013
Ashley Ellis - QA Approval — Date

# Reagent

# vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

# RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

## Certificate of Analysis

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30026 **Lot No.:** A0120567

**Description :** 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 1-Bromo-4-fluorobenzene (BFB) | 2,019.3 µg/mL | +/- 11.8506 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 (Lot 20401KOV) | | +/- 113.2335 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 115.8825 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# vm30241_00007

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Fax: (814)353-1309

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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

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Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30241 **Lot No.:** A0134242

**Description :** 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2023 **Storage:** 0°C or colder

**CERTIFIED VALUES**

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Fluorobenzene | | 2,503.6 µg/mL | +/- 14.5561 | µg/mL | Gravimetric |
| | **CAS #** 462-06-6 | (Lot BCBK8171V) | | +/- 140.3744 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 143.6590 | µg/mL | Stressed |
| 2 | Chlorobenzene-d5 | | 2,506.4 µg/mL | +/- 14.5724 | µg/mL | Gravimetric |
| | **CAS #** 3114-55-4 | (Lot PR-22736) | | +/- 140.5314 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 143.8196 | µg/mL | Stressed |
| 3 | 1,4-Dichlorobenzene-d4 | | 2,513.4 µg/mL | +/- 14.6131 | µg/mL | Gravimetric |
| | **CAS #** 3855-82-1 | (Lot PR-18488) | | +/- 140.9238 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.2213 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

VM30241-00007

REC'D 5-4-18

# Reagent

# VM567650_00027

VM567650-00027 Rec: 4/10/17 (39)

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
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# CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis

ilac-MRA

ACCREDITED
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Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0120212

**Description :** 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dibromofluoromethane | 2,521.3 µg/mL | +/- 14.6591 µg/mL | Gravimetric |
| | **CAS #** 1868-53-7 (Lot 032015) | | +/- 141.3668 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.6746 µg/mL | Stressed |
| 2 | 1,2-Dichloroethane-d4 | 2,523.7 µg/mL | +/- 14.6730 µg/mL | Gravimetric |
| | **CAS #** 17060-07-0 (Lot 14C-191) | | +/- 141.5014 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.8123 µg/mL | Stressed |
| 3 | Toluene-d8 | 2,523.6 µg/mL | +/- 14.6724 µg/mL | Gravimetric |
| | **CAS #** 2037-26-5 (Lot PR-26623) | | +/- 141.4957 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.8066 µg/mL | Stressed |
| 4 | 1-Bromo-4-fluorobenzene (BFB) | 2,510.9 µg/mL | +/- 14.5986 µg/mL | Gravimetric |
| | **CAS #** 460-00-4 (Lot 20401KOV) | | +/- 140.7837 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.0778 µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# VM567650_00029

Rec: 8/22/17
VM567650-00029

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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# Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ilac-MRA

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Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0124069

**Description :** 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2022 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Dibromofluoromethane | 2,521.2 µg/mL | +/- 14.6582 | µg/mL | Gravimetric |
| | **CAS #** 1868-53-7 (Lot 0012016) | | +/- 141.3584 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.6660 | µg/mL | Stressed |
| 2 | 1,2-Dichloroethane-d4 | 2,513.8 µg/mL | +/- 14.6157 | µg/mL | Gravimetric |
| | **CAS #** 17060-07-0 (Lot PR-25433) | | +/- 140.9489 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 144.2469 | µg/mL | Stressed |
| 3 | Toluene-d8 | 2,519.4 µg/mL | +/- 14.6480 | µg/mL | Gravimetric |
| | **CAS #** 2037-26-5 (Lot PR-27311) | | +/- 141.2603 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.5656 | µg/mL | Stressed |
| 4 | 1-Bromo-4-fluorobenzene (BFB) | 2,520.8 µg/mL | +/- 14.6559 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 (Lot 20401KOV) | | +/- 141.3360 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 144.6430 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# VM567650_00030

Rec: 11/8/17
VM567650-00050

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0124069

**Description :** 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2022 **Storage:** 0°C or colder

**CERTIFIED VALUES**

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Dibromofluoromethane | | 2,521.2 µg/mL | +/- 14.6582 | µg/mL | Gravimetric |
| | **CAS #** 1868-53-7 | (Lot 0012016) | | +/- 141.3584 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.6660 | µg/mL | Stressed |
| 2 | 1,2-Dichloroethane-d4 | | 2,513.8 µg/mL | +/- 14.6157 | µg/mL | Gravimetric |
| | **CAS #** 17060-07-0 | (Lot PR-25433) | | +/- 140.9489 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 144.2469 | µg/mL | Stressed |
| 3 | Toluene-d8 | | 2,519.4 µg/mL | +/- 14.6480 | µg/mL | Gravimetric |
| | **CAS #** 2037-26-5 | (Lot PR-27311) | | +/- 141.2603 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.5656 | µg/mL | Stressed |
| 4 | 1-Bromo-4-fluorobenzene (BFB) | | 2,520.8 µg/mL | +/- 14.6559 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 | (Lot 20401KOV) | | +/- 141.3360 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.6430 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# VM568720_00028

rec: 6/1/18

VM568720-00028

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 568720 **Lot No.:** A0135693

**Description :** 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2018 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|---|
| 1 | Acrolein | | 19,777.5 | µg/mL | +/- 115.8016 | µg/mL | Gravimetric |
| | **CAS #** 107-02-8 | (Lot 171116JLM) | | | +/- 634.1288 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 737.1054 | µg/mL | Stressed |

**Solvent:** Water
**CAS #** 7732-18-5
**Purity** 99%

# Reagent

# VM569721_00002

VM569721_00002 Rec: 9/16/15

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**Catalog No. :** 569721 **Lot No.:** A0113194

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** August 31, 2018 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Acetone | | 12,510.0 µg/mL | +/- 73.2488 | µg/mL | Gravimetric |
| | **CAS #** 67-64-1 | (Lot 07196AK) | | +/- 665.8110 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 666.5452 | µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | | 12,527.5 µg/mL | +/- 73.3513 | µg/mL | Gravimetric |
| | **CAS #** 78-93-3 | (Lot BCBK4358V) | | +/- 666.7424 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 667.4776 | µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | | 12,503.0 µg/mL | +/- 73.2078 | µg/mL | Gravimetric |
| | **CAS #** 108-10-1 | (Lot SHBF5332V) | | +/- 665.4385 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 666.1722 | µg/mL | Stressed |
| 4 | 2-Hexanone | | 12,509.0 µg/mL | +/- 73.2429 | µg/mL | Gravimetric |
| | **CAS #** 591-78-6 | (Lot MKBN7380V) | | +/- 665.7578 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 666.4919 | µg/mL | Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# VM569721_00004

Rec: 1-25-17

VM569721-00004

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**Catalog No. :** 569721 **Lot No.:** A0115554

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2018 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Acetone | | 12,501.8 µg/mL | +/- 72.6865 | µg/mL | Gravimetric |
| | **CAS #** 67-64-1 | (Lot 07196AK) | | +/- 754.2890 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 756.0798 | µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | | 12,499.7 µg/mL | +/- 72.6744 | µg/mL | Gravimetric |
| | **CAS #** 78-93-3 | (Lot SHBG0444V) | | +/- 754.1625 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 755.9530 | µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | | 12,500.6 µg/mL | +/- 72.6796 | µg/mL | Gravimetric |
| | **CAS #** 108-10-1 | (Lot SHBF9556V) | | +/- 754.2166 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 756.0072 | µg/mL | Stressed |
| 4 | 2-Hexanone | | 12,502.4 µg/mL | +/- 72.6900 | µg/mL | Gravimetric |
| | **CAS #** 591-78-6 | (Lot MKBT3158V) | | +/- 754.3252 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 756.1161 | µg/mL | Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# VM569721_00005

VM569721_00005 Rec: 11/30/18

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**Catalog No. :** 569721 **Lot No.:** A0137509

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Acetone | | 12,619.0 µg/mL | +/- 73.8870 | µg/mL | Gravimetric |
| | **CAS #** 67-64-1 | (Lot SHBH6933) | | +/- 761.4104 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 763.2179 | µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | | 12,602.0 µg/mL | +/- 73.7875 | µg/mL | Gravimetric |
| | **CAS #** 78-93-3 | (Lot SHBF2461V) | | +/- 760.3846 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 762.1897 | µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | | 12,531.0 µg/mL | +/- 73.3718 | µg/mL | Gravimetric |
| | **CAS #** 108-10-1 | (Lot SHBH7006) | | +/- 756.1006 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 757.8955 | µg/mL | Stressed |
| 4 | 2-Hexanone | | 12,606.0 µg/mL | +/- 73.8109 | µg/mL | Gravimetric |
| | **CAS #** 591-78-6 | (Lot MKBW0198V) | | +/- 760.6260 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 762.4316 | µg/mL | Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# VM569721S_00003

Rec: 7/12/16 (20)
VM569721S-00003

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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721.sec **Lot No.:** A0118013

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** March 31, 2019 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Acetone<br>**CAS #** 67-64-1.SEC (Lot P14A572)<br>**Purity** 99% | 12,550.0 µg/mL | +/- 73.4830 µg/mL<br>+/- 757.2470 µg/mL<br>+/- 759.0446 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 2-Butanone (MEK)<br>**CAS #** 78-93-3.SEC (Lot RA58J)<br>**Purity** 99% | 12,603.0 µg/mL | +/- 73.7933 µg/mL<br>+/- 760.4450 µg/mL<br>+/- 762.2502 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK)<br>**CAS #** 108-10-1.SEC (Lot E29T040)<br>**Purity** 99% | 12,591.5 µg/mL | +/- 73.7260 µg/mL<br>+/- 759.7511 µg/mL<br>+/- 761.5546 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 2-Hexanone<br>**CAS #** 591-78-6.SEC (Lot V3NRA)<br>**Purity** 99% | 12,588.0 µg/mL | +/- 73.7055 µg/mL<br>+/- 759.5399 µg/mL<br>+/- 761.3429 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# VM569721S_00005

Rec: 6/15/18 20 vials

VM569721S-00005

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**Catalog No. :** 569721.SEC **Lot No.:** A0133078

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Acetone | 12,504.8 µg/mL | +/- 73.2184 | µg/mL | Gravimetric |
| | **CAS #** 67-64-1.SEC (Lot P14A572) | | +/- 754.5197 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 756.3109 | µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | 12,504.0 µg/mL | +/- 73.2137 | µg/mL | Gravimetric |
| | **CAS #** 78-93-3.SEC (Lot RA58J) | | +/- 754.4715 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 756.2625 | µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | 12,500.8 µg/mL | +/- 73.1949 | µg/mL | Gravimetric |
| | **CAS #** 108-10-1.SEC (Lot E29T040) | | +/- 754.2784 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 756.0689 | µg/mL | Stressed |
| 4 | 2-Hexanone | 12,503.6 µg/mL | +/- 73.2113 | µg/mL | Gravimetric |
| | **CAS #** 591-78-6.SEC (Lot V3NRA) | | +/- 754.4473 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 756.2383 | µg/mL | Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# vm569722_00011

Rec: 4/17/18

VM569722_00011

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**Catalog No. :** 569722 **Lot No.:** A0131502

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** October 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8 (Lot Q167-08)<br>**Purity** 99% | 2,501.3 µg/mL | +/- 20.2137 µg/mL<br>+/- 140.9452 µg/mL<br>+/- 144.2108 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3 (Lot SHBG9707V)<br>**Purity** 99% | 2,504.9 µg/mL | +/- 24.8531 µg/mL<br>+/- 141.8827 µg/mL<br>+/- 145.1364 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4 (Lot 1026101231B1)<br>**Purity** 99% | 2,498.3 µg/mL | +/- 21.7258 µg/mL<br>+/- 141.0069 µg/mL<br>+/- 144.2635 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0 (Lot SHBH7966)<br>**Purity** 99% | 2,499.9 µg/mL | +/- 19.8572 µg/mL<br>+/- 140.8167 µg/mL<br>+/- 144.0816 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9 (Lot 101604)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 24.9675 µg/mL<br>+/- 141.6590 µg/mL<br>+/- 144.9064 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3 (Lot 23593)<br>**Purity** 99% | 2,500.1 µg/mL | +/- 25.2649 µg/mL<br>+/- 141.6931 µg/mL<br>+/- 144.9388 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4 (Lot 4938100)<br>**Purity** 99% | 2,500.0 µg/mL | +/- 16.7114 µg/mL<br>+/- 140.4149 µg/mL<br>+/- 143.6892 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11)<br>**CAS #** 75-69-4<br>**Purity** 99% | (Lot SHBH4155V) | 2,499.5 µg/mL | +/- 20.7085<br>+/- 140.9189<br>+/- 144.1805 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**
Raw material may contain trace amounts of tert-Butanol.

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

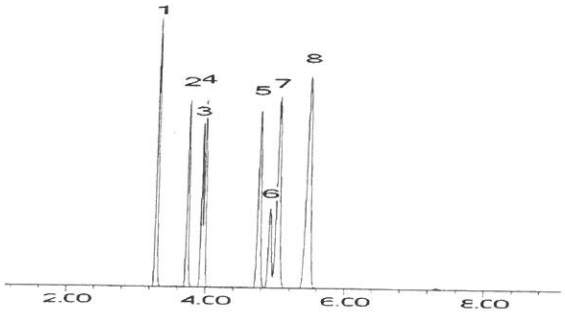
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 10-Oct-2017 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 12-Oct-2017

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# Reagent

# vm569722_00012

Acc: 1/23/19

VM569722_00012

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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722 **Lot No.:** A0143158

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8 (Lot 00012554)<br>**Purity** 99% | 2,500.9 µg/mL | +/- 17.2023 µg/mL<br>+/- 140.5234 µg/mL<br>+/- 143.7976 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3 (Lot SHBJ6334)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 17.0791 µg/mL<br>+/- 140.4796 µg/mL<br>+/- 143.7534 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4 (Lot 00012557)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 16.5693 µg/mL<br>+/- 140.4224 µg/mL<br>+/- 143.6977 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0 (Lot SHBK2299)<br>**Purity** 99% | 2,500.1 µg/mL | +/- 17.0785 µg/mL<br>+/- 140.4623 µg/mL<br>+/- 143.7357 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9 (Lot 101604)<br>**Purity** 99% | 2,500.9 µg/mL | +/- 16.5511 µg/mL<br>+/- 140.4457 µg/mL<br>+/- 143.7217 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3 (Lot 107-401039114-1)<br>**Purity** 99% | 2,502.0 µg/mL | +/- 16.0409 µg/mL<br>+/- 140.4480 µg/mL<br>+/- 143.7268 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4 (Lot 7766400)<br>**Purity** 99% | 2,500.0 µg/mL | +/- 14.5352 µg/mL<br>+/- 140.1725 µg/mL<br>+/- 143.4524 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11) | | 2,500.8 | µg/mL | +/- | 17.8012 | µg/mL | Gravimetric |
| | **CAS #** 75-69-4 | (Lot SHBH4155V) | | | +/- | 140.5946 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 143.8670 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**
Raw material may contain trace amounts of tert-Butanol.

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

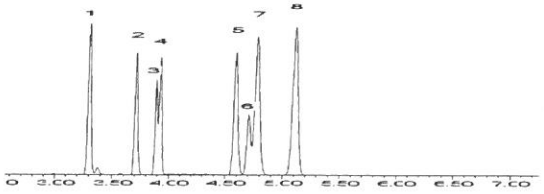
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician **Date Mixed:** 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 11-Dec-2018

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# vm569722S_00004

VM569722S-00004 Rec'd 7/12/16 (20)

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# Certificate of Analysis

ACCREDITED ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722.sec **Lot No.:** A0115484

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2018 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8.SEC (Lot 22274)<br>**Purity** 99% | 2,505.6 µg/mL | +/- 16.6251 µg/mL<br>+/- 140.7169 µg/mL<br>+/- 143.9990 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3.SEC (Lot 18343)<br>**Purity** 99% | 2,517.3 µg/mL | +/- 17.3796 µg/mL<br>+/- 141.4522 µg/mL<br>+/- 144.7477 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4.SEC (Lot MKBK6872V)<br>**Purity** 99% | 2,510.2 µg/mL | +/- 16.6342 µg/mL<br>+/- 140.9727 µg/mL<br>+/- 144.2609 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0.SEC (Lot 22331)<br>**Purity** 99% | 2,516.5 µg/mL | +/- 17.4874 µg/mL<br>+/- 141.4240 µg/mL<br>+/- 144.7182 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9.SEC (Lot Q119-46)<br>**Purity** 99% | 2,511.5 µg/mL | +/- 16.8310 µg/mL<br>+/- 141.0664 µg/mL<br>+/- 144.3557 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3.SEC (Lot 00004202)<br>**Purity** 99% | 2,504.8 µg/mL | +/- 16.4341 µg/mL<br>+/- 140.6469 µg/mL<br>+/- 143.9283 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4.SEC (Lot SHBC0858V)<br>**Purity** 99% | 2,500.5 µg/mL | +/- 16.1659 µg/mL<br>+/- 140.3776 µg/mL<br>+/- 143.6540 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11) | | 2,524.5 | µg/mL | +/- 16.8928 | µg/mL | Gravimetric |
| | **CAS #** 75-69-4.SEC | (Lot Q12B-59) | | | +/- 141.7952 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 145.1017 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

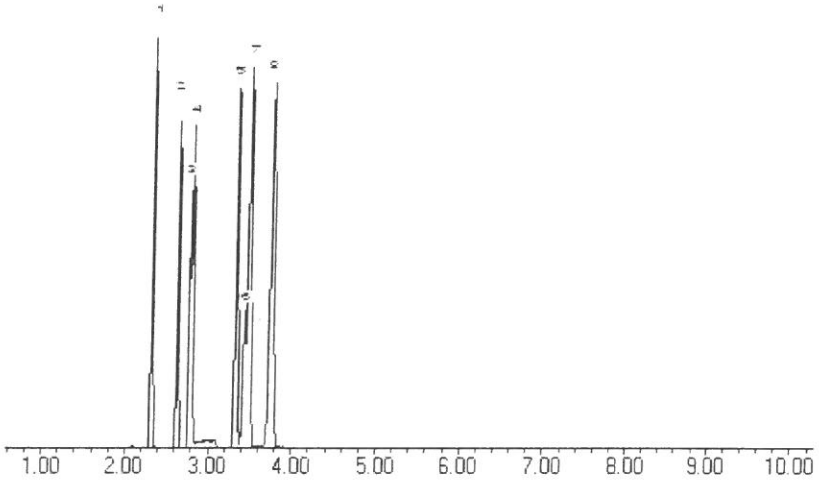
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

**Date Mixed:** 17-Nov-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

**Date Passed:** 10-Dec-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

# Reagent

# vm569722S_00005

VM 569722S-0005 Rec: 7/17/17

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722.SEC **Lot No.:** A0124116

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8.SEC (Lot 23586)<br>**Purity** 99% | 2,503.4 µg/mL | +/- 19.5506 µg/mL<br>+/- 140.9699 µg/mL<br>+/- 144.2404 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3.SEC (Lot 18343)<br>**Purity** 99% | 2,508.1 µg/mL | +/- 21.1963 µg/mL<br>+/- 141.4639 µg/mL<br>+/- 144.7353 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4.SEC (Lot MKBK6872V)<br>**Purity** 99% | 2,518.6 µg/mL | +/- 19.4186 µg/mL<br>+/- 141.7924 µg/mL<br>+/- 145.0836 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0.SEC (Lot 22331)<br>**Purity** 99% | 2,504.0 µg/mL | +/- 20.5722 µg/mL<br>+/- 141.1450 µg/mL<br>+/- 144.4130 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9.SEC (Lot Q119-46)<br>**Purity** 99% | 2,498.5 µg/mL | +/- 19.9806 µg/mL<br>+/- 140.7602 µg/mL<br>+/- 144.0229 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3.SEC (Lot 00004202)<br>**Purity** 99% | 2,494.9 µg/mL | +/- 17.8868 µg/mL<br>+/- 140.2786 µg/mL<br>+/- 143.5429 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4.SEC (Lot SHBC0858V)<br>**Purity** 99% | 2,503.4 µg/mL | +/- 20.0421 µg/mL<br>+/- 141.0350 µg/mL<br>+/- 144.3039 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11) | | 2,503.2 | µg/mL | +/- | 18.7037 | µg/mL | Gravimetric |
| | **CAS #** | 75-69-4.SEC (Lot Q12B-59) | | | +/- | 140.8450 | µg/mL | Unstressed |
| | **Purity** | 99% | | | +/- | 144.1179 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

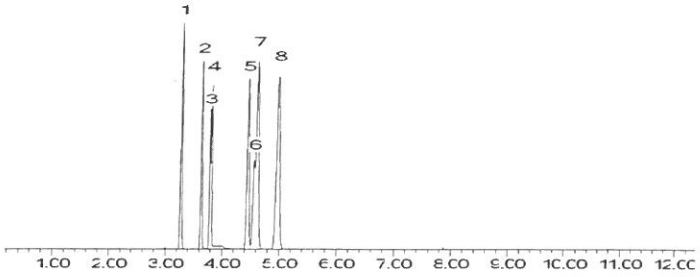
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician — **Date Mixed:** 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC — **Date Passed:** 17-Jan-2017

**Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397**

# Reagent

# VM569723_00003

VM 569723-00003 Rec'd 11/12/15

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## Certificate of Analysis

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569723 **Lot No.:** A0112895

**Description :** 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 2-Chloroethyl vinyl ether | 2,503.2 µg/mL | +/- 14.6902 | µg/mL | Gravimetric |
| | **CAS #** 110-75-8 (Lot MKBK2735V) | | +/- 53.1239 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 53.3593 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

# Reagent

# VM569723_00004

VM569723-00004 Rec: 5/16/16 (20)

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## Certificate of Analysis

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569723 **Lot No.:** A0115628

**Description :** 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 2-Chloroethyl vinyl ether<br>**CAS #** 110-75-8 (Lot MKBK2735V)<br>**Purity** 99% | 2,509.2 µg/mL | +/- 14.5887 µg/mL<br>+/- 53.7223 µg/mL<br>+/- 55.2841 µg/mL | | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

# Reagent

# VM569724_00014

Rec'd 4/17/18 VM569724_00014

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569724 **Lot No.:** A0134268

**Description :** 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2018 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

**CERTIFIED VALUES**

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Vinyl acetate | 5,014.0 µg/mL | +/- 29.3581 | µg/mL | Gravimetric |
| | **CAS #** 108-05-4 (Lot STBD7333V) | | +/- 302.5368 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 303.2550 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Reagent

# VM569724_00016

VM569724_ 05016 Rcd: 7/13/18

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569724 **Lot No.:** A0137562

**Description :** 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** October 31, 2018 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Vinyl acetate | 5,020.0 µg/mL | +/- 29.4602 | µg/mL | Gravimetric |
| | **CAS #** 108-05-4 (Lot STBD7333V) | | +/- 302.9053 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 303.6243 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Reagent

# VM571992_00001

VM571992_00001 Rec'd 1-25-17

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 571992 **Lot No.:** A0123711

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2018 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether)<br>**CAS #** 60-29-7 (Lot SHBG1462V)<br>**Purity** 99% | 2,501.3 µg/mL | +/- 14.5425 µg/mL<br>+/- 150.9115 µg/mL<br>+/- 151.2698 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>**CAS #** 76-13-1 (Lot 00009482)<br>**Purity** 99% | 2,505.1 µg/mL | +/- 14.5650 µg/mL<br>+/- 151.1453 µg/mL<br>+/- 151.5041 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 1,1-dichloroethene<br>**CAS #** 75-35-4 (Lot SHBG8609V)<br>**Purity** 99% | 2,511.5 µg/mL | +/- 14.6021 µg/mL<br>+/- 151.5299 µg/mL<br>+/- 151.8897 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | tert-Butanol (TBA)<br>**CAS #** 75-65-0 (Lot SHBF0688V)<br>**Purity** 99% | 25,001.8 µg/mL | +/- 145.3547 µg/mL<br>+/- 1,508.4656 µg/mL<br>+/- 1,512.0470 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Methyl acetate<br>**CAS #** 79-20-9 (Lot SHBG4345V)<br>**Purity** 99% | 5,000.5 µg/mL | +/- 29.0733 µg/mL<br>+/- 301.7023 µg/mL<br>+/- 302.4186 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Iodomethane (methyl iodide)<br>**CAS #** 74-88-4 (Lot SHBF2149V)<br>**Purity** 99% | 2,502.9 µg/mL | +/- 14.5519 µg/mL<br>+/- 151.0095 µg/mL<br>+/- 151.3681 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Allyl chloride ( 3-chloropropene )<br>**CAS #** 107-05-1 (Lot SHBF8133V)<br>**Purity** 99% | 2,517.1 µg/mL | +/- 14.6348 µg/mL<br>+/- 151.8693 µg/mL<br>+/- 152.2299 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane) | | 2,502.1 µg/mL | +/- 14.5476 | µg/mL | Gravimetric |
| | **CAS #** 75-09-2 | (Lot SHBH2578V) | | +/- 150.9643 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3227 | µg/mL | Stressed |
| 9 | Carbon disulfide | | 2,501.4 µg/mL | +/- 14.5432 | µg/mL | Gravimetric |
| | **CAS #** 75-15-0 | (Lot S20A856) | | +/- 150.9190 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2773 | µg/mL | Stressed |
| 10 | Acrylonitrile | | 25,001.3 µg/mL | +/- 145.3518 | µg/mL | Gravimetric |
| | **CAS #** 107-13-1 | (Lot T07B2030) | | +/- 1,508.4355 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 1,512.0167 | µg/mL | Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE ) | | 2,505.3 µg/mL | +/- 14.5657 | µg/mL | Gravimetric |
| | **CAS #** 1634-04-4 | (Lot SHBG2655V) | | +/- 151.1528 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.5117 | µg/mL | Stressed |
| 12 | cis-1,2-Dichloroethene | | 2,500.5 µg/mL | +/- 14.5379 | µg/mL | Gravimetric |
| | **CAS #** 156-59-2 | (Lot MKBV2831V) | | +/- 150.8644 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.2226 | µg/mL | Stressed |
| 13 | n-Hexane (C6) | | 2,503.8 µg/mL | +/- 14.5570 | µg/mL | Gravimetric |
| | **CAS #** 110-54-3 | (Lot SHBG2674V) | | +/- 151.0623 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4210 | µg/mL | Stressed |
| 14 | 1,1-Dichloroethane | | 2,500.4 µg/mL | +/- 14.5374 | µg/mL | Gravimetric |
| | **CAS #** 75-34-3 | (Lot 00008621) | | +/- 150.8587 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2169 | µg/mL | Stressed |
| 15 | 2,2-Dichloropropane | | 2,501.0 µg/mL | +/- 14.5408 | µg/mL | Gravimetric |
| | **CAS #** 594-20-7 | (Lot BCBR0622V) | | +/- 150.8940 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.2522 | µg/mL | Stressed |
| 16 | trans-1,2-Dichloroethene | | 2,503.8 µg/mL | +/- 14.5570 | µg/mL | Gravimetric |
| | **CAS #** 156-60-5 | (Lot 09431AEV) | | +/- 151.0623 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4210 | µg/mL | Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol) | | 62,512.5 µg/mL | +/- 363.4341 | µg/mL | Gravimetric |
| | **CAS #** 78-83-1 | (Lot SHBG8201V) | | +/- 3,771.6543 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 3,780.6088 | µg/mL | Stressed |
| 18 | chloroform | | 2,501.9 µg/mL | +/- 14.5461 | µg/mL | Gravimetric |
| | **CAS #** 67-66-3 | (Lot MKBV2089V) | | +/- 150.9492 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3076 | µg/mL | Stressed |
| 19 | Bromochloromethane | | 2,503.3 µg/mL | +/- 14.5541 | µg/mL | Gravimetric |
| | **CAS #** 74-97-5 | (Lot 00004559) | | +/- 151.0322 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3907 | µg/mL | Stressed |
| 20 | Tetrahydrofuran | | 5,001.3 µg/mL | +/- 29.0777 | µg/mL | Gravimetric |
| | **CAS #** 109-99-9 | (Lot SHBG2910V) | | +/- 301.7476 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 302.4640 | µg/mL | Stressed |
| 21 | 1,1,1-trichloroethane | | 2,500.3 µg/mL | +/- 14.5367 | µg/mL | Gravimetric |
| | **CAS #** 71-55-6 | (Lot B15W12061) | | +/- 150.8512 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2093 | µg/mL | Stressed |
| 22 | Cyclohexane | | 2,502.0 µg/mL | +/- 14.5468 | µg/mL | Gravimetric |
| | **CAS #** 110-82-7 | (Lot MKBX4768V) | | +/- 150.9567 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3151 | µg/mL | Stressed |
| 23 | 1,1-Dichloropropene | | 2,500.5 µg/mL | +/- 14.5381 | µg/mL | Gravimetric |
| | **CAS #** 563-58-6 | (Lot 160727JLM) | | +/- 150.8662 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2244 | µg/mL | Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 24 | carbon tetrachloride<br>**CAS #** 56-23-5<br>**Purity** 99% | (Lot SHBG1763V) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | n-Heptane (C7)<br>**CAS #** 142-82-5<br>**Purity** 99% | (Lot SHBG6171V) | 2,505.5 µg/mL | +/- 14.5672<br>+/- 151.1679<br>+/- 151.5268 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2-Dichloroethane<br>**CAS #** 107-06-2<br>**Purity** 99% | (Lot SHBF9313V) | 2,504.8 µg/mL | +/- 14.5628<br>+/- 151.1227<br>+/- 151.4815 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Benzene<br>**CAS #** 71-43-2<br>**Purity** 99% | (Lot SHBH2056V) | 2,506.9 µg/mL | +/- 14.5752<br>+/- 151.2509<br>+/- 151.6100 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Trichloroethene<br>**CAS #** 79-01-6<br>**Purity** 99% | (Lot SHBH1955V) | 2,502.4 µg/mL | +/- 14.5490<br>+/- 150.9794<br>+/- 151.3378 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | Methylcyclohexane<br>**CAS #** 108-87-2<br>**Purity** 98% | (Lot SHBG0634V) | 2,500.3 µg/mL | +/- 14.5372<br>+/- 150.8570<br>+/- 151.2152 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | 1,2-Dichloropropane<br>**CAS #** 78-87-5<br>**Purity** 99% | (Lot 01113D0V) | 2,503.0 µg/mL | +/- 14.5527<br>+/- 151.0171<br>+/- 151.3756 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>**CAS #** 123-91-1<br>**Purity** 99% | (Lot SHBH2584V) | 50,011.4 µg/mL | +/- 290.7552<br>+/- 3,017.4064<br>+/- 3,024.5702 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>**CAS #** 74-95-3<br>**Purity** 98% | (Lot 10183283) | 2,501.9 µg/mL | +/- 14.5465<br>+/- 150.9531<br>+/- 151.3115 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>**CAS #** 10061-01-5<br>**Purity** 99% | (Lot 22622) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>**CAS #** 108-88-3<br>**Purity** 99% | (Lot SHBH1932V) | 2,504.3 µg/mL | +/- 14.5599<br>+/- 151.0925<br>+/- 151.4512 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>**CAS #** 97-63-2<br>**Purity** 99% | (Lot SHBD9190V) | 2,506.9 µg/mL | +/- 14.5752<br>+/- 151.2509<br>+/- 151.6100 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>**CAS #** 10061-02-6<br>**Purity** 99% | (Lot C584177) | 2,503.6 µg/mL | +/- 14.5563<br>+/- 151.0548<br>+/- 151.4134 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>**CAS #** 79-00-5<br>**Purity** 99% | (Lot FGB01) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>**CAS #** 142-28-9<br>**Purity** 99% | (Lot BCBG2162V) | 2,503.5 µg/mL | +/- 14.5556<br>+/- 151.0472<br>+/- 151.4059 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>**CAS #** 127-18-4<br>**Purity** 99% | (Lot SHBD9374V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40 | dibromochloromethane | | 2,500.2 µg/mL | +/- | 14.5365 | µg/mL | Gravimetric |
| | **CAS #** 124-48-1 | (Lot MKBW3597V) | | +/- | 150.8497 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- | 151.2078 | µg/mL | Stressed |
| 41 | 1,2-Dibromoethane (EDB) | | 2,501.3 µg/mL | +/- | 14.5425 | µg/mL | Gravimetric |
| | **CAS #** 106-93-4 | (Lot BCBH3877V) | | +/- | 150.9115 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.2698 | µg/mL | Stressed |
| 42 | Chlorobenzene | | 2,500.1 µg/mL | +/- | 14.5359 | µg/mL | Gravimetric |
| | **CAS #** 108-90-7 | (Lot SHBF0505V) | | +/- | 150.8436 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.2017 | µg/mL | Stressed |
| 43 | m-Xylene | | 1,250.3 µg/mL | +/- | 7.2691 | µg/mL | Gravimetric |
| | **CAS #** 108-38-3 | (Lot SHBG4347V) | | +/- | 75.4331 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 75.6122 | µg/mL | Stressed |
| 44 | p-Xylene | | 1,251.3 µg/mL | +/- | 7.2749 | µg/mL | Gravimetric |
| | **CAS #** 106-42-3 | (Lot SHBG3928V) | | +/- | 75.4935 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 75.6727 | µg/mL | Stressed |
| 45 | Ethylbenzene | | 2,503.3 µg/mL | +/- | 14.5541 | µg/mL | Gravimetric |
| | **CAS #** 100-41-4 | (Lot SHBG5920V) | | +/- | 151.0322 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.3907 | µg/mL | Stressed |
| 46 | 1,1,1,2-Tetrachloroethane | | 2,500.3 µg/mL | +/- | 14.5367 | µg/mL | Gravimetric |
| | **CAS #** 630-20-6 | (Lot MKBS3769V) | | +/- | 150.8512 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.2093 | µg/mL | Stressed |
| 47 | o-Xylene | | 2,504.9 µg/mL | +/- | 14.5636 | µg/mL | Gravimetric |
| | **CAS #** 95-47-6 | (Lot SHBH3432V) | | +/- | 151.1302 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.4890 | µg/mL | Stressed |
| 48 | Styrene | | 2,506.3 µg/mL | +/- | 14.5716 | µg/mL | Gravimetric |
| | **CAS #** 100-42-5 | (Lot MKBS7097V) | | +/- | 151.2132 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.5722 | µg/mL | Stressed |
| 49 | Isopropylbenzene (cumene) | | 2,501.6 µg/mL | +/- | 14.5447 | µg/mL | Gravimetric |
| | **CAS #** 98-82-8 | (Lot 10185056) | | +/- | 150.9341 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.2925 | µg/mL | Stressed |
| 50 | bromoform | | 2,502.9 µg/mL | +/- | 14.5519 | µg/mL | Gravimetric |
| | **CAS #** 75-25-2 | (Lot SHBD8459V) | | +/- | 151.0095 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.3681 | µg/mL | Stressed |
| 51 | bromodichloromethane | | 2,506.8 µg/mL | +/- | 14.5750 | µg/mL | Gravimetric |
| | **CAS #** 75-27-4 | (Lot MKBW5506V) | | +/- | 151.2490 | µg/mL | Unstressed |
| | **Purity** 97% | | | +/- | 151.6081 | µg/mL | Stressed |
| 52 | 1,1,2,2-Tetrachloroethane | | 2,501.3 µg/mL | +/- | 14.5425 | µg/mL | Gravimetric |
| | **CAS #** 79-34-5 | (Lot CFA4D) | | +/- | 150.9115 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.2698 | µg/mL | Stressed |
| 53 | 1,2,3-Trichloropropane | | 2,508.5 µg/mL | +/- | 14.5846 | µg/mL | Gravimetric |
| | **CAS #** 96-18-4 | (Lot BCBH8722V) | | +/- | 151.3489 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.7082 | µg/mL | Stressed |
| 54 | trans-1,4-dichloro-2-butene | | 2,500.8 µg/mL | +/- | 14.5396 | µg/mL | Gravimetric |
| | **CAS #** 110-57-6 | (Lot MKBP6041V) | | +/- | 150.8817 | µg/mL | Unstressed |
| | **Purity** 95% | | | +/- | 151.2399 | µg/mL | Stressed |
| 55 | n-Propylbenzene | | 2,501.9 µg/mL | +/- | 14.5461 | µg/mL | Gravimetric |
| | **CAS #** 103-65-1 | (Lot MKBJ0332V) | | +/- | 150.9492 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.3076 | µg/mL | Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene<br>**CAS #** 108-86-1<br>**Purity** 99% | (Lot MKBD4032V) | 2,507.0 µg/mL | +/- 14.5759<br>+/- 151.2584<br>+/- 151.6175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,3,5-Trimethylbenzene<br>**CAS #** 108-67-8<br>**Purity** 99% | (Lot BCBQ2165V) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>**CAS #** 95-49-8<br>**Purity** 99% | (Lot MKBW5554V) | 2,500.6 µg/mL | +/- 14.5388<br>+/- 150.8738<br>+/- 151.2320 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>**CAS #** 106-43-4<br>**Purity** 99% | (Lot MKBL7753V) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>**CAS #** 98-06-6<br>**Purity** 99% | (Lot S52237V) | 2,507.0 µg/mL | +/- 14.5759<br>+/- 151.2584<br>+/- 151.6175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,2,4-Trimethylbenzene<br>**CAS #** 95-63-6<br>**Purity** 98% | (Lot MKBJ6229V) | 2,500.8 µg/mL | +/- 14.5401<br>+/- 150.8866<br>+/- 151.2448 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>**CAS #** 135-98-8<br>**Purity** 99% | (Lot MKBR9260V) | 2,505.4 µg/mL | +/- 14.5665<br>+/- 151.1604<br>+/- 151.5193 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | p-Isopropyltoluene (p-Cymene)<br>**CAS #** 99-87-6<br>**Purity** 99% | (Lot MKBS2604V) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>**CAS #** 541-73-1<br>**Purity** 99% | (Lot BCBM5751V) | 2,503.9 µg/mL | +/- 14.5577<br>+/- 151.0699<br>+/- 151.4285 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>**CAS #** 106-46-7<br>**Purity** 99% | (Lot MKBS1350V) | 2,509.9 µg/mL | +/- 14.5926<br>+/- 151.4319<br>+/- 151.7914 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>**CAS #** 104-51-8<br>**Purity** 99% | (Lot 09418JJV) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>**CAS #** 95-50-1<br>**Purity** 99% | (Lot SHBD7331V) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>**CAS #** 96-12-8<br>**Purity** 99% | (Lot FBL01) | 2,505.0 µg/mL | +/- 14.5643<br>+/- 151.1378<br>+/- 151.4966 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>**CAS #** 120-82-1<br>**Purity** 99% | (Lot SHBC5541V) | 2,505.3 µg/mL | +/- 14.5657<br>+/- 151.1528<br>+/- 151.5117 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>**CAS #** 87-68-3<br>**Purity** 98% | (Lot J31X013) | 2,506.5 µg/mL | +/- 14.5728<br>+/- 151.2266<br>+/- 151.5856 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>**CAS #** 91-20-3<br>**Purity** 99% | (Lot MKBW2603V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,511.1 | µg/mL | +/- | 14.5999 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6 | (Lot 12912PFV) | | | +/- | 151.5073 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.8670 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

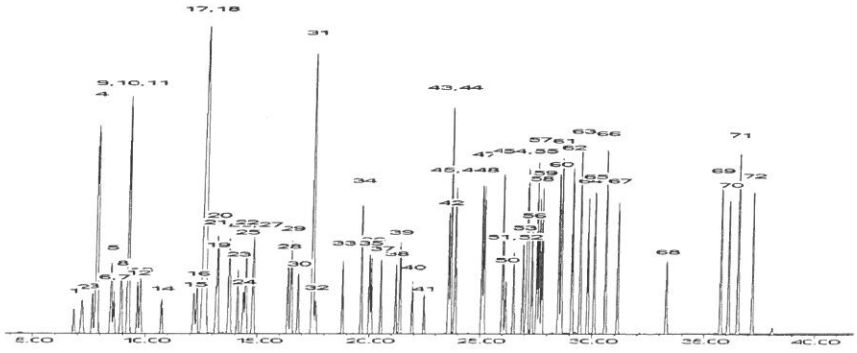
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397**

# Reagent

# VM571992_00002

Rec: 6/15/18 20 vials

VMS71992_00002

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Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 571992 **Lot No.:** A0123711

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether)<br>**CAS #** 60-29-7 (Lot SHBG1462V)<br>**Purity** 99% | 2,501.3 µg/mL | +/- 14.5425 µg/mL<br>+/- 150.9115 µg/mL<br>+/- 151.2698 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>**CAS #** 76-13-1 (Lot 00009482)<br>**Purity** 99% | 2,505.1 µg/mL | +/- 14.5650 µg/mL<br>+/- 151.1453 µg/mL<br>+/- 151.5041 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 1,1-dichloroethene<br>**CAS #** 75-35-4 (Lot SHBG8609V)<br>**Purity** 99% | 2,511.5 µg/mL | +/- 14.6021 µg/mL<br>+/- 151.5299 µg/mL<br>+/- 151.8897 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | tert-Butanol (TBA)<br>**CAS #** 75-65-0 (Lot SHBF0688V)<br>**Purity** 99% | 25,001.8 µg/mL | +/- 145.3547 µg/mL<br>+/- 1,508.4656 µg/mL<br>+/- 1,512.0470 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Methyl acetate<br>**CAS #** 79-20-9 (Lot SHBG4345V)<br>**Purity** 99% | 5,000.5 µg/mL | +/- 29.0733 µg/mL<br>+/- 301.7023 µg/mL<br>+/- 302.4186 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Iodomethane (methyl iodide)<br>**CAS #** 74-88-4 (Lot SHBF2149V)<br>**Purity** 99% | 2,502.9 µg/mL | +/- 14.5519 µg/mL<br>+/- 151.0095 µg/mL<br>+/- 151.3681 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Allyl chloride ( 3-chloropropene )<br>**CAS #** 107-05-1 (Lot SHBF8133V)<br>**Purity** 99% | 2,517.1 µg/mL | +/- 14.6348 µg/mL<br>+/- 151.8693 µg/mL<br>+/- 152.2299 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane)<br>**CAS #** 75-09-2<br>**Purity** 99% | (Lot SHBH2578V) | 2,502.1 µg/mL | +/- 14.5476<br>+/- 150.9643<br>+/- 151.3227 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | Carbon disulfide<br>**CAS #** 75-15-0<br>**Purity** 99% | (Lot S20A856) | 2,501.4 µg/mL | +/- 14.5432<br>+/- 150.9190<br>+/- 151.2773 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | Acrylonitrile<br>**CAS #** 107-13-1<br>**Purity** 99% | (Lot T07B2030) | 25,001.3 µg/mL | +/- 145.3518<br>+/- 1,508.4355<br>+/- 1,512.0167 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE )<br>**CAS #** 1634-04-4<br>**Purity** 99% | (Lot SHBG2655V) | 2,505.3 µg/mL | +/- 14.5657<br>+/- 151.1528<br>+/- 151.5117 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | cis-1,2-Dichloroethene<br>**CAS #** 156-59-2<br>**Purity** 98% | (Lot MKBV2831V) | 2,500.5 µg/mL | +/- 14.5379<br>+/- 150.8644<br>+/- 151.2226 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexane (C6)<br>**CAS #** 110-54-3<br>**Purity** 99% | (Lot SHBG2674V) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | 1,1-Dichloroethane<br>**CAS #** 75-34-3<br>**Purity** 99% | (Lot 00008621) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | 2,2-Dichloropropane<br>**CAS #** 594-20-7<br>**Purity** 98% | (Lot BCBR0622V) | 2,501.0 µg/mL | +/- 14.5408<br>+/- 150.8940<br>+/- 151.2522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | trans-1,2-Dichloroethene<br>**CAS #** 156-60-5<br>**Purity** 99% | (Lot 09431AEV) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol)<br>**CAS #** 78-83-1<br>**Purity** 99% | (Lot SHBG8201V) | 62,512.5 µg/mL | +/- 363.4341<br>+/- 3,771.6543<br>+/- 3,780.6088 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | chloroform<br>**CAS #** 67-66-3<br>**Purity** 99% | (Lot MKBV2089V) | 2,501.9 µg/mL | +/- 14.5461<br>+/- 150.9492<br>+/- 151.3076 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | Bromochloromethane<br>**CAS #** 74-97-5<br>**Purity** 99% | (Lot 00004559) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | Tetrahydrofuran<br>**CAS #** 109-99-9<br>**Purity** 99% | (Lot SHBG2910V) | 5,001.3 µg/mL | +/- 29.0777<br>+/- 301.7476<br>+/- 302.4640 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 21 | 1,1,1-trichloroethane<br>**CAS #** 71-55-6<br>**Purity** 99% | (Lot B15W12061) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 22 | Cyclohexane<br>**CAS #** 110-82-7<br>**Purity** 99% | (Lot MKBX4768V) | 2,502.0 µg/mL | +/- 14.5468<br>+/- 150.9567<br>+/- 151.3151 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 23 | 1,1-Dichloropropene<br>**CAS #** 563-58-6<br>**Purity** 99% | (Lot 160727JLM) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

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|---|---|---|---|---|---|---|---|
| 24 | carbon tetrachloride<br>**CAS #** 56-23-5<br>**Purity** 99% | (Lot SHBG1763V) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | n-Heptane (C7)<br>**CAS #** 142-82-5<br>**Purity** 99% | (Lot SHBG6171V) | 2,505.5 µg/mL | +/- 14.5672<br>+/- 151.1679<br>+/- 151.5268 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2-Dichloroethane<br>**CAS #** 107-06-2<br>**Purity** 99% | (Lot SHBF9313V) | 2,504.8 µg/mL | +/- 14.5628<br>+/- 151.1227<br>+/- 151.4815 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Benzene<br>**CAS #** 71-43-2<br>**Purity** 99% | (Lot SHBH2056V) | 2,506.9 µg/mL | +/- 14.5752<br>+/- 151.2509<br>+/- 151.6100 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Trichloroethene<br>**CAS #** 79-01-6<br>**Purity** 99% | (Lot SHBH1955V) | 2,502.4 µg/mL | +/- 14.5490<br>+/- 150.9794<br>+/- 151.3378 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | Methylcyclohexane<br>**CAS #** 108-87-2<br>**Purity** 98% | (Lot SHBG0634V) | 2,500.3 µg/mL | +/- 14.5372<br>+/- 150.8570<br>+/- 151.2152 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | 1,2-Dichloropropane<br>**CAS #** 78-87-5<br>**Purity** 99% | (Lot 01113D0V) | 2,503.0 µg/mL | +/- 14.5527<br>+/- 151.0171<br>+/- 151.3756 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>**CAS #** 123-91-1<br>**Purity** 99% | (Lot SHBH2584V) | 50,011.4 µg/mL | +/- 290.7552<br>+/- 3,017.4064<br>+/- 3,024.5702 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>**CAS #** 74-95-3<br>**Purity** 98% | (Lot 10183283) | 2,501.9 µg/mL | +/- 14.5465<br>+/- 150.9531<br>+/- 151.3115 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>**CAS #** 10061-01-5<br>**Purity** 99% | (Lot 22622) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>**CAS #** 108-88-3<br>**Purity** 99% | (Lot SHBH1932V) | 2,504.3 µg/mL | +/- 14.5599<br>+/- 151.0925<br>+/- 151.4512 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>**CAS #** 97-63-2<br>**Purity** 99% | (Lot SHBD9190V) | 2,506.9 µg/mL | +/- 14.5752<br>+/- 151.2509<br>+/- 151.6100 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>**CAS #** 10061-02-6<br>**Purity** 99% | (Lot C584177) | 2,503.6 µg/mL | +/- 14.5563<br>+/- 151.0548<br>+/- 151.4134 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>**CAS #** 79-00-5<br>**Purity** 99% | (Lot FGB01) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>**CAS #** 142-28-9<br>**Purity** 99% | (Lot BCBG2162V) | 2,503.5 µg/mL | +/- 14.5556<br>+/- 151.0472<br>+/- 151.4059 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>**CAS #** 127-18-4<br>**Purity** 99% | (Lot SHBD9374V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

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|---|---|---|---|---|---|---|
| 40 | dibromochloromethane<br>**CAS #** 124-48-1<br>**Purity** 98% | (Lot MKBW3597V) | 2,500.2 µg/mL | +/- 14.5365<br>+/- 150.8497<br>+/- 151.2078 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 41 | 1,2-Dibromoethane (EDB)<br>**CAS #** 106-93-4<br>**Purity** 99% | (Lot BCBH3877V) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 42 | Chlorobenzene<br>**CAS #** 108-90-7<br>**Purity** 99% | (Lot SHBF0505V) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 43 | m-Xylene<br>**CAS #** 108-38-3<br>**Purity** 99% | (Lot SHBG4347V) | 1,250.3 µg/mL | +/- 7.2691<br>+/- 75.4331<br>+/- 75.6122 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 44 | p-Xylene<br>**CAS #** 106-42-3<br>**Purity** 99% | (Lot SHBG3928V) | 1,251.3 µg/mL | +/- 7.2749<br>+/- 75.4935<br>+/- 75.6727 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 45 | Ethylbenzene<br>**CAS #** 100-41-4<br>**Purity** 99% | (Lot SHBG5920V) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 46 | 1,1,1,2-Tetrachloroethane<br>**CAS #** 630-20-6<br>**Purity** 99% | (Lot MKBS3769V) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 47 | o-Xylene<br>**CAS #** 95-47-6<br>**Purity** 99% | (Lot SHBH3432V) | 2,504.9 µg/mL | +/- 14.5636<br>+/- 151.1302<br>+/- 151.4890 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 48 | Styrene<br>**CAS #** 100-42-5<br>**Purity** 99% | (Lot MKBS7097V) | 2,506.3 µg/mL | +/- 14.5716<br>+/- 151.2132<br>+/- 151.5722 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 49 | Isopropylbenzene (cumene)<br>**CAS #** 98-82-8<br>**Purity** 99% | (Lot 10185056) | 2,501.6 µg/mL | +/- 14.5447<br>+/- 150.9341<br>+/- 151.2925 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 50 | bromoform<br>**CAS #** 75-25-2<br>**Purity** 99% | (Lot SHBD8459V) | 2,502.9 µg/mL | +/- 14.5519<br>+/- 151.0095<br>+/- 151.3681 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 51 | bromodichloromethane<br>**CAS #** 75-27-4<br>**Purity** 97% | (Lot MKBW5506V) | 2,506.8 µg/mL | +/- 14.5750<br>+/- 151.2490<br>+/- 151.6081 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 52 | 1,1,2,2-Tetrachloroethane<br>**CAS #** 79-34-5<br>**Purity** 99% | (Lot CFA4D) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 53 | 1,2,3-Trichloropropane<br>**CAS #** 96-18-4<br>**Purity** 99% | (Lot BCBH8722V) | 2,508.5 µg/mL | +/- 14.5846<br>+/- 151.3489<br>+/- 151.7082 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 54 | trans-1,4-dichloro-2-butene<br>**CAS #** 110-57-6<br>**Purity** 95% | (Lot MKBP6041V) | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8817<br>+/- 151.2399 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 55 | n-Propylbenzene<br>**CAS #** 103-65-1<br>**Purity** 99% | (Lot MKBJ0332V) | 2,501.9 µg/mL | +/- 14.5461<br>+/- 150.9492<br>+/- 151.3076 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

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|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene | | 2,507.0 µg/mL | +/- 14.5759 | µg/mL | Gravimetric |
| | **CAS #** 108-86-1 | (Lot MKBD4032V) | | +/- 151.2584 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.6175 | µg/mL | Stressed |
| 57 | 1,3,5-Trimethylbenzene | | 2,501.1 µg/mL | +/- 14.5418 | µg/mL | Gravimetric |
| | **CAS #** 108-67-8 | (Lot BCBQ2165V) | | +/- 150.9040 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2622 | µg/mL | Stressed |
| 58 | 2-Chlorotoluene | | 2,500.6 µg/mL | +/- 14.5388 | µg/mL | Gravimetric |
| | **CAS #** 95-49-8 | (Lot MKBW5554V) | | +/- 150.8738 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2320 | µg/mL | Stressed |
| 59 | 4-Chlorotoluene | | 2,501.3 µg/mL | +/- 14.5425 | µg/mL | Gravimetric |
| | **CAS #** 106-43-4 | (Lot MKBL7753V) | | +/- 150.9115 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2698 | µg/mL | Stressed |
| 60 | tert-Butylbenzene | | 2,507.0 µg/mL | +/- 14.5759 | µg/mL | Gravimetric |
| | **CAS #** 98-06-6 | (Lot S52237V) | | +/- 151.2584 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.6175 | µg/mL | Stressed |
| 61 | 1,2,4-Trimethylbenzene | | 2,500.8 µg/mL | +/- 14.5401 | µg/mL | Gravimetric |
| | **CAS #** 95-63-6 | (Lot MKBJ6229V) | | +/- 150.8866 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.2448 | µg/mL | Stressed |
| 62 | sec-Butylbenzene | | 2,505.4 µg/mL | +/- 14.5665 | µg/mL | Gravimetric |
| | **CAS #** 135-98-8 | (Lot MKBR9260V) | | +/- 151.1604 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.5193 | µg/mL | Stressed |
| 63 | p-Isopropyltoluene (p-Cymene) | | 2,503.8 µg/mL | +/- 14.5570 | µg/mL | Gravimetric |
| | **CAS #** 99-87-6 | (Lot MKBS2604V) | | +/- 151.0623 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4210 | µg/mL | Stressed |
| 64 | 1,3-Dichlorobenzene | | 2,503.9 µg/mL | +/- 14.5577 | µg/mL | Gravimetric |
| | **CAS #** 541-73-1 | (Lot BCBM5751V) | | +/- 151.0699 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4285 | µg/mL | Stressed |
| 65 | 1,4-Dichlorobenzene | | 2,509.9 µg/mL | +/- 14.5926 | µg/mL | Gravimetric |
| | **CAS #** 106-46-7 | (Lot MKBS1350V) | | +/- 151.4319 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.7914 | µg/mL | Stressed |
| 66 | n-Butylbenzene | | 2,503.3 µg/mL | +/- 14.5541 | µg/mL | Gravimetric |
| | **CAS #** 104-51-8 | (Lot 09418JJV) | | +/- 151.0322 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3907 | µg/mL | Stressed |
| 67 | 1,2-Dichlorobenzene | | 2,503.8 µg/mL | +/- 14.5570 | µg/mL | Gravimetric |
| | **CAS #** 95-50-1 | (Lot SHBD7331V) | | +/- 151.0623 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4210 | µg/mL | Stressed |
| 68 | 1,2-Dibromo-3-chloropropane | | 2,505.0 µg/mL | +/- 14.5643 | µg/mL | Gravimetric |
| | **CAS #** 96-12-8 | (Lot FBL01) | | +/- 151.1378 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4966 | µg/mL | Stressed |
| 69 | 1,2,4-Trichlorobenzene | | 2,505.3 µg/mL | +/- 14.5657 | µg/mL | Gravimetric |
| | **CAS #** 120-82-1 | (Lot SHBC5541V) | | +/- 151.1528 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.5117 | µg/mL | Stressed |
| 70 | Hexachlorobutadiene | | 2,506.5 µg/mL | +/- 14.5728 | µg/mL | Gravimetric |
| | **CAS #** 87-68-3 | (Lot J31X013) | | +/- 151.2266 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.5856 | µg/mL | Stressed |
| 71 | Naphthalene | | 2,500.9 µg/mL | +/- 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 91-20-3 | (Lot MKBW2603V) | | +/- 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2471 | µg/mL | Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,511.1 µg/mL | +/- | 14.5999 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6 | (Lot 12912PFV) | | +/- | 151.5073 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.8670 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

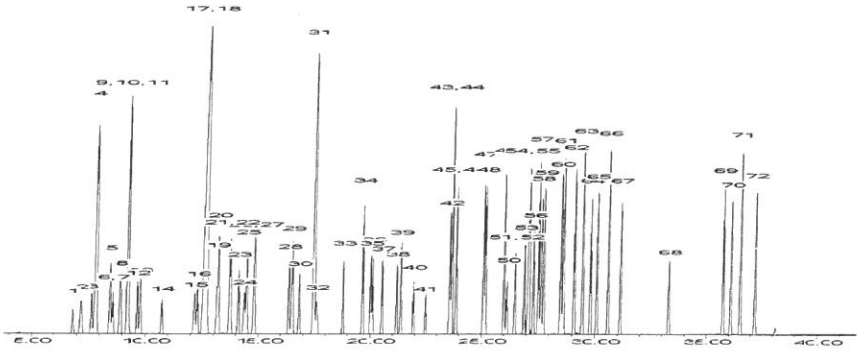
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# VM571992S_00002

Rec: 5/24/17

VMS71992S-00002

(10)

RESTEK®

# CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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## Certificate of Analysis

ilac-MRA

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 571992.sec **Lot No.:** A0123775

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether)<br>**CAS #** 60-29-7.SEC (Lot F23X068)<br>**Purity** 98% | 2,501.2 µg/mL | +/- 14.5422<br>+/- 150.9088<br>+/- 151.2671 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>**CAS #** 76-13-1.SEC (Lot 18342)<br>**Purity** 99% | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 1,1-Dichloroethene<br>**CAS #** 75-35-4.SEC (Lot 2767000)<br>**Purity** 99% | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | tert-Butanol (TBA)<br>**CAS #** 75-65-0.SEC (Lot XYXDO)<br>**Purity** 98% | 25,003.1 µg/mL | +/- 145.3626<br>+/- 1,508.5475<br>+/- 1,512.1291 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Methyl acetate<br>**CAS #** 79-20-9.SEC (Lot YDGVD)<br>**Purity** 99% | 5,000.4 µg/mL | +/- 29.0726<br>+/- 301.6948<br>+/- 302.4111 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Iodomethane (methyl iodide)<br>**CAS #** 74-88-4.SEC (Lot Y25A027)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Allyl chloride ( 3-chloropropene )<br>**CAS #** 107-05-1.SEC (Lot VEBOC)<br>**Purity** 98% | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane)<br>**CAS #** 75-09-2.SEC (Lot FGM02)<br>**Purity** 99% | | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8813<br>+/- 151.2395 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | Carbon disulfide<br>**CAS #** 75-15-0.SEC<br>**Purity** 99% | (Lot MKBL1376V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | Acrylonitrile<br>**CAS #** 107-13-1.SEC<br>**Purity** 99% | (Lot UERIL) | 25,000.9 µg/mL | +/- 145.3496<br>+/- 1,508.4128<br>+/- 1,511.9941 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE )<br>**CAS #** 1634-04-4.SEC<br>**Purity** 99% | (Lot ZAQTA-MS) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | cis-1,2-Dichloroethene<br>**CAS #** 156-59-2.SEC<br>**Purity** 98% | (Lot HGC01-BLKT) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexane (C6)<br>**CAS #** 110-54-3.SEC<br>**Purity** 99% | (Lot 10188491) | 2,501.5 µg/mL | +/- 14.5439<br>+/- 150.9266<br>+/- 151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | 1,1-Dichloroethane<br>**CAS #** 75-34-3.SEC<br>**Purity** 99% | (Lot 5379000) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | 2,2-Dichloropropane<br>**CAS #** 594-20-7.SEC<br>**Purity** 98% | (Lot 17E8E) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | trans-1,2-Dichloroethene<br>**CAS #** 156-60-5.SEC<br>**Purity** 97% | (Lot TS5UB) | 2,500.2 µg/mL | +/- 14.5362<br>+/- 150.8466<br>+/- 151.2048 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol)<br>**CAS #** 78-83-1.SEC<br>**Purity** 99% | (Lot 83NHH) | 62,506.9 µg/mL | +/- 363.4014<br>+/- 3,771.3149<br>+/- 3,780.2687 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | Chloroform<br>**CAS #** 67-66-3.SEC<br>**Purity** 99% | (Lot 1297547) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | Bromochloromethane<br>**CAS #** 74-97-5.SEC<br>**Purity** 99% | (Lot 5670200) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | Tetrahydrofuran<br>**CAS #** 109-99-9.SEC<br>**Purity** 99% | (Lot K3V7J-SJ) | 5,002.3 µg/mL | +/- 29.0835<br>+/- 301.8079<br>+/- 302.5245 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 21 | 1,1,1-Trichloroethane<br>**CAS #** 71-55-6.SEC<br>**Purity** 98% | (Lot CS160712) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 22 | Cyclohexane<br>**CAS #** 110-82-7.SEC<br>**Purity** 99% | (Lot YADRA) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 23 | 1,1-Dichloropropene<br>**CAS #** 563-58-6.SEC<br>**Purity** 96% | (Lot 5221100) | 2,501.3 µg/mL | +/- 14.5427<br>+/- 150.9133<br>+/- 151.2716 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 24 | Carbon tetrachloride<br>**CAS #** 56-23-5.SEC<br>**Purity** 99% | (Lot 11466) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | n-Heptane (C7)<br>**CAS #** 142-82-5.SEC<br>**Purity** 99% | (Lot OGM01) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2-Dichloroethane<br>**CAS #** 107-06-2.SEC<br>**Purity** 99% | (Lot FO6PK) | 2,500.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>150.8436<br>151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Benzene<br>**CAS #** 71-43-2.SEC<br>**Purity** 99% | (Lot B28Y008) | 2,501.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5439<br>150.9266<br>151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Trichloroethene<br>**CAS #** 79-01-6.SEC<br>**Purity** 99% | (Lot H04X050) | 2,501.0 | µg/mL | +/-<br>+/-<br>+/- | 14.5410<br>150.8964<br>151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | Methylcyclohexane<br>**CAS #** 108-87-2.SEC<br>**Purity** 99% | (Lot 24MSD-CD) | 2,500.9 | µg/mL | +/-<br>+/-<br>+/- | 14.5403<br>150.8889<br>151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | 1,2-Dichloropropane<br>**CAS #** 78-87-5.SEC<br>**Purity** 99% | (Lot OGG01) | 2,501.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>150.9040<br>151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>**CAS #** 123-91-1.SEC<br>**Purity** 99% | (Lot MUFZH) | 50,007.1 | µg/mL | +/-<br>+/-<br>+/- | 290.7305<br>3,017.1500<br>3,024.3132 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>**CAS #** 74-95-3.SEC<br>**Purity** 99% | (Lot FGI01-OICH) | 2,501.6 | µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>150.9341<br>151.2925 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>**CAS #** 10061-01-5.SEC<br>**Purity** 99% | (Lot 487OA) | 2,500.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>150.8436<br>151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>**CAS #** 108-88-3.SEC<br>**Purity** 99% | (Lot YND2B-BD) | 2,500.0 | µg/mL | +/-<br>+/-<br>+/- | 14.5352<br>150.8361<br>151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>**CAS #** 97-63-2.SEC<br>**Purity** 99% | (Lot MLWYK-LS) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>**CAS #** 10061-02-6.SEC<br>**Purity** 99% | (Lot ZDMSL) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>**CAS #** 79-00-5.SEC<br>**Purity** 98% | (Lot 5034600) | 2,500.8 | µg/mL | +/-<br>+/-<br>+/- | 14.5401<br>150.8866<br>151.2448 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>**CAS #** 142-28-9.SEC<br>**Purity** 99% | (Lot AGN01-EFPC) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>**CAS #** 127-18-4.SEC<br>**Purity** 99% | (Lot F09W014) | 2,501.3 | µg/mL | +/-<br>+/-<br>+/- | 14.5425<br>150.9115<br>151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40 | Dibromochloromethane<br>**CAS #** 124-48-1.SEC<br>**Purity** 97% | (Lot 10181507) | 2,500.4 µg/mL | +/- 14.5376<br>+/- 150.8613<br>+/- 151.2194 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 41 | 1,2-Dibromoethane (EDB)<br>**CAS #** 106-93-4.SEC<br>**Purity** 99% | (Lot 3505900) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 42 | Chlorobenzene<br>**CAS #** 108-90-7.SEC<br>**Purity** 99% | (Lot 1161936) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 43 | m-Xylene<br>**CAS #** 108-38-3.SEC<br>**Purity** 99% | (Lot OUKMG-GB) | 1,250.9 µg/mL | +/- 7.2727<br>+/- 75.4708<br>+/- 75.6500 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 44 | p-Xylene<br>**CAS #** 106-42-3.SEC<br>**Purity** 99% | (Lot GM01) | 1,250.5 µg/mL | +/- 7.2705<br>+/- 75.4482<br>+/- 75.6273 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 45 | Ethylbenzene<br>**CAS #** 100-41-4.SEC<br>**Purity** 99% | (Lot PI4SE) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 46 | 1,1,1,2-Tetrachloroethane<br>**CAS #** 630-20-6.SEC<br>**Purity** 99% | (Lot GC01) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 47 | o-Xylene<br>**CAS #** 95-47-6.SEC<br>**Purity** 99% | (Lot FGL01-KTPK) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 48 | Styrene<br>**CAS #** 100-42-5.SEC<br>**Purity** 99% | (Lot OFIOL-IA) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 49 | Isopropylbenzene (cumene)<br>**CAS #** 98-82-8.SEC<br>**Purity** 99% | (Lot 2PHXG-IH) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 50 | Bromoform<br>**CAS #** 75-25-2.SEC<br>**Purity** 99% | (Lot 5139000) | 2,502.3 µg/mL | +/- 14.5483<br>+/- 150.9718<br>+/- 151.3303 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 51 | Bromodichloromethane<br>**CAS #** 75-27-4.SEC<br>**Purity** 98% | (Lot 13780) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 52 | 1,1,2,2-Tetrachloroethane<br>**CAS #** 79-34-5.SEC<br>**Purity** 99% | (Lot CFA4D-AQ) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 53 | 1,2,3-Trichloropropane<br>**CAS #** 96-18-4.SEC<br>**Purity** 98% | (Lot OGI01) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 54 | trans-1,4-Dichloro-2-butene<br>**CAS #** 110-57-6.SEC<br>**Purity** 98% | (Lot 100700-3) | 2,501.0 µg/mL | +/- 14.5408<br>+/- 150.8940<br>+/- 151.2522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 55 | n-Propylbenzene<br>**CAS #** 103-65-1.SEC<br>**Purity** 99% | (Lot T2HFC-IT) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene | | 2,500.1 | µg/mL | +/- | 14.5359 | µg/mL | Gravimetric |
| | **CAS #** 108-86-1.SEC | (Lot 2FUHG-EM) | | | +/- | 150.8436 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2017 | µg/mL | Stressed |
| 57 | 1,3,5-Trimethylbenzene | | 2,500.3 | µg/mL | +/- | 14.5367 | µg/mL | Gravimetric |
| | **CAS #** 108-67-8.SEC | (Lot TOOOF) | | | +/- | 150.8512 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2093 | µg/mL | Stressed |
| 58 | 2-Chlorotoluene | | 2,500.9 | µg/mL | +/- | 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 95-49-8.SEC | (Lot SW8QG-AO) | | | +/- | 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2471 | µg/mL | Stressed |
| 59 | 4-Chlorotoluene | | 2,500.5 | µg/mL | +/- | 14.5381 | µg/mL | Gravimetric |
| | **CAS #** 106-43-4.SEC | (Lot P4XHJ-AO) | | | +/- | 150.8662 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2244 | µg/mL | Stressed |
| 60 | tert-Butylbenzene | | 2,500.1 | µg/mL | +/- | 14.5359 | µg/mL | Gravimetric |
| | **CAS #** 98-06-6.SEC | (Lot OGN01-CAI) | | | +/- | 150.8436 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2017 | µg/mL | Stressed |
| 61 | 1,2,4-Trimethylbenzene | | 2,500.4 | µg/mL | +/- | 14.5374 | µg/mL | Gravimetric |
| | **CAS #** 95-63-6.SEC | (Lot SC7LO-QA) | | | +/- | 150.8587 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2169 | µg/mL | Stressed |
| 62 | sec-Butylbenzene | | 2,501.4 | µg/mL | +/- | 14.5432 | µg/mL | Gravimetric |
| | **CAS #** 135-98-8.SEC | (Lot OGN01-IMA) | | | +/- | 150.9190 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2773 | µg/mL | Stressed |
| 63 | 4-Isopropyltoluene (p-cymene) | | 2,501.3 | µg/mL | +/- | 14.5425 | µg/mL | Gravimetric |
| | **CAS #** 99-87-6.SEC | (Lot 5221800) | | | +/- | 150.9115 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2698 | µg/mL | Stressed |
| 64 | 1,3-Dichlorobenzene | | 2,500.9 | µg/mL | +/- | 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 541-73-1.SEC | (Lot FMDFD) | | | +/- | 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2471 | µg/mL | Stressed |
| 65 | 1,4-Dichlorobenzene | | 2,500.8 | µg/mL | +/- | 14.5396 | µg/mL | Gravimetric |
| | **CAS #** 106-46-7.SEC | (Lot 4Y5DC) | | | +/- | 150.8813 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2395 | µg/mL | Stressed |
| 66 | n-Butylbenzene | | 2,500.8 | µg/mL | +/- | 14.5396 | µg/mL | Gravimetric |
| | **CAS #** 104-51-8.SEC | (Lot OGN01-PNP) | | | +/- | 150.8813 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2395 | µg/mL | Stressed |
| 67 | 1,2-Dichlorobenzene | | 2,501.0 | µg/mL | +/- | 14.5410 | µg/mL | Gravimetric |
| | **CAS #** 95-50-1.SEC | (Lot R6QDM) | | | +/- | 150.8964 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.2547 | µg/mL | Stressed |
| 68 | 1,2-Dibromo-3-chloropropane | | 2,501.5 | µg/mL | +/- | 14.5436 | µg/mL | Gravimetric |
| | **CAS #** 96-12-8.SEC | (Lot LC00408V) | | | +/- | 150.9236 | µg/mL | Unstressed |
| | **Purity** 98% | | | | +/- | 151.2819 | µg/mL | Stressed |
| 69 | 1,2,4-Trichlorobenzene | | 2,502.5 | µg/mL | +/- | 14.5498 | µg/mL | Gravimetric |
| | **CAS #** 120-82-1.SEC | (Lot 3LYYC) | | | +/- | 150.9869 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.3454 | µg/mL | Stressed |
| 70 | Hexachlorobutadiene | | 2,501.4 | µg/mL | +/- | 14.5433 | µg/mL | Gravimetric |
| | **CAS #** 87-68-3.SEC | (Lot 5526800) | | | +/- | 150.9198 | µg/mL | Unstressed |
| | **Purity** 97% | | | | +/- | 151.2781 | µg/mL | Stressed |
| 71 | Naphthalene | | 2,501.8 | µg/mL | +/- | 14.5454 | µg/mL | Gravimetric |
| | **CAS #** 91-20-3.SEC | (Lot SKZ5N) | | | +/- | 150.9417 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 151.3000 | µg/mL | Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,500.7 µg/mL | +/- | 14.5394 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6.SEC | (Lot A0043055) | | +/- | 150.8792 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- | 151.2374 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

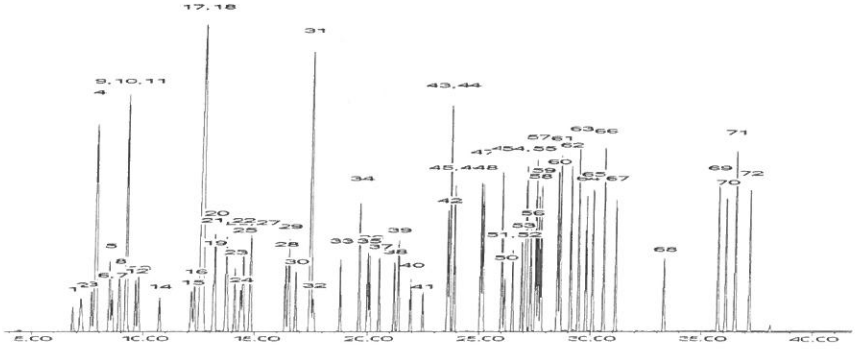
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

**Date Mixed:** 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397**

# Reagent

# VM571992S_00004

Rec: 12/4/18

20

VM5719925-00004

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Bellefonte, PA 16823-8812
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# Certificate of Analysis

ilac-MRA

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 571992.sec **Lot No.:** A0123775

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2019 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether) | 2,501.2 µg/mL | +/- 14.5422 | µg/mL | Gravimetric |
| | **CAS #** 60-29-7.SEC (Lot F23X068) | | +/- 150.9088 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 151.2671 | µg/mL | Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113) | 2,501.1 µg/mL | +/- 14.5418 | µg/mL | Gravimetric |
| | **CAS #** 76-13-1.SEC (Lot 18342) | | +/- 150.9040 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 151.2622 | µg/mL | Stressed |
| 3 | 1,1-Dichloroethene | 2,500.5 µg/mL | +/- 14.5381 | µg/mL | Gravimetric |
| | **CAS #** 75-35-4.SEC (Lot 2767000) | | +/- 150.8662 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 151.2244 | µg/mL | Stressed |
| 4 | tert-Butanol (TBA) | 25,003.1 µg/mL | +/- 145.3626 | µg/mL | Gravimetric |
| | **CAS #** 75-65-0.SEC (Lot XYXDO) | | +/- 1,508.5475 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 1,512.1291 | µg/mL | Stressed |
| 5 | Methyl acetate | 5,000.4 µg/mL | +/- 29.0726 | µg/mL | Gravimetric |
| | **CAS #** 79-20-9.SEC (Lot YDGVD) | | +/- 301.6948 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 302.4111 | µg/mL | Stressed |
| 6 | Iodomethane (methyl iodide) | 2,500.4 µg/mL | +/- 14.5374 | µg/mL | Gravimetric |
| | **CAS #** 74-88-4.SEC (Lot Y25A027) | | +/- 150.8587 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 151.2169 | µg/mL | Stressed |
| 7 | Allyl chloride ( 3-chloropropene ) | 2,500.1 µg/mL | +/- 14.5358 | µg/mL | Gravimetric |
| | **CAS #** 107-05-1.SEC (Lot VEBOC) | | +/- 150.8423 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 151.2004 | µg/mL | Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane)<br>**CAS #** 75-09-2.SEC (Lot [illegible])<br>**Purity** 99% | | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8813<br>+/- 151.2395 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | Carbon disulfide<br>**CAS #** 75-15-0.SEC<br>**Purity** 99% | (Lot MKBL1376V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | Acrylonitrile<br>**CAS #** 107-13-1.SEC<br>**Purity** 99% | (Lot UERIL) | 25,000.9 µg/mL | +/- 145.3496<br>+/- 1,508.4128<br>+/- 1,511.9941 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE )<br>**CAS #** 1634-04-4.SEC<br>**Purity** 99% | (Lot ZAQTA-MS) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | cis-1,2-Dichloroethene<br>**CAS #** 156-59-2.SEC<br>**Purity** 98% | (Lot HGC01-BLKT) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexane (C6)<br>**CAS #** 110-54-3.SEC<br>**Purity** 99% | (Lot 10188491) | 2,501.5 µg/mL | +/- 14.5439<br>+/- 150.9266<br>+/- 151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | 1,1-Dichloroethane<br>**CAS #** 75-34-3.SEC<br>**Purity** 99% | (Lot 5379000) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | 2,2-Dichloropropane<br>**CAS #** 594-20-7.SEC<br>**Purity** 98% | (Lot I7E8E) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | trans-1,2-Dichloroethene<br>**CAS #** 156-60-5.SEC<br>**Purity** 97% | (Lot TS5UB) | 2,500.2 µg/mL | +/- 14.5362<br>+/- 150.8466<br>+/- 151.2048 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol)<br>**CAS #** 78-83-1.SEC<br>**Purity** 99% | (Lot 83NHH) | 62,506.9 µg/mL | +/- 363.4014<br>+/- 3,771.3149<br>+/- 3,780.2687 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | Chloroform<br>**CAS #** 67-66-3.SEC<br>**Purity** 99% | (Lot 1297547) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | Bromochloromethane<br>**CAS #** 74-97-5.SEC<br>**Purity** 99% | (Lot 5670200) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | Tetrahydrofuran<br>**CAS #** 109-99-9.SEC<br>**Purity** 99% | (Lot K3V7J-SJ) | 5,002.3 µg/mL | +/- 29.0835<br>+/- 301.8079<br>+/- 302.5245 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 21 | 1,1,1-Trichloroethane<br>**CAS #** 71-55-6.SEC<br>**Purity** 98% | (Lot CS160712) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 22 | Cyclohexane<br>**CAS #** 110-82-7.SEC<br>**Purity** 99% | (Lot YADRA) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 23 | 1,1-Dichloropropene<br>**CAS #** 563-58-6.SEC<br>**Purity** 96% | (Lot 5221100) | 2,501.3 µg/mL | +/- 14.5427<br>+/- 150.9133<br>+/- 151.2716 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

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|---|---|---|---|---|---|---|---|---|
| 24 | Carbon tetrachloride<br>**CAS #** 56-23-5.SEC<br>**Purity** 99% | (Lot 11466) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | n-Heptane (C7)<br>**CAS #** 142-82-5.SEC<br>**Purity** 99% | (Lot OGM01) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2-Dichloroethane<br>**CAS #** 107-06-2.SEC<br>**Purity** 99% | (Lot FO6PK) | 2,500.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>150.8436<br>151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Benzene<br>**CAS #** 71-43-2.SEC<br>**Purity** 99% | (Lot B28Y008) | 2,501.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5439<br>150.9266<br>151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Trichloroethene<br>**CAS #** 79-01-6.SEC<br>**Purity** 99% | (Lot H04X050) | 2,501.0 | µg/mL | +/-<br>+/-<br>+/- | 14.5410<br>150.8964<br>151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | Methylcyclohexane<br>**CAS #** 108-87-2.SEC<br>**Purity** 99% | (Lot 24MSD-CD) | 2,500.9 | µg/mL | +/-<br>+/-<br>+/- | 14.5403<br>150.8889<br>151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | 1,2-Dichloropropane<br>**CAS #** 78-87-5.SEC<br>**Purity** 99% | (Lot OGG01) | 2,501.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>150.9040<br>151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>**CAS #** 123-91-1.SEC<br>**Purity** 99% | (Lot MUFZH) | 50,007.1 | µg/mL | +/-<br>+/-<br>+/- | 290.7305<br>3,017.1500<br>3,024.3132 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>**CAS #** 74-95-3.SEC<br>**Purity** 99% | (Lot FGI01-OICH) | 2,501.6 | µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>150.9341<br>151.2925 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>**CAS #** 10061-01-5.SEC<br>**Purity** 99% | (Lot 487OA) | 2,500.1 | µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>150.8436<br>151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>**CAS #** 108-88-3.SEC<br>**Purity** 99% | (Lot YND2B-BD) | 2,500.0 | µg/mL | +/-<br>+/-<br>+/- | 14.5352<br>150.8361<br>151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>**CAS #** 97-63-2.SEC<br>**Purity** 99% | (Lot MLWYK-LS) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>**CAS #** 10061-02-6.SEC<br>**Purity** 99% | (Lot ZDMSL) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>**CAS #** 79-00-5.SEC<br>**Purity** 98% | (Lot 5034600) | 2,500.8 | µg/mL | +/-<br>+/-<br>+/- | 14.5401<br>150.8866<br>151.2448 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>**CAS #** 142-28-9.SEC<br>**Purity** 99% | (Lot AGN01-EFPC) | 2,500.5 | µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>150.8662<br>151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>**CAS #** 127-18-4.SEC<br>**Purity** 99% | (Lot F09W014) | 2,501.3 | µg/mL | +/-<br>+/-<br>+/- | 14.5425<br>150.9115<br>151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

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|---|---|---|---|---|---|---|---|
| 40 | Dibromochloromethane<br>**CAS #** 124-48-1.SEC<br>**Purity** 97% | (Lot 10181507) | 2,500.4 µg/mL | +/- 14.5376<br>+/- 150.8613<br>+/- 151.2194 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 41 | 1,2-Dibromoethane (EDB)<br>**CAS #** 106-93-4.SEC<br>**Purity** 99% | (Lot 3505900) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 42 | Chlorobenzene<br>**CAS #** 108-90-7.SEC<br>**Purity** 99% | (Lot 1161936) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 43 | m-Xylene<br>**CAS #** 108-38-3.SEC<br>**Purity** 99% | (Lot OUKMG-GB) | 1,250.9 µg/mL | +/- 7.2727<br>+/- 75.4708<br>+/- 75.6500 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 44 | p-Xylene<br>**CAS #** 106-42-3.SEC<br>**Purity** 99% | (Lot GM01) | 1,250.5 µg/mL | +/- 7.2705<br>+/- 75.4482<br>+/- 75.6273 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 45 | Ethylbenzene<br>**CAS #** 100-41-4.SEC<br>**Purity** 99% | (Lot PI4SE) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 46 | 1,1,1,2-Tetrachloroethane<br>**CAS #** 630-20-6.SEC<br>**Purity** 99% | (Lot GC01) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 47 | o-Xylene<br>**CAS #** 95-47-6.SEC<br>**Purity** 99% | (Lot FGL01-KTPK) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 48 | Styrene<br>**CAS #** 100-42-5.SEC<br>**Purity** 99% | (Lot OFIOL-IA) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 49 | Isopropylbenzene (cumene)<br>**CAS #** 98-82-8.SEC<br>**Purity** 99% | (Lot 2PHXG-IH) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 50 | Bromoform<br>**CAS #** 75-25-2.SEC<br>**Purity** 99% | (Lot 5139000) | 2,502.3 µg/mL | +/- 14.5483<br>+/- 150.9718<br>+/- 151.3303 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 51 | Bromodichloromethane<br>**CAS #** 75-27-4.SEC<br>**Purity** 98% | (Lot 13780) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 52 | 1,1,2,2-Tetrachloroethane<br>**CAS #** 79-34-5.SEC<br>**Purity** 99% | (Lot CFA4D-AQ) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 53 | 1,2,3-Trichloropropane<br>**CAS #** 96-18-4.SEC<br>**Purity** 98% | (Lot OGI01) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 54 | trans-1,4-Dichloro-2-butene<br>**CAS #** 110-57-6.SEC<br>**Purity** 98% | (Lot 100700-3) | 2,501.0 µg/mL | +/- 14.5408<br>+/- 150.8940<br>+/- 151.2522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 55 | n-Propylbenzene<br>**CAS #** 103-65-1.SEC<br>**Purity** 99% | (Lot T2HFC-IT) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene<br>**CAS #** 108-86-1.SEC<br>**Purity** 99% | (Lot 2FUHG-EM) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,3,5-Trimethylbenzene<br>**CAS #** 108-67-8.SEC<br>**Purity** 99% | (Lot TOOOF) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>**CAS #** 95-49-8.SEC<br>**Purity** 99% | (Lot SW8QG-AO) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>**CAS #** 106-43-4.SEC<br>**Purity** 99% | (Lot P4XHJ-AO) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>**CAS #** 98-06-6.SEC<br>**Purity** 99% | (Lot OGN01-CAI) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,2,4-Trimethylbenzene<br>**CAS #** 95-63-6.SEC<br>**Purity** 99% | (Lot SC7LO-QA) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>**CAS #** 135-98-8.SEC<br>**Purity** 99% | (Lot OGN01-IMA) | 2,501.4 µg/mL | +/- 14.5432<br>+/- 150.9190<br>+/- 151.2773 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | 4-Isopropyltoluene (p-cymene)<br>**CAS #** 99-87-6.SEC<br>**Purity** 99% | (Lot 5221800) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>**CAS #** 541-73-1.SEC<br>**Purity** 99% | (Lot FMDFD) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>**CAS #** 106-46-7.SEC<br>**Purity** 99% | (Lot 4Y5DC) | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8813<br>+/- 151.2395 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>**CAS #** 104-51-8.SEC<br>**Purity** 99% | (Lot OGN01-PNP) | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8813<br>+/- 151.2395 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>**CAS #** 95-50-1.SEC<br>**Purity** 99% | (Lot R6QDM) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>**CAS #** 96-12-8.SEC<br>**Purity** 98% | (Lot LC00408V) | 2,501.5 µg/mL | +/- 14.5436<br>+/- 150.9236<br>+/- 151.2819 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>**CAS #** 120-82-1.SEC<br>**Purity** 99% | (Lot 3LYYC) | 2,502.5 µg/mL | +/- 14.5498<br>+/- 150.9869<br>+/- 151.3454 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>**CAS #** 87-68-3.SEC<br>**Purity** 97% | (Lot 5526800) | 2,501.4 µg/mL | +/- 14.5433<br>+/- 150.9198<br>+/- 151.2781 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>**CAS #** 91-20-3.SEC<br>**Purity** 99% | (Lot SKZ5N) | 2,501.8 µg/mL | +/- 14.5454<br>+/- 150.9417<br>+/- 151.3000 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,500.7 | µg/mL | +/- | 14.5394 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6.SEC | (Lot A0043055) | | | +/- | 150.8792 | µg/mL | Unstressed |
| | **Purity** 98% | | | | +/- | 151.2374 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

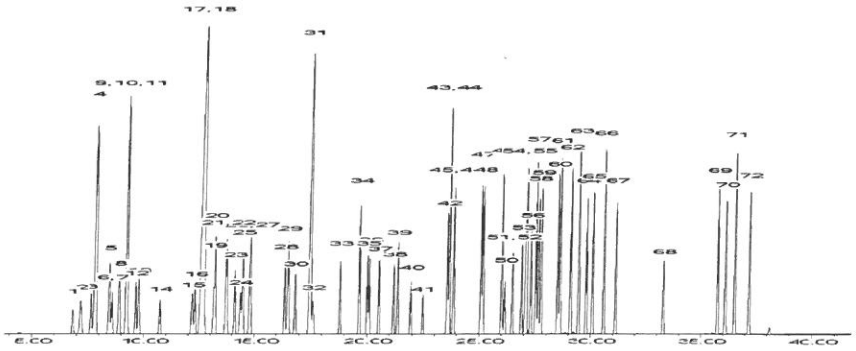
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

**Date Mixed:** 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

**Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# WCICSOLNA1_00018

Characterization of CRM by two independent methods

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

Characterization of CRM by one method

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 CHROMATOGRAM

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**



## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

### 10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

November 29, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- November 29, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Prepared By:**

Maurice Harris
Product Documentation Technician

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director



INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Ion Chromatography Solution |
| Catalog Number: | TA-19REV1 |
| Lot Number: | K2-MEB653716 |
| Matrix: | H2O |
| Value / Analyte(s): | 2 500 mg/L ea: Chloride, Sulfate,<br>500 mg/L ea: Bromide,<br>125 mg/L ea: Fluoride, Nitrate as N |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Bromide, Br | 500.0 ± 2.6 mg/L | Chloride, Cl | 2 500 ± 13 mg/L |
| Fluoride, F- | 125.0 ± 0.5 mg/L | Nitrate as N, NNO3- | 125.0 ± 0.6 mg/L |
| Sulfate, SO4 | 2 500 ± 12 mg/L | | |

**Certified Density:** 1.010 g/mL (measured at 20 ± 1 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Br | IC Assay | 3184 | 020701 |
| Br | Volhard | 999c | 999c |
| Cl | ICP Assay | 3182 | 060925 |
| Cl | Volhard | 999c | 999c |
| F- | IC Assay | 3183 | 050721 |
| NNO3- | IC Assay | 3185 | 050517 |
| SO4 | IC Assay | 3181 | 080603 |

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

# Reagent

# WCICSOLNA2_00018

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | CCV |
| Part Number: | **SM-606-140** Solution A |
| Lot Number: | **1732028** |
| Matrix: | $H_2O$ |
| Purity: | 98.5+% |

**Certified Values**:

| Component | (mg/L) | SRM ID | SRM Lot# |
|---|---|---|---|
| Bromide | 100 ± 1 | 3184 | 151130 |
| Chloride | 500 ± 3 | 3182 | 060925 |
| Fluoride | 25.0 ± 0.3 | 3183 | 140203 |
| Nitrate as N | 25.0 ± 0.3 | 3185 | 050517 |
| Sulfate | 500 ± 3 | 3181 | 080603 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via ion chromatography (IC) and/or inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2017**

**Expiration Date:** **November 2018**

**Certificate Issue Date:** November 16, 2017

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
   The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# WCICSOLNA2_00020

7221 Investment Drive • North Charleston, SC 29418
843.767.7900 • info@highpuritystandards.com • www.highpuritystandards.com

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | CCV |
| Part Number: | **SM-606-140 Solution A** |
| Lot Number: | **1833341** |
| Matrix: | $H_2O$ |
| Purity: | 98.5+% |

**Certified Values**:

| Component | (mg/L) | SRM ID | SRM Lot# |
|---|---|---|---|
| Bromide | 100 ± 1 | 3184 | 151130 |
| Chloride | 500 ± 3 | 3182 | 060925 |
| Fluoride | 25.0 ± 0.3 | 3183 | 140203 |
| Nitrate as N | 25.0 ± 0.3 | 3185 | 050517 |
| Sulfate | 500 ± 3 | 3181 | 080603 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via ion chromatography (IC) and/or inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **December 2018**

**Certificate Issue Date:** December 3, 2018

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# WCPHENOMINER_00025

## WP Minerals 1 and 2, and Conductivity — Lot #8177-08, -102, -72

| TNI Analyte Code | Analyte | Certified Value mg/L | Acceptance Limits mg/L | Acceptance Limits % |
|---|---|---|---|---|
| **Lot #8177-08** | | | | |
| 1505 | Total Alkalinity(as CaCO3) | 168 | 142 - 193 | 84.5 - 115 |
| 1540 | Bromide | 7.95 | 6.75 - 9.20 | 84.9 - 116 |
| 1575 | Chloride | 171 | 151 - 192 | 88.3 - 112 |
| 1730 | Fluoride | 2.39 | 1.92 - 2.78 | 80.3 - 116 |
| 1813 | Total Inorganic Carbon | 40.0 | 32.0 - 48.0 | 80.0 - 120 |
| 2000 | Sulfate | 77.5 | 64.3 - 88.3 | 83.0 - 114 |
| **Lot #8177-102** | | | | |
| 1035 | Calcium | 42.9 | 36.4 - 49.3 | 84.8 - 115 |
| 1550 | Calcium Hardness (as CaCO3) | 107 | 91.0 - 123 | 85.0 - 115 |
| 1755 | Total Hardness (as CaCO3) | 246 | 209 - 283 | 85.0 - 115 |
| 1085 | Magnesium | 33.7 | 28.7 - 38.8 | 85.2 - 115 |
| 1125 | Potassium | 20.4 | 16.3 - 24.5 | 79.9 - 120 |
| 1155 | Sodium | 90.1 | 72.1 - 108 | 80.0 - 120 |
| **Lot #8177-72** | | **µmhos/cm** | **µmhos/cm** | **%** |
| 1610 | Specific Conductance (25°C) | 982 | 883 - 1080 | 89.9 - 110 |

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Matrix: Deionized Water
Store at 20-25°C.
Expiration Date: 04/20
Catalog #QC-MINSET-WP

**Preparation Instructions**: The WP Minerals and Conductivity standards are provided as whole volume standards that do not require a dilution prior to use. The standards are ready for preparation and analysis as received using your normal procedures. The standards should be stored at 20-25°C.

**Notes:** It is suggested that the lab analyze for Alkalinity first as soon as the Minerals 1 bottle has been opened. If the lab does not analyze Alkalinity, recap the bottle tightly as soon as possible after each use. This will minimize possible $CO_2$ absorption. Homogenize the Minerals 2 standard well by shaking immediately prior to taking an aliquot. The Minerals 1 and 2 standards contain no acid, so follow your normal procedures for checking and, if needed, adjusting the pH. A separate Conductivity bottle has been provided for the determination of conductivity (WP Conductivity). Do not analyze conductivity from the WP Minerals standards.

Approved by: AFL
Date: 07/17

Reviewed by: ALG
Date: 07/17

# Reagent

# TOC_CCV@1000_00043

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

# Certificate of Analysis

## Organic Carbon Standard, 1000 ppm C

4728624
ID: TOC_CCV@1000_00043
Exp:07/29/19 Prpd:MPH Opn:11/26/18
TOC CCV

**Lot Number:** 2808628 **Product Number:** 1847

**Manufacture Date:** AUG 01, 2018
**Expiration Date:** JUL 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

| Name | CAS# | Grade |
|---|---|---|
| Water | 7732-18-5 | ACS/ASTM/USP/EP |
| Phosphoric Acid | 7664-38-2 | ACS |
| Potassium Acid Phthalate | 877-24-7 | ACS Acidimetric |

| Test | Specification | Result |
|---|---|---|
| Appearance | Colorless liquid | Passed |
| Carbon (C) | 995-1005 ppm | 1000 ppm |

| Specification | Reference |
|---|---|
| Organic Carbon Stock Solution | APHA (5310 B) |
| Potassium Hydrogen Phthalate, Stock Solution | EPA (SW-846) (9060) |
| Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter | EPA (415.1) |
| Organic Carbon Solution, Standard (1 mL = 1 mg C) | ASTM (D 2579) |

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 1847-16 | 500 mL amber glass | 12 months |

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)

Andy Baumgartner (08/01/2018)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

# Reagent

# TOC_LCS@1000_00023

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Single Analyte Ion Chromatography Solution |
| Catalog Number: | TOCKHP1 |
| Lot Number: | N2-C672223 |
| Matrix: | H2O |
| Value / Analyte(s): | 1 000 µg/mL ea: Carbon |
| Starting Material: | KHP |
| Starting Material Lot#: | 1518 |
| Starting Material Purity: | 99.8200% |

4728655
ID: TOC_LCS@1000_00023
Exp:10/24/22 Prpd:MPH Opn:11/26/18
TOC LCS

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 1004 ± 4 µg/mL

**Density:** 0.999 g/mL (measured at 20 ± 4 °C)

### Assay Information:

**Assay Method #1** **1004 ± 2 µg/mL**
Acidimetric NIST SRM 84L Lot Number: 84L

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 CHROMATOGRAM

**Not Set**

| | | | |
|---|---|---|---|
| **Analytical Column:** | N/A | **Eluent:** | N/A |
| **Guard Column:** | N/A | **Eluent Flow Rate:** | N/A |
| **Anion Self Regen Suppressor/ Chemical Suppression:** | N/A | **Column Temp:** | N/A |
| | | **Cell Temp:** | N/A |
| **Cation Self Regen Suppressor/ Chemical Suppression:** | N/A | **Scale X-Axis:** | N/A |
| | | **Scale Y-Axis:** | N/A |
| | | **Concentration:** | N/A |
| **Suppressor Current/ Chemical Suppressant:** | N/A | | |

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

October 24, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **October 24, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

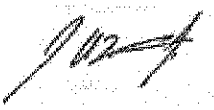
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

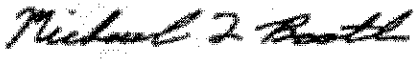
**Certificate Prepared By:**

James King Jr
Chemist, Technical Manager



**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control



**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director



# Method 8260C

## Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): DB-624  ID: 0.18(mm)

| Client Sample ID | Lab Sample ID | DBFM # | DCA # | TOL # | BFB # |
|---|---|---|---|---|---|
| TB-050619 | 240-112111-1 | 96 | 91 | 99 | 93 |
| MRC-MW-81B-050619 | 240-112111-2 | 101 | 92 | 98 | 92 |
| MRC-NMW-1I-050619 | 240-112111-3 | 97 | 89 | 96 | 91 |
| MRC-NMW-3I-050619 | 240-112111-4 | 97 | 90 | 96 | 91 |
| MRC-NMW-2I-050619 | 240-112111-5 | 102 | 93 | 100 | 97 |
| | MB 240-380285/8 | 99 | 90 | 95 | 93 |
| | MB 240-380508/8 | 98 | 91 | 98 | 93 |
| | LCS 240-380285/5 | 99 | 90 | 103 | 100 |
| | LCS 240-380508/5 | 96 | 90 | 101 | 99 |
| MRC-MW-81B-050619 MS | 240-112111-2 MS | 97 | 91 | 104 | 101 |
| MRC-NMW-3I-050619 MS | 240-112111-4 MS | 96 | 89 | 102 | 99 |
| MRC-MW-81B-050619 MSD | 240-112111-2 MSD | 100 | 90 | 100 | 100 |
| MRC-NMW-3I-050619 MSD | 240-112111-4 MSD | 94 | 85 | 96 | 95 |

| | QC LIMITS |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 75-128 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 70-121 |
| TOL = Toluene-d8 (Surr) | 70-123 |
| BFB = 4-Bromofluorobenzene (Surr) | 59-120 |

# Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907217.d

Lab ID: LCS 240-380285/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 18.7 | 93 | 69-134 | |
| 1,1,2,2-Tetrachloroethane | 20.0 | 23.7 | 119 | 65-139 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 21.3 | 107 | 50-156 | |
| 1,1,2-Trichloroethane | 20.0 | 21.3 | 106 | 78-133 | |
| 1,1-Dichloroethane | 20.0 | 22.0 | 110 | 75-133 | |
| 1,1-Dichloroethene | 20.0 | 21.3 | 106 | 65-139 | |
| 1,2,4-Trichlorobenzene | 20.0 | 16.6 | 83 | 42-133 | |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 19.6 | 98 | 46-132 | |
| Ethylene Dibromide | 20.0 | 19.2 | 96 | 77-123 | |
| 1,2-Dichlorobenzene | 20.0 | 20.1 | 101 | 78-120 | |
| 1,2-Dichloroethane | 20.0 | 17.2 | 86 | 71-135 | |
| 1,2-Dichloropropane | 20.0 | 22.2 | 111 | 78-133 | |
| 1,3-Dichlorobenzene | 20.0 | 19.2 | 96 | 78-120 | |
| 1,4-Dichlorobenzene | 20.0 | 19.3 | 96 | 78-120 | |
| 2-Butanone (MEK) | 40.0 | 45.5 | 114 | 39-163 | |
| 2-Hexanone | 40.0 | 40.0 | 100 | 43-148 | |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 40.6 | 101 | 49-143 | |
| Acetone | 40.0 | 52.8 | 132 | 21-162 | |
| Benzene | 20.0 | 22.3 | 112 | 80-123 | |
| Dichlorobromomethane | 20.0 | 18.6 | 93 | 77-125 | |
| Bromoform | 20.0 | 17.4 | 87 | 49-141 | |
| Bromomethane | 20.0 | 21.1 | 106 | 41-175 | |
| Carbon disulfide | 20.0 | 22.2 | 111 | 60-138 | |
| Carbon tetrachloride | 20.0 | 17.4 | 87 | 63-140 | |
| Chlorobenzene | 20.0 | 19.2 | 96 | 80-121 | |
| Chloroethane | 20.0 | 23.1 | 116 | 33-173 | |
| Chloroform | 20.0 | 20.2 | 101 | 79-127 | |
| Chloromethane | 20.0 | 23.2 | 116 | 54-143 | |
| cis-1,2-Dichloroethene | 20.0 | 21.6 | 108 | 76-128 | |
| cis-1,3-Dichloropropene | 20.0 | 20.0 | 100 | 64-132 | |
| Cyclohexane | 20.0 | 22.7 | 113 | 58-145 | |
| Chlorodibromomethane | 20.0 | 18.5 | 93 | 70-132 | |
| Dichlorodifluoromethane | 20.0 | 17.4 | 87 | 29-148 | |
| Ethylbenzene | 20.0 | 20.4 | 102 | 80-120 | |
| Isopropylbenzene | 20.0 | 20.7 | 103 | 74-120 | |
| Methyl acetate | 40.0 | 44.2 | 110 | 52-145 | |
| Methyl tert-butyl ether | 20.0 | 20.3 | 101 | 51-133 | |
| Methylcyclohexane | 20.0 | 21.2 | 106 | 60-125 | |
| Methylene Chloride | 20.0 | 21.8 | 109 | 70-134 | |
| Styrene | 20.0 | 19.9 | 99 | 79-120 | |
| Tetrachloroethene | 20.0 | 18.3 | 91 | 74-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907217.d

Lab ID: LCS 240-380285/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Toluene | 20.0 | 20.6 | 103 | 78-129 | |
| trans-1,2-Dichloroethene | 20.0 | 21.2 | 106 | 78-133 | |
| trans-1,3-Dichloropropene | 20.0 | 17.6 | 88 | 55-128 | |
| Trichloroethene | 20.0 | 18.8 | 94 | 76-125 | |
| Trichlorofluoromethane | 20.0 | 18.0 | 90 | 51-164 | |
| Vinyl chloride | 20.0 | 23.9 | 120 | 58-143 | |
| Xylenes, Total | 40.0 | 41.4 | 104 | 80-120 | |
| m-Xylene & p-Xylene | 20.0 | 20.3 | 102 | 80-120 | |
| o-Xylene | 20.0 | 21.1 | 105 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907248.d

Lab ID: LCS 240-380508/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 18.0 | 90 | 69-134 | |
| 1,1,2,2-Tetrachloroethane | 20.0 | 23.6 | 118 | 65-139 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 20.2 | 101 | 50-156 | |
| 1,1,2-Trichloroethane | 20.0 | 21.0 | 105 | 78-133 | |
| 1,1-Dichloroethane | 20.0 | 21.0 | 105 | 75-133 | |
| 1,1-Dichloroethene | 20.0 | 19.7 | 98 | 65-139 | |
| 1,2,4-Trichlorobenzene | 20.0 | 16.8 | 84 | 42-133 | |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 19.2 | 96 | 46-132 | |
| Ethylene Dibromide | 20.0 | 18.7 | 94 | 77-123 | |
| 1,2-Dichlorobenzene | 20.0 | 20.5 | 103 | 78-120 | |
| 1,2-Dichloroethane | 20.0 | 17.1 | 86 | 71-135 | |
| 1,2-Dichloropropane | 20.0 | 22.0 | 110 | 78-133 | |
| 1,3-Dichlorobenzene | 20.0 | 19.7 | 99 | 78-120 | |
| 1,4-Dichlorobenzene | 20.0 | 20.0 | 100 | 78-120 | |
| 2-Butanone (MEK) | 40.0 | 46.2 | 116 | 39-163 | |
| 2-Hexanone | 40.0 | 40.0 | 100 | 43-148 | |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 40.7 | 102 | 49-143 | |
| Acetone | 40.0 | 56.3 | 141 | 21-162 | |
| Benzene | 20.0 | 21.8 | 109 | 80-123 | |
| Dichlorobromomethane | 20.0 | 18.6 | 93 | 77-125 | |
| Bromoform | 20.0 | 16.8 | 84 | 49-141 | |
| Bromomethane | 20.0 | 20.2 | 101 | 41-175 | |
| Carbon disulfide | 20.0 | 20.4 | 102 | 60-138 | |
| Carbon tetrachloride | 20.0 | 17.1 | 85 | 63-140 | |
| Chlorobenzene | 20.0 | 19.5 | 97 | 80-121 | |
| Chloroethane | 20.0 | 22.6 | 113 | 33-173 | |
| Chloroform | 20.0 | 19.5 | 98 | 79-127 | |
| Chloromethane | 20.0 | 22.0 | 110 | 54-143 | |
| cis-1,2-Dichloroethene | 20.0 | 20.8 | 104 | 76-128 | |
| cis-1,3-Dichloropropene | 20.0 | 20.1 | 101 | 64-132 | |
| Cyclohexane | 20.0 | 21.4 | 107 | 58-145 | |
| Chlorodibromomethane | 20.0 | 18.5 | 93 | 70-132 | |
| Dichlorodifluoromethane | 20.0 | 16.6 | 83 | 29-148 | |
| Ethylbenzene | 20.0 | 20.3 | 102 | 80-120 | |
| Isopropylbenzene | 20.0 | 20.6 | 103 | 74-120 | |
| Methyl acetate | 40.0 | 44.9 | 112 | 52-145 | |
| Methyl tert-butyl ether | 20.0 | 19.1 | 96 | 51-133 | |
| Methylcyclohexane | 20.0 | 20.8 | 104 | 60-125 | |
| Methylene Chloride | 20.0 | 20.5 | 102 | 70-134 | |
| Styrene | 20.0 | 19.9 | 99 | 79-120 | |
| Tetrachloroethene | 20.0 | 17.3 | 87 | 74-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907248.d

Lab ID: LCS 240-380508/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Toluene | 20.0 | 20.4 | 102 | 78-129 | |
| trans-1,2-Dichloroethene | 20.0 | 20.4 | 102 | 78-133 | |
| trans-1,3-Dichloropropene | 20.0 | 17.6 | 88 | 55-128 | |
| Trichloroethene | 20.0 | 19.0 | 95 | 76-125 | |
| Trichlorofluoromethane | 20.0 | 17.9 | 89 | 51-164 | |
| Vinyl chloride | 20.0 | 22.6 | 113 | 58-143 | |
| Xylenes, Total | 40.0 | 42.1 | 105 | 80-120 | |
| m-Xylene & p-Xylene | 20.0 | 21.0 | 105 | 80-120 | |
| o-Xylene | 20.0 | 21.1 | 106 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907272.d

Lab ID: 240-112111-2 MS  Client ID: MRC-MW-81B-050619 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 400 | 4.8 U | 344 | 86 | 51-138 | |
| 1,1,2,2-Tetrachloroethane | 400 | 2.6 U | 474 | 119 | 60-137 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 400 | 8.2 U | 356 | 89 | 31-156 | |
| 1,1,2-Trichloroethane | 400 | 1.8 U | 434 | 108 | 76-132 | |
| 1,1-Dichloroethane | 400 | 4.9 J | 417 | 103 | 63-136 | |
| 1,1-Dichloroethene | 400 | 11 J | 393 | 95 | 53-140 | |
| 1,2,4-Trichlorobenzene | 400 | 5.2 U | 289 | 72 | 30-126 | |
| 1,2-Dibromo-3-Chloropropane | 400 | 18 U | 371 | 93 | 38-124 | |
| Ethylene Dibromide | 400 | 2.4 U | 379 | 95 | 71-123 | |
| 1,2-Dichlorobenzene | 400 | 3.0 U | 383 | 96 | 64-120 | |
| 1,2-Dichloroethane | 400 | 4.2 U | 336 | 84 | 65-135 | |
| 1,2-Dichloropropane | 400 | 3.0 U | 428 | 107 | 70-132 | |
| 1,3-Dichlorobenzene | 400 | 3.0 U | 370 | 92 | 62-120 | |
| 1,4-Dichlorobenzene | 400 | 3.2 U | 363 | 91 | 63-120 | |
| 2-Butanone (MEK) | 800 | 23 U | 913 | 114 | 37-156 | |
| 2-Hexanone | 800 | 11 U | 809 | 101 | 42-150 | |
| 4-Methyl-2-pentanone (MIBK) | 800 | 8.4 U | 807 | 101 | 44-143 | |
| Acetone | 800 | 110 U | 1120 | 140 | 10-168 | |
| Benzene | 400 | 2.6 U | 426 | 107 | 71-122 | |
| Dichlorobromomethane | 400 | 3.4 U | 364 | 91 | 64-125 | |
| Bromoform | 400 | 15 U | 334 | 83 | 44-129 | |
| Bromomethane | 400 | 8.4 U | 397 | 99 | 19-187 | |
| Carbon disulfide | 400 | 5.6 U | 383 | 96 | 43-144 | |
| Carbon tetrachloride | 400 | 5.2 U | 315 | 79 | 41-143 | |
| Chlorobenzene | 400 | 2.8 U | 373 | 93 | 70-123 | |
| Chloroethane | 400 | 17 U | 438 | 110 | 11-189 | |
| Chloroform | 400 | 2.6 U | 395 | 99 | 68-130 | |
| Chloromethane | 400 | 4.0 U | 440 | 110 | 31-154 | |
| cis-1,2-Dichloroethene | 400 | 680 | 1040 | 91 | 64-130 | |
| cis-1,3-Dichloropropene | 400 | 12 U | 367 | 92 | 48-127 | |
| Cyclohexane | 400 | 4.8 U | 368 | 92 | 42-135 | |
| Chlorodibromomethane | 400 | 7.8 U | 367 | 92 | 60-129 | |
| Dichlorodifluoromethane | 400 | 7.0 U | 288 | 72 | 28-136 | |
| Ethylbenzene | 400 | 2.2 U | 375 | 94 | 66-120 | |
| Isopropylbenzene | 400 | 1.8 U | 381 | 95 | 59-120 | |
| Methyl acetate | 800 | 34 U | 887 | 111 | 41-142 | |
| Methyl tert-butyl ether | 400 | 1.4 U | 369 | 92 | 41-136 | |
| Methylcyclohexane | 400 | 6.6 U | 349 | 87 | 37-123 | |
| Methylene Chloride | 400 | 52 U | 409 | 102 | 61-130 | |
| Styrene | 400 | 2.0 U | 378 | 95 | 68-120 | |
| Tetrachloroethene | 400 | 3.0 U | 327 | 82 | 51-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907272.d

Lab ID: 240-112111-2 MS  Client ID: MRC-MW-81B-050619 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Toluene | 400 | 2.8 U | 394 | 99 | 62-132 | |
| trans-1,2-Dichloroethene | 400 | 5.2 J | 399 | 99 | 68-133 | |
| trans-1,3-Dichloropropene | 400 | 13 U | 336 | 84 | 40-125 | |
| Trichloroethene | 400 | 120 | 460 | 84 | 55-131 | |
| Trichlorofluoromethane | 400 | 9.0 U | 328 | 82 | 37-174 | |
| Vinyl chloride | 400 | 190 | 607 | 105 | 43-154 | |
| Xylenes, Total | 800 | 3.0 U | 793 | 99 | 67-120 | |
| m-Xylene & p-Xylene | 400 | 1.6 U | 388 | 97 | 63-121 | |
| o-Xylene | 400 | 1.8 U | 405 | 101 | 69-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907235.d

Lab ID: 240-112111-4 MS  Client ID: MRC-NMW-3I-050619 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 800 | 9.6 U | 720 | 90 | 51-138 | |
| 1,1,2,2-Tetrachloroethane | 800 | 5.2 U | 973 | 122 | 60-137 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 800 | 16 U | 771 | 96 | 31-156 | |
| 1,1,2-Trichloroethane | 800 | 3.6 U | 840 | 105 | 76-132 | |
| 1,1-Dichloroethane | 800 | 6.8 U | 834 | 104 | 63-136 | |
| 1,1-Dichloroethene | 800 | 9.7 J | 791 | 98 | 53-140 | |
| 1,2,4-Trichlorobenzene | 800 | 10 U | 628 | 79 | 30-126 | |
| 1,2-Dibromo-3-Chloropropane | 800 | 36 U | 732 | 91 | 38-124 | |
| Ethylene Dibromide | 800 | 4.8 U | 754 | 94 | 71-123 | |
| 1,2-Dichlorobenzene | 800 | 6.0 U | 811 | 101 | 64-120 | |
| 1,2-Dichloroethane | 800 | 8.4 U | 683 | 85 | 65-135 | |
| 1,2-Dichloropropane | 800 | 6.0 U | 860 | 108 | 70-132 | |
| 1,3-Dichlorobenzene | 800 | 6.0 U | 797 | 100 | 62-120 | |
| 1,4-Dichlorobenzene | 800 | 6.4 U | 773 | 97 | 63-120 | |
| 2-Butanone (MEK) | 1600 | 46 U | 1890 | 118 | 37-156 | |
| 2-Hexanone | 1600 | 22 U | 1600 | 100 | 42-150 | |
| 4-Methyl-2-pentanone (MIBK) | 1600 | 17 U | 1600 | 100 | 44-143 | |
| Acetone | 1600 | 220 U | 2310 | 144 | 10-168 | |
| Benzene | 800 | 5.2 U | 859 | 107 | 71-122 | |
| Dichlorobromomethane | 800 | 6.8 U | 718 | 90 | 64-125 | |
| Bromoform | 800 | 30 U | 680 | 85 | 44-129 | |
| Bromomethane | 800 | 17 U | 793 | 99 | 19-187 | |
| Carbon disulfide | 800 | 11 U | 824 | 103 | 43-144 | |
| Carbon tetrachloride | 800 | 10 U | 657 | 82 | 41-143 | |
| Chlorobenzene | 800 | 5.6 U | 770 | 96 | 70-123 | |
| Chloroethane | 800 | 33 U | 883 | 110 | 11-189 | |
| Chloroform | 800 | 5.2 U | 784 | 98 | 68-130 | |
| Chloromethane | 800 | 8.0 U | 885 | 111 | 31-154 | |
| cis-1,2-Dichloroethene | 800 | 1400 | 2200 | 97 | 64-130 | |
| cis-1,3-Dichloropropene | 800 | 24 U | 755 | 94 | 48-127 | |
| Cyclohexane | 800 | 9.6 U | 836 | 105 | 42-135 | |
| Chlorodibromomethane | 800 | 16 U | 724 | 90 | 60-129 | |
| Dichlorodifluoromethane | 800 | 14 U | 649 | 81 | 28-136 | |
| Ethylbenzene | 800 | 4.4 U | 793 | 99 | 66-120 | |
| Isopropylbenzene | 800 | 3.6 U | 809 | 101 | 59-120 | |
| Methyl acetate | 1600 | 69 U | 1770 | 111 | 41-142 | |
| Methyl tert-butyl ether | 800 | 2.8 U | 738 | 92 | 41-136 | |
| Methylcyclohexane | 800 | 13 U | 783 | 98 | 37-123 | |
| Methylene Chloride | 800 | 100 U | 811 | 101 | 61-130 | |
| Styrene | 800 | 4.0 U | 789 | 99 | 68-120 | |
| Tetrachloroethene | 800 | 6.0 U | 699 | 87 | 51-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907235.d

Lab ID: 240-112111-4 MS  Client ID: MRC-NMW-3I-050619 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Toluene | 800 | 5.6 U | 817 | 102 | 62-132 | |
| trans-1,2-Dichloroethene | 800 | 13 J | 835 | 103 | 68-133 | |
| trans-1,3-Dichloropropene | 800 | 27 U | 694 | 87 | 40-125 | |
| Trichloroethene | 800 | 390 | 1110 | 90 | 55-131 | |
| Trichlorofluoromethane | 800 | 18 U | 692 | 86 | 37-174 | |
| Vinyl chloride | 800 | 260 | 1170 | 114 | 43-154 | |
| Xylenes, Total | 1600 | 6.0 U | 1670 | 105 | 67-120 | |
| m-Xylene & p-Xylene | 800 | 3.2 U | 830 | 104 | 63-121 | |
| o-Xylene | 800 | 3.6 U | 843 | 105 | 69-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907273.d

Lab ID: 240-112111-2 MSD  Client ID: MRC-MW-81B-050619 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 400 | 356 | 89 | 3 | 27 | 51-138 | |
| 1,1,2,2-Tetrachloroethane | 400 | 492 | 123 | 4 | 31 | 60-137 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 400 | 360 | 90 | 1 | 35 | 31-156 | |
| 1,1,2-Trichloroethane | 400 | 414 | 104 | 5 | 25 | 76-132 | |
| 1,1-Dichloroethane | 400 | 439 | 109 | 5 | 23 | 63-136 | |
| 1,1-Dichloroethene | 400 | 407 | 99 | 3 | 35 | 53-140 | |
| 1,2,4-Trichlorobenzene | 400 | 315 | 79 | 9 | 35 | 30-126 | |
| 1,2-Dibromo-3-Chloropropane | 400 | 390 | 98 | 5 | 35 | 38-124 | |
| Ethylene Dibromide | 400 | 371 | 93 | 2 | 27 | 71-123 | |
| 1,2-Dichlorobenzene | 400 | 401 | 100 | 5 | 30 | 64-120 | |
| 1,2-Dichloroethane | 400 | 339 | 85 | 1 | 24 | 65-135 | |
| 1,2-Dichloropropane | 400 | 427 | 107 | 0 | 26 | 70-132 | |
| 1,3-Dichlorobenzene | 400 | 378 | 94 | 2 | 31 | 62-120 | |
| 1,4-Dichlorobenzene | 400 | 376 | 94 | 3 | 28 | 63-120 | |
| 2-Butanone (MEK) | 800 | 890 | 111 | 3 | 35 | 37-156 | |
| 2-Hexanone | 800 | 787 | 98 | 3 | 35 | 42-150 | |
| 4-Methyl-2-pentanone (MIBK) | 800 | 782 | 98 | 3 | 35 | 44-143 | |
| Acetone | 800 | 1140 | 143 | 2 | 35 | 10-168 | |
| Benzene | 400 | 428 | 107 | 0 | 22 | 71-122 | |
| Dichlorobromomethane | 400 | 364 | 91 | 0 | 27 | 64-125 | |
| Bromoform | 400 | 334 | 84 | 0 | 28 | 44-129 | |
| Bromomethane | 400 | 417 | 104 | 5 | 35 | 19-187 | |
| Carbon disulfide | 400 | 404 | 101 | 5 | 33 | 43-144 | |
| Carbon tetrachloride | 400 | 323 | 81 | 3 | 30 | 41-143 | |
| Chlorobenzene | 400 | 375 | 94 | 1 | 23 | 70-123 | |
| Chloroethane | 400 | 463 | 116 | 6 | 35 | 11-189 | |
| Chloroform | 400 | 402 | 101 | 2 | 23 | 68-130 | |
| Chloromethane | 400 | 454 | 114 | 3 | 35 | 31-154 | |
| cis-1,2-Dichloroethene | 400 | 1100 | 107 | 6 | 21 | 64-130 | |
| cis-1,3-Dichloropropene | 400 | 364 | 91 | 1 | 30 | 48-127 | |
| Cyclohexane | 400 | 387 | 97 | 5 | 35 | 42-135 | |
| Chlorodibromomethane | 400 | 367 | 92 | 0 | 26 | 60-129 | |
| Dichlorodifluoromethane | 400 | 298 | 75 | 4 | 35 | 28-136 | |
| Ethylbenzene | 400 | 377 | 94 | 1 | 24 | 66-120 | |
| Isopropylbenzene | 400 | 381 | 95 | 0 | 31 | 59-120 | |
| Methyl acetate | 800 | 900 | 113 | 1 | 35 | 41-142 | |
| Methyl tert-butyl ether | 400 | 399 | 100 | 8 | 29 | 41-136 | |
| Methylcyclohexane | 400 | 361 | 90 | 3 | 35 | 37-123 | |
| Methylene Chloride | 400 | 417 | 104 | 2 | 29 | 61-130 | |
| Styrene | 400 | 374 | 94 | 1 | 26 | 68-120 | |
| Tetrachloroethene | 400 | 331 | 83 | 1 | 23 | 51-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907273.d

Lab ID: 240-112111-2 MSD  Client ID: MRC-MW-81B-050619 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Toluene | 400 | 395 | 99 | 0 | 23 | 62-132 | |
| trans-1,2-Dichloroethene | 400 | 421 | 104 | 5 | 24 | 68-133 | |
| trans-1,3-Dichloropropene | 400 | 333 | 83 | 1 | 27 | 40-125 | |
| Trichloroethene | 400 | 468 | 86 | 2 | 23 | 55-131 | |
| Trichlorofluoromethane | 400 | 343 | 86 | 4 | 35 | 37-174 | |
| Vinyl chloride | 400 | 643 | 114 | 6 | 29 | 43-154 | |
| Xylenes, Total | 800 | 793 | 99 | 0 | 25 | 67-120 | |
| m-Xylene & p-Xylene | 400 | 391 | 98 | 1 | 25 | 63-121 | |
| o-Xylene | 400 | 402 | 101 | 1 | 25 | 69-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907236.d

Lab ID: 240-112111-4 MSD  Client ID: MRC-NMW-3I-050619 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 800 | 717 | 90 | 0 | 27 | 51-138 | |
| 1,1,2,2-Tetrachloroethane | 800 | 962 | 120 | 1 | 31 | 60-137 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 800 | 809 | 101 | 5 | 35 | 31-156 | |
| 1,1,2-Trichloroethane | 800 | 839 | 105 | 0 | 25 | 76-132 | |
| 1,1-Dichloroethane | 800 | 861 | 108 | 3 | 23 | 63-136 | |
| 1,1-Dichloroethene | 800 | 814 | 101 | 3 | 35 | 53-140 | |
| 1,2,4-Trichlorobenzene | 800 | 645 | 81 | 3 | 35 | 30-126 | |
| 1,2-Dibromo-3-Chloropropane | 800 | 726 | 91 | 1 | 35 | 38-124 | |
| Ethylene Dibromide | 800 | 753 | 94 | 0 | 27 | 71-123 | |
| 1,2-Dichlorobenzene | 800 | 803 | 100 | 1 | 30 | 64-120 | |
| 1,2-Dichloroethane | 800 | 687 | 86 | 1 | 24 | 65-135 | |
| 1,2-Dichloropropane | 800 | 859 | 107 | 0 | 26 | 70-132 | |
| 1,3-Dichlorobenzene | 800 | 788 | 98 | 1 | 31 | 62-120 | |
| 1,4-Dichlorobenzene | 800 | 771 | 96 | 0 | 28 | 63-120 | |
| 2-Butanone (MEK) | 1600 | 1830 | 114 | 3 | 35 | 37-156 | |
| 2-Hexanone | 1600 | 1590 | 99 | 1 | 35 | 42-150 | |
| 4-Methyl-2-pentanone (MIBK) | 1600 | 1570 | 98 | 2 | 35 | 44-143 | |
| Acetone | 1600 | 2310 | 145 | 0 | 35 | 10-168 | |
| Benzene | 800 | 863 | 108 | 1 | 22 | 71-122 | |
| Dichlorobromomethane | 800 | 718 | 90 | 0 | 27 | 64-125 | |
| Bromoform | 800 | 696 | 87 | 2 | 28 | 44-129 | |
| Bromomethane | 800 | 819 | 102 | 3 | 35 | 19-187 | |
| Carbon disulfide | 800 | 845 | 106 | 3 | 33 | 43-144 | |
| Carbon tetrachloride | 800 | 671 | 84 | 2 | 30 | 41-143 | |
| Chlorobenzene | 800 | 773 | 97 | 0 | 23 | 70-123 | |
| Chloroethane | 800 | 904 | 113 | 2 | 35 | 11-189 | |
| Chloroform | 800 | 803 | 100 | 2 | 23 | 68-130 | |
| Chloromethane | 800 | 885 | 111 | 0 | 35 | 31-154 | |
| cis-1,2-Dichloroethene | 800 | 2270 | 105 | 3 | 21 | 64-130 | |
| cis-1,3-Dichloropropene | 800 | 751 | 94 | 1 | 30 | 48-127 | |
| Cyclohexane | 800 | 853 | 107 | 2 | 35 | 42-135 | |
| Chlorodibromomethane | 800 | 729 | 91 | 1 | 26 | 60-129 | |
| Dichlorodifluoromethane | 800 | 670 | 84 | 3 | 35 | 28-136 | |
| Ethylbenzene | 800 | 800 | 100 | 1 | 24 | 66-120 | |
| Isopropylbenzene | 800 | 814 | 102 | 1 | 31 | 59-120 | |
| Methyl acetate | 1600 | 1760 | 110 | 1 | 35 | 41-142 | |
| Methyl tert-butyl ether | 800 | 762 | 95 | 3 | 29 | 41-136 | |
| Methylcyclohexane | 800 | 791 | 99 | 1 | 35 | 37-123 | |
| Methylene Chloride | 800 | 844 | 105 | 4 | 29 | 61-130 | |
| Styrene | 800 | 786 | 98 | 0 | 26 | 68-120 | |
| Tetrachloroethene | 800 | 693 | 87 | 1 | 23 | 51-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1907236.d

Lab ID: 240-112111-4 MSD  Client ID: MRC-NMW-3I-050619 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Toluene | 800 | 822 | 103 | 1 | 23 | 62-132 | |
| trans-1,2-Dichloroethene | 800 | 841 | 103 | 1 | 24 | 68-133 | |
| trans-1,3-Dichloropropene | 800 | 692 | 86 | 0 | 27 | 40-125 | |
| Trichloroethene | 800 | 1090 | 88 | 1 | 23 | 55-131 | |
| Trichlorofluoromethane | 800 | 702 | 88 | 1 | 35 | 37-174 | |
| Vinyl chloride | 800 | 1190 | 116 | 1 | 29 | 43-154 | |
| Xylenes, Total | 1600 | 1680 | 105 | 0 | 25 | 67-120 | |
| m-Xylene & p-Xylene | 800 | 828 | 104 | 0 | 25 | 63-121 | |
| o-Xylene | 800 | 847 | 106 | 1 | 25 | 69-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: U1907220.d  Lab Sample ID: MB 240-380285/8

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

Instrument ID: A3UX19  Date Analyzed: 05/08/2019 17:48

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-380285/5 | U1907217.d | 05/08/2019 16:41 |
| TB-050619 | 240-112111-1 | U1907222.d | 05/08/2019 18:32 |
| MRC-NMW-1I-050619 | 240-112111-3 | U1907224.d | 05/08/2019 19:16 |
| MRC-NMW-3I-050619 | 240-112111-4 | U1907225.d | 05/08/2019 19:39 |
| MRC-NMW-2I-050619 | 240-112111-5 | U1907226.d | 05/08/2019 20:01 |
| MRC-NMW-3I-050619 MS | 240-112111-4 MS | U1907235.d | 05/08/2019 23:21 |
| MRC-NMW-3I-050619 MSD | 240-112111-4 MSD | U1907236.d | 05/08/2019 23:44 |

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: U1907251.d  Lab Sample ID: MB 240-380508/8

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

Instrument ID: A3UX19  Date Analyzed: 05/09/2019 19:03

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-380508/5 | U1907248.d | 05/09/2019 17:57 |
| MRC-MW-81B-050619 | 240-112111-2 | U1907252.d | 05/09/2019 19:26 |
| MRC-MW-81B-050619 MS | 240-112111-2 MS | U1907272.d | 05/10/2019 02:52 |
| MRC-MW-81B-050619 MSD | 240-112111-2 MSD | U1907273.d | 05/10/2019 03:14 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: bfb036.d  BFB Injection Date: 07/24/2018

Instrument ID: A3UX19  BFB Injection Time: 17:22

Analysis Batch No.: 337766

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 21.1 | |
| 75 | 30.0 - 60.0 % of mass 95 | 53.5 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.8 | |
| 173 | Less than 2.0 % of mass 174 | 1.1 | (1.2) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 84.3 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.2 | (7.4) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 80.7 | (95.7) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.4 | (6.6) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD8260 240-337766/2 | U1900783.d | 07/24/2018 | 17:50 |
| | STD8260 240-337766/3 | U1900784.d | 07/24/2018 | 18:13 |
| | STD8260 240-337766/9 | U1900790.d | 07/24/2018 | 18:35 |
| | ICIS 240-337766/10 | U1900791.d | 07/24/2018 | 18:57 |
| | STD8260 240-337766/11 | U1900792.d | 07/24/2018 | 19:20 |
| | STD8260 240-337766/12 | U1900793.d | 07/24/2018 | 19:42 |
| | STD8260 240-337766/13 | U1900794.d | 07/24/2018 | 20:04 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: bfb037.d  BFB Injection Date: 07/25/2018

Instrument ID: A3UX19  BFB Injection Time: 11:28

Analysis Batch No.: 337917

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 21.4 | |
| 75 | 30.0 - 60.0 % of mass 95 | 52.5 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.8 | |
| 173 | Less than 2.0 % of mass 174 | 1.1 | (1.3) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 82.7 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.4 | (7.8) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 80.3 | (97.1) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.2 | (6.5) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | ICV 240-337917/14 | U1900808.d | 07/25/2018 | 15:37 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: bfb058.d  BFB Injection Date: 08/27/2018

Instrument ID: A3UX19  BFB Injection Time: 16:23

Analysis Batch No.: 342719

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 17.5 | |
| 75 | 30.0 - 60.0 % of mass 95 | 49.5 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.5 | |
| 173 | Less than 2.0 % of mass 174 | 0.6 | (0.6) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 94.9 | |
| 175 | 5.0 - 9.0 % of mass 174 | 7.3 | (7.7) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 92.7 | (97.7) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.9 | (6.4) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD8260 240-342719/7 | U1901323.d | 08/27/2018 | 17:09 |
| | STD8260 240-342719/8 | U1901324.d | 08/27/2018 | 17:31 |
| | STD8260 240-342719/9 | U1901325.d | 08/27/2018 | 17:53 |
| | ICIS 240-342719/10 | U1901326.d | 08/27/2018 | 18:16 |
| | STD8260 240-342719/11 | U1901327.d | 08/27/2018 | 18:38 |
| | STD8260 240-342719/12 | U1901328.d | 08/27/2018 | 19:01 |
| | STD8260 240-342719/13 | U1901329.d | 08/27/2018 | 19:23 |
| | ICV 240-342719/14 | U1901330.d | 08/27/2018 | 19:45 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: bfb253.d  BFB Injection Date: 05/08/2019

Instrument ID: A3UX19  BFB Injection Time: 15:32

Analysis Batch No.: 380285

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 15.5 | |
| 75 | 30.0 - 60.0 % of mass 95 | 45.4 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.5 | |
| 173 | Less than 2.0 % of mass 174 | 0.0 | (0.0) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 92.6 | |
| 175 | 5.0 - 9.0 % of mass 174 | 7.2 | (7.8) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 88.1 | (95.2) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.7 | (6.5) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-380285/3 | U1907215.d | 05/08/2019 | 15:57 |
| | CCVIS 240-380285/4 | U1907216.d | 05/08/2019 | 16:19 |
| | LCS 240-380285/5 | U1907217.d | 05/08/2019 | 16:41 |
| | MB 240-380285/8 | U1907220.d | 05/08/2019 | 17:48 |
| TB-050619 | 240-112111-1 | U1907222.d | 05/08/2019 | 18:32 |
| MRC-NMW-1I-050619 | 240-112111-3 | U1907224.d | 05/08/2019 | 19:16 |
| MRC-NMW-3I-050619 | 240-112111-4 | U1907225.d | 05/08/2019 | 19:39 |
| MRC-NMW-2I-050619 | 240-112111-5 | U1907226.d | 05/08/2019 | 20:01 |
| MRC-NMW-3I-050619 MS | 240-112111-4 MS | U1907235.d | 05/08/2019 | 23:21 |
| MRC-NMW-3I-050619 MSD | 240-112111-4 MSD | U1907236.d | 05/08/2019 | 23:44 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab File ID: bfb254.d  BFB Injection Date: 05/09/2019

Instrument ID: A3UX19  BFB Injection Time: 16:50

Analysis Batch No.: 380508

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 15.6 | |
| 75 | 30.0 - 60.0 % of mass 95 | 45.1 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.5 | |
| 173 | Less than 2.0 % of mass 174 | 0.0 | (0.0) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 86.5 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.7 | (7.7) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 84.0 | (97.2) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.4 | (6.4) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-380508/3 | U1907246.d | 05/09/2019 | 17:13 |
| | CCVIS 240-380508/4 | U1907247.d | 05/09/2019 | 17:35 |
| | LCS 240-380508/5 | U1907248.d | 05/09/2019 | 17:57 |
| | MB 240-380508/8 | U1907251.d | 05/09/2019 | 19:03 |
| MRC-MW-81B-050619 | 240-112111-2 | U1907252.d | 05/09/2019 | 19:26 |
| MRC-MW-81B-050619 MS | 240-112111-2 MS | U1907272.d | 05/10/2019 | 02:52 |
| MRC-MW-81B-050619 MSD | 240-112111-2 MSD | U1907273.d | 05/10/2019 | 03:14 |

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Sample No.: ICIS 240-342719/10  Date Analyzed: 08/27/2018 18:16

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)

Lab File ID (Standard): U1901326.d  Heated Purge: (Y/N) N

Calibration ID: 46687

| | | FB | | CBNZd5 | | DCBd4 | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 972482 | 5.65 | 783101 | 8.50 | 430906 | 10.88 |
| UPPER LIMIT | | 1944964 | 6.15 | 1566202 | 9.00 | 861812 | 11.38 |
| LOWER LIMIT | | 486241 | 5.15 | 391551 | 8.00 | 215453 | 10.38 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-342719/14 | | 955207 | 5.65 | 765531 | 8.50 | 424750 | 10.88 |
| CCVIS 240-380285/4 | | 856543 | 5.65 | 666855 | 8.50 | 334920 | 10.88 |
| CCVIS 240-380508/4 | | 882170 | 5.65 | 695162 | 8.50 | 360633 | 10.88 |

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Sample No.: CCVIS 240-380285/4  Date Analyzed: 05/08/2019 16:19

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)

Lab File ID (Standard): U1907216.d  Heated Purge: (Y/N) N

Calibration ID: 47354

| | | FB | | CBNZd5 | | DCBd4 | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 856543 | 5.65 | 666855 | 8.50 | 334920 | 10.88 |
| UPPER LIMIT | | 1713086 | 6.15 | 1333710 | 9.00 | 669840 | 11.38 |
| LOWER LIMIT | | 428272 | 5.15 | 333428 | 8.00 | 167460 | 10.38 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| LCS 240-380285/5 | | 842096 | 5.67 | 656793 | 8.50 | 344242 | 10.88 |
| MB 240-380285/8 | | 830126 | 5.65 | 656470 | 8.50 | 340195 | 10.88 |
| 240-112111-1 | TB-050619 | 864983 | 5.65 | 688157 | 8.50 | 336403 | 10.88 |
| 240-112111-3 | MRC-NMW-1I-050619 | 825978 | 5.65 | 648136 | 8.50 | 326096 | 10.88 |
| 240-112111-4 | MRC-NMW-3I-050619 | 857772 | 5.65 | 690016 | 8.50 | 341367 | 10.88 |
| 240-112111-5 | MRC-NMW-2I-050619 | 820288 | 5.67 | 636379 | 8.50 | 328033 | 10.88 |
| 240-112111-4 MS | MRC-NMW-3I-050619 MS | 856678 | 5.65 | 667836 | 8.50 | 342686 | 10.88 |
| 240-112111-4 MSD | MRC-NMW-3I-050619 MSD | 841975 | 5.65 | 644509 | 8.50 | 340291 | 10.88 |

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Sample No.: CCVIS 240-380508/4  Date Analyzed: 05/09/2019 17:35

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)

Lab File ID (Standard): U1907247.d  Heated Purge: (Y/N) N

Calibration ID: 47354

| | | FB | | CBNZd5 | | DCBd4 | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 882170 | 5.65 | 695162 | 8.50 | 360633 | 10.88 |
| UPPER LIMIT | | 1764340 | 6.15 | 1390324 | 9.00 | 721266 | 11.38 |
| LOWER LIMIT | | 441085 | 5.15 | 347581 | 8.00 | 180317 | 10.38 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| LCS 240-380508/5 | | 868129 | 5.65 | 693935 | 8.50 | 361716 | 10.88 |
| MB 240-380508/8 | | 845739 | 5.65 | 683151 | 8.50 | 339237 | 10.88 |
| 240-112111-2 | MRC-MW-81B-050619 | 808671 | 5.67 | 632989 | 8.50 | 320517 | 10.88 |
| 240-112111-2 MS | MRC-MW-81B-050619 MS | 838550 | 5.65 | 650631 | 8.50 | 340630 | 10.88 |
| 240-112111-2 MSD | MRC-MW-81B-050619 MSD | 792249 | 5.67 | 608238 | 8.50 | 316480 | 10.88 |

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: TB-050619  Lab Sample ID: 240-112111-1

Matrix: Water  Lab File ID: U1907222.d

Analysis Method: 8260C  Date Collected: 05/06/2019 00:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 18:32

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.4 | U | 10 | 5.4 |
| 71-43-2 | Benzene | 0.13 | U | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: TB-050619  Lab Sample ID: 240-112111-1

Matrix: Water  Lab File ID: U1907222.d

Analysis Method: 8260C  Date Collected: 05/06/2019 00:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 18:32

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 0.10 | U | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 0.20 | U | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 99 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 96 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 93 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 91 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907222.d
Lims ID: 240-112111-B-1
Client ID: TB-050619
Sample Type: Client
Inject. Date: 08-May-2019 18:32:24 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-011
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:00:02 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:02:07

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 864983 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 81 | 688157 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 336403 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 224702 | 19.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 95 | 244374 | 18.3 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.112 | 7.101 | 0.011 | 91 | 814020 | 19.7 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.685 | 9.674 | 0.011 | 97 | 288186 | 18.6 | |
| 9 Dichlorodifluoromethane | 85 | | 1.598 | | | | ND | |
| 10 Chloromethane | 50 | | 1.812 | | | | ND | |
| 12 Vinyl chloride | 62 | | 1.918 | | | | ND | |
| 13 Bromomethane | 94 | | 2.215 | | | | ND | |
| 15 Chloroethane | 64 | | 2.298 | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.559 | | | | ND | |
| 20 1,1-Dichloroethene | 61 | | 3.033 | | | | ND | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.045 | | | | ND | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 77 | 6745 | 1.99 | |
| 25 Carbon disulfide | 76 | | 3.258 | | | | ND | |
| 28 Methyl acetate | 43 | | 3.377 | | | | ND | |
| 29 Methylene Chloride | 49 | 3.483 | 3.484 | -0.001 | 20 | 1624 | 0.1319 | |
| 32 trans-1,2-Dichloroethene | 61 | | 3.733 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 4.112 | | | | ND | |
| 41 cis-1,2-Dichloroethene | 96 | | 4.622 | | | | ND | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 90 | 2142 | 1.05 | |
| 48 Chloroform | 83 | | 4.907 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.085 | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | ND | |
| 54 Benzene | 78 | | 5.417 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.417 | | | | ND | |
| 59 Trichloroethene | 130 | | 5.986 | | | | ND | |
| 61 Methylcyclohexane | 83 | | 6.176 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.437 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.840 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.362 | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.694 | | | | ND | |
| 77 2-Hexanone | 43 | | 7.765 | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.931 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.524 | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.812 | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.129 | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | | 13.018 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | ND | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

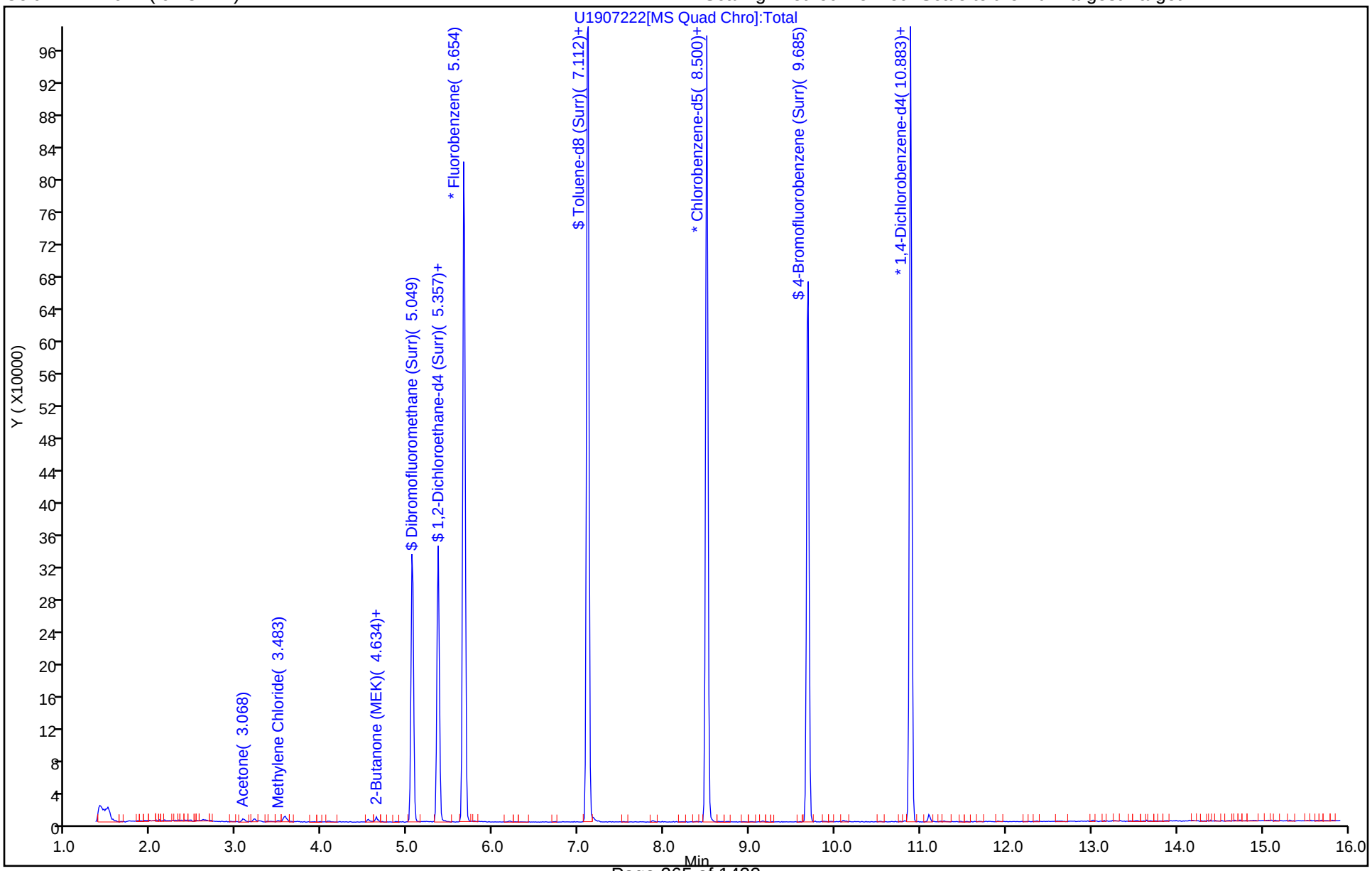
Report Date: 08-May-2019 19:02:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907222.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 18:32:24 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-B-1 | Lab Sample ID: | 240-112111-1 | Worklist Smp#: | 11 |
| Client ID: | TB-050619 | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907222.d
Lims ID: 240-112111-B-1
Client ID: TB-050619
Sample Type: Client
Inject. Date: 08-May-2019 18:32:24 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-011
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:00:02 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:02:07

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.3 | 96.50 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.3 | 91.37 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.7 | 98.63 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.6 | 92.80 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619  Lab Sample ID: 240-112111-2

Matrix: Water  Lab File ID: U1907252.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 19:26

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 4.8 | U | 20 | 4.8 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 2.6 | U | 20 | 2.6 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 8.2 | U | 20 | 8.2 |
| 79-00-5 | 1,1,2-Trichloroethane | 1.8 | U | 20 | 1.8 |
| 75-34-3 | 1,1-Dichloroethane | 4.9 | J | 20 | 3.4 |
| 75-35-4 | 1,1-Dichloroethene | 11 | J | 20 | 3.8 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 5.2 | U | 20 | 5.2 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 18 | U | 40 | 18 |
| 106-93-4 | Ethylene Dibromide | 2.4 | U | 20 | 2.4 |
| 95-50-1 | 1,2-Dichlorobenzene | 3.0 | U | 20 | 3.0 |
| 107-06-2 | 1,2-Dichloroethane | 4.2 | U | 20 | 4.2 |
| 78-87-5 | 1,2-Dichloropropane | 3.0 | U | 20 | 3.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 3.0 | U | 20 | 3.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 3.2 | U | 20 | 3.2 |
| 78-93-3 | 2-Butanone (MEK) | 23 | U | 200 | 23 |
| 591-78-6 | 2-Hexanone | 11 | U | 200 | 11 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 8.4 | U | 200 | 8.4 |
| 67-64-1 | Acetone | 110 | U | 200 | 110 |
| 71-43-2 | Benzene | 2.6 | U | 20 | 2.6 |
| 75-27-4 | Dichlorobromomethane | 3.4 | U | 20 | 3.4 |
| 75-25-2 | Bromoform | 15 | U | 20 | 15 |
| 74-83-9 | Bromomethane | 8.4 | U | 20 | 8.4 |
| 75-15-0 | Carbon disulfide | 5.6 | U | 20 | 5.6 |
| 56-23-5 | Carbon tetrachloride | 5.2 | U | 20 | 5.2 |
| 108-90-7 | Chlorobenzene | 2.8 | U | 20 | 2.8 |
| 75-00-3 | Chloroethane | 17 | U | 20 | 17 |
| 67-66-3 | Chloroform | 2.6 | U | 20 | 2.6 |
| 74-87-3 | Chloromethane | 4.0 | U | 20 | 4.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 680 |  | 20 | 3.2 |
| 10061-01-5 | cis-1,3-Dichloropropene | 12 | U | 20 | 12 |
| 110-82-7 | Cyclohexane | 4.8 | U | 20 | 4.8 |
| 124-48-1 | Chlorodibromomethane | 7.8 | U | 20 | 7.8 |
| 75-71-8 | Dichlorodifluoromethane | 7.0 | U | 20 | 7.0 |
| 100-41-4 | Ethylbenzene | 2.2 | U | 20 | 2.2 |
| 98-82-8 | Isopropylbenzene | 1.8 | U | 20 | 1.8 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619  Lab Sample ID: 240-112111-2

Matrix: Water  Lab File ID: U1907252.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 19:26

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 34 | U | 200 | 34 |
| 1634-04-4 | Methyl tert-butyl ether | 1.4 | U | 20 | 1.4 |
| 108-87-2 | Methylcyclohexane | 6.6 | U | 20 | 6.6 |
| 75-09-2 | Methylene Chloride | 52 | U | 100 | 52 |
| 100-42-5 | Styrene | 2.0 | U | 20 | 2.0 |
| 127-18-4 | Tetrachloroethene | 3.0 | U | 20 | 3.0 |
| 108-88-3 | Toluene | 2.8 | U | 20 | 2.8 |
| 156-60-5 | trans-1,2-Dichloroethene | 5.2 | J | 20 | 3.8 |
| 10061-02-6 | trans-1,3-Dichloropropene | 13 | U | 20 | 13 |
| 79-01-6 | Trichloroethene | 120 | | 20 | 2.0 |
| 75-69-4 | Trichlorofluoromethane | 9.0 | U | 20 | 9.0 |
| 75-01-4 | Vinyl chloride | 190 | | 20 | 4.0 |
| 1330-20-7 | Xylenes, Total | 3.0 | U | 40 | 3.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 101 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 92 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 92 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d
Lims ID: 240-112111-B-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 09-May-2019 19:26:02 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-010
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 20:16:01 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 20:16:01

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.666 | 5.654 | 0.012 | 99 | 808671 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 632989 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 320517 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.061 | 5.049 | 0.012 | 67 | 220833 | 20.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 95 | 230230 | 18.4 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.112 | 7.100 | 0.012 | 91 | 740319 | 19.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 262518 | 18.4 | |
| 9 Dichlorodifluoromethane | 85 | | 1.610 | | | | ND | |
| 10 Chloromethane | 50 | | 1.823 | | | | ND | |
| 12 Vinyl chloride | 62 | 1.942 | 1.930 | 0.012 | 83 | 111856 | 9.28 | |
| 13 Bromomethane | 94 | | 2.226 | | | | ND | |
| 15 Chloroethane | 64 | | 2.309 | | | | ND | U |
| 17 Trichlorofluoromethane | 101 | | 2.570 | | | | ND | |
| 20 1,1-Dichloroethene | 61 | 3.057 | 3.045 | 0.012 | 50 | 8276 | 0.5702 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.057 | | | | ND | |
| 22 Acetone | 43 | 3.081 | 3.068 | 0.012 | 93 | 11373 | 3.59 | |
| 25 Carbon disulfide | 76 | | 3.270 | | | | ND | |
| 28 Methyl acetate | 43 | | 3.389 | | | | ND | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 64 | 7432 | 0.6457 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 68 | 3582 | 0.2616 | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | 4.124 | 4.112 | 0.012 | 18 | 3983 | 0.2434 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 65 | 395349 | 33.8 | |
| 40 2-Butanone (MEK) | 72 | | 4.634 | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.084 | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | ND | |
| 54 Benzene | 78 | | 5.416 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.416 | | | | ND | |
| 59 Trichloroethene | 130 | 5.998 | 5.986 | 0.012 | 88 | 78679 | 6.16 | |
| 61 Methylcyclohexane | 83 | | 6.175 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.436 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.851 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.361 | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.693 | | | | ND | |
| 77 2-Hexanone | 43 | | 7.764 | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.930 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.523 | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.824 | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.128 | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | | 13.018 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

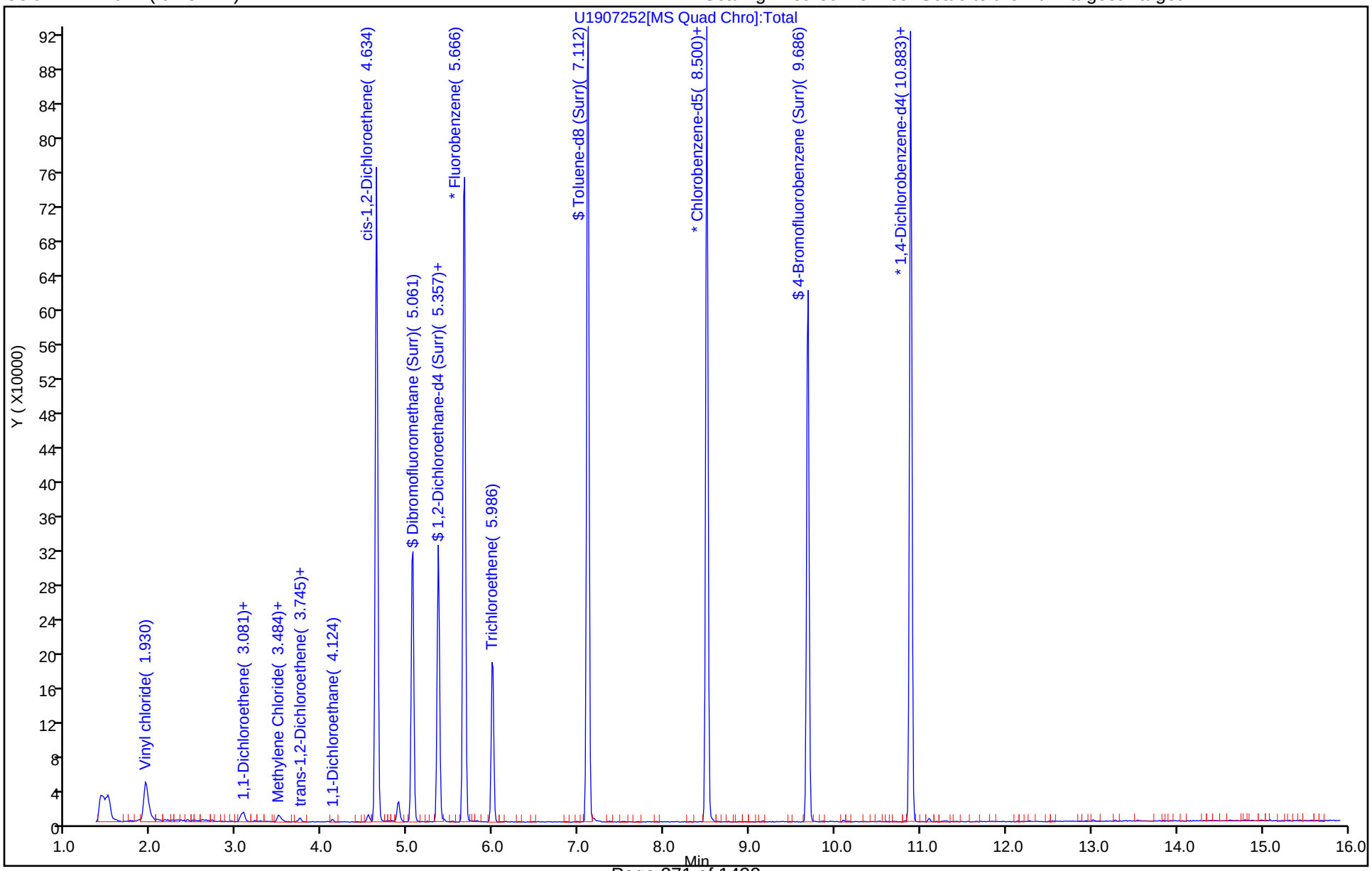
Report Date: 09-May-2019 20:16:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | Worklist Smp#: | 10 |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d
Lims ID: 240-112111-B-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 09-May-2019 19:26:02 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-010
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 20:16:01 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 20:16:01

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 20.3 | 2028.82 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.4 | 1841.55 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.5 | 1950.44 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.4 | 1837.97 |

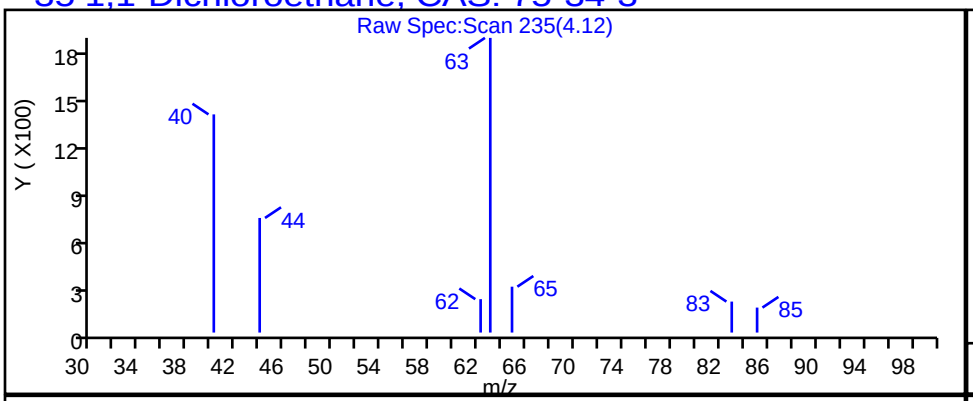
Report Date: 09-May-2019 20:16:02 Chrom Revision: 2.3 03-May-2019 15:52:00

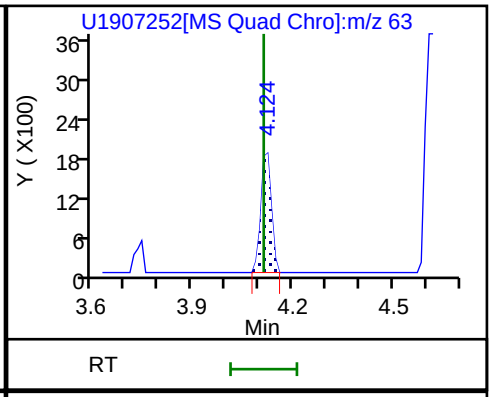
Eurofins TestAmerica, Canton

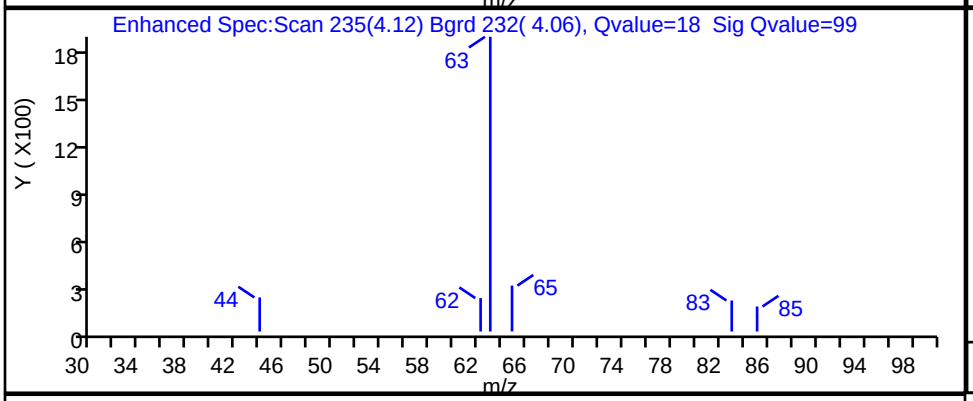
Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

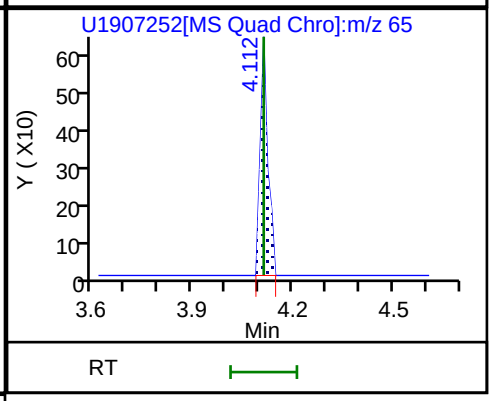
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

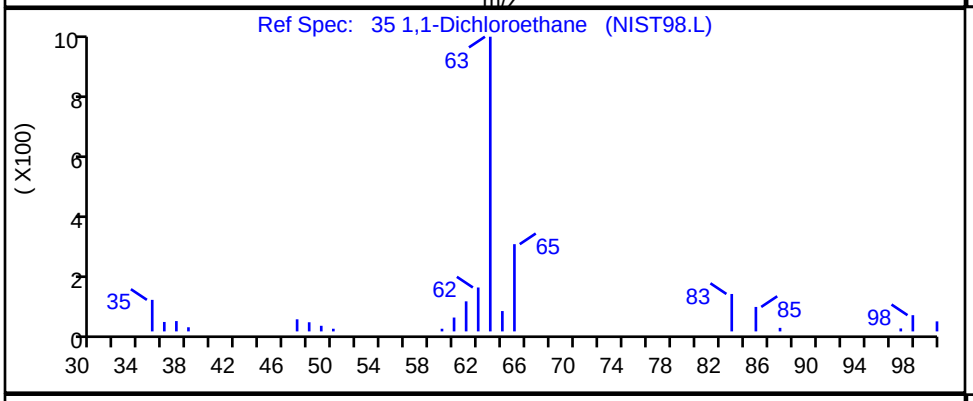
## 35 1,1-Dichloroethane, CAS: 75-34-3

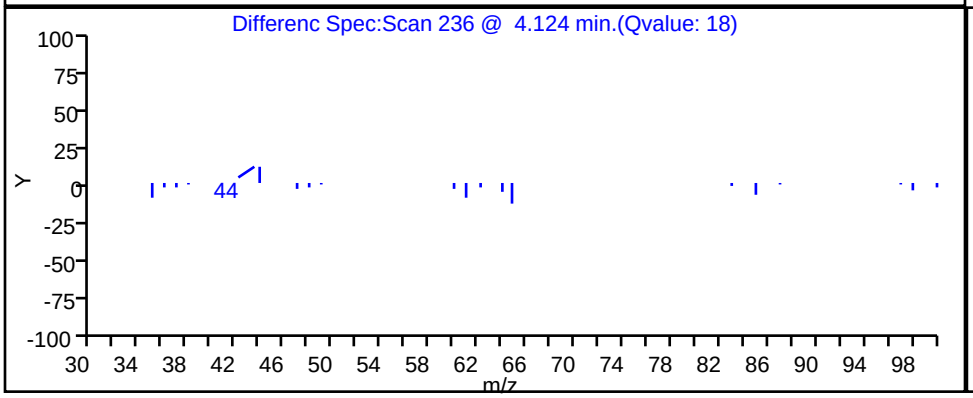


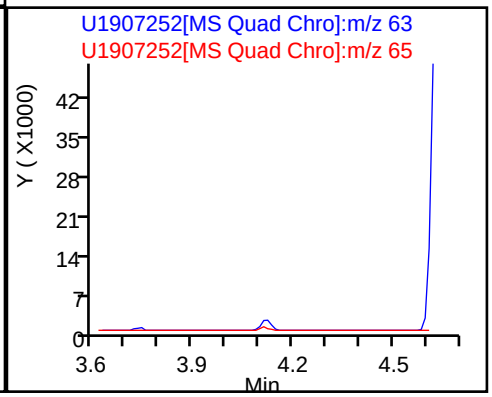



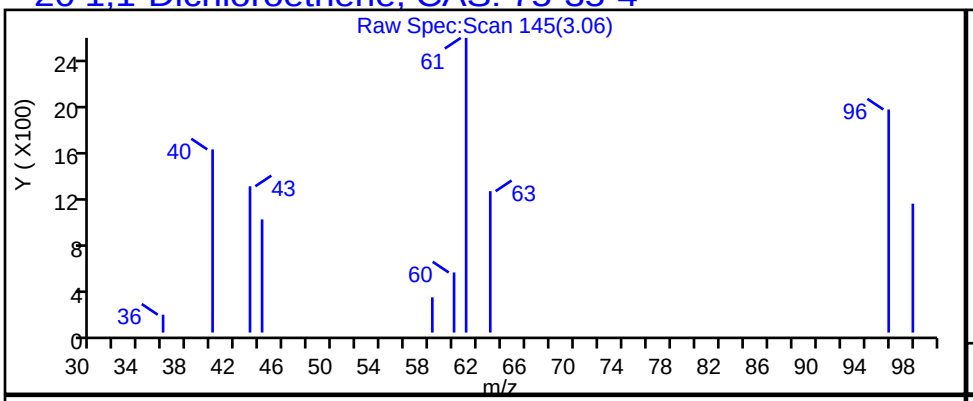
Report Date: 09-May-2019 20:16:01 Chrom Revision: 2.3 03-May-2019 15:52:00

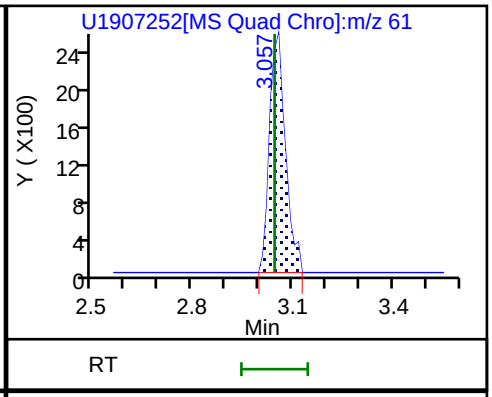
Eurofins TestAmerica, Canton

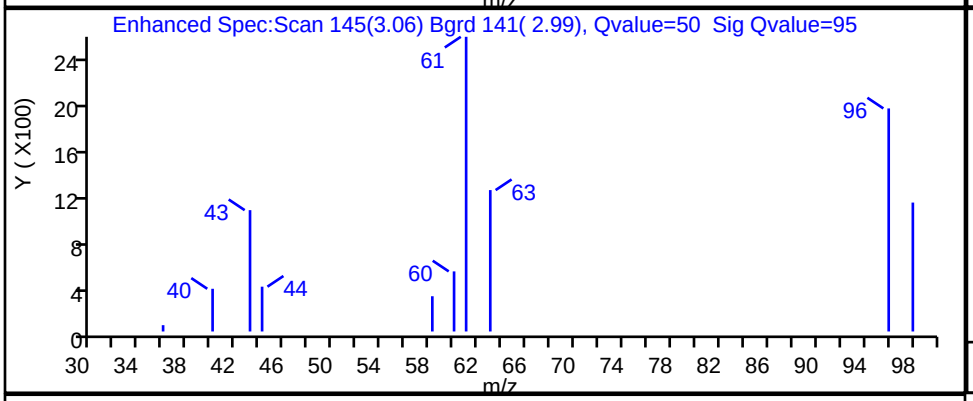
Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

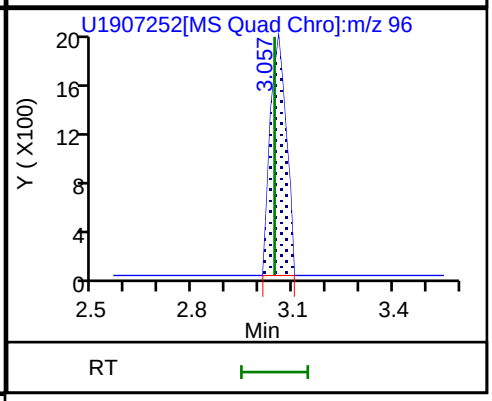
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

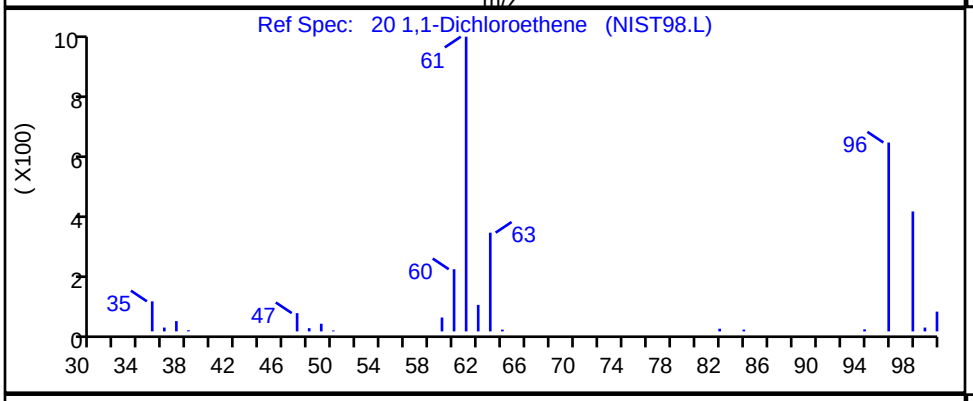
## 20 1,1-Dichloroethene, CAS: 75-35-4

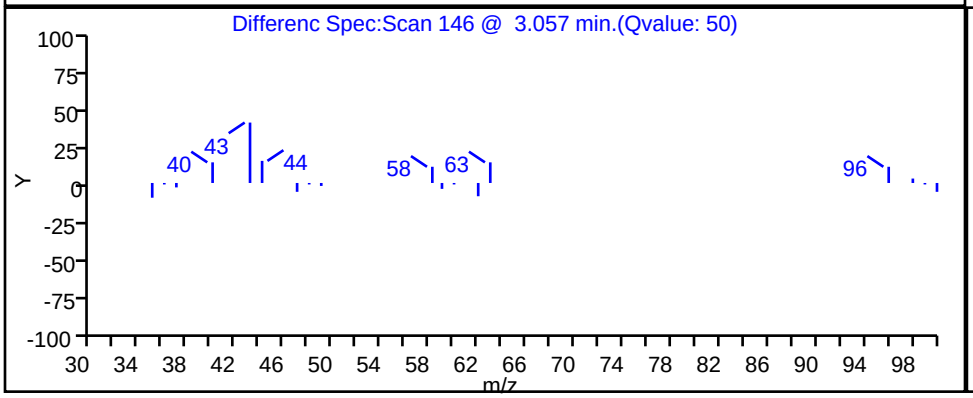


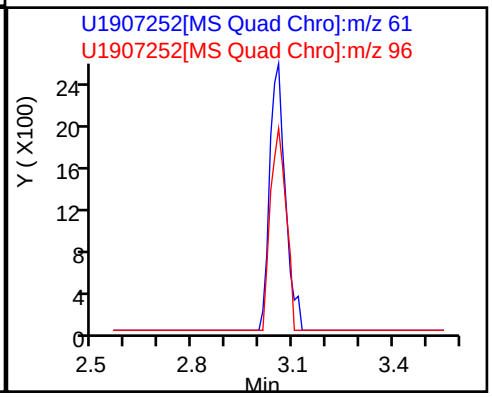



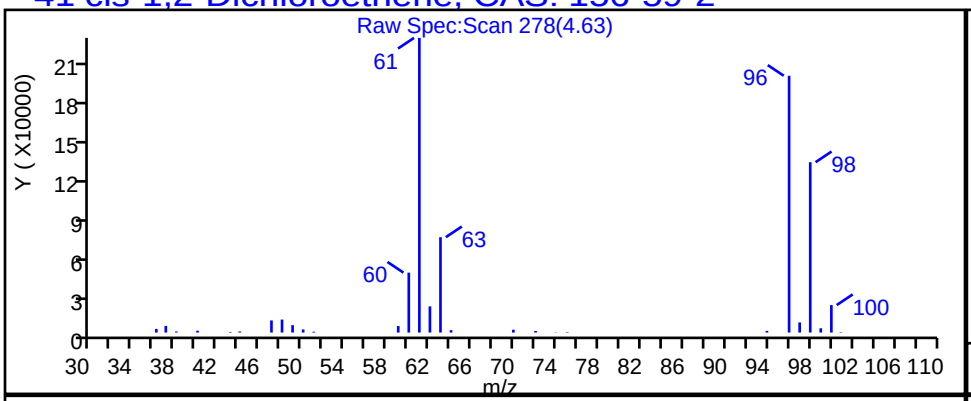
Report Date: 09-May-2019 20:16:02 Chrom Revision: 2.3 03-May-2019 15:52:00

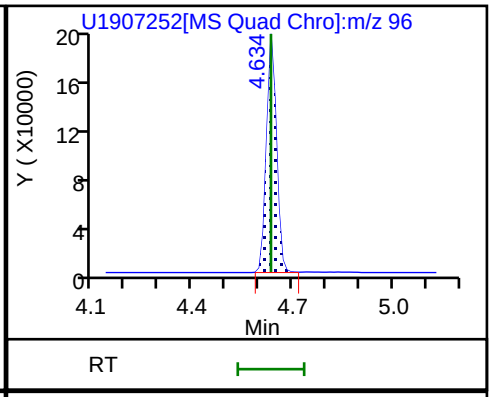
Eurofins TestAmerica, Canton

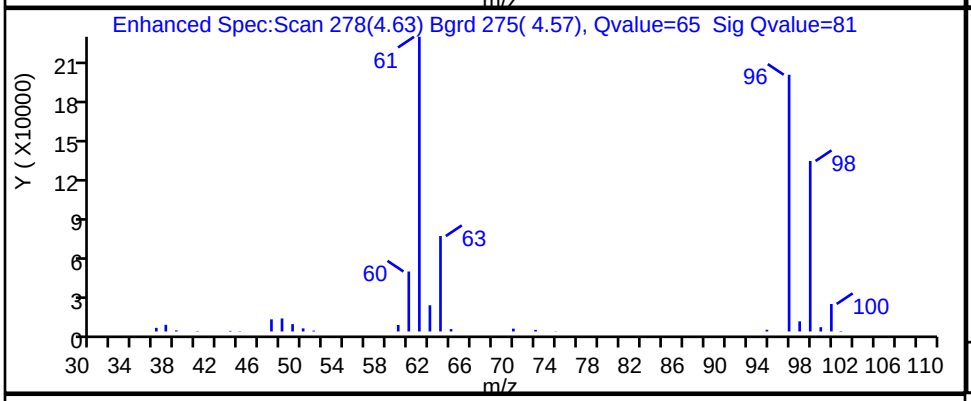
Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

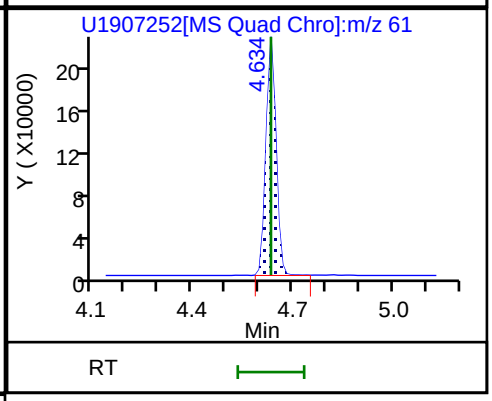
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

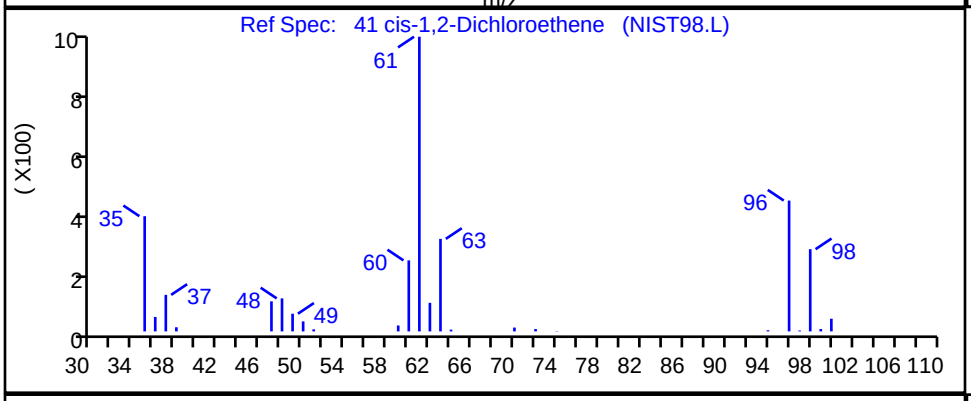
## 41 cis-1,2-Dichloroethene, CAS: 156-59-2

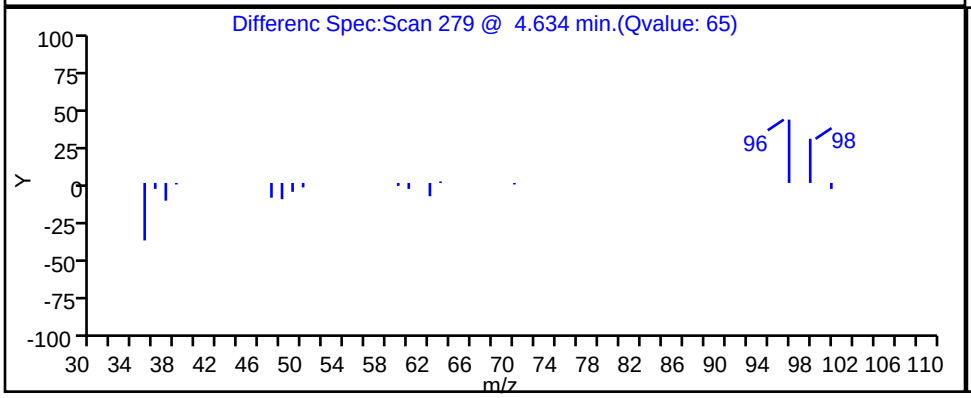


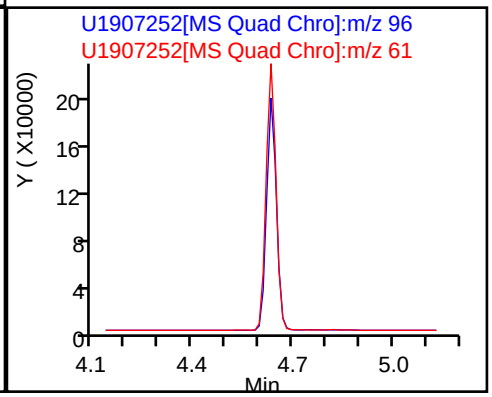



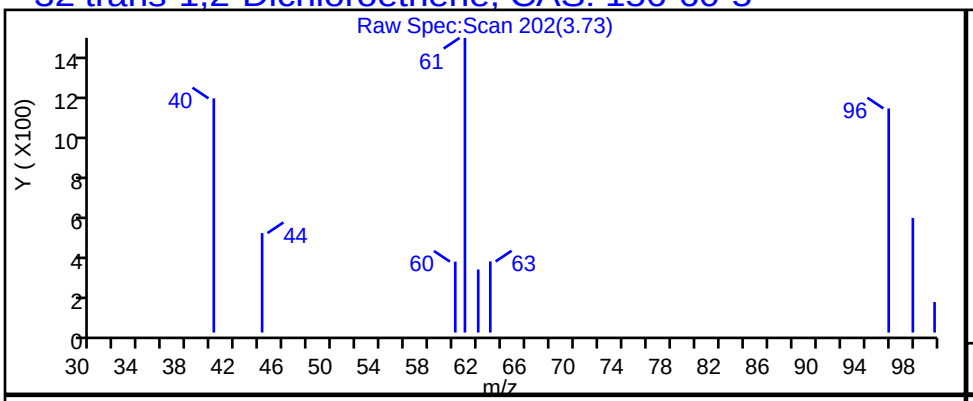



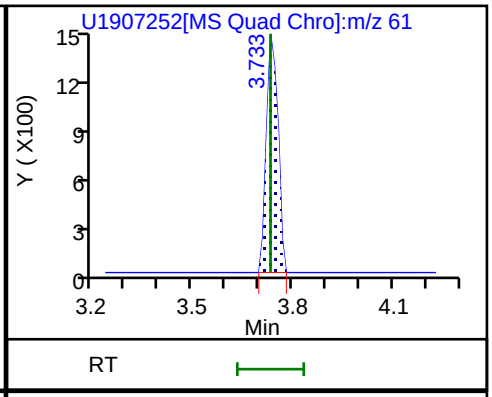
Report Date: 09-May-2019 20:16:02 Chrom Revision: 2.3 03-May-2019 15:52:00

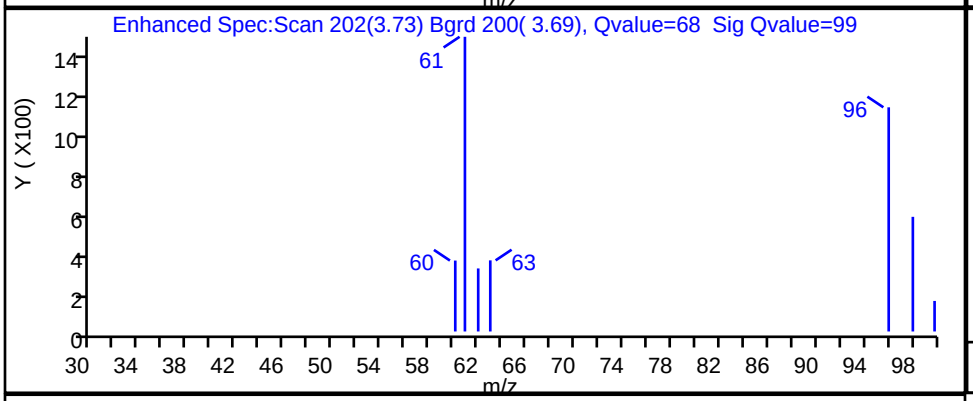
Eurofins TestAmerica, Canton

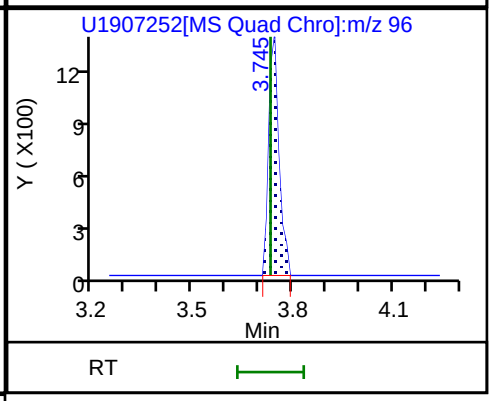
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d | | | | |
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

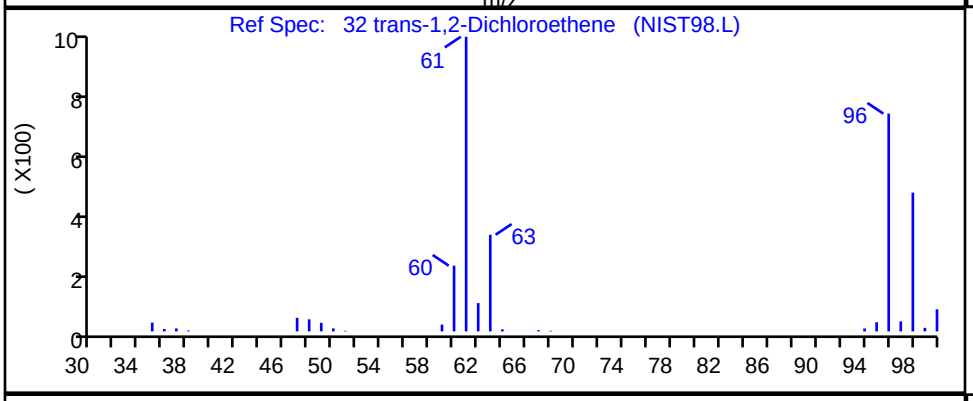
## 32 trans-1,2-Dichloroethene, CAS: 156-60-5

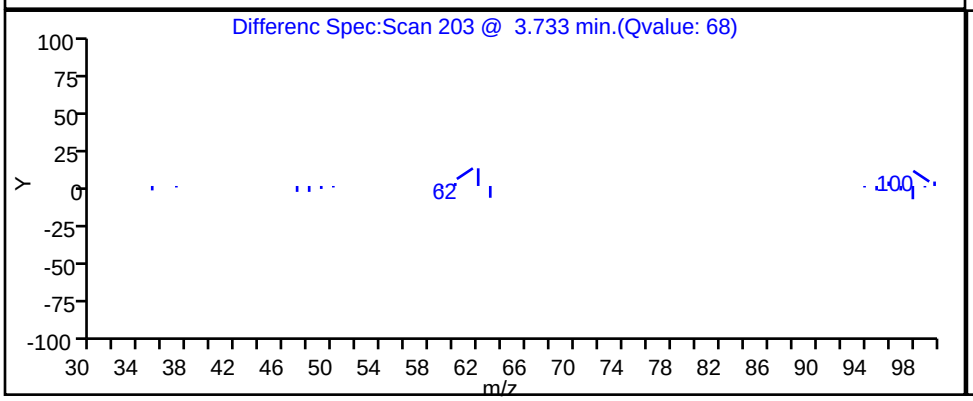


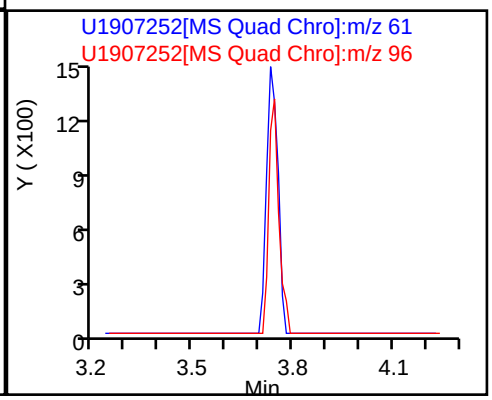



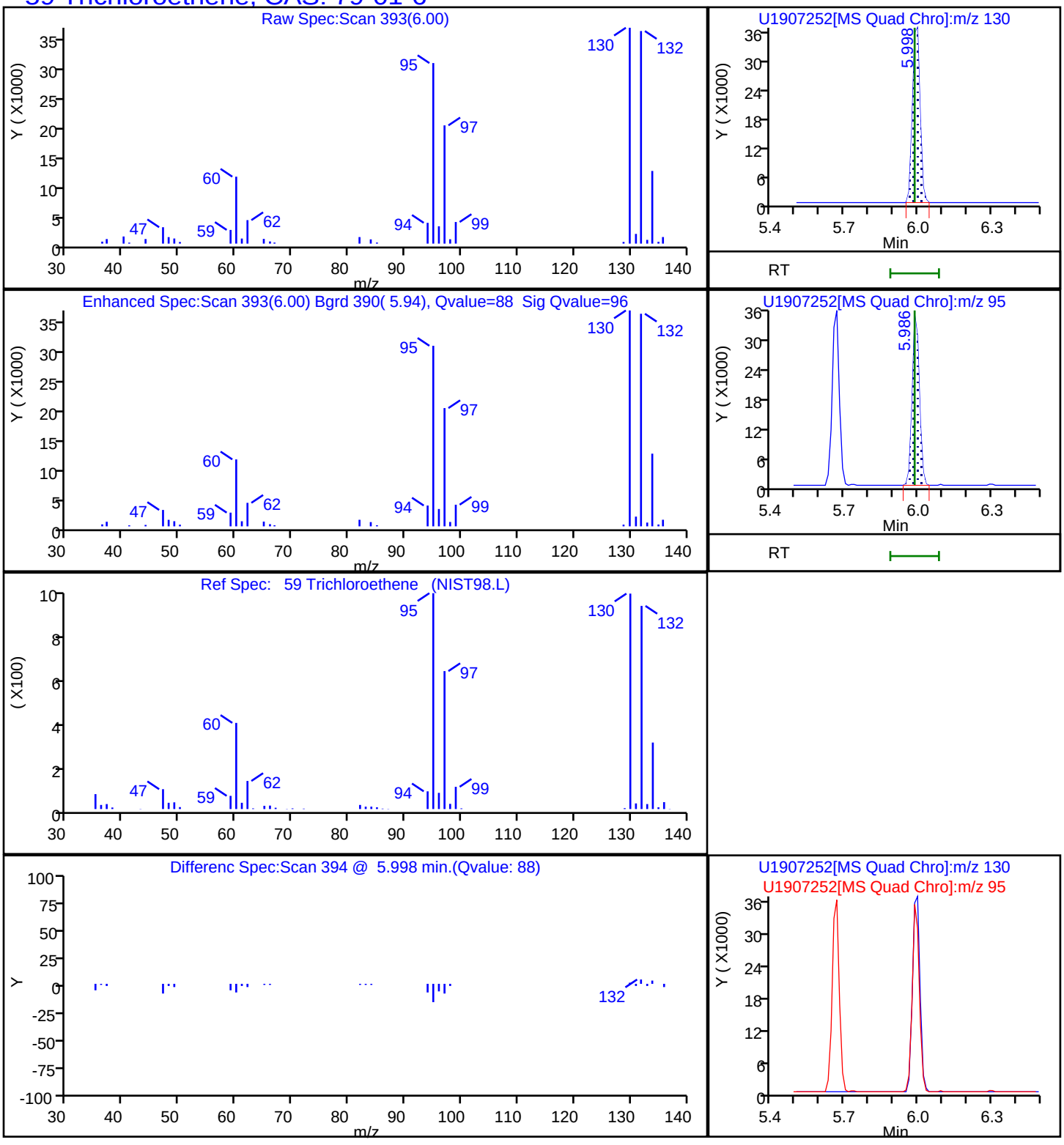
Report Date: 09-May-2019 20:16:02 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 59 Trichloroethene, CAS: 79-01-6



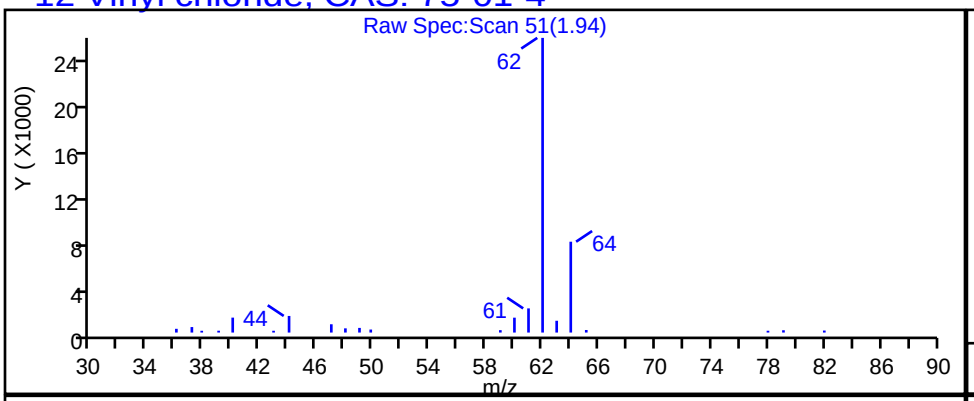
Report Date: 09-May-2019 20:16:01 Chrom Revision: 2.3 03-May-2019 15:52:00

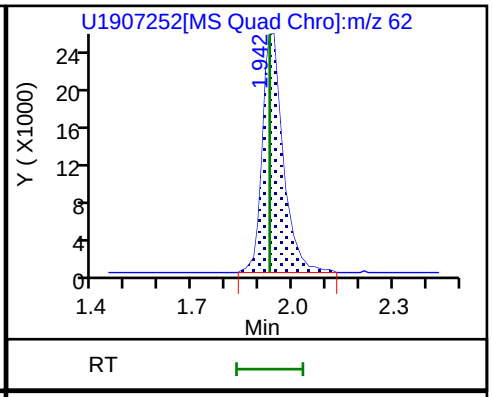
Eurofins TestAmerica, Canton

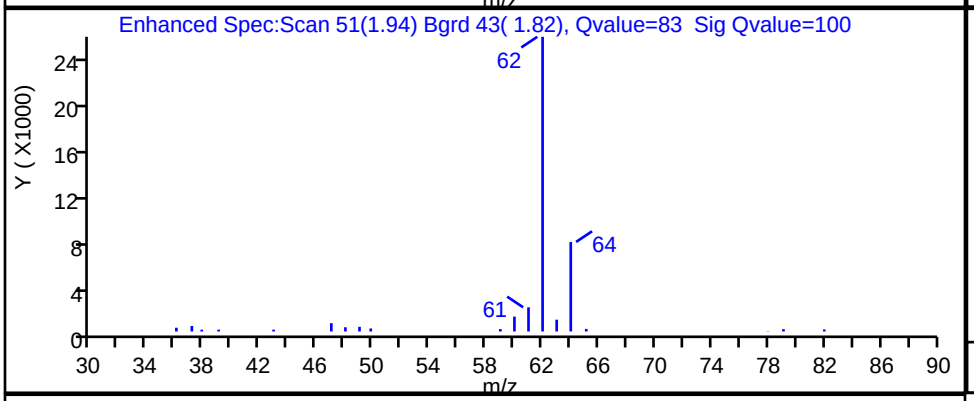
Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d

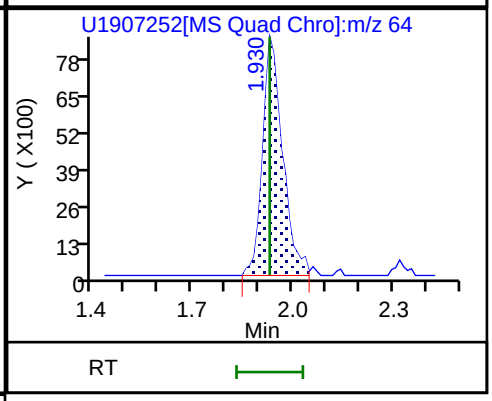
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

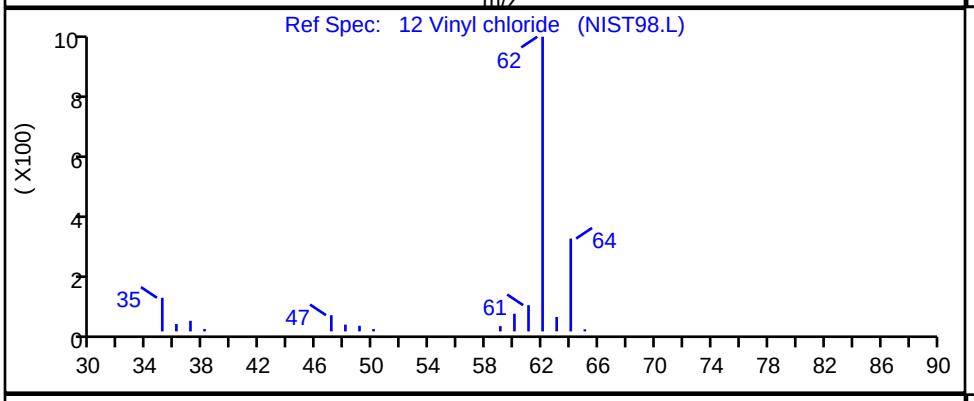
## 12 Vinyl chloride, CAS: 75-01-4

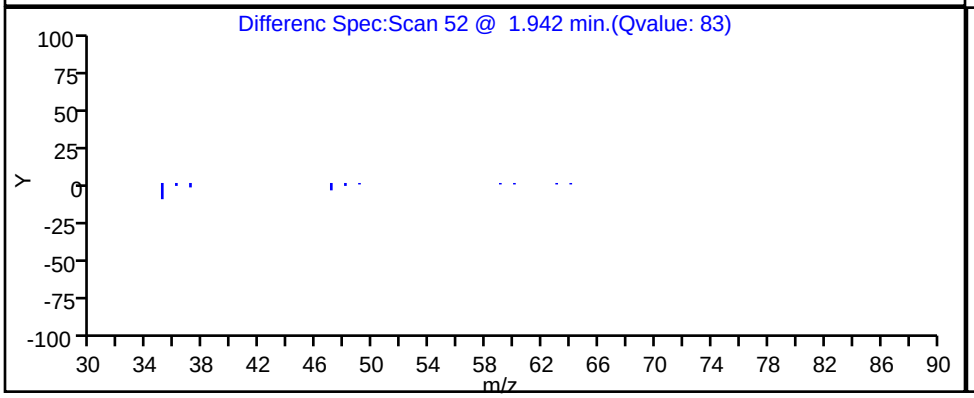


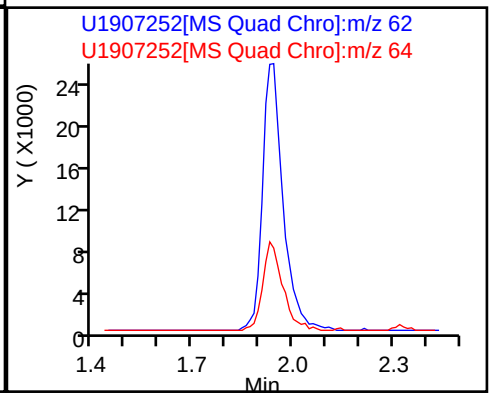



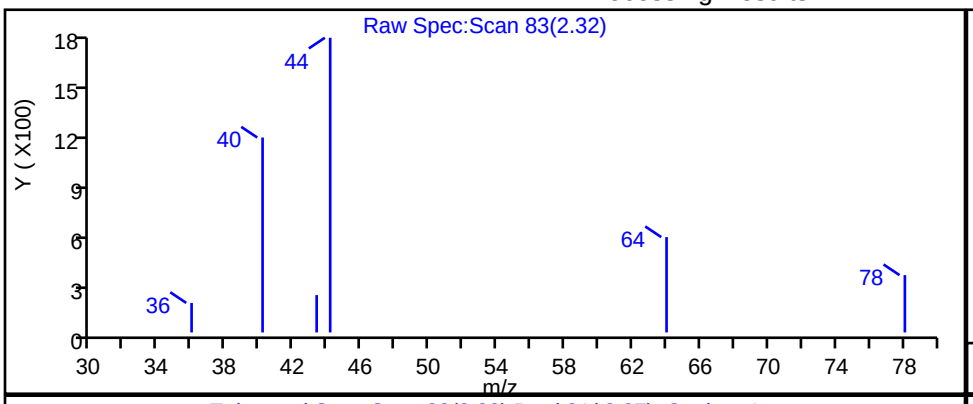
User Disabled Compound Report

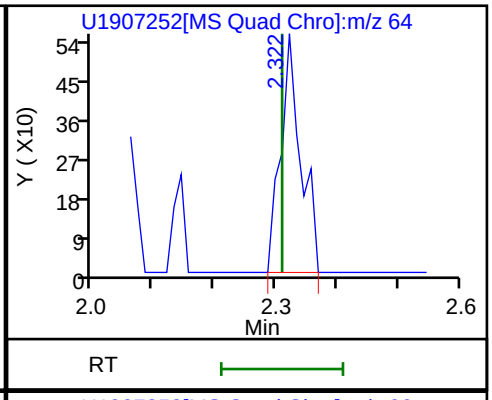
Eurofins TestAmerica, Canton

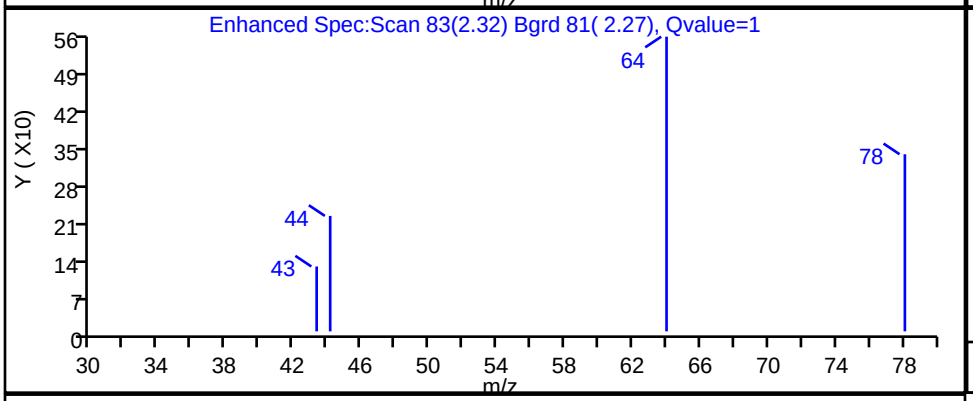
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907252.d | | | | |
| Injection Date: | 09-May-2019 19:26:02 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-B-2 | Lab Sample ID: | 240-112111-2 | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 10 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

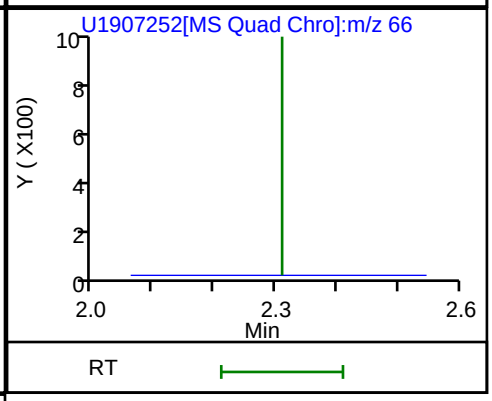
## 15 Chloroethane, CAS: 75-00-3

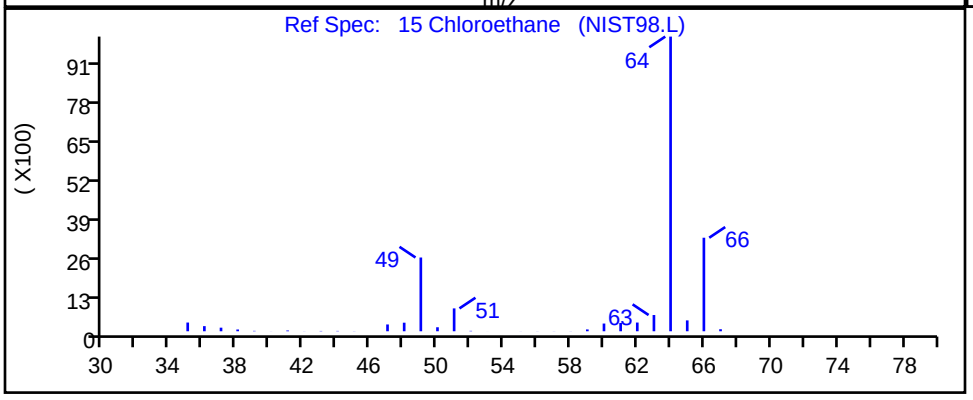
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.32 | 64.00 | 1284 | 0.171799 |
| 2.31 | 66.00 | 0 | |

Reviewer: laveyt, 09-May-2019 20:15:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-1I-050619  Lab Sample ID: 240-112111-3

Matrix: Water  Lab File ID: U1907224.d

Analysis Method: 8260C  Date Collected: 05/06/2019 10:53

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 19:16

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 2.4 | U | 10 | 2.4 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 1.3 | U | 10 | 1.3 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 4.1 | U | 10 | 4.1 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.90 | U | 10 | 0.90 |
| 75-34-3 | 1,1-Dichloroethane | 2.8 | J | 10 | 1.7 |
| 75-35-4 | 1,1-Dichloroethene | 9.0 | J | 10 | 1.9 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 2.6 | U | 10 | 2.6 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 9.1 | U | 20 | 9.1 |
| 106-93-4 | Ethylene Dibromide | 1.2 | U | 10 | 1.2 |
| 95-50-1 | 1,2-Dichlorobenzene | 1.5 | U | 10 | 1.5 |
| 107-06-2 | 1,2-Dichloroethane | 2.1 | U | 10 | 2.1 |
| 78-87-5 | 1,2-Dichloropropane | 1.5 | U | 10 | 1.5 |
| 541-73-1 | 1,3-Dichlorobenzene | 1.5 | U | 10 | 1.5 |
| 106-46-7 | 1,4-Dichlorobenzene | 1.6 | U | 10 | 1.6 |
| 78-93-3 | 2-Butanone (MEK) | 12 | U | 100 | 12 |
| 591-78-6 | 2-Hexanone | 5.4 | U | 100 | 5.4 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 4.2 | U | 100 | 4.2 |
| 67-64-1 | Acetone | 54 | U | 100 | 54 |
| 71-43-2 | Benzene | 1.3 | U | 10 | 1.3 |
| 75-27-4 | Dichlorobromomethane | 1.7 | U | 10 | 1.7 |
| 75-25-2 | Bromoform | 7.6 | U | 10 | 7.6 |
| 74-83-9 | Bromomethane | 4.2 | U | 10 | 4.2 |
| 75-15-0 | Carbon disulfide | 2.8 | U | 10 | 2.8 |
| 56-23-5 | Carbon tetrachloride | 2.6 | U | 10 | 2.6 |
| 108-90-7 | Chlorobenzene | 1.4 | U | 10 | 1.4 |
| 75-00-3 | Chloroethane | 8.3 | U | 10 | 8.3 |
| 67-66-3 | Chloroform | 1.3 | U | 10 | 1.3 |
| 74-87-3 | Chloromethane | 2.0 | U | 10 | 2.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 280 |  | 10 | 1.6 |
| 10061-01-5 | cis-1,3-Dichloropropene | 6.1 | U | 10 | 6.1 |
| 110-82-7 | Cyclohexane | 2.4 | U | 10 | 2.4 |
| 124-48-1 | Chlorodibromomethane | 3.9 | U | 10 | 3.9 |
| 75-71-8 | Dichlorodifluoromethane | 3.5 | U | 10 | 3.5 |
| 100-41-4 | Ethylbenzene | 1.1 | U | 10 | 1.1 |
| 98-82-8 | Isopropylbenzene | 0.90 | U | 10 | 0.90 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-1I-050619  Lab Sample ID: 240-112111-3

Matrix: Water  Lab File ID: U1907224.d

Analysis Method: 8260C  Date Collected: 05/06/2019 10:53

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 19:16

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 17 | U | 100 | 17 |
| 1634-04-4 | Methyl tert-butyl ether | 0.70 | U | 10 | 0.70 |
| 108-87-2 | Methylcyclohexane | 3.3 | U | 10 | 3.3 |
| 75-09-2 | Methylene Chloride | 26 | U | 50 | 26 |
| 100-42-5 | Styrene | 1.0 | U | 10 | 1.0 |
| 127-18-4 | Tetrachloroethene | 1.5 | U | 10 | 1.5 |
| 108-88-3 | Toluene | 1.4 | U | 10 | 1.4 |
| 156-60-5 | trans-1,2-Dichloroethene | 1.9 | J | 10 | 1.9 |
| 10061-02-6 | trans-1,3-Dichloropropene | 6.7 | U | 10 | 6.7 |
| 79-01-6 | Trichloroethene | 89 | | 10 | 1.0 |
| 75-69-4 | Trichlorofluoromethane | 4.5 | U | 10 | 4.5 |
| 75-01-4 | Vinyl chloride | 17 | | 10 | 2.0 |
| 1330-20-7 | Xylenes, Total | 1.5 | U | 20 | 1.5 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 96 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 97 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 91 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 89 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d
Lims ID: 240-112111-A-3
Client ID: MRC-NMW-1I-050619
Sample Type: Client
Inject. Date: 08-May-2019 19:16:56 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 10.0000
Sample Info: 240-0086906-013
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:40:30 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:40:30

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 825978 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 648136 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 94 | 326096 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 57 | 215440 | 19.4 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 93 | 226379 | 17.7 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 92 | 748907 | 19.3 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 97 | 264815 | 18.1 | |
| 9 Dichlorodifluoromethane | 85 | | 1.598 | | | | ND | |
| 10 Chloromethane | 50 | | 1.812 | | | | ND | |
| 12 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 58 | 20824 | 1.69 | |
| 13 Bromomethane | 94 | | 2.215 | | | | ND | |
| 15 Chloroethane | 64 | | 2.298 | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.559 | | | | ND | |
| 20 1,1-Dichloroethene | 61 | 3.057 | 3.033 | 0.024 | 80 | 13311 | 0.8979 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.045 | | | | ND | |
| 22 Acetone | 43 | 3.081 | 3.069 | 0.011 | 96 | 14230 | 4.39 | |
| 25 Carbon disulfide | 76 | | 3.258 | | | | ND | |
| 28 Methyl acetate | 43 | | 3.377 | | | | ND | U |
| 29 Methylene Chloride | 49 | 3.496 | 3.484 | 0.012 | 64 | 7751 | 0.6593 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 55 | 2660 | 0.1902 | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 27 | 4689 | 0.2805 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 63 | 331607 | 27.8 | |
| 40 2-Butanone (MEK) | 72 | | 4.634 | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.085 | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | ND | |
| 54 Benzene | 78 | | 5.417 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.417 | | | | ND | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 93 | 116162 | 8.90 | |
| 61 Methylcyclohexane | 83 | | 6.176 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.437 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.840 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.362 | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.694 | | | | ND | |
| 77 2-Hexanone | 43 | | 7.765 | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.931 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.524 | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.812 | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.129 | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | | 13.018 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

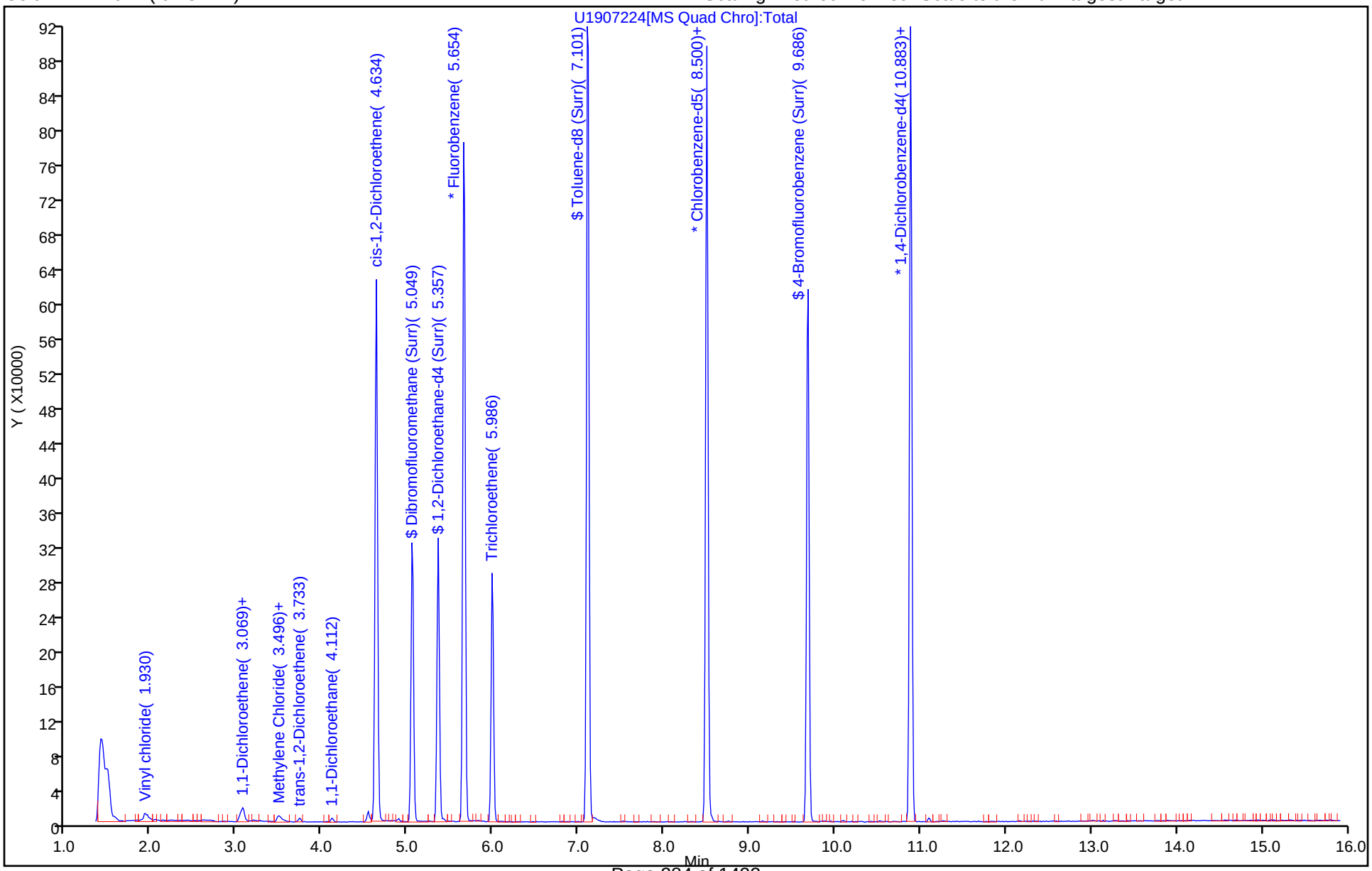
Report Date: 08-May-2019 19:40:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | Worklist Smp#: | 13 |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d
Lims ID: 240-112111-A-3
Client ID: MRC-NMW-1I-050619
Sample Type: Client
Inject. Date: 08-May-2019 19:16:56 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 10.0000
Sample Info: 240-0086906-013
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:40:30 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:40:30

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.4 | 968.90 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.7 | 886.40 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.3 | 963.48 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.1 | 905.36 |

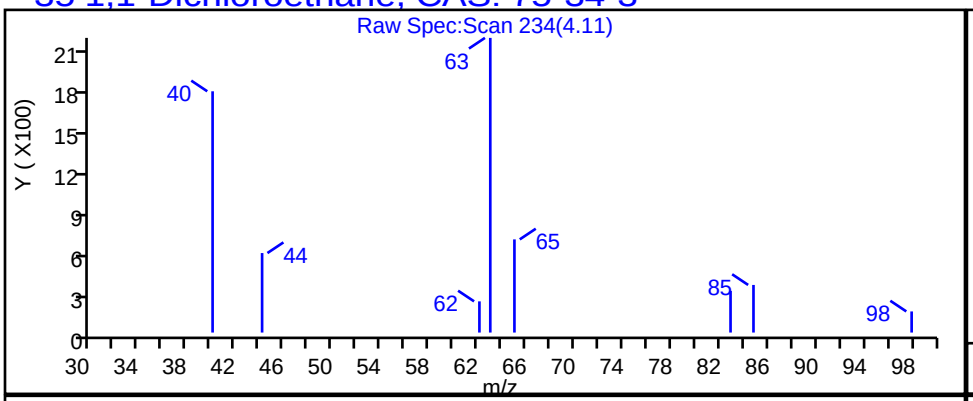
Report Date: 08-May-2019 19:40:31 Chrom Revision: 2.3 03-May-2019 15:52:00

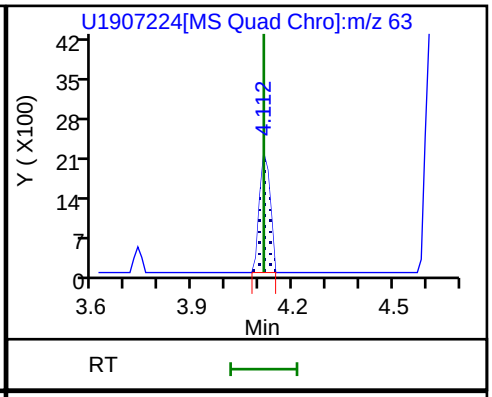
Eurofins TestAmerica, Canton

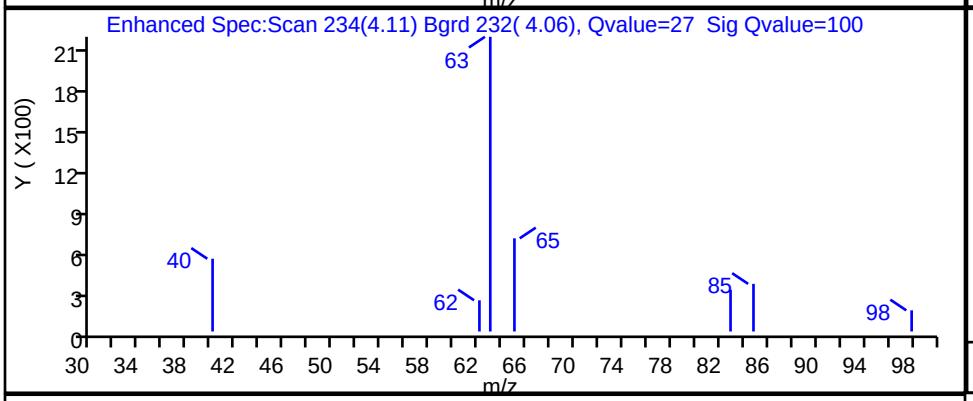
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

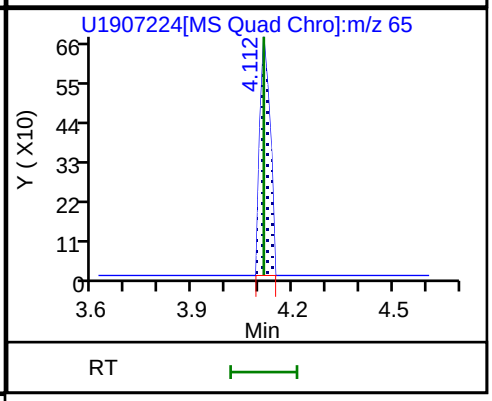
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

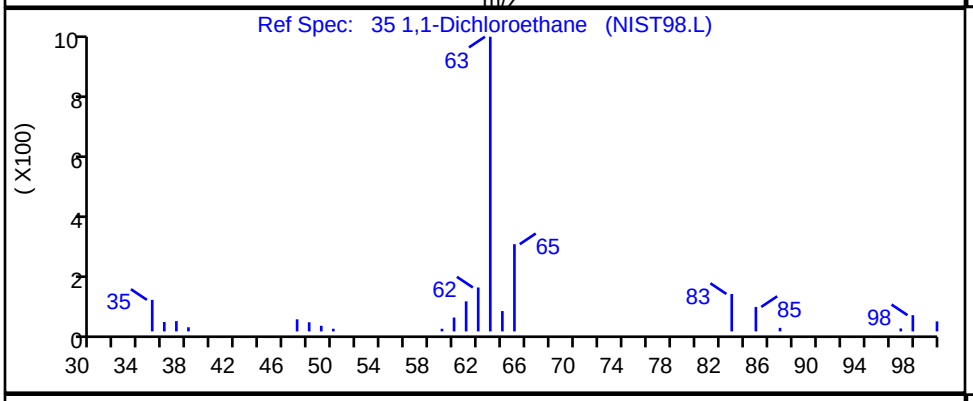
## 35 1,1-Dichloroethane, CAS: 75-34-3

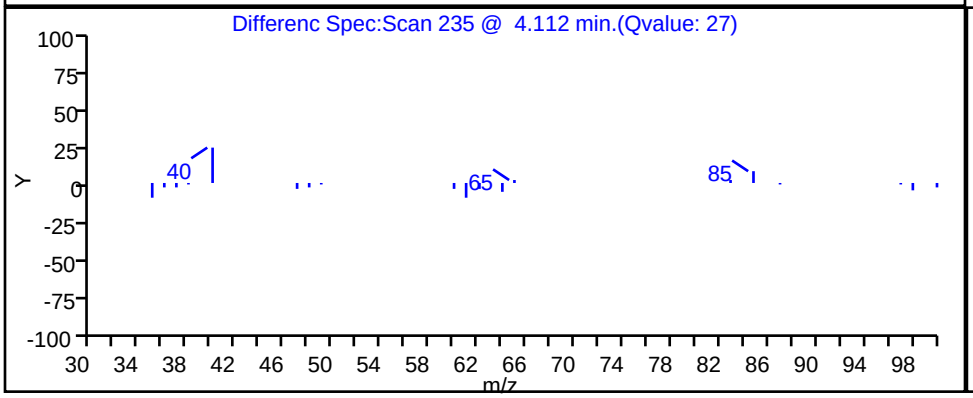


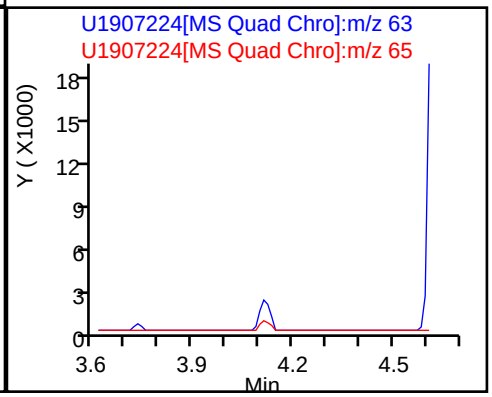



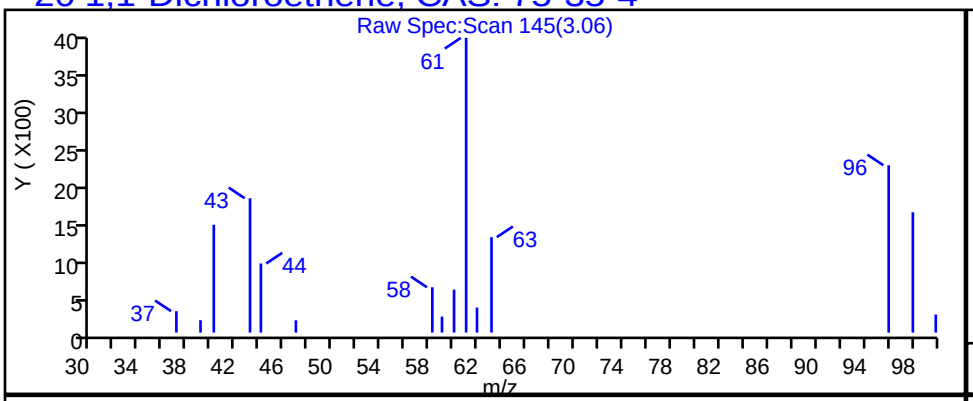
Report Date: 08-May-2019 19:40:30 Chrom Revision: 2.3 03-May-2019 15:52:00

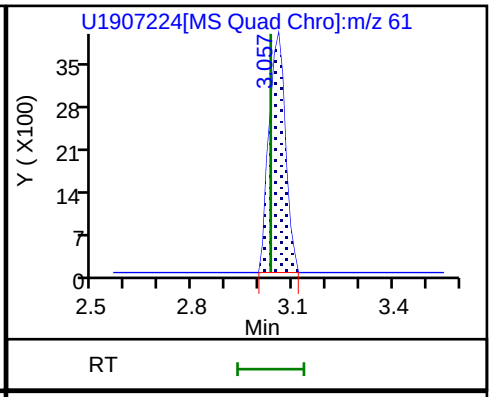
Eurofins TestAmerica, Canton

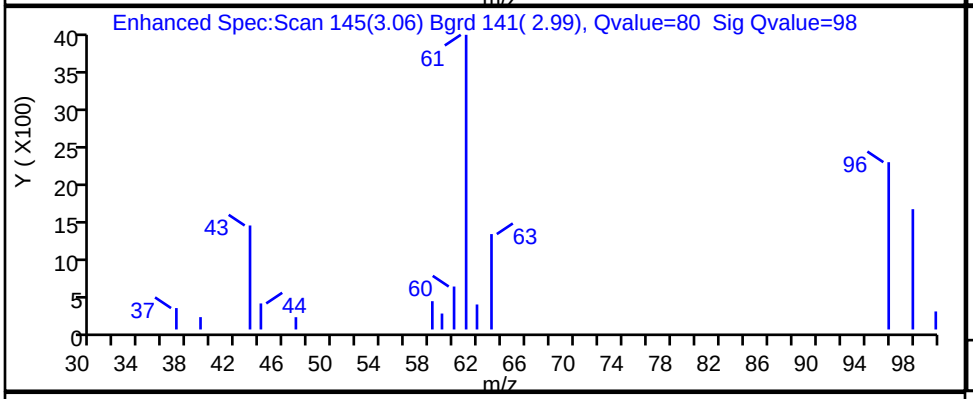
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

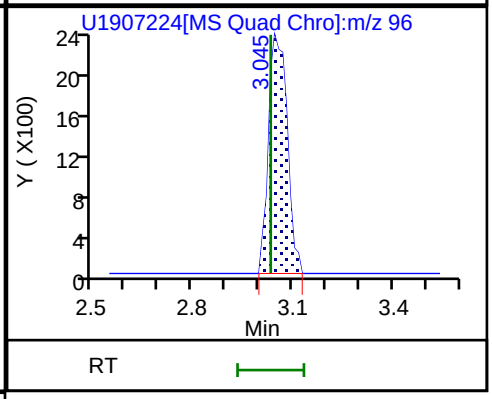
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

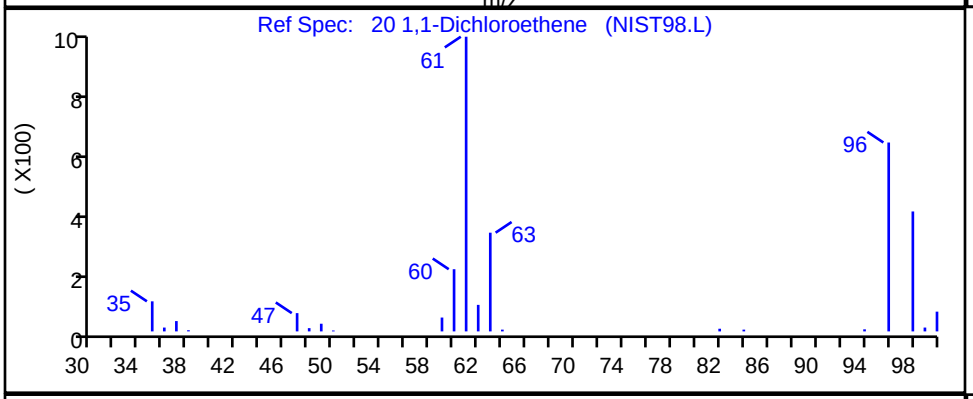
## 20 1,1-Dichloroethene, CAS: 75-35-4

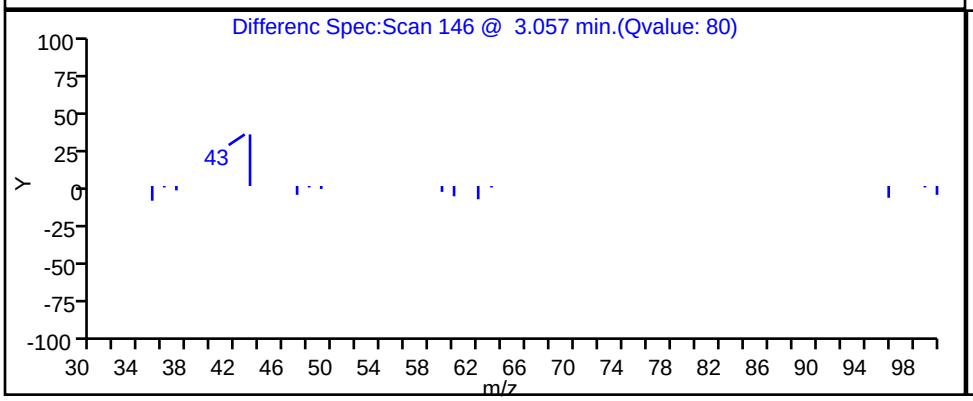


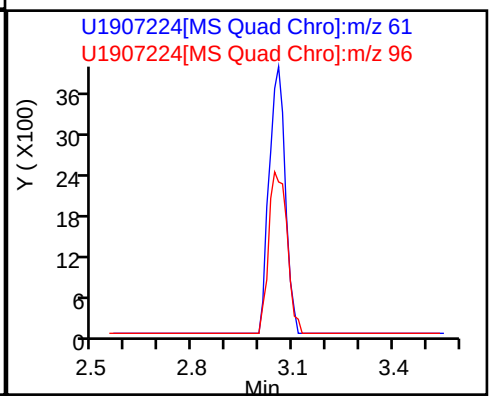



Report Date: 08-May-2019 19:40:31 Chrom Revision: 2.3 03-May-2019 15:52:00

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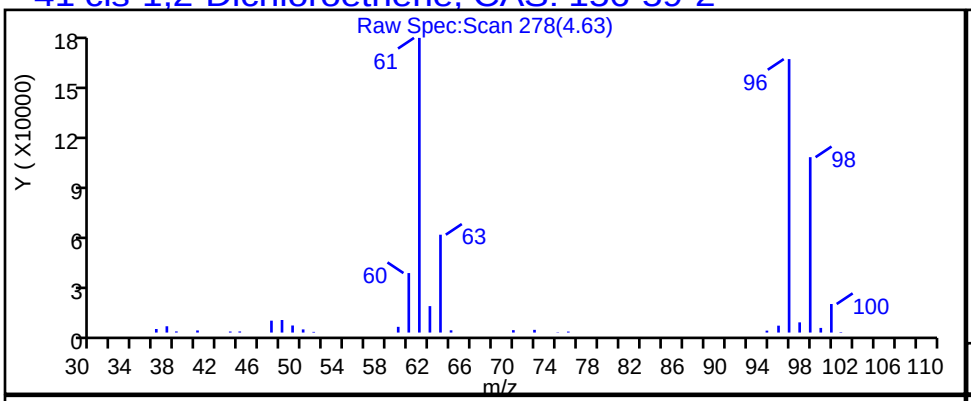
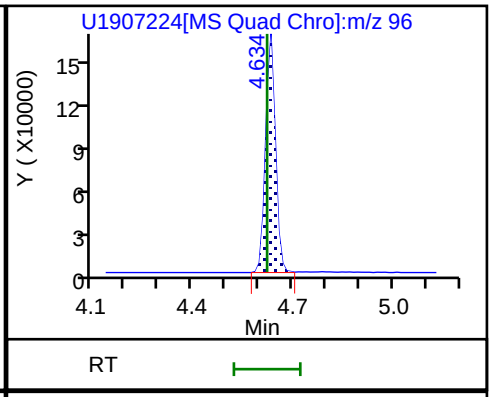
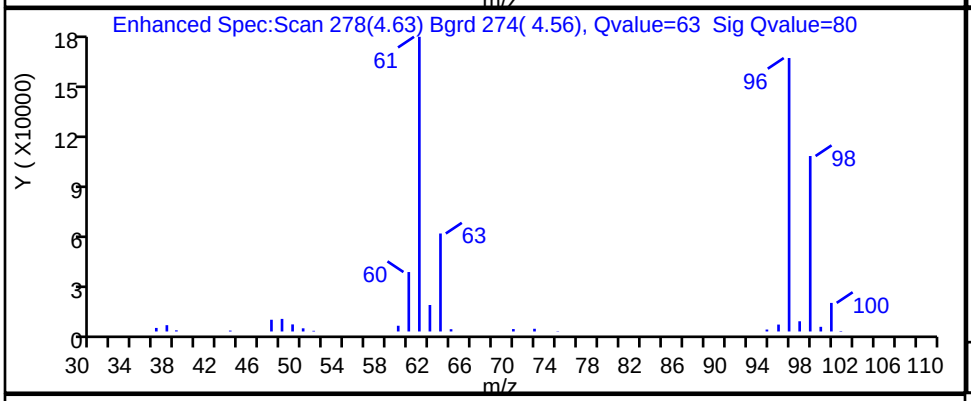
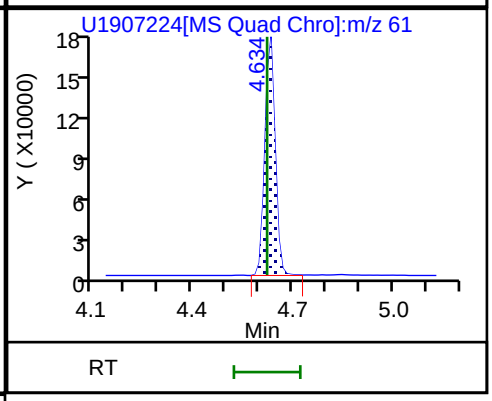
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d | | | | |
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

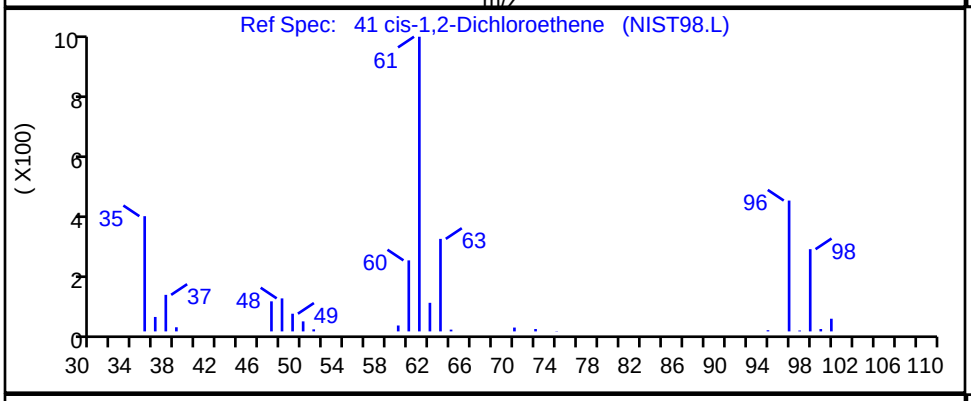
## 41 cis-1,2-Dichloroethene, CAS: 156-59-2

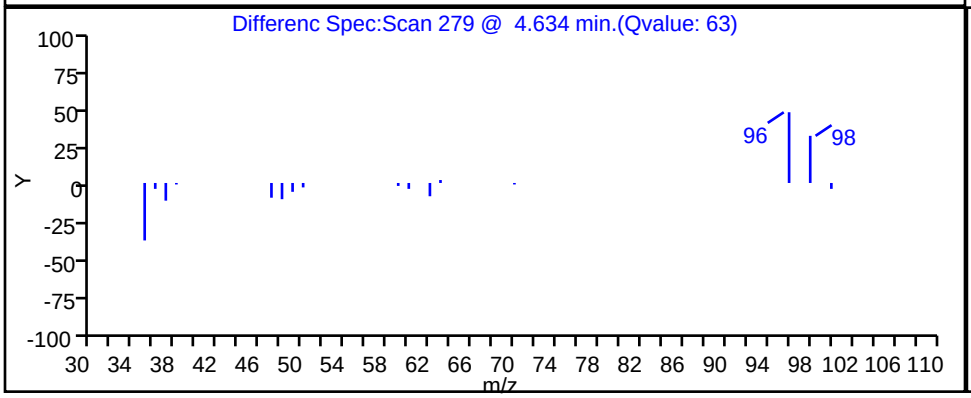


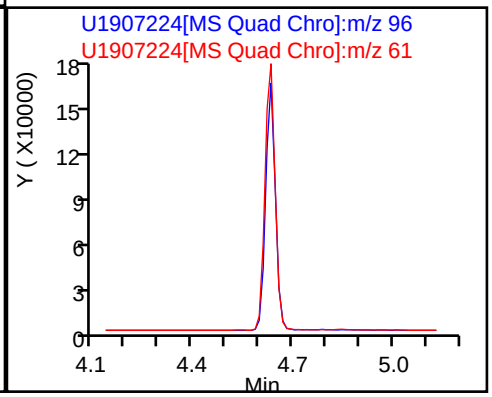



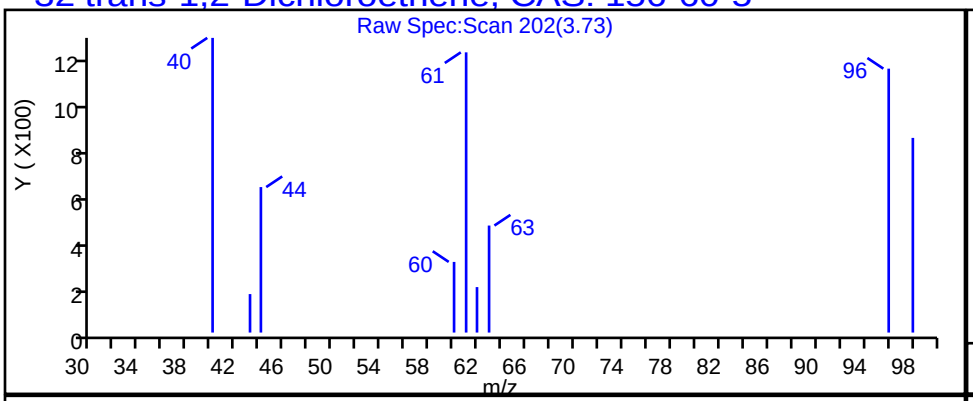
Report Date: 08-May-2019 19:40:31 Chrom Revision: 2.3 03-May-2019 15:52:00

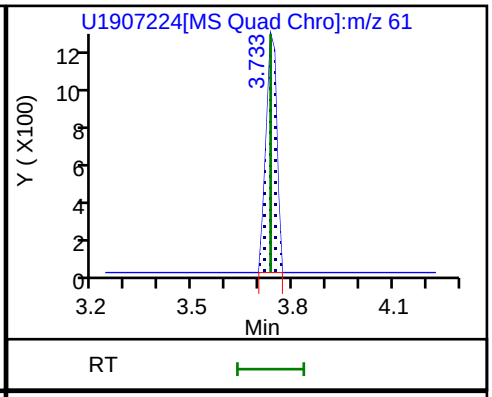
Eurofins TestAmerica, Canton

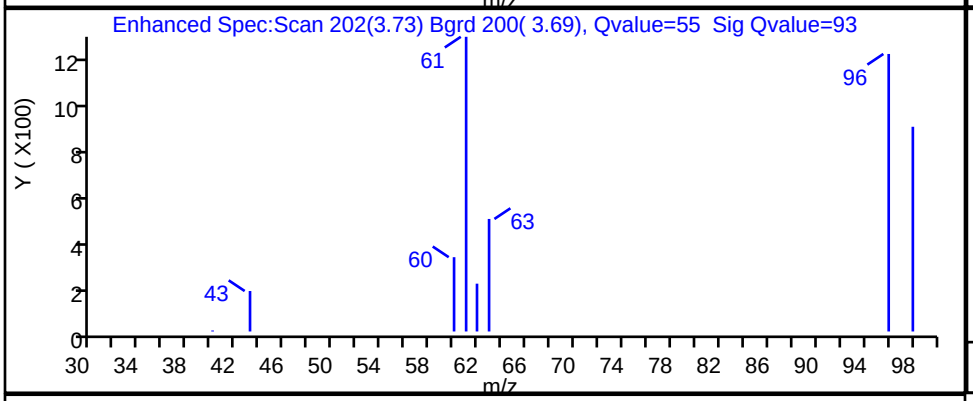
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

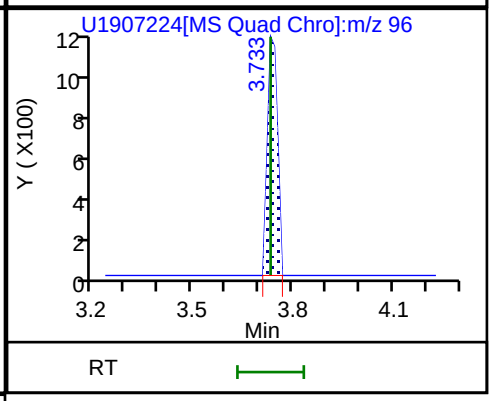
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

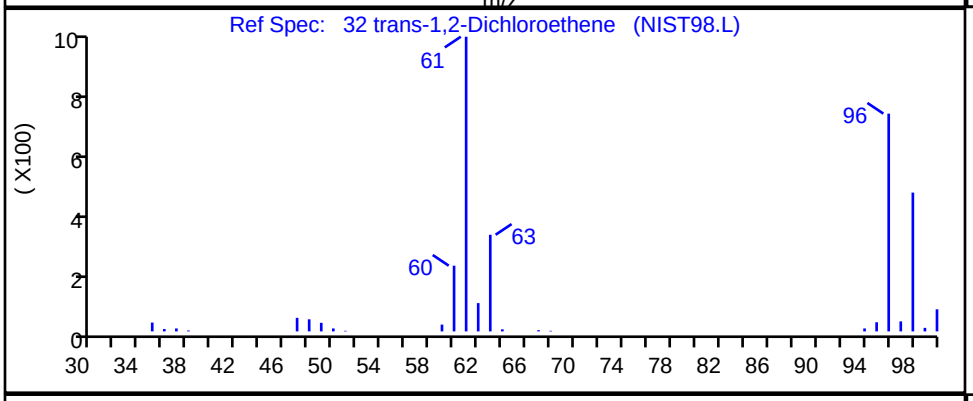
## 32 trans-1,2-Dichloroethene, CAS: 156-60-5

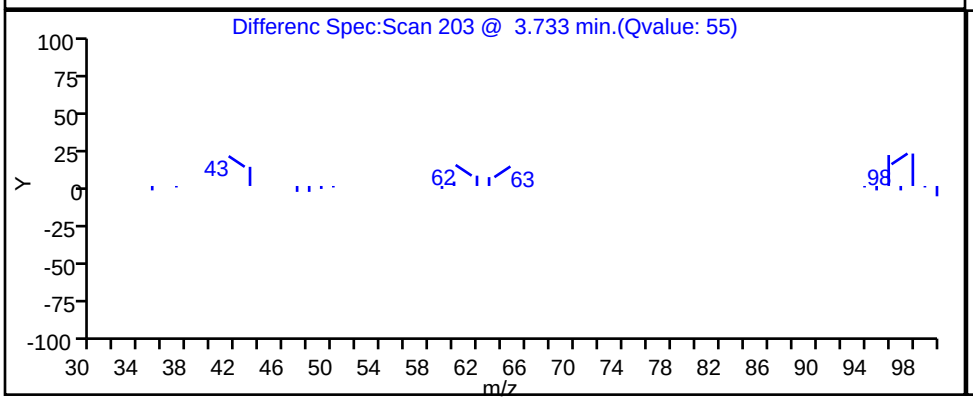


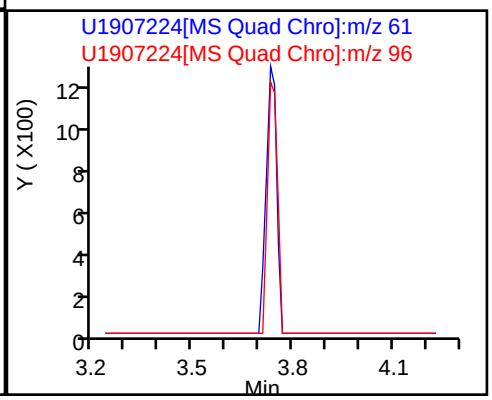



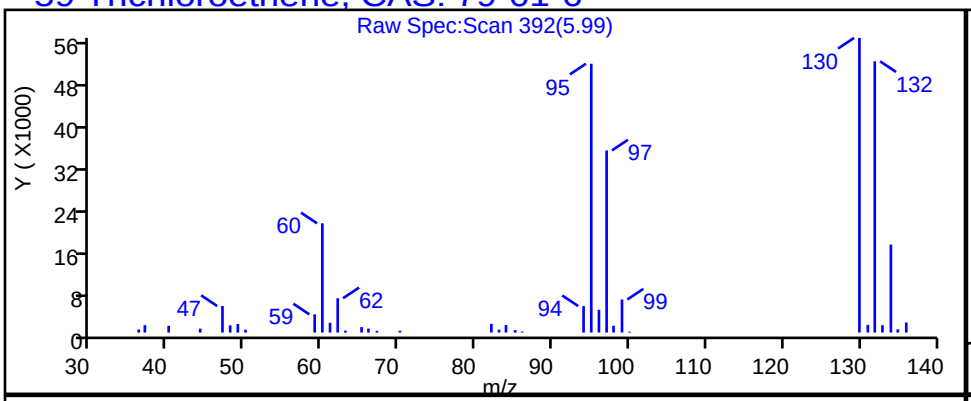
Report Date: 08-May-2019 19:40:31 Chrom Revision: 2.3 03-May-2019 15:52:00

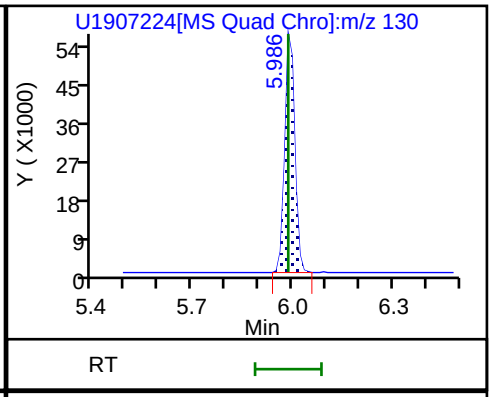
Eurofins TestAmerica, Canton

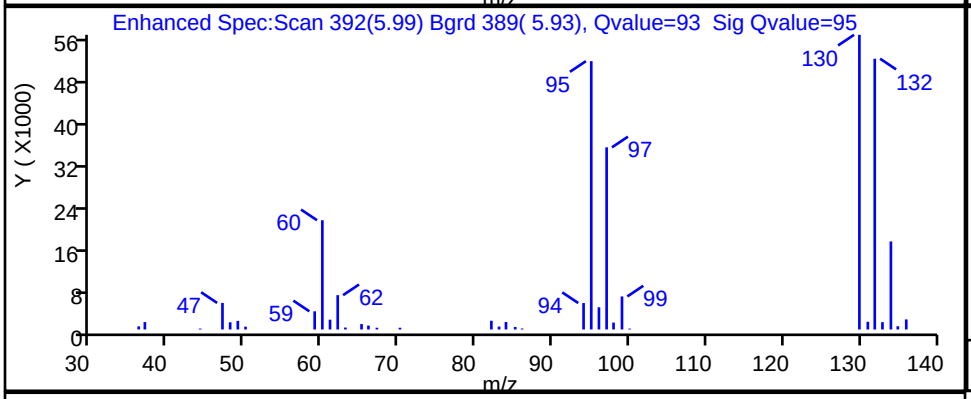
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

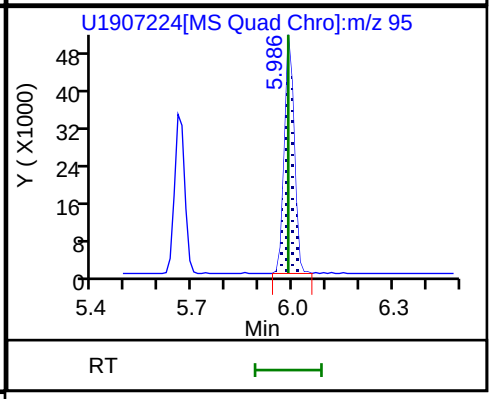
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

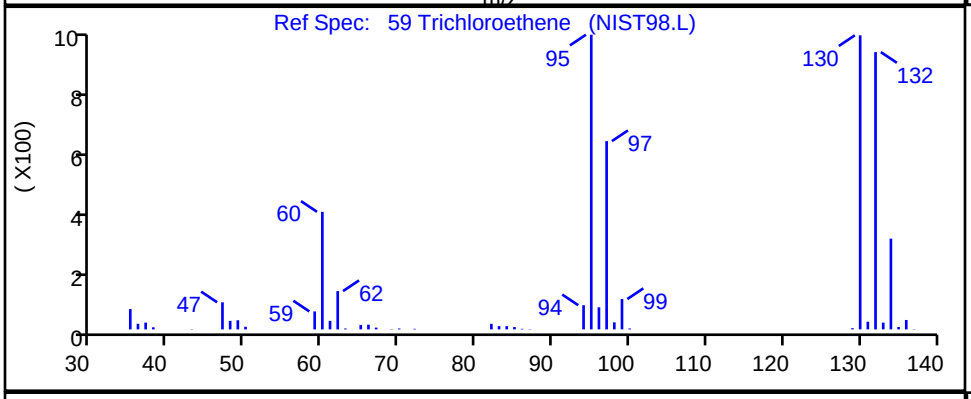
## 59 Trichloroethene, CAS: 79-01-6

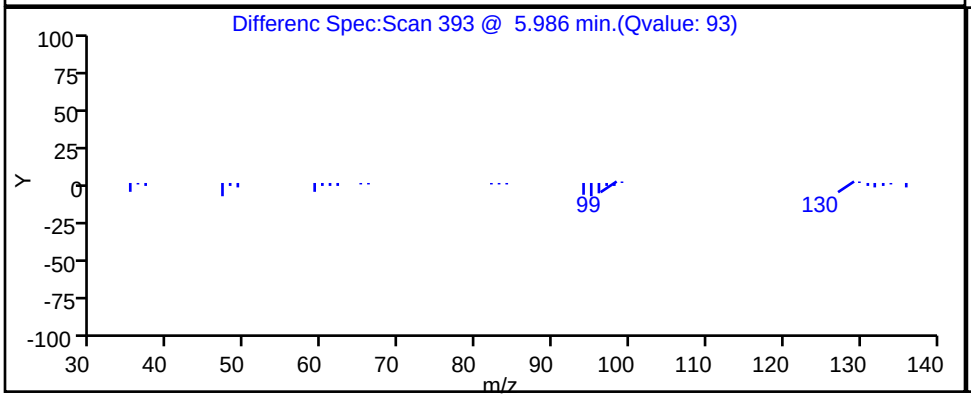


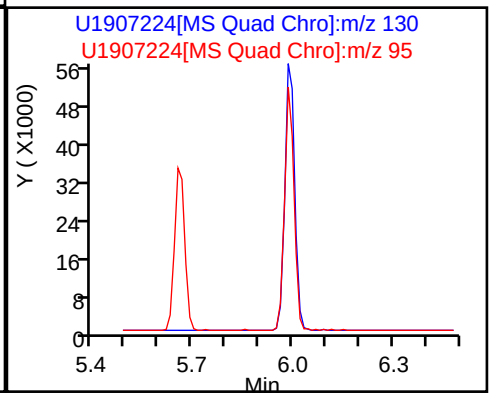



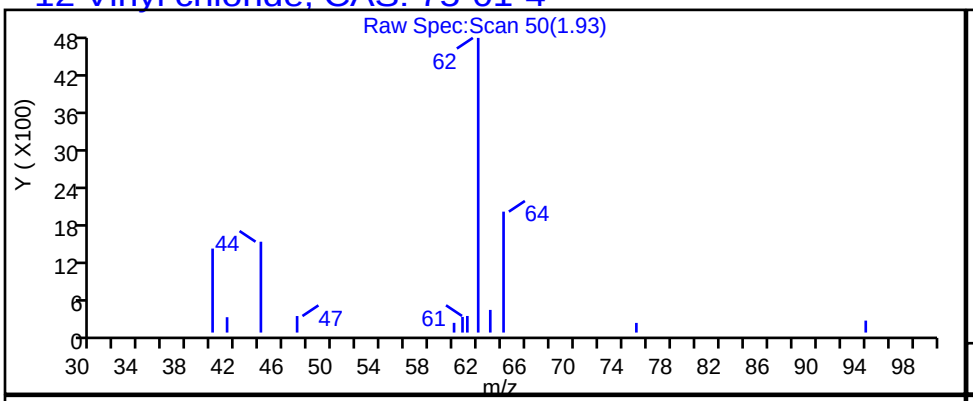
Report Date: 08-May-2019 19:40:30 Chrom Revision: 2.3 03-May-2019 15:52:00

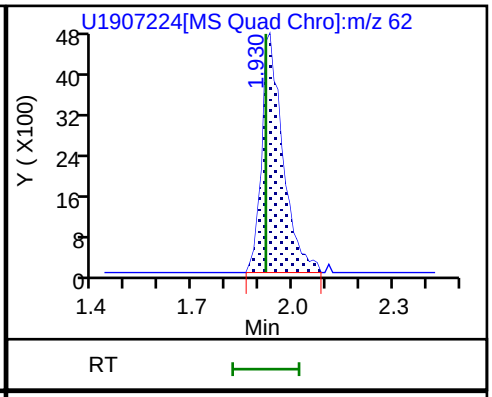
Eurofins TestAmerica, Canton

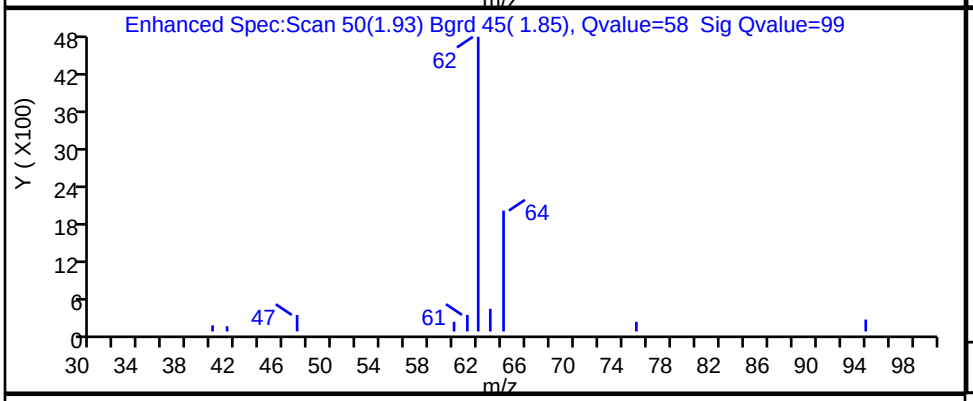
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d

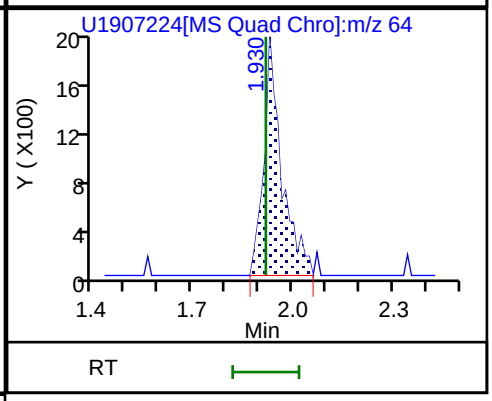
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

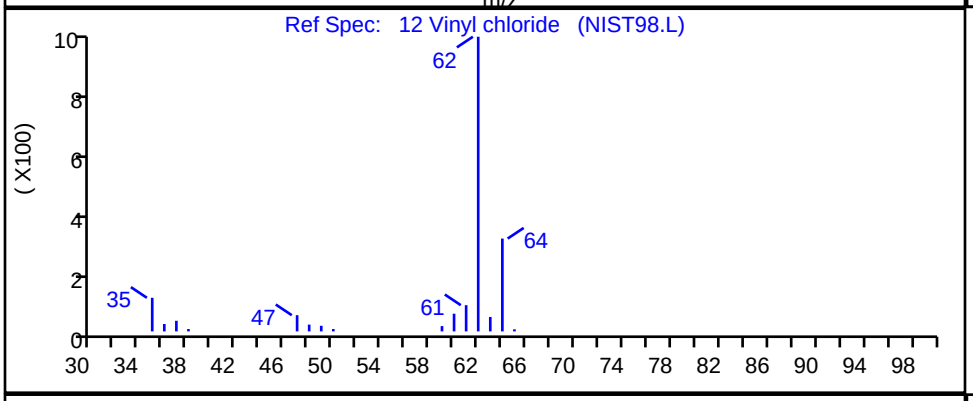
## 12 Vinyl chloride, CAS: 75-01-4

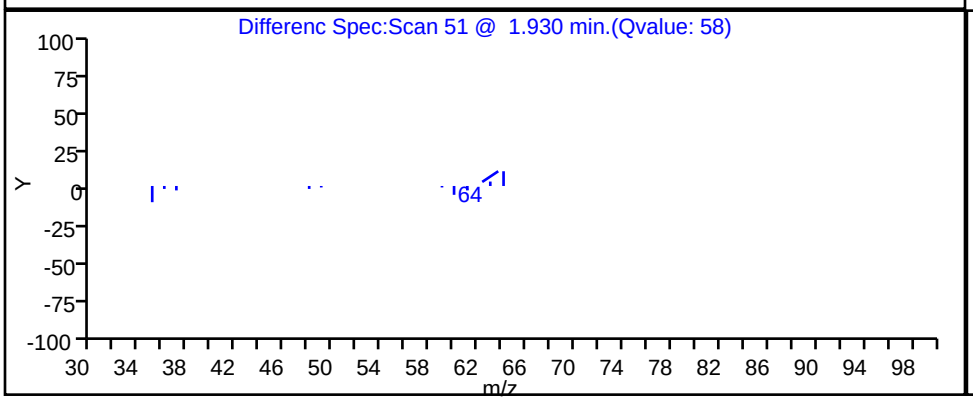


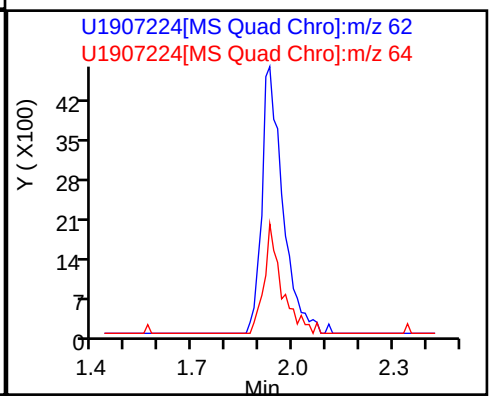



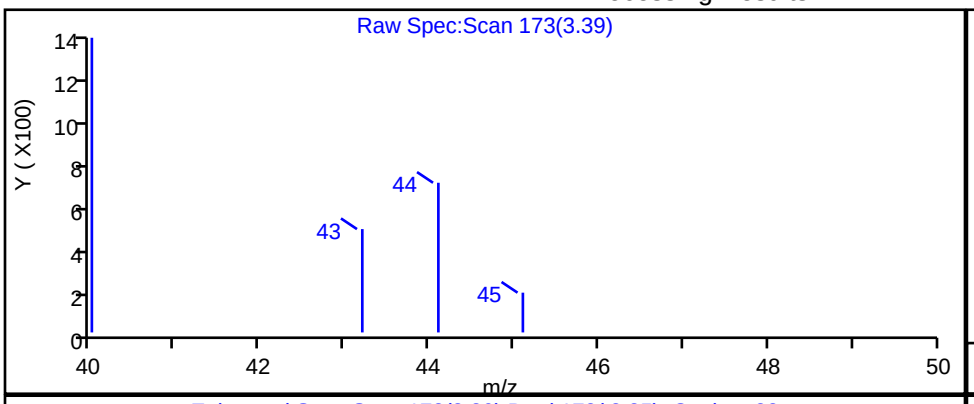
User Disabled Compound Report

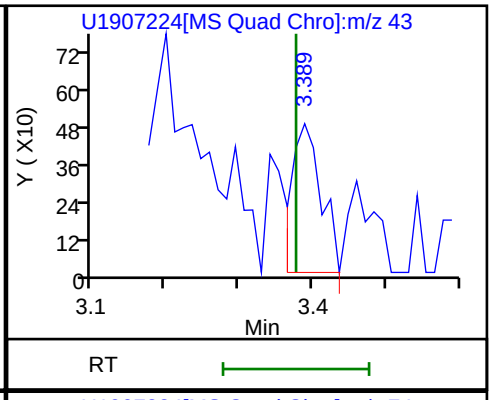
Eurofins TestAmerica, Canton

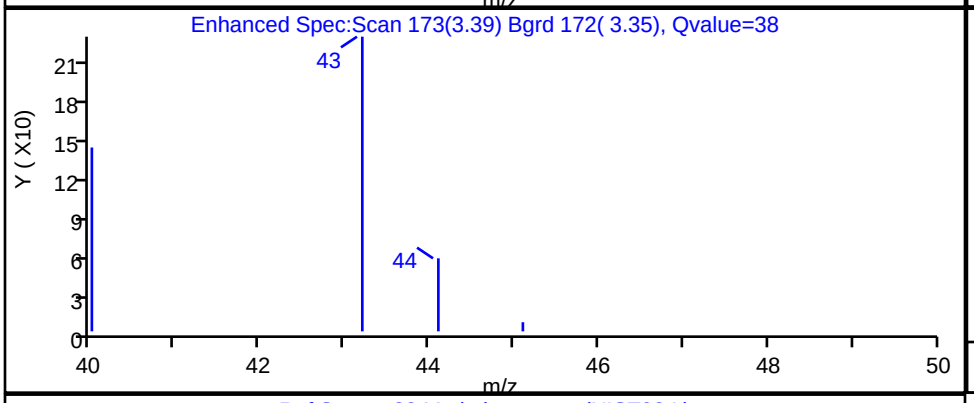
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907224.d | | | | |
| Injection Date: | 08-May-2019 19:16:56 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-3 | Lab Sample ID: | 240-112111-3 | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 10.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

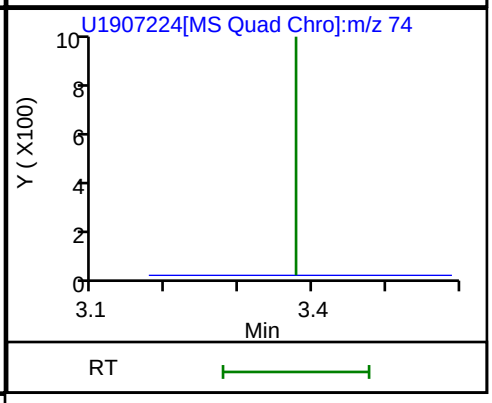
## 28 Methyl acetate, CAS: 79-20-9

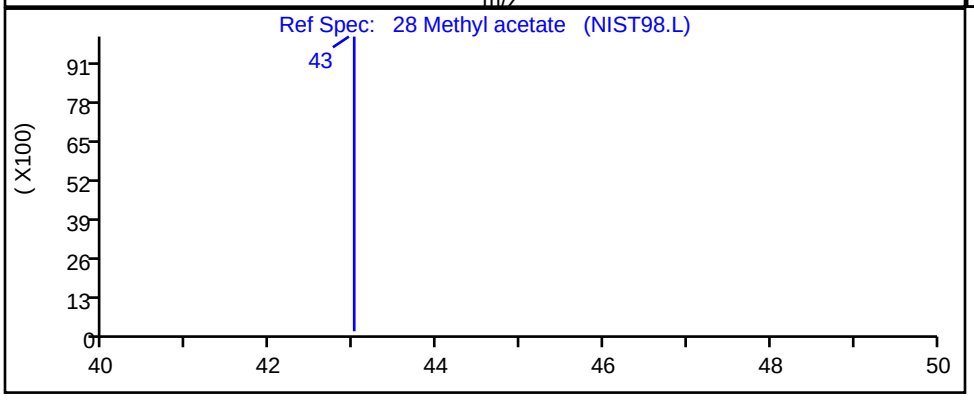
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.39 | 43.00 | 1383 | 0.143861 |
| 3.38 | 74.00 | 0 | |

Reviewer: laveyt, 08-May-2019 19:40:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619  Lab Sample ID: 240-112111-4

Matrix: Water  Lab File ID: U1907225.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 19:39

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 9.6 | U | 40 | 9.6 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5.2 | U | 40 | 5.2 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 16 | U | 40 | 16 |
| 79-00-5 | 1,1,2-Trichloroethane | 3.6 | U | 40 | 3.6 |
| 75-34-3 | 1,1-Dichloroethane | 6.8 | U | 40 | 6.8 |
| 75-35-4 | 1,1-Dichloroethene | 9.7 | J | 40 | 7.6 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U | 40 | 10 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 36 | U | 80 | 36 |
| 106-93-4 | Ethylene Dibromide | 4.8 | U | 40 | 4.8 |
| 95-50-1 | 1,2-Dichlorobenzene | 6.0 | U | 40 | 6.0 |
| 107-06-2 | 1,2-Dichloroethane | 8.4 | U | 40 | 8.4 |
| 78-87-5 | 1,2-Dichloropropane | 6.0 | U | 40 | 6.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 6.0 | U | 40 | 6.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 6.4 | U | 40 | 6.4 |
| 78-93-3 | 2-Butanone (MEK) | 46 | U | 400 | 46 |
| 591-78-6 | 2-Hexanone | 22 | U | 400 | 22 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 17 | U | 400 | 17 |
| 67-64-1 | Acetone | 220 | U | 400 | 220 |
| 71-43-2 | Benzene | 5.2 | U | 40 | 5.2 |
| 75-27-4 | Dichlorobromomethane | 6.8 | U | 40 | 6.8 |
| 75-25-2 | Bromoform | 30 | U | 40 | 30 |
| 74-83-9 | Bromomethane | 17 | U | 40 | 17 |
| 75-15-0 | Carbon disulfide | 11 | U | 40 | 11 |
| 56-23-5 | Carbon tetrachloride | 10 | U | 40 | 10 |
| 108-90-7 | Chlorobenzene | 5.6 | U | 40 | 5.6 |
| 75-00-3 | Chloroethane | 33 | U | 40 | 33 |
| 67-66-3 | Chloroform | 5.2 | U | 40 | 5.2 |
| 74-87-3 | Chloromethane | 8.0 | U | 40 | 8.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 1400 |  | 40 | 6.4 |
| 10061-01-5 | cis-1,3-Dichloropropene | 24 | U | 40 | 24 |
| 110-82-7 | Cyclohexane | 9.6 | U | 40 | 9.6 |
| 124-48-1 | Chlorodibromomethane | 16 | U | 40 | 16 |
| 75-71-8 | Dichlorodifluoromethane | 14 | U | 40 | 14 |
| 100-41-4 | Ethylbenzene | 4.4 | U | 40 | 4.4 |
| 98-82-8 | Isopropylbenzene | 3.6 | U | 40 | 3.6 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619  Lab Sample ID: 240-112111-4

Matrix: Water  Lab File ID: U1907225.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 19:39

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 69 | U | 400 | 69 |
| 1634-04-4 | Methyl tert-butyl ether | 2.8 | U | 40 | 2.8 |
| 108-87-2 | Methylcyclohexane | 13 | U | 40 | 13 |
| 75-09-2 | Methylene Chloride | 100 | U | 200 | 100 |
| 100-42-5 | Styrene | 4.0 | U | 40 | 4.0 |
| 127-18-4 | Tetrachloroethene | 6.0 | U | 40 | 6.0 |
| 108-88-3 | Toluene | 5.6 | U | 40 | 5.6 |
| 156-60-5 | trans-1,2-Dichloroethene | 13 | J | 40 | 7.6 |
| 10061-02-6 | trans-1,3-Dichloropropene | 27 | U | 40 | 27 |
| 79-01-6 | Trichloroethene | 390 | | 40 | 4.0 |
| 75-69-4 | Trichlorofluoromethane | 18 | U | 40 | 18 |
| 75-01-4 | Vinyl chloride | 260 | | 40 | 8.0 |
| 1330-20-7 | Xylenes, Total | 6.0 | U | 80 | 6.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 96 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 97 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 91 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d
Lims ID: 240-112111-A-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 08-May-2019 19:39:12 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 20:46:10 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 20:05:04

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 857772 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 690016 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 341367 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 57 | 224667 | 19.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 94 | 238731 | 18.0 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 92 | 795063 | 19.2 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 98 | 284897 | 18.3 | |
| 9 Dichlorodifluoromethane | 85 | | 1.598 | | | | ND | |
| 10 Chloromethane | 50 | | 1.812 | | | | ND | |
| 12 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 96 | 82519 | 6.46 | |
| 13 Bromomethane | 94 | | 2.215 | | | | ND | |
| 15 Chloroethane | 64 | | 2.298 | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.559 | | | | ND | |
| 20 1,1-Dichloroethene | 61 | 3.057 | 3.033 | 0.024 | 16 | 3742 | 0.2431 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.045 | | | | ND | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 87 | 14295 | 4.25 | |
| 25 Carbon disulfide | 76 | | 3.258 | | | | ND | |
| 28 Methyl acetate | 43 | | 3.377 | | | | ND | U |
| 29 Methylene Chloride | 49 | 3.483 | 3.484 | -0.001 | 65 | 8093 | 0.6629 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.733 | -0.001 | 77 | 4882 | 0.3361 | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 4.112 | | | | ND | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 64 | 441772 | 35.6 | |
| 40 2-Butanone (MEK) | 72 | | 4.634 | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.085 | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | ND | |
| 54 Benzene | 78 | | 5.417 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.417 | | | | ND | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 91 | 130918 | 9.66 | |
| 61 Methylcyclohexane | 83 | | 6.176 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.437 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.840 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.362 | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.694 | | | | ND | |
| 77 2-Hexanone | 43 | | 7.765 | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.931 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.524 | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.812 | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.129 | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | | 13.018 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

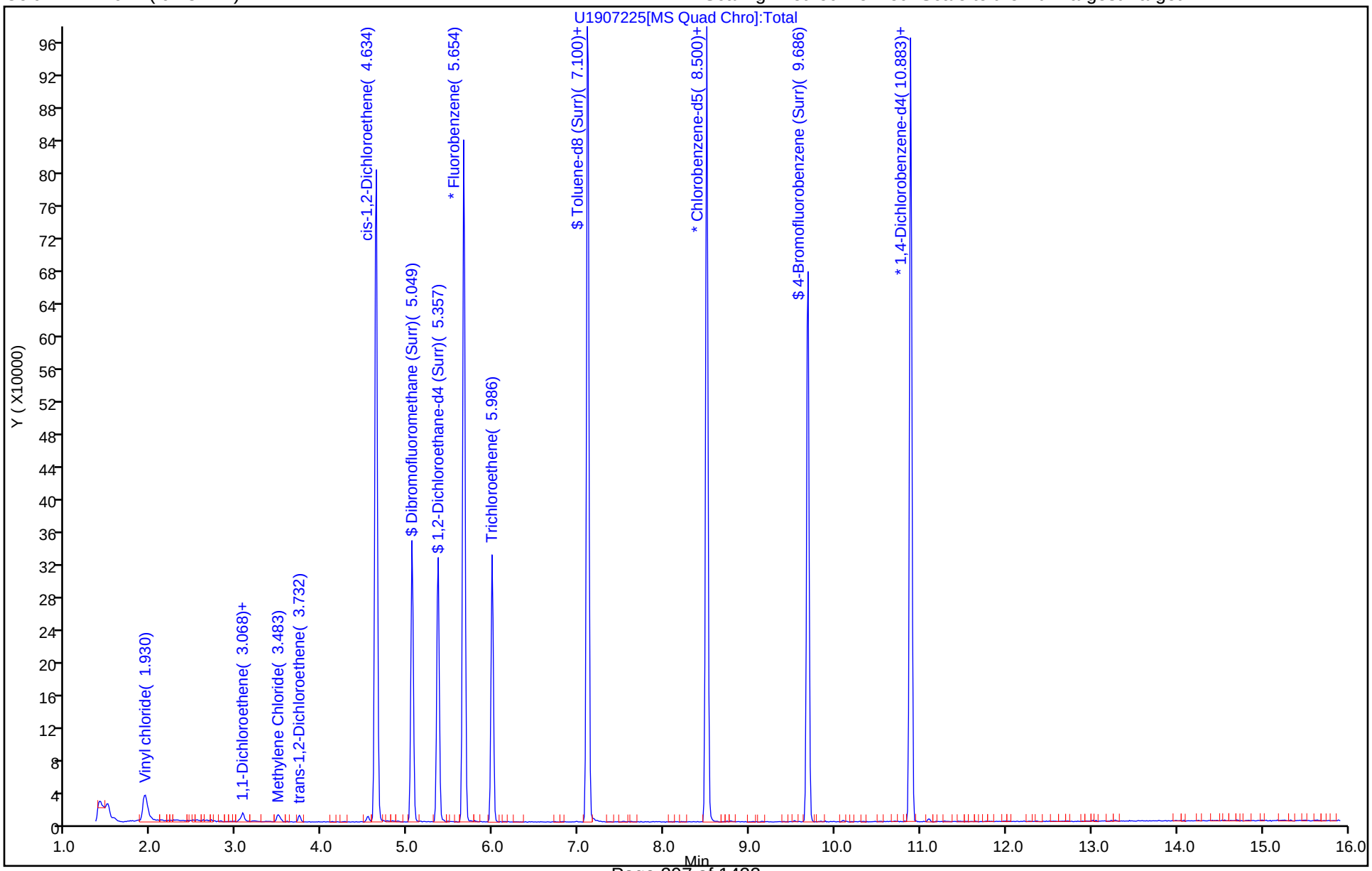
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | Worklist Smp#: | 14 |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d
Lims ID: 240-112111-A-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 08-May-2019 19:39:12 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-014
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 20:46:10 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 20:05:04

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.5 | 3891.79 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.0 | 3600.49 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.2 | 3843.10 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.3 | 3659.61 |

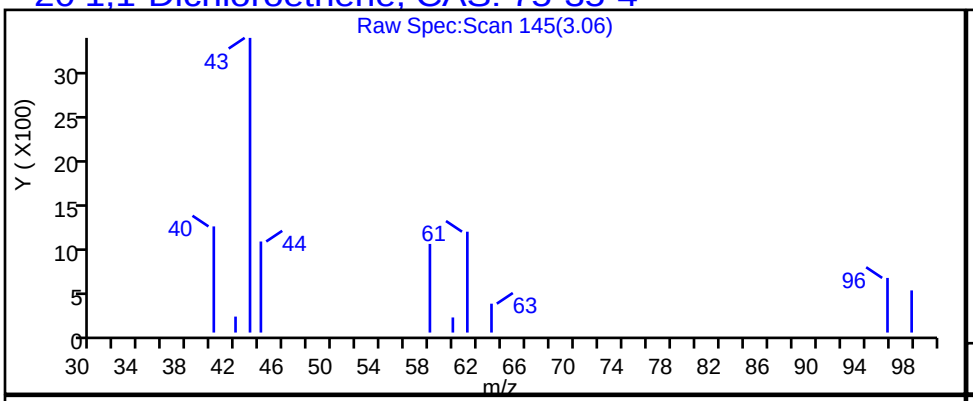
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

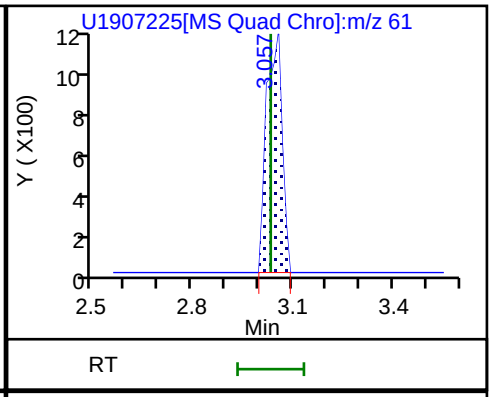
Eurofins TestAmerica, Canton

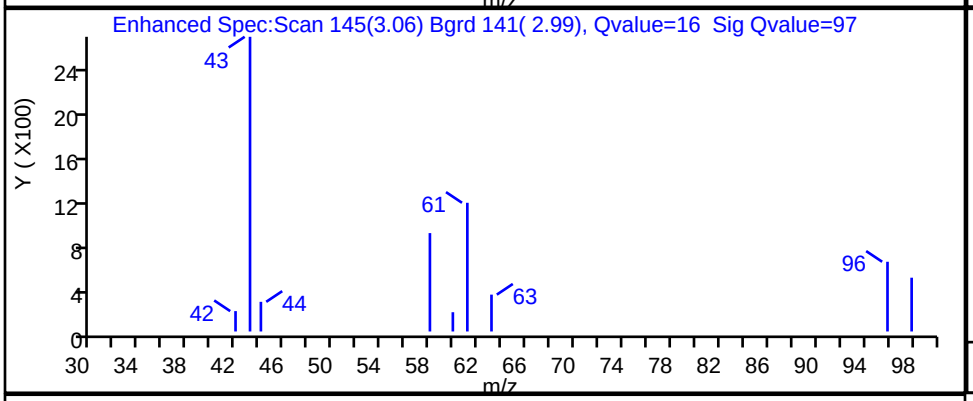
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

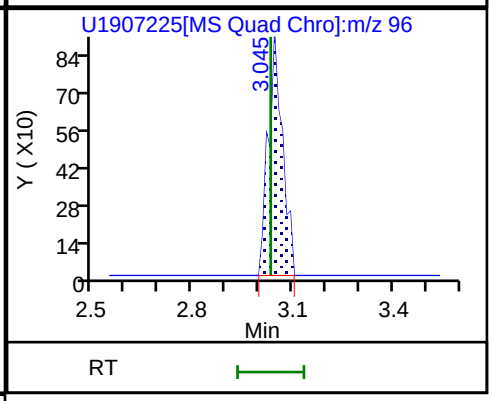
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

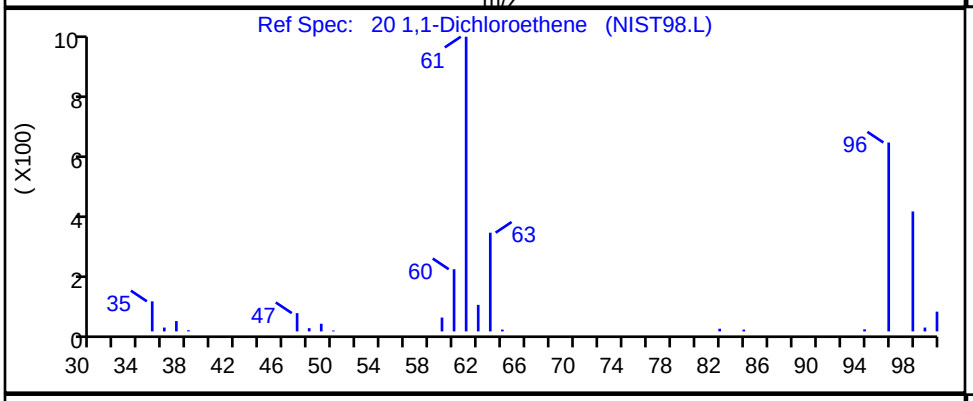
## 20 1,1-Dichloroethene, CAS: 75-35-4

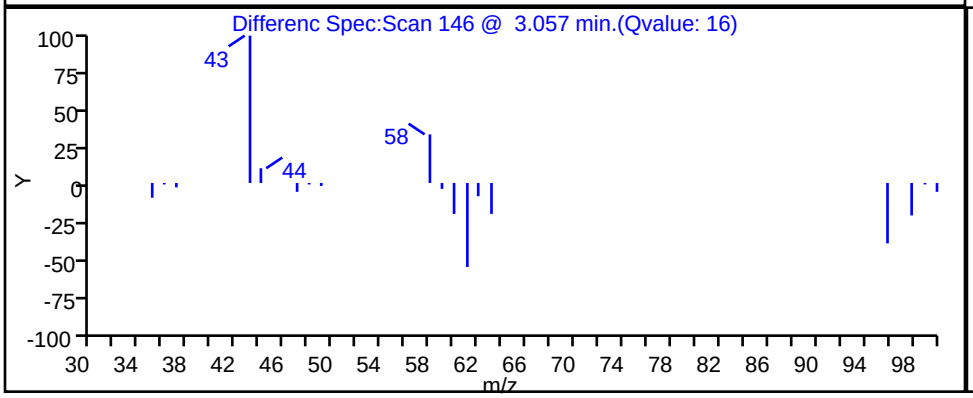


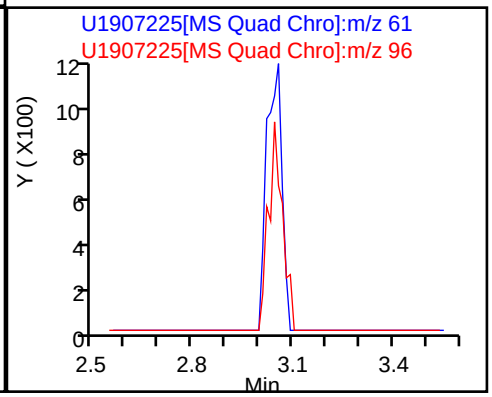



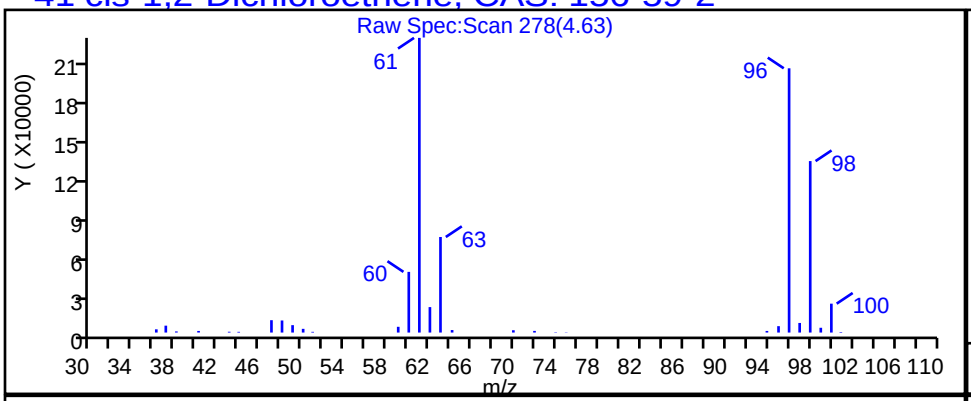
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

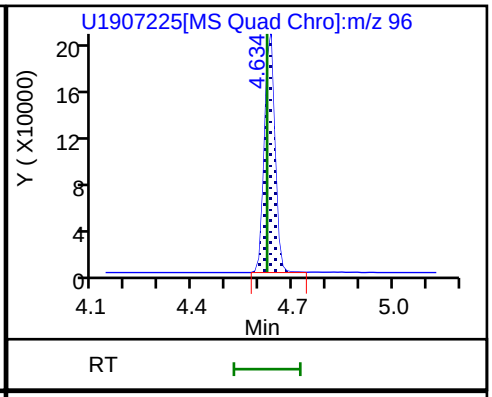
Eurofins TestAmerica, Canton

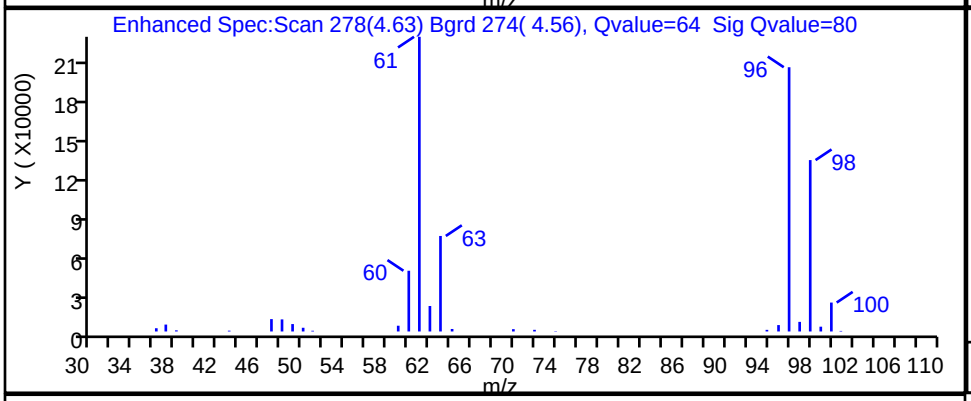
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

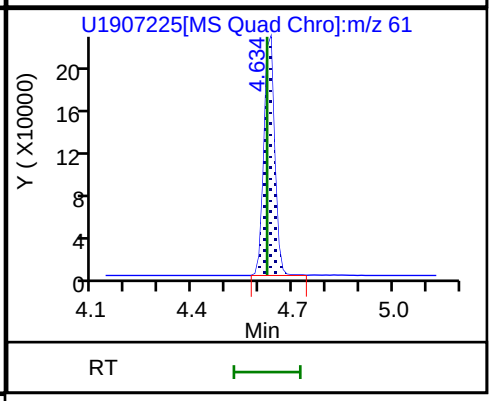
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

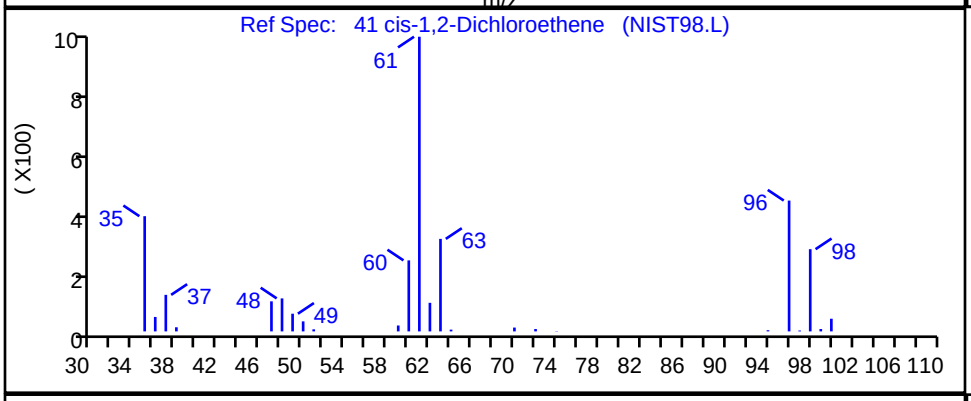
## 41 cis-1,2-Dichloroethene, CAS: 156-59-2

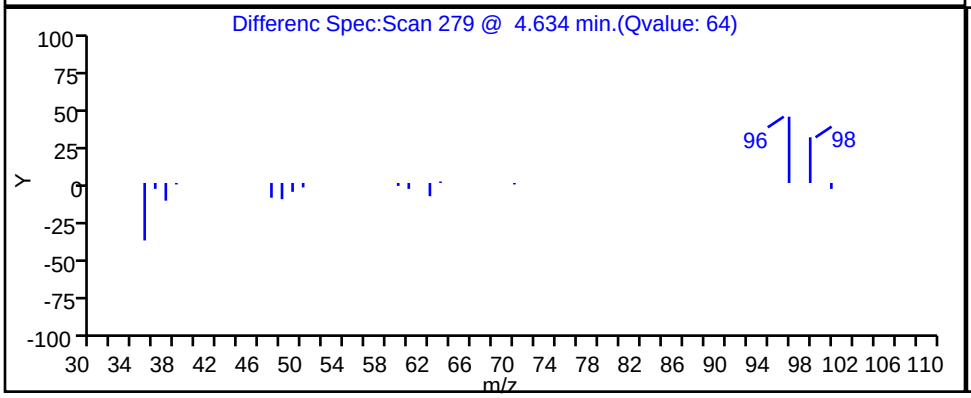


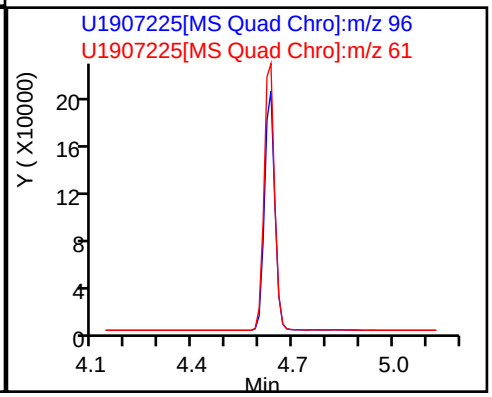



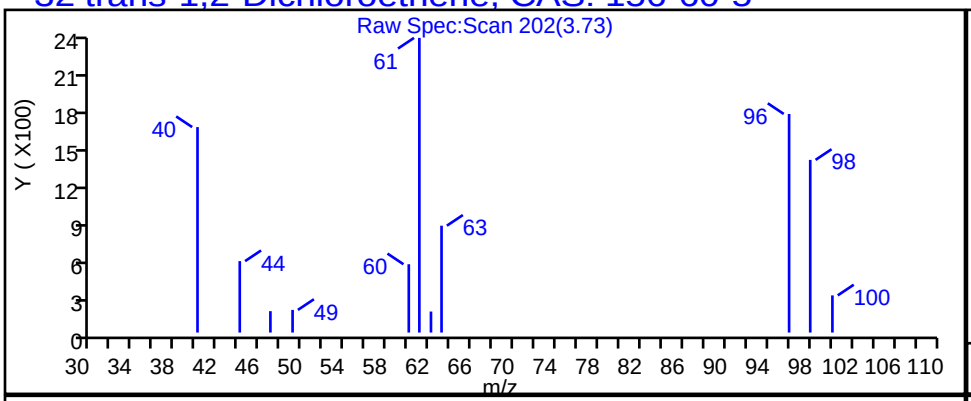
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

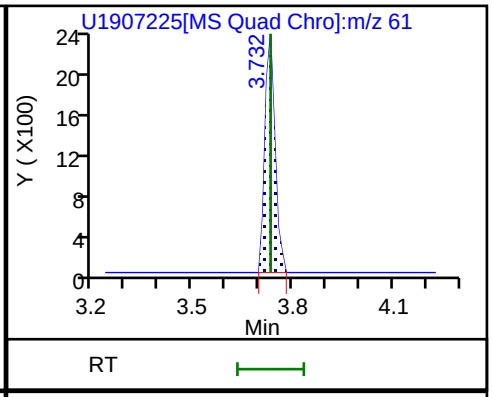
Eurofins TestAmerica, Canton

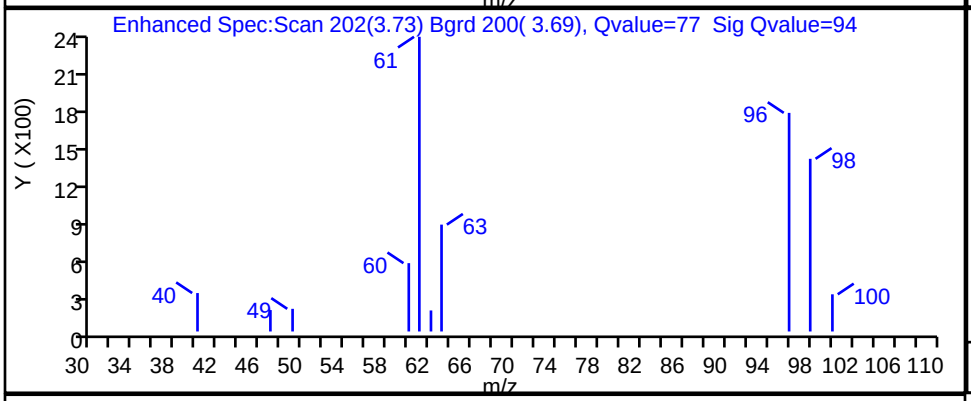
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

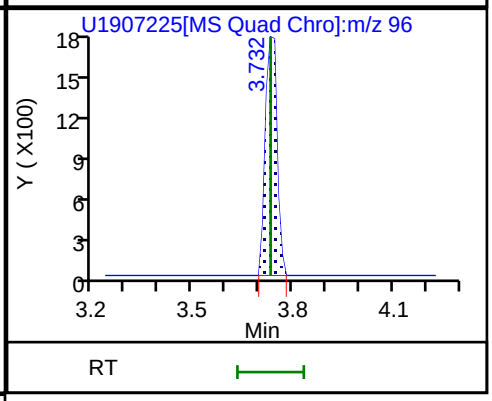
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

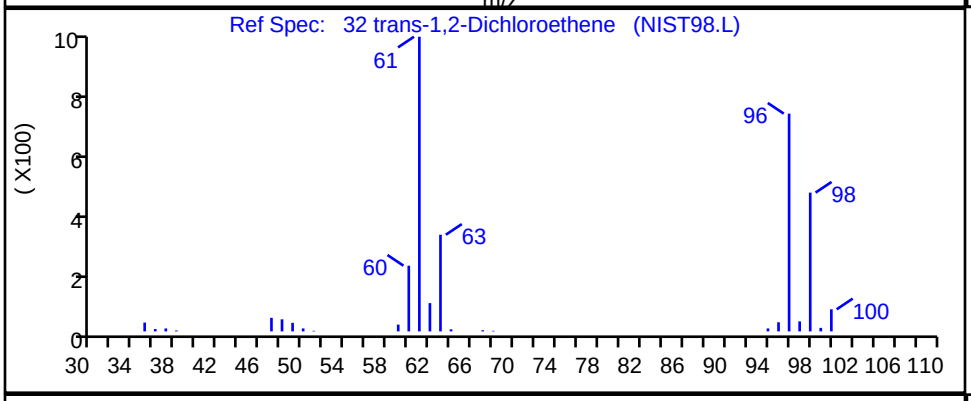
## 32 trans-1,2-Dichloroethene, CAS: 156-60-5

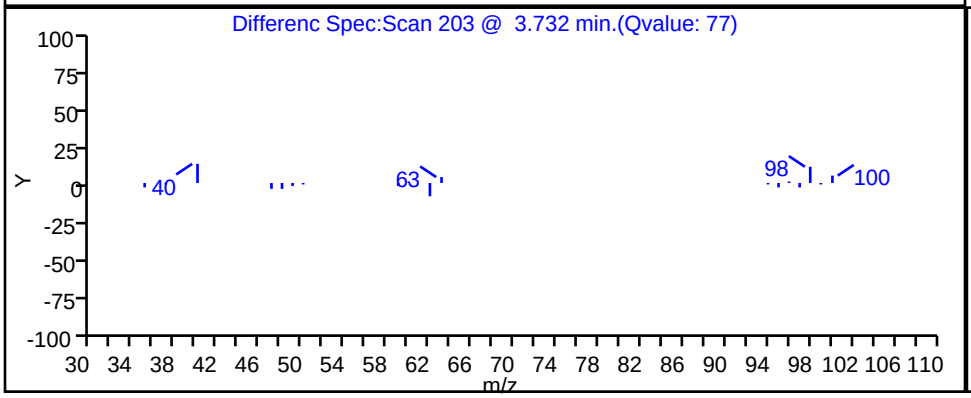


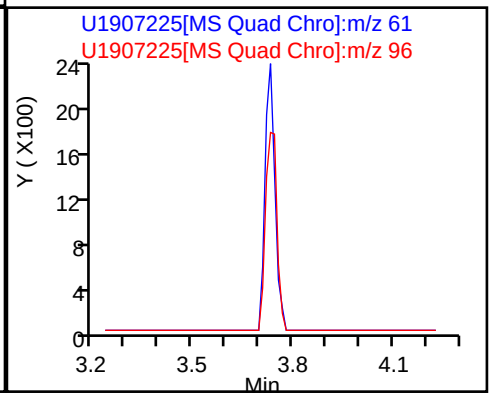



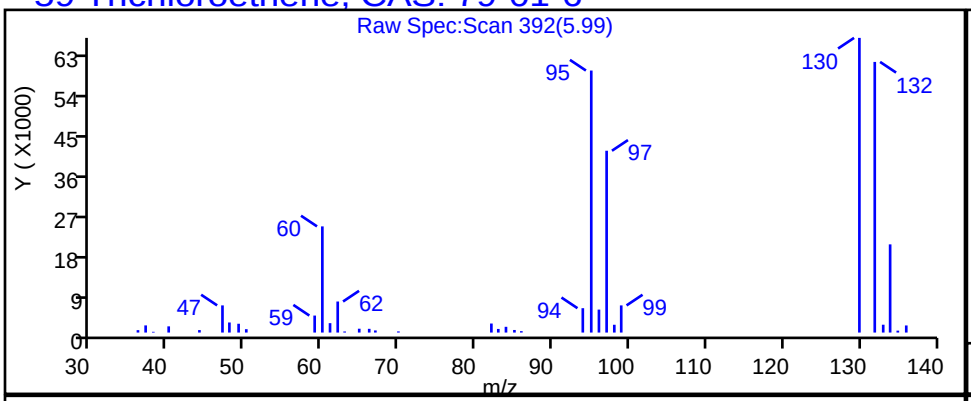
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

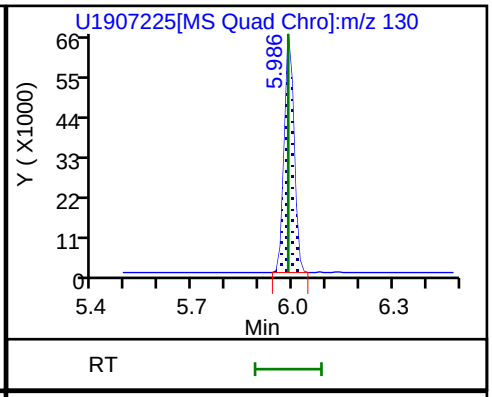
Eurofins TestAmerica, Canton

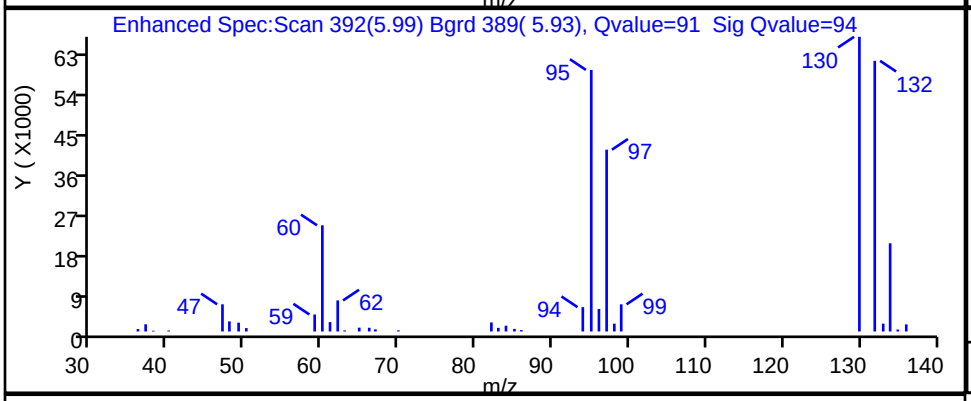
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

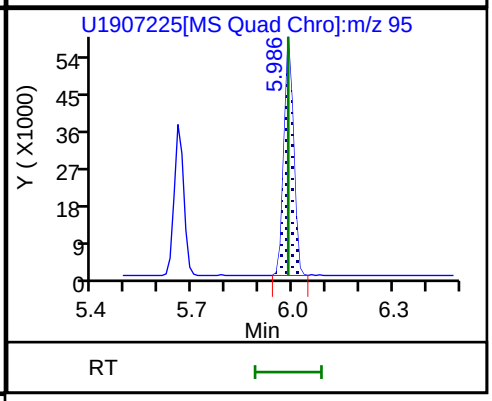
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

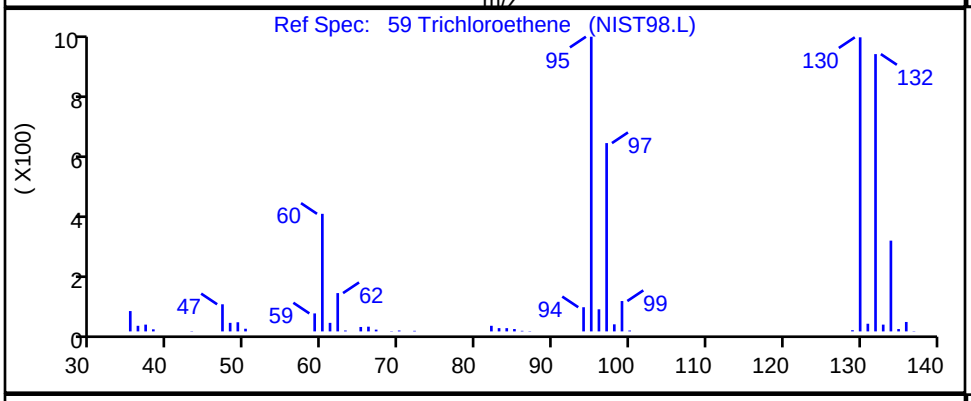
## 59 Trichloroethene, CAS: 79-01-6

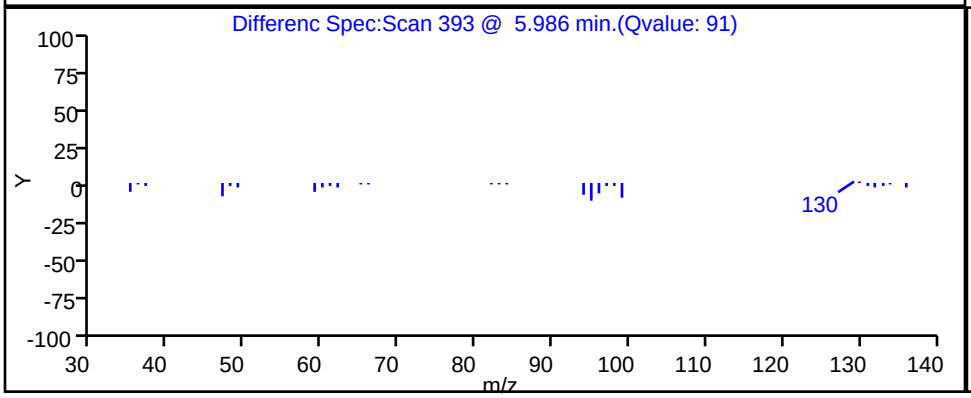


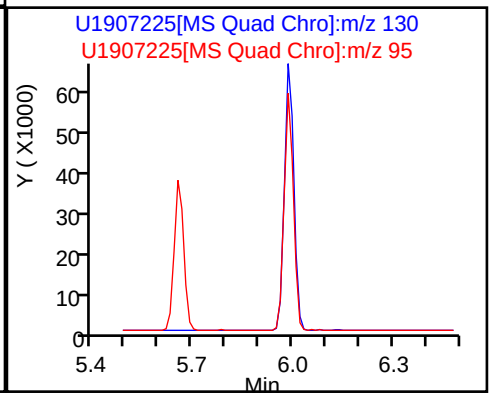



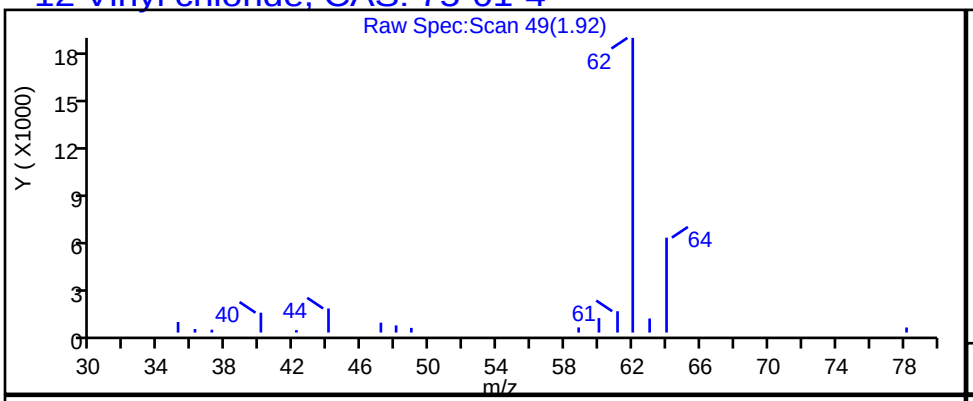
Report Date: 08-May-2019 20:46:26 Chrom Revision: 2.3 03-May-2019 15:52:00

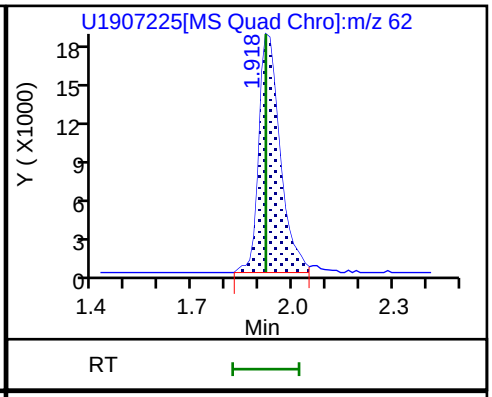
Eurofins TestAmerica, Canton

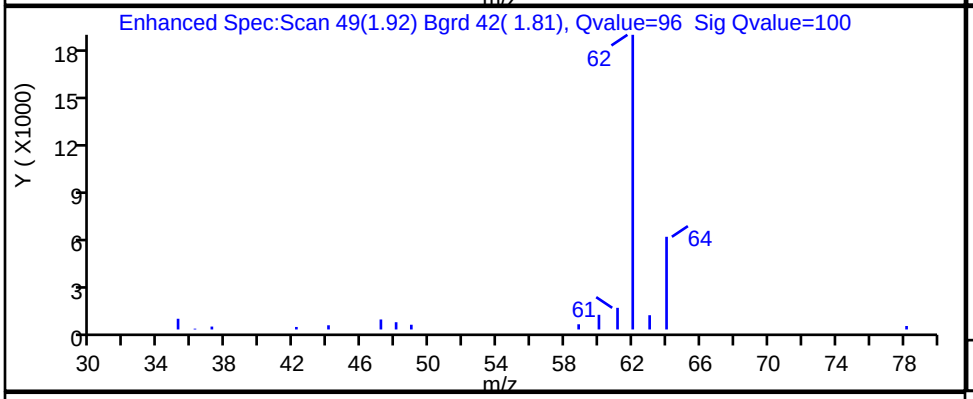
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d

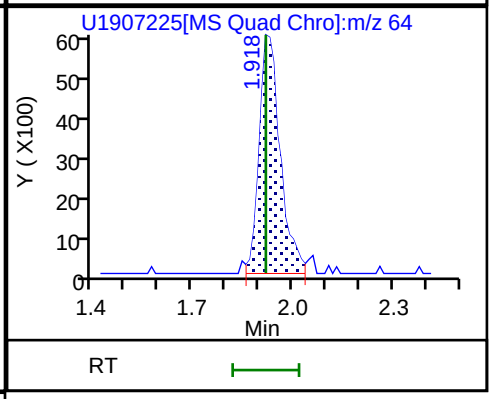
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

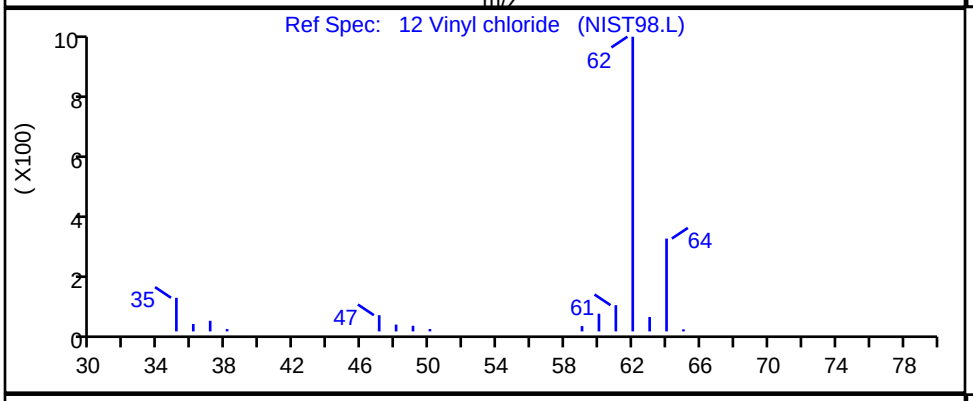
## 12 Vinyl chloride, CAS: 75-01-4

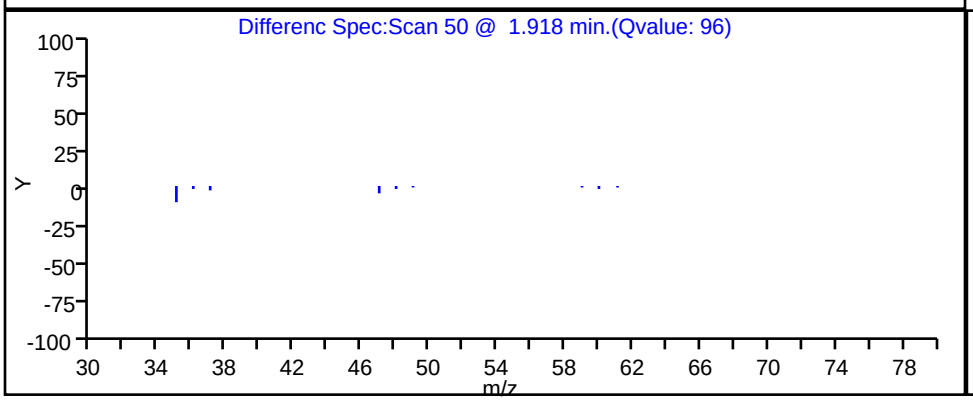


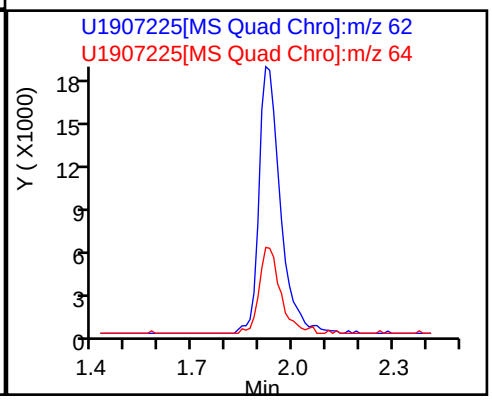



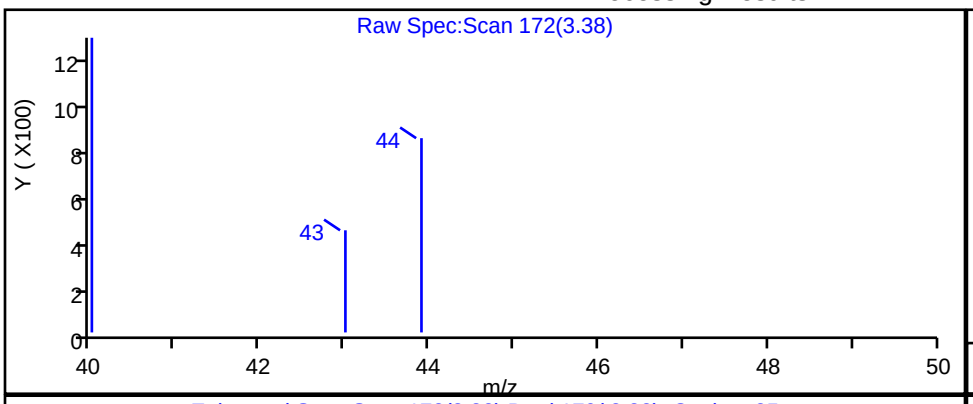
User Disabled Compound Report

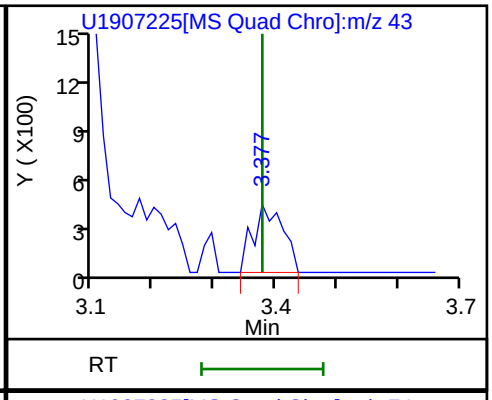
Eurofins TestAmerica, Canton

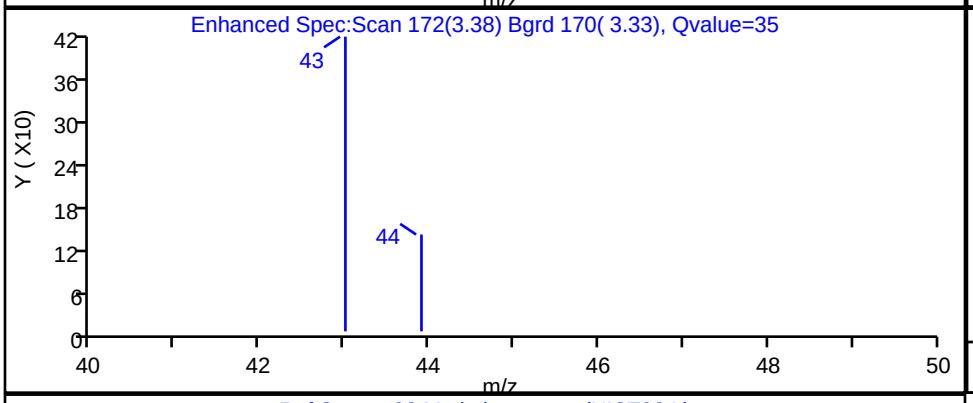
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907225.d | | | | |
| Injection Date: | 08-May-2019 19:39:12 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

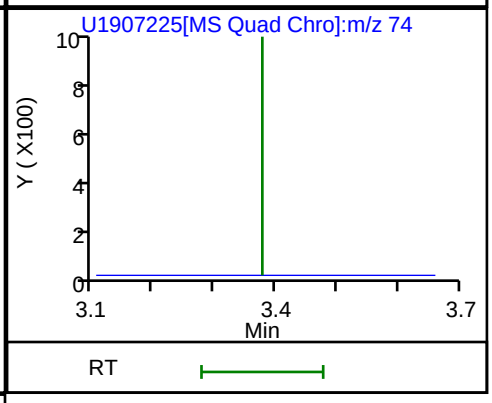
## 28 Methyl acetate, CAS: 79-20-9

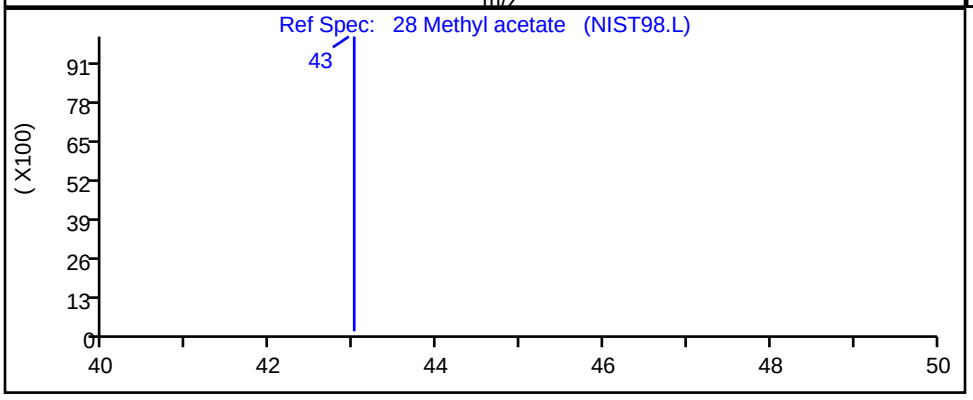
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.38 | 43.00 | 1418 | 0.142034 |
| 3.38 | 74.00 | 0 | |

Reviewer: laveyt, 08-May-2019 20:04:46

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619  Lab Sample ID: 240-112111-5

Matrix: Water  Lab File ID: U1907226.d

Analysis Method: 8260C  Date Collected: 05/06/2019 14:57

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 20:01

Soil Aliquot Vol:  Dilution Factor: 25

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 6.0 | U | 25 | 6.0 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 3.3 | U | 25 | 3.3 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10 | U | 25 | 10 |
| 79-00-5 | 1,1,2-Trichloroethane | 2.3 | U | 25 | 2.3 |
| 75-34-3 | 1,1-Dichloroethane | 4.3 | U | 25 | 4.3 |
| 75-35-4 | 1,1-Dichloroethene | 29 | | 25 | 4.8 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 6.5 | U | 25 | 6.5 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 23 | U | 50 | 23 |
| 106-93-4 | Ethylene Dibromide | 3.0 | U | 25 | 3.0 |
| 95-50-1 | 1,2-Dichlorobenzene | 3.8 | U | 25 | 3.8 |
| 107-06-2 | 1,2-Dichloroethane | 5.3 | U | 25 | 5.3 |
| 78-87-5 | 1,2-Dichloropropane | 3.8 | U | 25 | 3.8 |
| 541-73-1 | 1,3-Dichlorobenzene | 3.8 | U | 25 | 3.8 |
| 106-46-7 | 1,4-Dichlorobenzene | 4.0 | U | 25 | 4.0 |
| 78-93-3 | 2-Butanone (MEK) | 29 | U | 250 | 29 |
| 591-78-6 | 2-Hexanone | 14 | U | 250 | 14 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 11 | U | 250 | 11 |
| 67-64-1 | Acetone | 140 | U | 250 | 140 |
| 71-43-2 | Benzene | 3.3 | U | 25 | 3.3 |
| 75-27-4 | Dichlorobromomethane | 4.3 | U | 25 | 4.3 |
| 75-25-2 | Bromoform | 19 | U | 25 | 19 |
| 74-83-9 | Bromomethane | 11 | U | 25 | 11 |
| 75-15-0 | Carbon disulfide | 7.0 | U | 25 | 7.0 |
| 56-23-5 | Carbon tetrachloride | 6.5 | U | 25 | 6.5 |
| 108-90-7 | Chlorobenzene | 3.5 | U | 25 | 3.5 |
| 75-00-3 | Chloroethane | 21 | U | 25 | 21 |
| 67-66-3 | Chloroform | 3.3 | U | 25 | 3.3 |
| 74-87-3 | Chloromethane | 5.0 | U | 25 | 5.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 1300 | | 25 | 4.0 |
| 10061-01-5 | cis-1,3-Dichloropropene | 15 | U | 25 | 15 |
| 110-82-7 | Cyclohexane | 6.0 | U | 25 | 6.0 |
| 124-48-1 | Chlorodibromomethane | 9.8 | U | 25 | 9.8 |
| 75-71-8 | Dichlorodifluoromethane | 8.8 | U | 25 | 8.8 |
| 100-41-4 | Ethylbenzene | 2.8 | U | 25 | 2.8 |
| 98-82-8 | Isopropylbenzene | 2.3 | U | 25 | 2.3 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619  Lab Sample ID: 240-112111-5

Matrix: Water  Lab File ID: U1907226.d

Analysis Method: 8260C  Date Collected: 05/06/2019 14:57

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 20:01

Soil Aliquot Vol:  Dilution Factor: 25

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 43 | U | 250 | 43 |
| 1634-04-4 | Methyl tert-butyl ether | 1.8 | U | 25 | 1.8 |
| 108-87-2 | Methylcyclohexane | 8.3 | U | 25 | 8.3 |
| 75-09-2 | Methylene Chloride | 66 | U | 130 | 66 |
| 100-42-5 | Styrene | 2.5 | U | 25 | 2.5 |
| 127-18-4 | Tetrachloroethene | 3.8 | U | 25 | 3.8 |
| 108-88-3 | Toluene | 3.5 | U | 25 | 3.5 |
| 156-60-5 | trans-1,2-Dichloroethene | 17 | J | 25 | 4.8 |
| 10061-02-6 | trans-1,3-Dichloropropene | 17 | U | 25 | 17 |
| 79-01-6 | Trichloroethene | 1200 | | 25 | 2.5 |
| 75-69-4 | Trichlorofluoromethane | 11 | U | 25 | 11 |
| 75-01-4 | Vinyl chloride | 150 | | 25 | 5.0 |
| 1330-20-7 | Xylenes, Total | 3.8 | U | 50 | 3.8 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 102 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 97 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 93 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d
Lims ID: 240-112111-A-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 08-May-2019 20:01:26 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 mL Dil. Factor: 25.0000
Sample Info: 240-0086906-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 18:20:13 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 20:26:17

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.666 | 5.654 | 0.012 | 100 | 820288 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 81 | 636379 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.884 | 10.883 | 0.001 | 92 | 328033 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 56 | 225815 | 20.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 94 | 236221 | 18.6 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.112 | 7.101 | 0.011 | 91 | 761935 | 20.0 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 277225 | 19.3 | |
| 9 Dichlorodifluoromethane | 85 | | 1.598 | | | | ND | |
| 10 Chloromethane | 50 | | 1.812 | | | | ND | |
| 12 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 81 | 72268 | 5.91 | |
| 13 Bromomethane | 94 | | 2.215 | | | | ND | |
| 15 Chloroethane | 64 | | 2.298 | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.559 | | | | ND | |
| 20 1,1-Dichloroethene | 61 | 3.057 | 3.033 | 0.024 | 75 | 17155 | 1.17 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.045 | | | | ND | |
| 22 Acetone | 43 | 3.081 | 3.069 | 0.011 | 96 | 15519 | 4.83 | |
| 25 Carbon disulfide | 76 | | 3.258 | | | | ND | |
| 28 Methyl acetate | 43 | | 3.377 | | | | ND | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 72 | 8681 | 0.7436 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 87 | 9407 | 0.6772 | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 5 | 2376 | 0.1431 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 65 | 639599 | 53.9 | |
| 40 2-Butanone (MEK) | 72 | | 4.634 | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.085 | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | ND | |
| 54 Benzene | 78 | | 5.417 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.417 | | | | ND | |
| 59 Trichloroethene | 130 | 5.998 | 5.986 | 0.012 | 90 | 621754 | 48.0 | |
| 61 Methylcyclohexane | 83 | | 6.176 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.437 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.840 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.362 | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.694 | | | | ND | |
| 77 2-Hexanone | 43 | | 7.765 | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.931 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.524 | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.812 | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.129 | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | | 13.018 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | ND | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

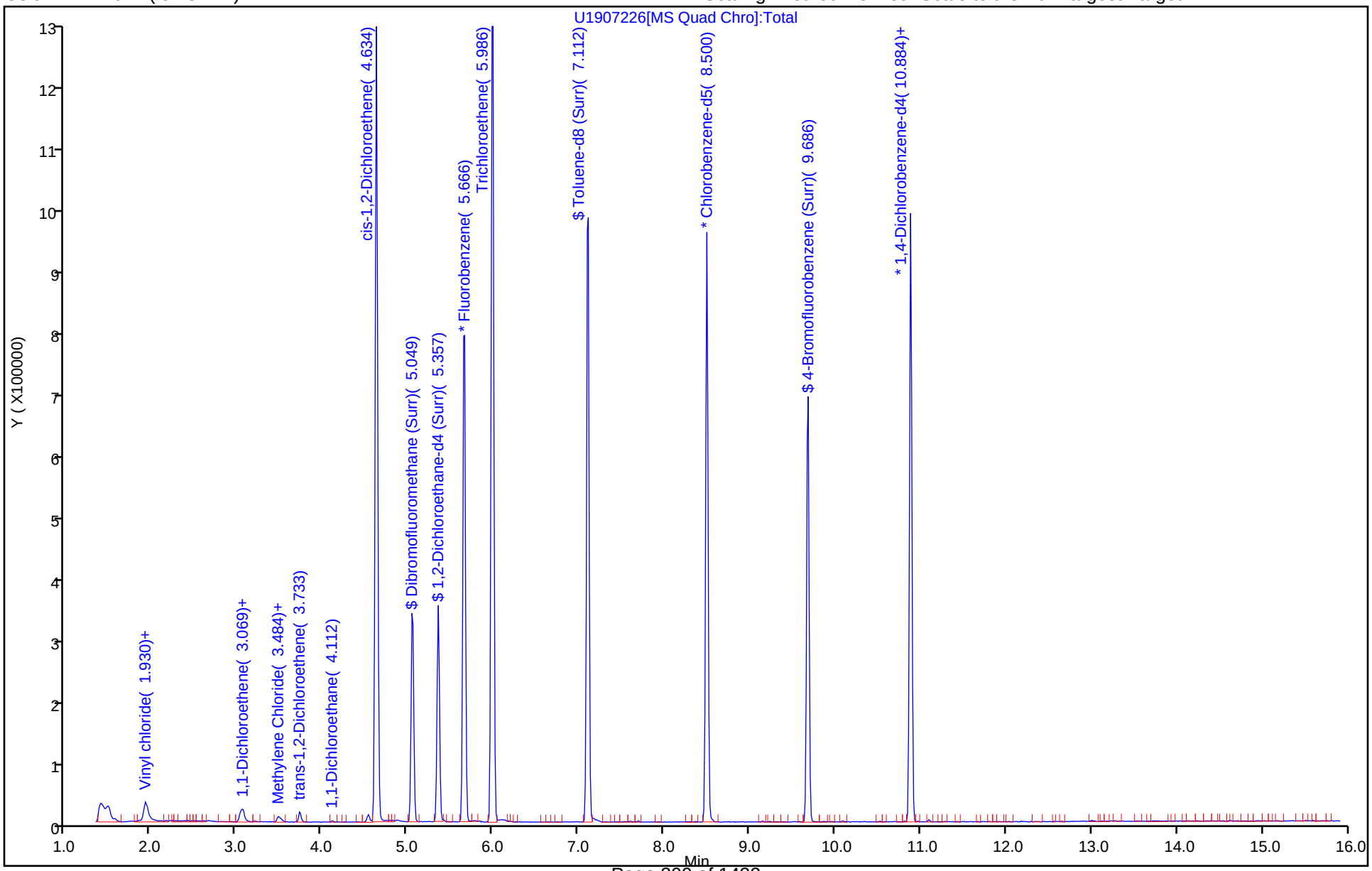
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | Worklist Smp#: | 15 |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d
Lims ID: 240-112111-A-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 08-May-2019 20:01:26 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 5.0 mL Dil. Factor: 25.0000
Sample Info: 240-0086906-015
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 18:20:13 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 20:26:17

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 20.5 | 2556.52 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.6 | 2328.39 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.0 | 2495.87 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.3 | 2413.25 |

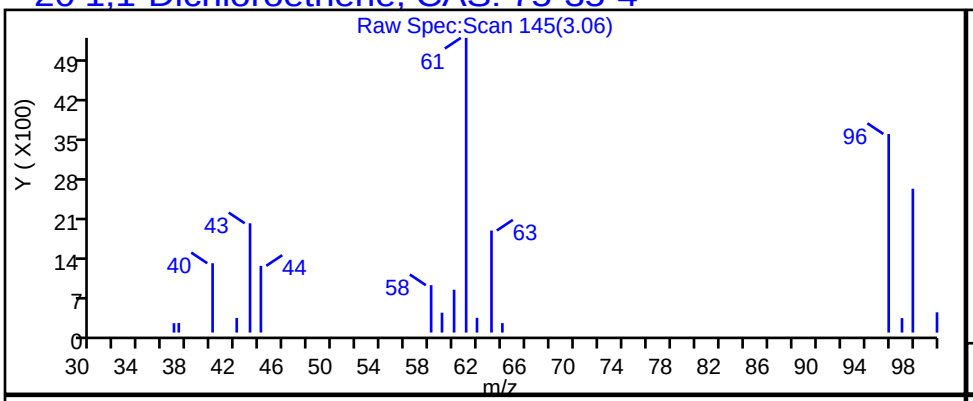
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

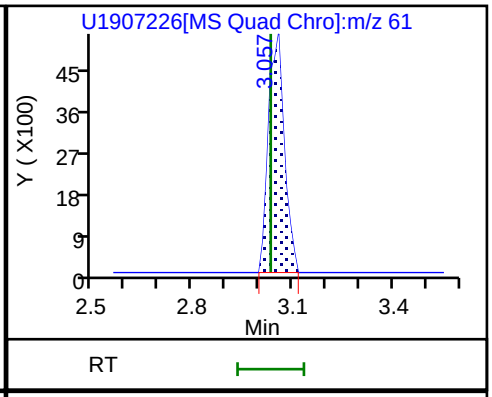
Eurofins TestAmerica, Canton

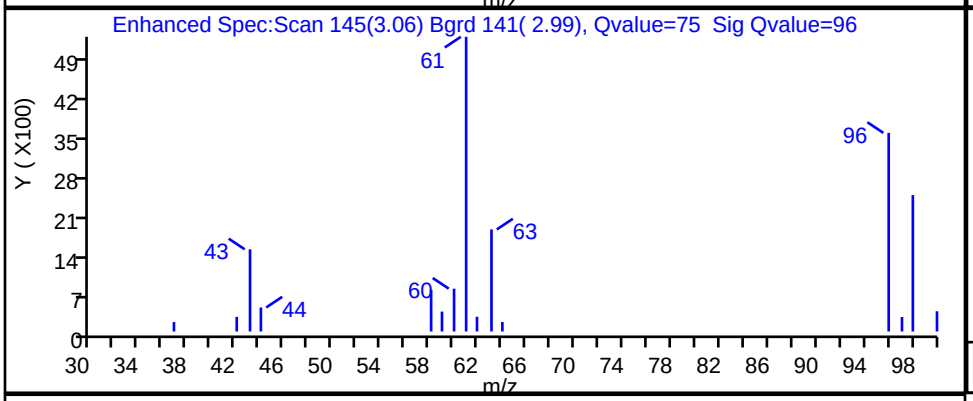
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d

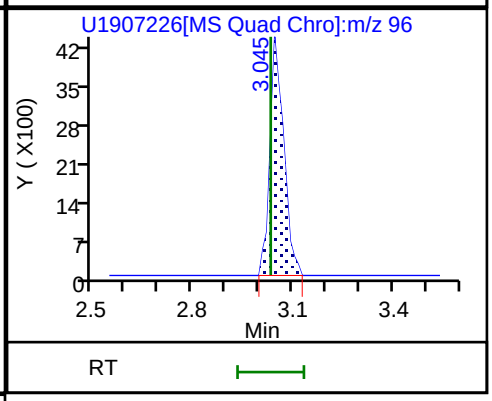
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 15 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

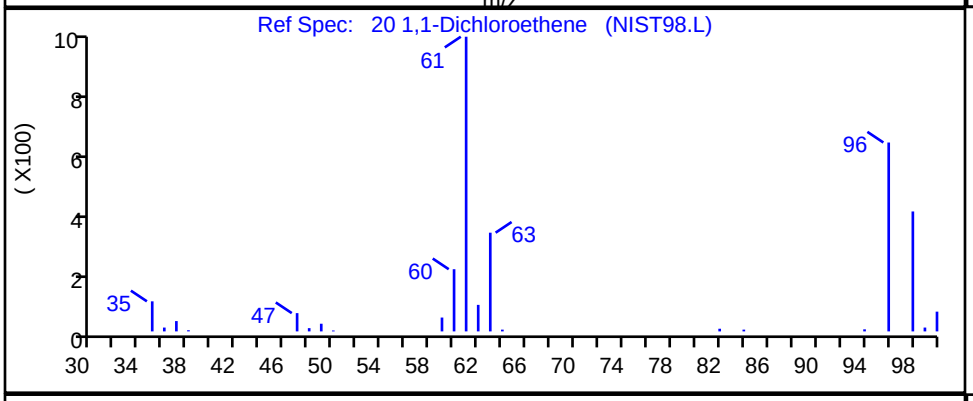
## 20 1,1-Dichloroethene, CAS: 75-35-4

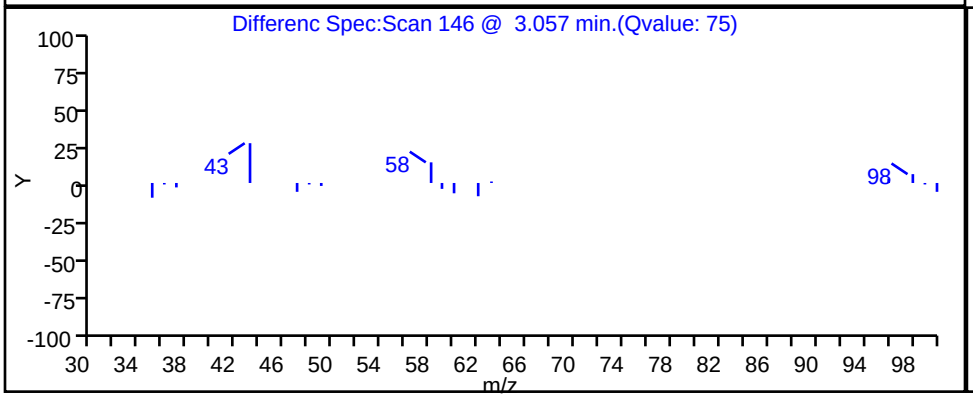


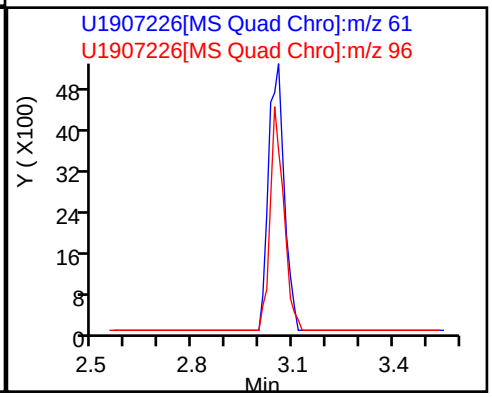



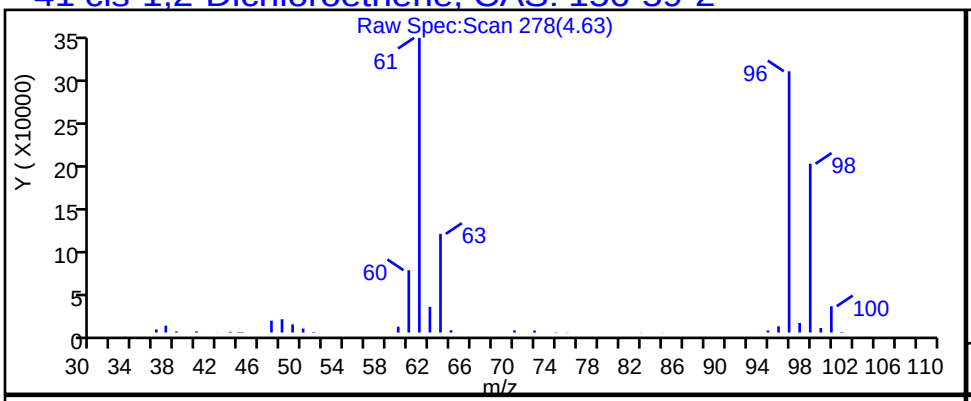
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

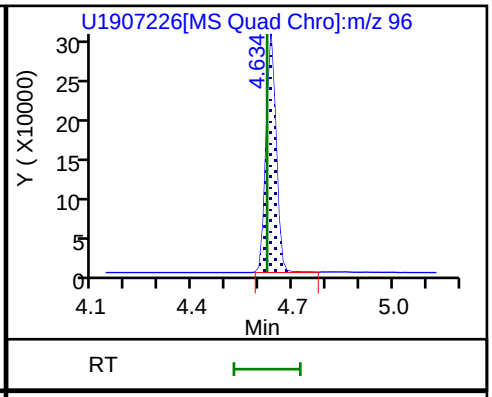
Eurofins TestAmerica, Canton

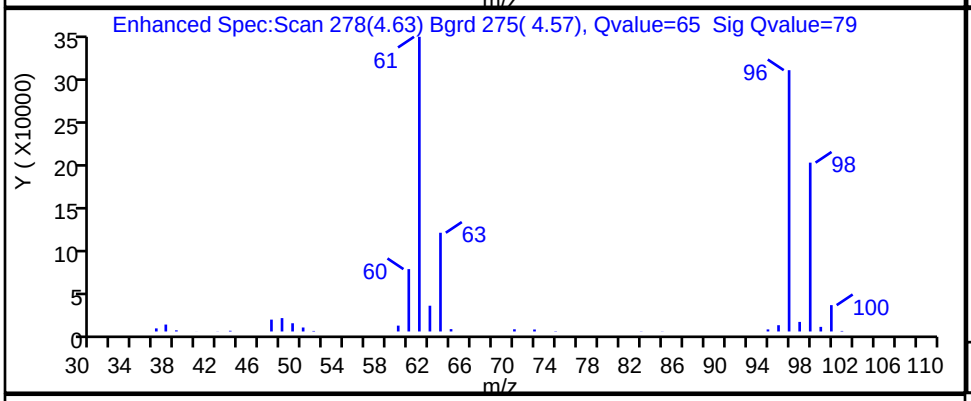
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d

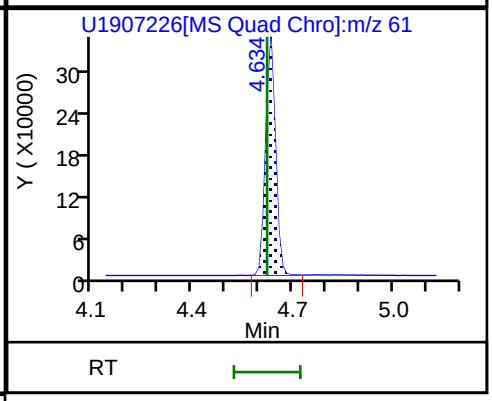
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 15 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

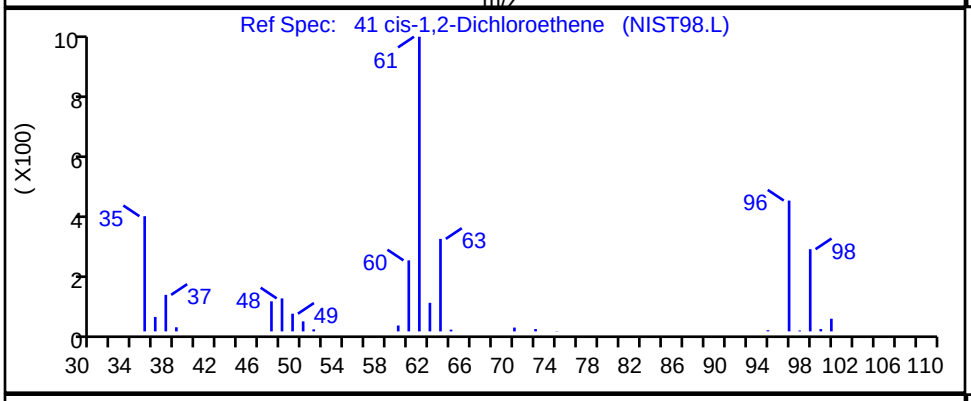
## 41 cis-1,2-Dichloroethene, CAS: 156-59-2

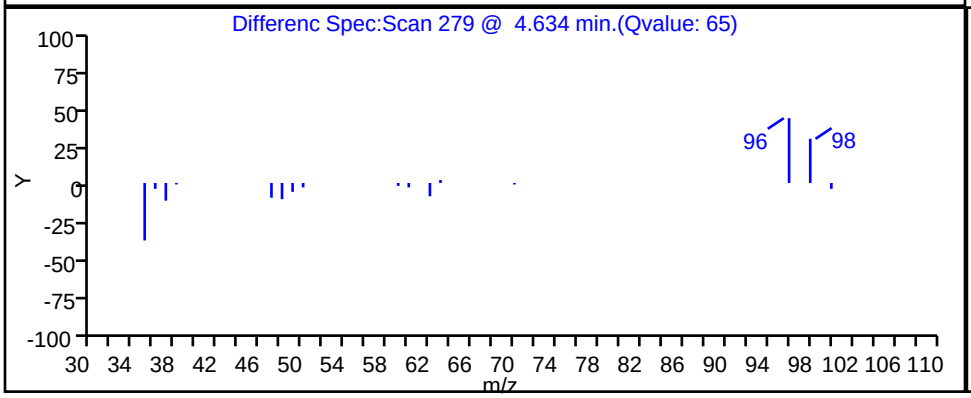


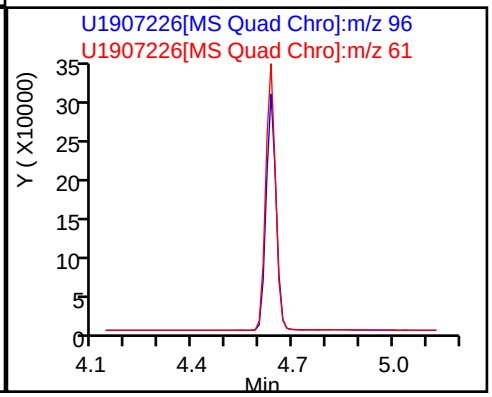



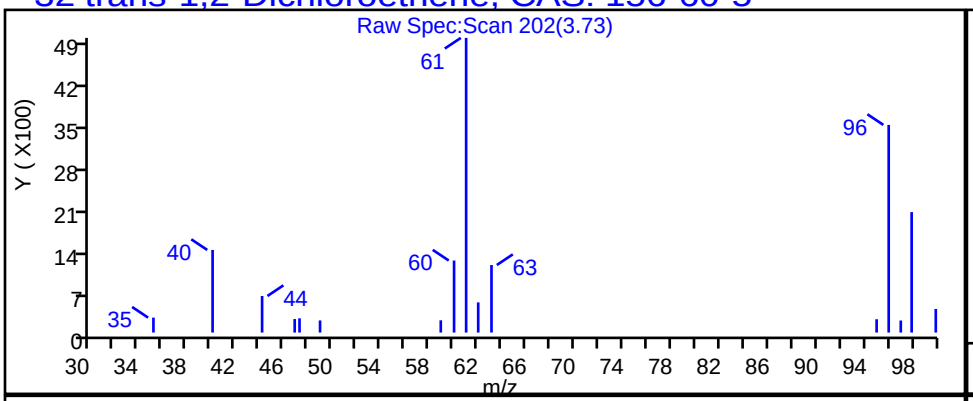



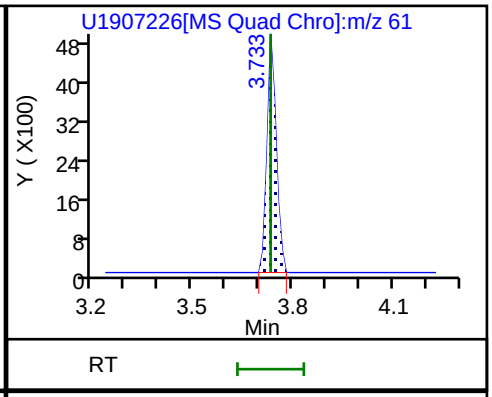
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

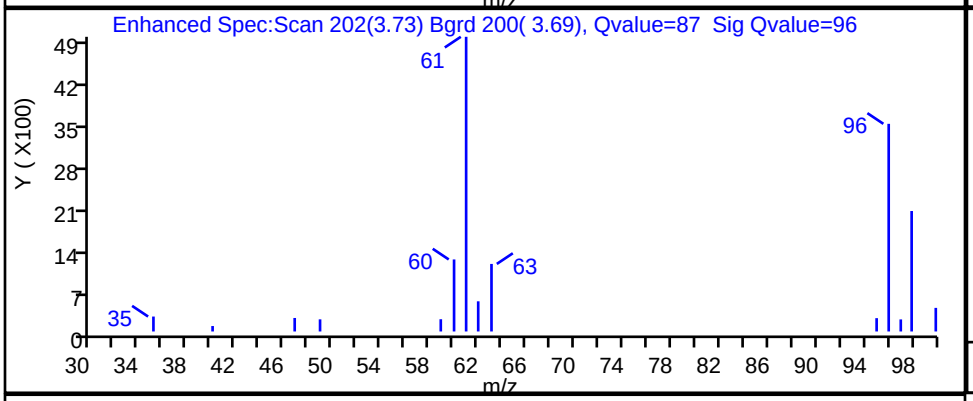
Eurofins TestAmerica, Canton

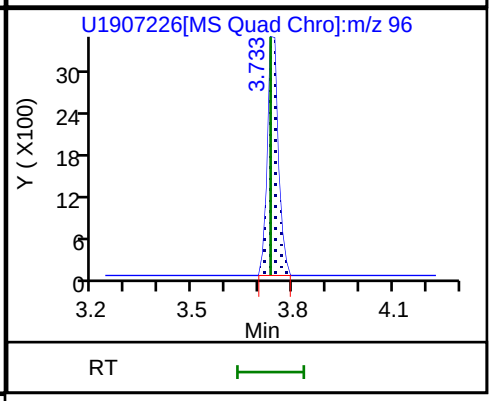
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d | | | | |
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 15 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

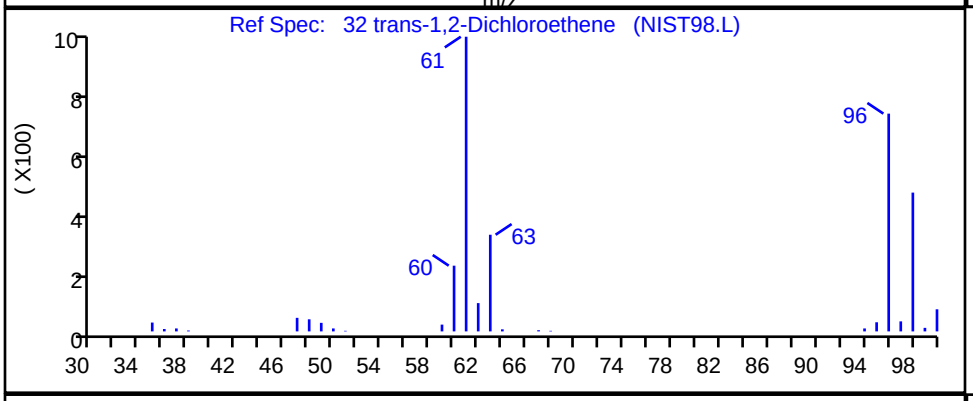
## 32 trans-1,2-Dichloroethene, CAS: 156-60-5

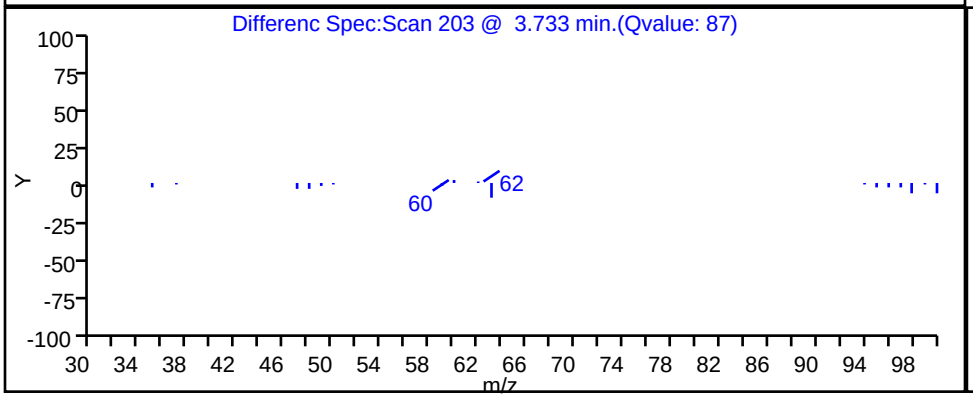


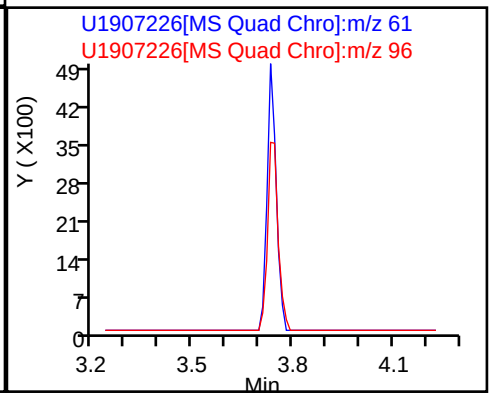



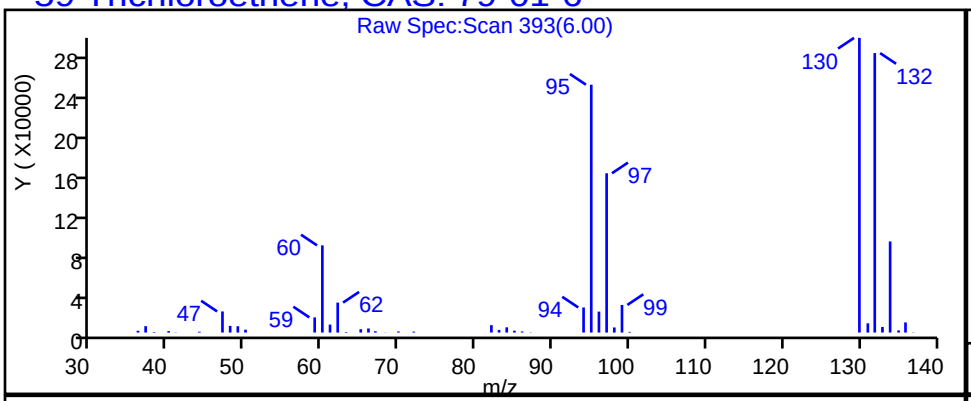
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

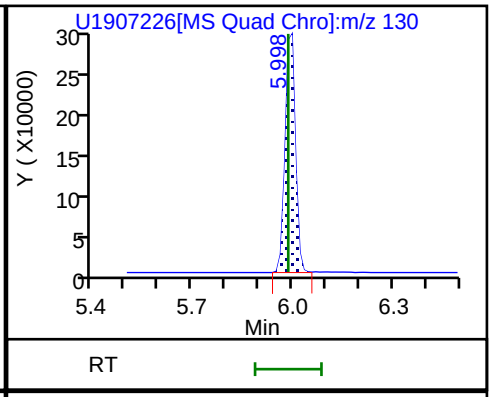
Eurofins TestAmerica, Canton

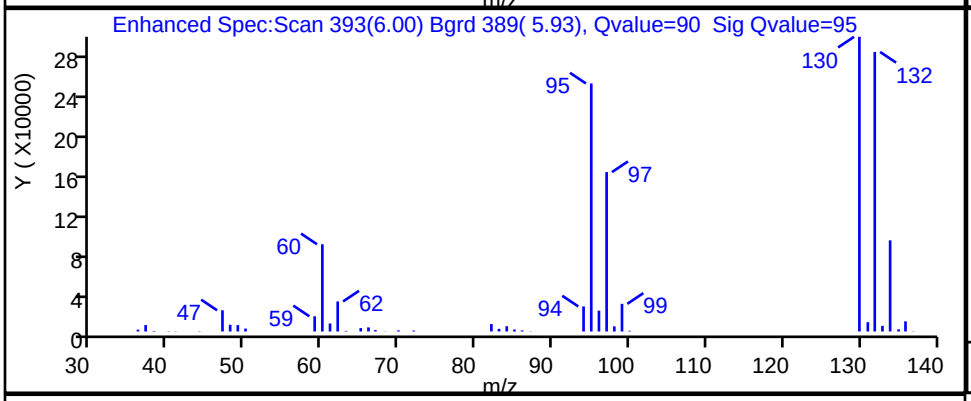
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d

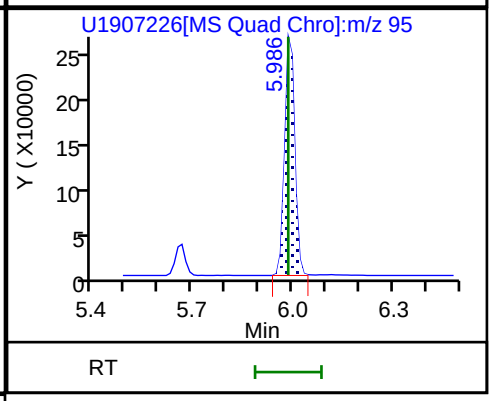
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 15 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

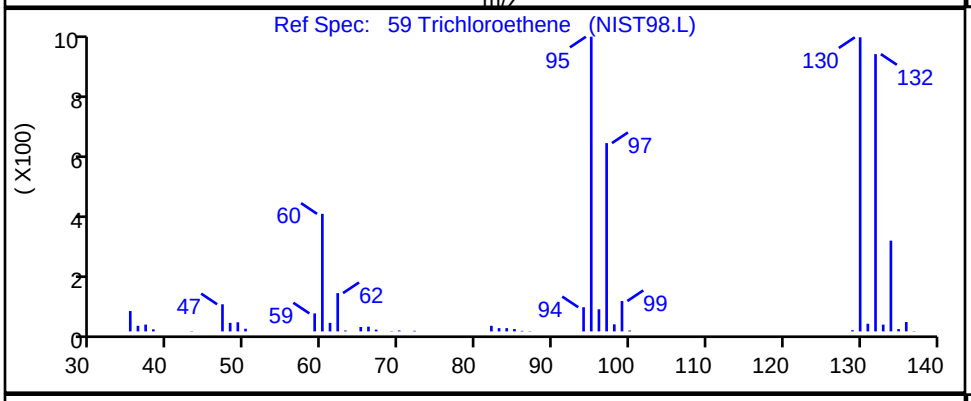
## 59 Trichloroethene, CAS: 79-01-6

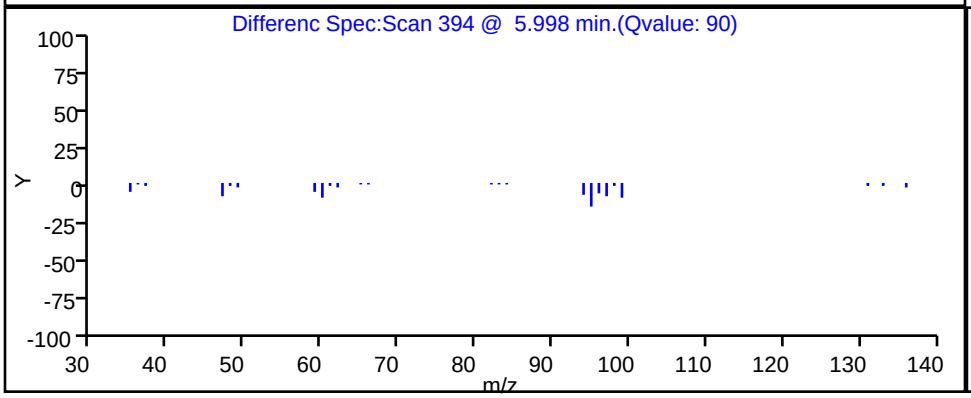


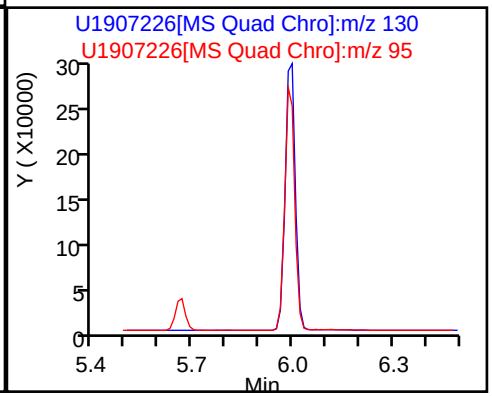



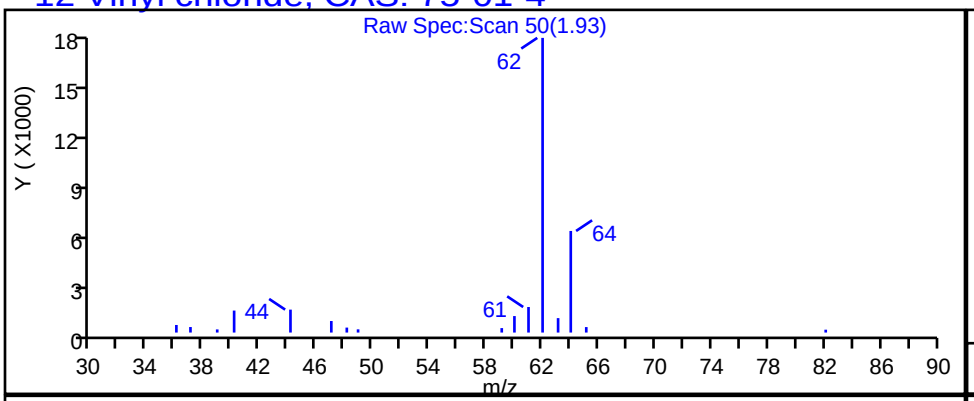
Report Date: 08-May-2019 20:26:18 Chrom Revision: 2.3 03-May-2019 15:52:00

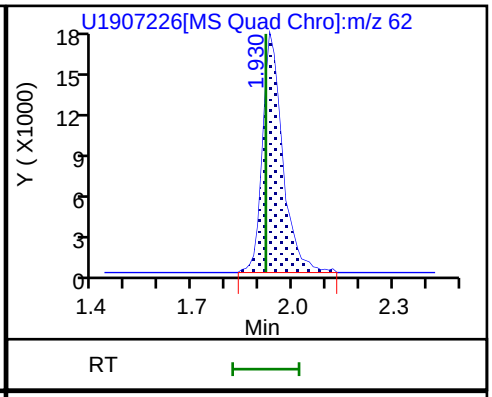
Eurofins TestAmerica, Canton

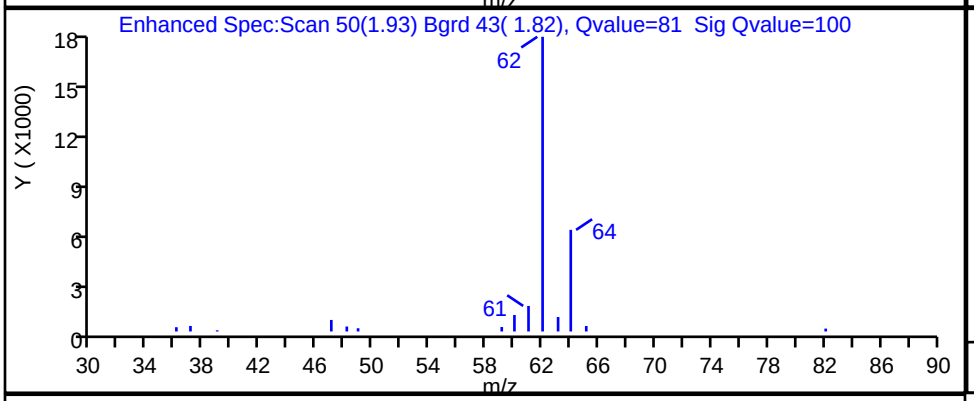
Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907226.d

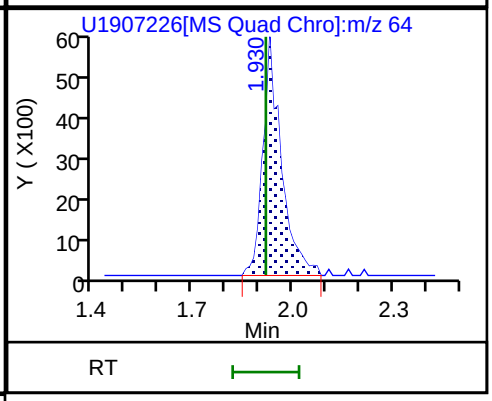
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 20:01:26 | Instrument ID: | A3UX19 | | |
| Lims ID: | 240-112111-A-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 15 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 25.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

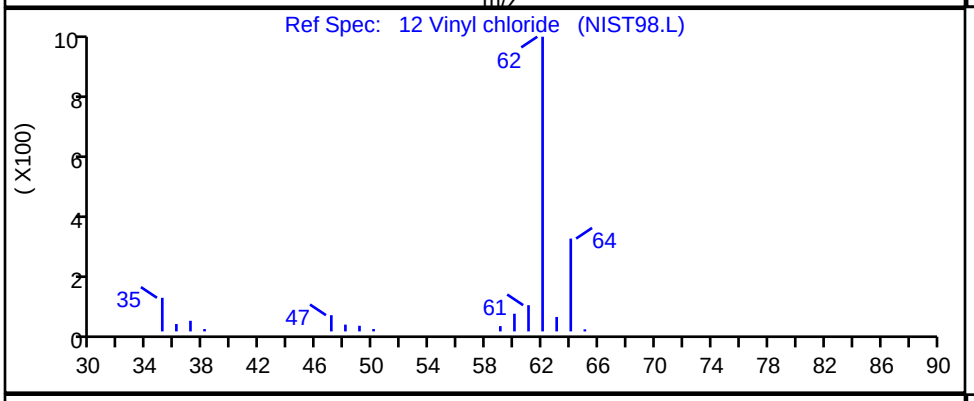
## 12 Vinyl chloride, CAS: 75-01-4

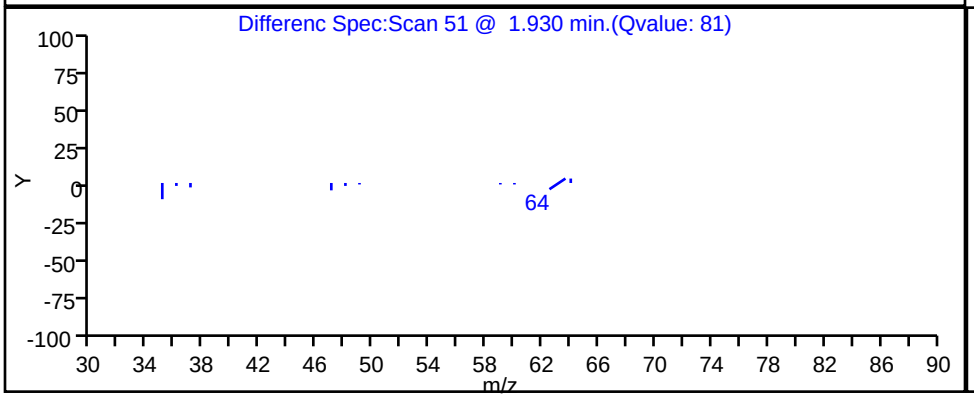


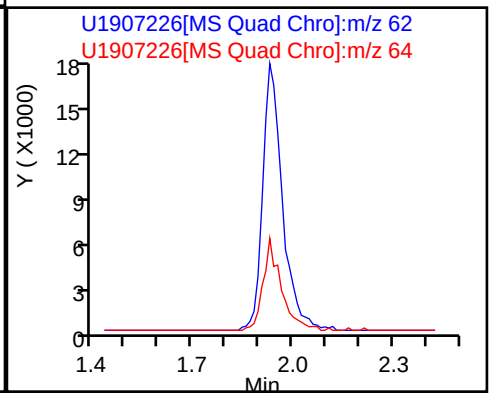



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50  Calibration End Date: 07/24/2018 20:04  Calibration ID: 46235

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-337766/13 | U1900794.d |
| Level 2 | STD8260 240-337766/12 | U1900793.d |
| Level 3 | STD8260 240-337766/11 | U1900792.d |
| Level 4 | ICIS 240-337766/10 | U1900791.d |
| Level 5 | STD8260 240-337766/9 | U1900790.d |
| Level 6 | STD8260 240-337766/3 | U1900784.d |
| Level 7 | STD8260 240-337766/2 | U1900783.d |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dichlorodifluoromethane | 0.2985<br>0.3869 | 0.3275<br>0.3899 | 0.3189 | 0.3531 | 0.3613 | Ave | | 0.3480 | | | 0.1000 | 10.0 | | 20.0 | | | |
| Chloromethane | 0.3558<br>0.3258 | 0.3705<br>0.3191 | 0.3263 | 0.3392 | 0.3223 | Ave | | 0.3370 | | | 0.1000 | 5.8 | | 20.0 | | | |
| Butadiene | 0.3408<br>0.3374 | 0.3424<br>0.3377 | 0.2895 | 0.3248 | 0.3219 | Ave | | 0.3278 | | | | 5.7 | | 20.0 | | | |
| Vinyl chloride | 0.2746<br>0.3390 | 0.3544<br>0.3374 | 0.3113 | 0.3366 | 0.3288 | Ave | | 0.3260 | | | 0.1000 | 8.0 | | 20.0 | | | |
| Bromomethane | 0.2749<br>0.2254 | 0.2866<br>0.2173 | 0.2405 | 0.2466 | 0.2251 | Ave | | 0.2452 | | | 0.0500 | 10.8 | | 20.0 | | | |
| Chloroethane | 0.2109<br>0.1921 | 0.2097<br>0.1854 | 0.1960 | 0.2032 | 0.1901 | Ave | | 0.1982 | | | 0.0500 | 5.0 | | 20.0 | | | |
| Dichlorofluoromethane | 0.5221<br>0.4475 | 0.4917<br>0.4372 | 0.4526 | 0.4727 | 0.4486 | Ave | | 0.4675 | | | | 6.5 | | 20.0 | | | |
| Trichlorofluoromethane | 0.4494<br>0.4561 | 0.4680<br>0.4427 | 0.3932 | 0.4472 | 0.4396 | Ave | | 0.4423 | | | 0.1000 | 5.3 | | 20.0 | | | |
| Ethyl ether | 0.2193<br>0.1979 | 0.2111<br>0.1891 | 0.1902 | 0.1939 | 0.1890 | Ave | | 0.1987 | | | | 6.0 | | 20.0 | | | |
| Acrolein | 0.0586<br>0.0546 | 0.0507<br>0.0535 | 0.0446 | 0.0490 | 0.0542 | Ave | | 0.0522 | | | | 8.7 | | 20.0 | | | |
| 1,1-Dichloroethene | 0.3808<br>0.3850 | 0.3828<br>0.3735 | 0.3902 | 0.3740 | 0.3655 | Ave | | 0.3788 | | | 0.1000 | 2.2 | | 20.0 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2602<br>0.2706 | 0.2860<br>0.2683 | 0.2820 | 0.2661 | 0.2580 | Ave | | 0.2702 | | | 0.0500 | 3.9 | | 20.0 | | | |
| Acetone | +++++<br>0.0784 | 0.0790<br>0.0643 | 0.0549 | 0.0580 | 0.0606 | Ave | | 0.0659 | | | 0.0100 | 15.8 | | 20.0 | | | |
| Iodomethane | 0.4645<br>0.4649 | 0.4824<br>0.4542 | 0.4796 | 0.4736 | 0.4610 | Ave | | 0.4686 | | | | 2.2 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50  Calibration End Date: 07/24/2018 20:04  Calibration ID: 46235

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon disulfide | 1.0264<br>0.7904 | 0.9769<br>0.7703 | 0.8143 | 0.7839 | 0.7630 | Ave | | 0.8465 | | | 0.1000 | 12.8 | | 20.0 | | | |
| 3-Chloro-1-propene | 0.4236<br>0.3955 | 0.4245<br>0.3845 | 0.3864 | 0.3828 | 0.3812 | Ave | | 0.3969 | | | | 4.8 | | 20.0 | | | |
| Methyl acetate | 0.2893<br>0.2388 | 0.2199<br>0.2093 | 0.2069 | 0.2105 | 0.2113 | Ave | | 0.2266 | | | 0.1000 | 13.1 | | 20.0 | | | |
| Methylene Chloride | +++++<br>0.2977 | 0.3380<br>0.2854 | 0.3031 | 0.3009 | 0.2892 | Ave | | 0.3024 | | | 0.1000 | 6.2 | | 20.0 | | | |
| 2-Methyl-2-propanol | +++++<br>0.0272 | 0.0286<br>+++++ | 0.0233 | 0.0231 | 0.0210 | Ave | | 0.0246 | | | | 12.8 | | 20.0 | | | |
| Acrylonitrile | 0.1149<br>0.1149 | 0.0936<br>0.0991 | 0.0942 | 0.0985 | 0.1008 | Ave | | 0.1023 | | | | 8.8 | | 20.0 | | | |
| trans-1,2-Dichloroethene | 0.4272<br>0.3621 | 0.3980<br>0.3508 | 0.3681 | 0.3544 | 0.3490 | Ave | | 0.3728 | | | 0.1000 | 7.8 | | 20.0 | | | |
| Methyl tert-butyl ether | 0.6889<br>0.7038 | 0.7226<br>0.6502 | 0.7037 | 0.7046 | 0.6888 | Ave | | 0.6946 | | | 0.1000 | 3.3 | | 20.0 | | | |
| Hexane | 0.4016<br>0.4127 | 0.4088<br>0.4136 | 0.4369 | 0.3839 | 0.3905 | Ave | | 0.4069 | | | | 4.3 | | 20.0 | | | |
| 1,1-Dichloroethane | 0.4297<br>0.4479 | 0.4309<br>0.4358 | 0.4483 | 0.4451 | 0.4391 | Ave | | 0.4395 | | | 0.2000 | 1.8 | | 20.0 | | | |
| Vinyl acetate | 0.4180<br>0.4211 | 0.3784<br>0.4083 | 0.3943 | 0.3850 | 0.3928 | Ave | | 0.3997 | | | | 4.1 | | 20.0 | | | |
| cis-1,2-Dichloroethene | 0.3259<br>0.3058 | 0.3308<br>0.2928 | 0.3020 | 0.3030 | 0.2971 | Ave | | 0.3082 | | | 0.1000 | 4.7 | | 20.0 | | | |
| 2-Butanone (MEK) | +++++<br>0.0411 | 0.0357<br>0.0381 | 0.0358 | 0.0358 | 0.0391 | Ave | | 0.0376 | | | 0.0100 | 6.0 | | 20.0 | | | |
| 2,2-Dichloropropane | 0.2667<br>0.2404 | 0.2856<br>0.2633 | 0.2822 | 0.2661 | 0.2457 | Ave | | 0.2643 | | | | 6.4 | | 20.0 | | | |
| Chlorobromomethane | 0.2447<br>0.2004 | 0.2207<br>0.1830 | 0.1878 | 0.1937 | 0.1884 | Ave | | 0.2027 | | | | 11.0 | | 20.0 | | | |
| Tetrahydrofuran | 0.0995<br>0.1054 | 0.1040<br>0.0940 | 0.0907 | 0.0913 | 0.0950 | Ave | | 0.0971 | | | | 6.1 | | 20.0 | | | |
| Chloroform | 0.4629<br>0.4616 | 0.4798<br>0.4429 | 0.4485 | 0.4541 | 0.4433 | Ave | | 0.4561 | | | 0.2000 | 2.9 | | 20.0 | | | |
| 1,1,1-Trichloroethane | 0.3956<br>0.4177 | 0.3988<br>0.4154 | 0.4324 | 0.4070 | 0.4089 | Ave | | 0.4108 | | | 0.1000 | 3.0 | | 20.0 | | | |
| Cyclohexane | 0.4246<br>0.4364 | 0.4382<br>0.4292 | 0.4507 | 0.4156 | 0.4161 | Ave | | 0.4301 | | | 0.1000 | 3.0 | | 20.0 | | | |
| 1,1-Dichloropropene | 0.3755<br>0.3758 | 0.3903<br>0.3692 | 0.3840 | 0.3595 | 0.3614 | Ave | | 0.3737 | | | | 3.0 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50  Calibration End Date: 07/24/2018 20:04  Calibration ID: 46235

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon tetrachloride | 0.3639<br>0.3981 | 0.3846<br>0.3917 | 0.3944 | 0.3722 | 0.3729 | Ave | | 0.3825 | | | 0.1000 | 3.4 | | 20.0 | | | |
| Isobutyl alcohol | 0.0095<br>0.0104 | 0.0071<br>0.0087 | 0.0088 | 0.0079 | 0.0092 | Ave | | 0.0088 | | | | 12.2 | | 20.0 | | | |
| Benzene | 0.9890<br>1.0452 | 1.0827<br>1.0051 | 1.0373 | 1.0007 | 1.0215 | Ave | | 1.0259 | | | 0.5000 | 3.1 | | 20.0 | | | |
| 1,2-Dichloroethane | 0.3674<br>0.3257 | 0.3549<br>0.3127 | 0.3205 | 0.3110 | 0.3150 | Ave | | 0.3296 | | | 0.1000 | 6.8 | | 20.0 | | | |
| n-Heptane | +++++<br>0.2252 | 0.7970<br>0.2266 | 0.2839 | 0.2324 | 0.2217 | Lin1 | 0.5799 | 0.2147 | | | | 4.3 | | | 0.9990 | | 0.9900 |
| Trichloroethene | 0.3122<br>0.3167 | 0.3258<br>0.3140 | 0.3258 | 0.3068 | 0.3105 | Ave | | 0.3160 | | | 0.1500 | 2.3 | | 20.0 | | | |
| Methylcyclohexane | 0.4985<br>0.5342 | 0.5073<br>0.5200 | 0.5394 | 0.4970 | 0.4957 | Ave | | 0.5132 | | | 0.1000 | 3.6 | | 20.0 | | | |
| 1,2-Dichloropropane | 0.2050<br>0.2404 | 0.2394<br>0.2326 | 0.2309 | 0.2270 | 0.2376 | Ave | | 0.2304 | | | 0.1000 | 5.3 | | 20.0 | | | |
| Dibromomethane | 0.2379<br>0.2151 | 0.2154<br>0.2010 | 0.2009 | 0.2115 | 0.2105 | Ave | | 0.2132 | | | | 5.8 | | 20.0 | | | |
| 1,4-Dioxane | +++++<br>0.0024 | 0.0017<br>0.0024 | 0.0024 | 0.0024 | 0.0023 | Ave | | 0.0023 | | | | 13.5 | | 20.0 | | | |
| Dichlorobromomethane | 0.3232<br>0.3408 | 0.3027<br>0.3295 | 0.3203 | 0.3127 | 0.3310 | Ave | | 0.3229 | | | 0.1500 | 3.9 | | 20.0 | | | |
| 2-Chloroethyl vinyl ether | 0.1601<br>0.1755 | 0.1580<br>0.1783 | 0.1797 | 0.1698 | 0.1774 | Ave | | 0.1713 | | | | 5.2 | | 20.0 | | | |
| cis-1,3-Dichloropropene | 0.3599<br>0.3873 | 0.3811<br>0.3872 | 0.3686 | 0.3735 | 0.3865 | Ave | | 0.3777 | | | 0.1500 | 2.8 | | 20.0 | | | |
| 4-Methyl-2-pentanone (MIBK) | 0.2834<br>0.3221 | 0.2998<br>0.3046 | 0.3240 | 0.2983 | 0.3095 | Ave | | 0.3059 | | | 0.0500 | 4.6 | | 20.0 | | | |
| Toluene | 1.5618<br>1.4027 | 1.4672<br>1.4180 | 1.4098 | 1.3276 | 1.3894 | Ave | | 1.4252 | | | 0.4000 | 5.1 | | 20.0 | | | |
| trans-1,3-Dichloropropene | 0.4760<br>0.4702 | 0.4587<br>0.4631 | 0.4478 | 0.4252 | 0.4649 | Ave | | 0.4580 | | | 0.1000 | 3.7 | | 20.0 | | | |
| Ethyl methacrylate | 0.4185<br>0.4604 | 0.4061<br>0.4531 | 0.4309 | 0.4112 | 0.4583 | Ave | | 0.4341 | | | | 5.3 | | 20.0 | | | |
| 1,1,2-Trichloroethane | 0.2547<br>0.2895 | 0.2773<br>0.2862 | 0.2834 | 0.2725 | 0.2908 | Ave | | 0.2792 | | | 0.1000 | 4.5 | | 20.0 | | | |
| Tetrachloroethene | 0.4086<br>0.4320 | 0.4228<br>0.4317 | 0.4309 | 0.4048 | 0.4173 | Ave | | 0.4212 | | | 0.1500 | 2.7 | | 20.0 | | | |
| 1,3-Dichloropropane | 0.4853<br>0.4890 | 0.5028<br>0.4855 | 0.4893 | 0.4635 | 0.4865 | Ave | | 0.4860 | | | | 2.4 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50  Calibration End Date: 07/24/2018 20:04  Calibration ID: 46235

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Hexanone | 0.2860<br>0.3061 | 0.2740<br>0.2989 | 0.3048 | 0.2770 | 0.2999 | Ave | | 0.2924 | | | 0.0500 | 4.5 | | 20.0 | | | |
| Chlorodibromomethane | 0.3153<br>0.3531 | 0.3347<br>0.3456 | 0.3254 | 0.3197 | 0.3424 | Ave | | 0.3337 | | | | 4.2 | | 20.0 | | | |
| Ethylene Dibromide | 0.3316<br>0.3186 | 0.3371<br>0.3125 | 0.3153 | 0.3013 | 0.3163 | Ave | | 0.3190 | | | | 3.8 | | 20.0 | | | |
| Chlorobenzene | 0.9988<br>0.9439 | 1.0195<br>0.9268 | 0.9392 | 0.9052 | 0.9346 | Ave | | 0.9526 | | | 0.3000 | 4.3 | | 20.0 | | | |
| 1,1,1,2-Tetrachloroethane | 0.2852<br>0.3466 | 0.3288<br>0.3341 | 0.3290 | 0.3310 | 0.3341 | Ave | | 0.3270 | | | | 5.9 | | 20.0 | | | |
| Ethylbenzene | 0.4594<br>0.5246 | 0.5226<br>0.5211 | 0.5127 | 0.4996 | 0.5108 | Ave | | 0.5073 | | | | 4.5 | | 20.0 | | | |
| m-Xylene & p-Xylene | 0.6169<br>0.6437 | 0.6148<br>0.6359 | 0.6355 | 0.6137 | 0.6232 | Ave | | 0.6262 | | | | 1.9 | | 20.0 | | | |
| o-Xylene | 0.5941<br>0.6233 | 0.5896<br>0.6029 | 0.6245 | 0.6014 | 0.5968 | Ave | | 0.6047 | | | | 2.3 | | 20.0 | | | |
| Styrene | 0.9580<br>1.0545 | 0.9583<br>1.0320 | 1.0135 | 0.9872 | 1.0201 | Ave | | 1.0034 | | | 0.3000 | 3.7 | | 20.0 | | | |
| Bromoform | +++++<br>0.2846 | 0.2440<br>0.2826 | 0.2606 | 0.2566 | 0.2726 | Ave | | 0.2668 | | | 0.1000 | 6.0 | | 20.0 | | | |
| Isopropylbenzene | 1.5546<br>1.6483 | 1.5581<br>1.6164 | 1.6482 | 1.5866 | 1.5868 | Ave | | 1.5999 | | | 0.1000 | 2.4 | | 20.0 | | | |
| 1,1,2,2-Tetrachloroethane | 0.7561<br>0.8073 | 0.8321<br>0.7913 | 0.8175 | 0.7659 | 0.8099 | Ave | | 0.7972 | | | 0.3000 | 3.5 | | 20.0 | | | |
| Bromobenzene | 0.8153<br>0.7490 | 0.7267<br>0.7427 | 0.7731 | 0.7237 | 0.7577 | Ave | | 0.7555 | | | | 4.2 | | 20.0 | | | |
| 1,2,3-Trichloropropane | 0.3160<br>0.2796 | 0.2566<br>0.2769 | 0.2966 | 0.2651 | 0.2852 | Ave | | 0.2823 | | | | 7.0 | | 20.0 | | | |
| trans-1,4-Dichloro-2-butene | 0.2699<br>0.2473 | 0.2213<br>0.2516 | 0.2435 | 0.2261 | 0.2517 | Ave | | 0.2445 | | | | 6.7 | | 20.0 | | | |
| N-Propylbenzene | 0.7798<br>0.8210 | 0.7523<br>0.8202 | 0.8514 | 0.7731 | 0.8029 | Ave | | 0.8001 | | | | 4.2 | | 20.0 | | | |
| 2-Chlorotoluene | 0.6509<br>0.6957 | 0.7125<br>0.6833 | 0.7132 | 0.6770 | 0.6858 | Ave | | 0.6883 | | | | 3.1 | | 20.0 | | | |
| 1,3,5-Trimethylbenzene | 2.0585<br>2.3418 | 2.1282<br>2.3386 | 2.4321 | 2.2627 | 2.2905 | Ave | | 2.2646 | | | | 5.7 | | 20.0 | | | |
| 4-Chlorotoluene | 0.7199<br>0.7173 | 0.7260<br>0.7141 | 0.7528 | 0.6936 | 0.7171 | Ave | | 0.7201 | | | | 2.4 | | 20.0 | | | |
| tert-Butylbenzene | 2.0893<br>2.2086 | 2.2305<br>2.1805 | 2.3049 | 2.0958 | 2.1272 | Ave | | 2.1767 | | | | 3.6 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50  Calibration End Date: 07/24/2018 20:04  Calibration ID: 46235

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,2,4-Trimethylbenzene | 2.3016<br>2.3641 | 2.3139<br>2.3974 | 2.4350 | 2.3225 | 2.3165 | Ave | | 2.3501 | | | | 2.1 | | 20.0 | | | |
| sec-Butylbenzene | 2.8312<br>3.0965 | 2.8639<br>3.1341 | 3.2011 | 2.9684 | 2.9595 | Ave | | 3.0078 | | | | 4.6 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.6206<br>1.4203 | 1.5501<br>1.4165 | 1.4543 | 1.3821 | 1.4074 | Ave | | 1.4645 | | | 0.6000 | 6.0 | | 20.0 | | | |
| 4-Isopropyltoluene | 2.3868<br>2.6740 | 2.3755<br>2.7456 | 2.7383 | 2.5786 | 2.5586 | Ave | | 2.5796 | | | | 5.9 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.7882<br>1.4335 | 1.6574<br>1.4328 | 1.4853 | 1.4002 | 1.4320 | Ave | | 1.5185 | | | 0.5000 | 9.7 | | 20.0 | | | |
| n-Butylbenzene | 2.0220<br>2.3242 | 2.1252<br>2.3914 | 2.3447 | 2.2111 | 2.1782 | Ave | | 2.2281 | | | | 5.9 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.3936<br>1.3079 | 1.4283<br>1.3217 | 1.3446 | 1.2913 | 1.2861 | Ave | | 1.3391 | | | 0.4000 | 4.0 | | 20.0 | | | |
| 1,2-Dibromo-3-Chloropropane | 0.2394<br>0.2501 | 0.2225<br>0.2556 | 0.2287 | 0.2293 | 0.2369 | Ave | | 0.2375 | | | 0.0500 | 5.0 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 1.0063<br>0.8577 | 1.0084<br>0.9508 | 0.8893 | 0.8765 | 0.8484 | Ave | | 0.9196 | | | 0.2000 | 7.4 | | 20.0 | | | |
| Hexachlorobutadiene | 0.4988<br>0.4431 | 0.5134<br>0.5128 | 0.4874 | 0.4604 | 0.4444 | Ave | | 0.4800 | | | | 6.4 | | 20.0 | | | |
| Naphthalene | 2.5280<br>2.5374 | 2.6896<br>2.7560 | 2.5594 | 2.5256 | 2.5586 | Ave | | 2.5935 | | | | 3.5 | | 20.0 | | | |
| 1,2,3-Trichlorobenzene | 0.8270<br>0.7867 | 0.8451<br>0.9084 | 0.8355 | 0.8114 | 0.8072 | Ave | | 0.8316 | | | | 4.7 | | 20.0 | | | |
| Dibromofluoromethane (Surr) | 0.2924<br>0.2586 | 0.2650<br>0.2453 | 0.2515 | 0.2531 | 0.2466 | Ave | | 0.2589 | | | | 6.3 | | 20.0 | | | |
| 1,2-Dichloroethane-d4 (Surr) | 0.3213<br>0.2669 | 0.3001<br>0.2485 | 0.2625 | 0.2659 | 0.2555 | Ave | | 0.2744 | | | | 9.6 | | 20.0 | | | |
| Toluene-d8 (Surr) | 1.2522<br>1.2151 | 1.2033<br>1.2031 | 1.2111 | 1.1433 | 1.2004 | Ave | | 1.2041 | | | | 2.7 | | 20.0 | | | |
| 4-Bromofluorobenzene (Surr) | 0.5696<br>0.4390 | 0.4918<br>0.4279 | 0.4472 | 0.4315 | 0.4318 | Ave | | 0.4627 | | | | 11.2 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-337766/13 | U1900794.d |
| Level 2 | STD8260 240-337766/12 | U1900793.d |
| Level 3 | STD8260 240-337766/11 | U1900792.d |
| Level 4 | ICIS 240-337766/10 | U1900791.d |
| Level 5 | STD8260 240-337766/9 | U1900790.d |
| Level 6 | STD8260 240-337766/3 | U1900784.d |
| Level 7 | STD8260 240-337766/2 | U1900783.d |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane | FB | Ave | 6894<br>1134505 | 14647<br>1522047 | 151920 | 328230 | 708511 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloromethane | FB | Ave | 8217<br>955231 | 16570<br>1245553 | 155433 | 315290 | 632033 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Butadiene | FB | Ave | 7871<br>989374 | 15313<br>1318121 | 137925 | 301883 | 631099 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl chloride | FB | Ave | 6342<br>993940 | 15847<br>1317064 | 148293 | 312915 | 644632 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromomethane | FB | Ave | 6350<br>660888 | 12818<br>848050 | 114577 | 229239 | 441425 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloroethane | FB | Ave | 4872<br>563348 | 9377<br>723733 | 93395 | 188891 | 372825 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dichlorofluoromethane | FB | Ave | 12059<br>1312016 | 21989<br>1706469 | 215631 | 439391 | 879608 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichlorofluoromethane | FB | Ave | 10381<br>1337225 | 20928<br>1728039 | 187339 | 415720 | 861954 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl ether | FB | Ave | 5066<br>580370 | 9442<br>738330 | 90620 | 180269 | 370565 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acrolein | FB | Ave | 6772<br>800130 | 11339<br>1043418 | 106196 | 227879 | 531628 | 2.50<br>300 | 5.00<br>400 | 50.0 | 100 | 200 |
| 1,1-Dichloroethene | FB | Ave | 8796<br>1128785 | 17119<br>1458107 | 185910 | 347690 | 716665 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | FB | Ave | 6009<br>793296 | 12789<br>1047375 | 134365 | 247358 | 505930 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acetone | FB | Ave | +++++<br>459712 | 7064<br>501797 | 52355 | 107763 | 237768 | +++++<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Iodomethane | FB | Ave | 10728<br>1363038 | 21574<br>1772860 | 228493 | 440198 | 903919 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon disulfide | FB | Ave | 23708<br>2317545 | 43688<br>3006958 | 387941 | 728690 | 1496184 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 3-Chloro-1-propene | FB | Ave | 9784<br>1159498 | 18985<br>1500878 | 184068 | 355801 | 747474 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl acetate | FB | Ave | 13362<br>1400331 | 19667<br>1633788 | 197122 | 391356 | 828794 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Methylene Chloride | FB | Ave | +++++<br>872855 | 15117<br>1113978 | 144386 | 279726 | 566982 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Methyl-2-propanol | FB | Ave | +++++<br>798354 | 12788<br>+++++ | 110777 | 215092 | 411966 | +++++<br>600 | 10.0<br>+++++ | 100 | 200 | 400 |
| Acrylonitrile | FB | Ave | 26540<br>3368428 | 41875<br>3868018 | 448754 | 915892 | 1977138 | 5.00<br>600 | 10.0<br>800 | 100 | 200 | 400 |
| trans-1,2-Dichloroethene | FB | Ave | 9868<br>1061569 | 17800<br>1369327 | 175373 | 329454 | 684359 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl tert-butyl ether | FB | Ave | 15911<br>2063462 | 32315<br>2537900 | 335243 | 654948 | 1350698 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexane | FB | Ave | 9277<br>1210166 | 18280<br>1614587 | 208123 | 356826 | 765779 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloroethane | FB | Ave | 9924<br>1313347 | 19272<br>1701003 | 213583 | 413734 | 860929 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl acetate | FB | Ave | 9654<br>1234805 | 16923<br>1593713 | 187841 | 357825 | 770166 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| cis-1,2-Dichloroethene | FB | Ave | 7528<br>896669 | 14795<br>1142993 | 143871 | 281663 | 582599 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Butanone (MEK) | FB | Ave | +++++<br>241145 | 3193<br>297238 | 34072 | 66486 | 153177 | +++++<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| 2,2-Dichloropropane | FB | Ave | 6159<br>704769 | 12773<br>1027916 | 134434 | 247316 | 481767 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chlorobromomethane | FB | Ave | 5651<br>587580 | 9868<br>714392 | 89489 | 180080 | 369472 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrahydrofuran | FB | Ave | 4596<br>618274 | 9301<br>734202 | 86462 | 169823 | 372381 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Chloroform | FB | Ave | 10692<br>1353439 | 21458<br>1728769 | 213657 | 422069 | 869181 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1-Trichloroethane | FB | Ave | 9137<br>1224716 | 17835<br>1621508 | 206006 | 378348 | 801860 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Cyclohexane | FB | Ave | 9806<br>1279473 | 19597<br>1675220 | 214696 | 386296 | 815868 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloropropene | FB | Ave | 8674<br>1102013 | 17455<br>1441115 | 182947 | 334178 | 708682 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon tetrachloride | FB | Ave | 8406<br>1167256 | 17198<br>1528972 | 187898 | 345961 | 731238 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isobutyl alcohol | FB | Ave | 5482<br>758926 | 7910<br>849021 | 105355 | 183028 | 449380 | 12.5<br>1500 | 25.0<br>2000 | 250 | 500 | 1000 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Benzene | FB | Ave | 22844<br>3064496 | 48419<br>3923346 | 494183 | 930203 | 2003056 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane | FB | Ave | 8485<br>954899 | 15873<br>1220640 | 152677 | 289097 | 617748 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Heptane | FB | Lin1 | +++++<br>660181 | 35642<br>884598 | 135257 | 216048 | 434651 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichloroethene | FB | Ave | 7211<br>928718 | 14571<br>1225880 | 155201 | 285190 | 608912 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methylcyclohexane | FB | Ave | 11515<br>1566351 | 22689<br>2029926 | 256970 | 461990 | 972024 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloropropane | FB | Ave | 4734<br>704987 | 10704<br>908144 | 110015 | 210992 | 465852 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromomethane | FB | Ave | 5496<br>630606 | 9635<br>784539 | 95707 | 196594 | 412829 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,4-Dioxane | FB | Ave | +++++<br>142512 | 1478<br>187742 | 23290 | 43840 | 91591 | +++++<br>1200 | 20.0<br>1600 | 200 | 400 | 800 |
| Dichlorobromomethane | FB | Ave | 7466<br>999127 | 13539<br>1286301 | 152581 | 290639 | 649042 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chloroethyl vinyl ether | FB | Ave | 7395<br>1029389 | 14128<br>1392220 | 171233 | 315645 | 695808 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| cis-1,3-Dichloropropene | FB | Ave | 8313<br>1135535 | 17042<br>1511629 | 175580 | 347181 | 757793 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Methyl-2-pentanone (MIBK) | FB | Ave | 13091<br>1889071 | 26811<br>2377711 | 308673 | 554613 | 1213622 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Toluene | CBNZ d5 | Ave | 28549<br>3229981 | 51989<br>4260144 | 544060 | 985962 | 2123092 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| trans-1,3-Dichloropropene | CBNZ d5 | Ave | 8702<br>1082760 | 16254<br>1391341 | 172822 | 315763 | 710372 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl methacrylate | CBNZ d5 | Ave | 7650<br>1060082 | 14391<br>1361372 | 166277 | 305349 | 700245 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloroethane | CBNZ d5 | Ave | 4656<br>666583 | 9825<br>859718 | 109350 | 202390 | 444369 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrachloroethene | CBNZ d5 | Ave | 7470<br>994717 | 14983<br>1297004 | 166266 | 300622 | 637692 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichloropropane | CBNZ d5 | Ave | 8871<br>1126088 | 17817<br>1458618 | 188817 | 344194 | 743433 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Hexanone | CBNZ d5 | Ave | 10457<br>1409861 | 19416<br>1795814 | 235229 | 411400 | 916606 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Chlorodibromomethane | CBNZ d5 | Ave | 5763<br>813124 | 11860<br>1038431 | 125585 | 237418 | 523153 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylene Dibromide | CBNZ d5 | Ave | 6061<br>733594 | 11944<br>938884 | 121691 | 223763 | 483377 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Chlorobenzene | CBNZ d5 | Ave | 18258<br>2173534 | 36126<br>2784427 | 362449 | 672294 | 1428038 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1,2-Tetrachloroethane | CBNZ d5 | Ave | 5213<br>798193 | 11650<br>1003714 | 126948 | 245845 | 510579 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylbenzene | CBNZ d5 | Ave | 8398<br>1207976 | 18517<br>1565528 | 197845 | 371072 | 780525 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| m-Xylene & p-Xylene | CBNZ d5 | Ave | 11276<br>1482266 | 21784<br>1910562 | 245222 | 455770 | 952249 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| o-Xylene | CBNZ d5 | Ave | 10860<br>1435324 | 20892<br>1811249 | 240986 | 446659 | 911893 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Styrene | CBNZ d5 | Ave | 17512<br>2428268 | 33956<br>3100442 | 391122 | 733164 | 1558780 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromoform | CBNZ d5 | Ave | +++++<br>655265 | 8645<br>849153 | 100560 | 190577 | 416502 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isopropylbenzene | CBNZ d5 | Ave | 28418<br>3795594 | 55210<br>4856288 | 636049 | 1178300 | 2424662 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2,2-Tetrachloroethane | DCBd 4 | Ave | 8105<br>1065677 | 17817<br>1352703 | 173948 | 331847 | 686661 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromobenzene | DCBd 4 | Ave | 8740<br>988831 | 15559<br>1269533 | 164497 | 313555 | 642419 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichloropropane | DCBd 4 | Ave | 3387<br>369092 | 5494<br>473318 | 63108 | 114884 | 241838 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| trans-1,4-Dichloro-2-butene | DCBd 4 | Ave | 2893<br>326498 | 4738<br>430124 | 51819 | 97955 | 213375 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| N-Propylbenzene | DCBd 4 | Ave | 8359<br>1083875 | 16107<br>1402046 | 181166 | 334963 | 680756 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chlorotoluene | DCBd 4 | Ave | 6977<br>918378 | 15255<br>1168008 | 151745 | 293354 | 581507 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3,5-Trimethylbenzene | DCBd 4 | Ave | 22067<br>3091430 | 45567<br>3997648 | 517511 | 980405 | 1942019 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Chlorotoluene | DCBd 4 | Ave | 7717<br>946982 | 15545<br>1220622 | 160173 | 300515 | 607997 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| tert-Butylbenzene | DCBd 4 | Ave | 22397<br>2915643 | 47758<br>3727392 | 490442 | 908078 | 1803602 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trimethylbenzene | DCBd 4 | Ave | 24672<br>3120829 | 49545<br>4098181 | 518127 | 1006317 | 1964040 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| sec-Butylbenzene | DCBd 4 | Ave | 30350<br>4087764 | 61320<br>5357379 | 681132 | 1286147 | 2509293 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichlorobenzene | DCBd 4 | Ave | 17372<br>1874897 | 33191<br>2421314 | 309437 | 598840 | 1193296 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Isopropyltoluene | DCBd 4 | Ave | 25586<br>3530033 | 50862<br>4693383 | 582655 | 1117286 | 2169356 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 1,4-Dichlorobenzene | DCBd 4 | Ave | 19169<br>1892443 | 35488<br>2449293 | 316046 | 606688 | 1214157 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Butylbenzene | DCBd 4 | Ave | 21675<br>3068191 | 45503<br>4087812 | 498908 | 958018 | 1846843 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichlorobenzene | DCBd 4 | Ave | 14939<br>1726550 | 30581<br>2259323 | 286113 | 559506 | 1090448 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dibromo-3-Chloropropane | DCBd 4 | Ave | 2566<br>330105 | 4764<br>436864 | 48670 | 99335 | 200822 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trichlorobenzene | DCBd 4 | Ave | 10787<br>1132196 | 21592<br>1625332 | 189226 | 379757 | 719342 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexachlorobutadiene | DCBd 4 | Ave | 5347<br>584967 | 10992<br>876579 | 103707 | 199490 | 376786 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Naphthalene | DCBd 4 | Ave | 27099<br>3349616 | 57589<br>4711177 | 544587 | 1094286 | 2169342 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichlorobenzene | DCBd 4 | Ave | 8865<br>1038523 | 18094<br>1552764 | 177768 | 351575 | 684438 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromofluoromethane (Surr) | FB | Ave | 6754<br>758227 | 11849<br>957680 | 119809 | 235239 | 483501 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane-d4 (Surr) | FB | Ave | 7422<br>782592 | 13421<br>970142 | 125069 | 247201 | 501017 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Toluene-d8 (Surr) | CBNZ d5 | Ave | 22890<br>2798059 | 42636<br>3614422 | 467380 | 849081 | 1834190 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Bromofluorobenzene (Surr) | CBNZ d5 | Ave | 10413<br>1010844 | 17427<br>1285631 | 172585 | 320453 | 659738 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 337766

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2018 17:50 Calibration End Date: 07/24/2018 20:04 Calibration ID: 46235

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-337766/13 | U1900794.d |
| Level 2 | STD8260 240-337766/12 | U1900793.d |
| Level 3 | STD8260 240-337766/11 | U1900792.d |
| Level 4 | ICIS 240-337766/10 | U1900791.d |
| Level 5 | STD8260 240-337766/9 | U1900790.d |
| Level 6 | STD8260 240-337766/3 | U1900784.d |
| Level 7 | STD8260 240-337766/2 | U1900783.d |

| ANALYTE | PERCENT ERROR | | | | | | PERCENT ERROR LIMIT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 # LVL 7 # | LVL 2 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1 LVL 7 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
| n-Heptane | +++++ | 1.1 | | | | | | 50 | | | | |

Report Date: 25-Jul-2018 10:13:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900783.d
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jul-2018 17:50:49 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-002
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:29 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:42:29

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 94 | 975875 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 80 | 751089 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 65 | 427349 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.037 | 5.049 | -0.012 | 62 | 957680 | 80.0 | 75.8 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.357 | -0.012 | 90 | 970142 | 80.0 | 72.5 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 92 | 3614422 | 80.0 | 79.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 92 | 1285631 | 80.0 | 74.0 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.622 | -0.012 | 88 | 1522047 | 80.0 | 89.6 | |
| 10 Chloromethane | 50 | 1.811 | 1.823 | -0.012 | 81 | 1245553 | 80.0 | 75.7 | |
| 12 Butadiene | 54 | 1.894 | 1.906 | -0.012 | 88 | 1318121 | 80.0 | 82.4 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.930 | -0.012 | 82 | 1317064 | 80.0 | 82.8 | |
| 13 Bromomethane | 94 | 2.203 | 2.227 | -0.024 | 90 | 848050 | 80.0 | 70.9 | |
| 14 Chloroethane | 64 | 2.286 | 2.310 | -0.024 | 86 | 723733 | 80.0 | 74.8 | |
| 15 Dichlorofluoromethane | 67 | 2.487 | 2.511 | -0.024 | 83 | 1706469 | 80.0 | 74.8 | |
| 16 Trichlorofluoromethane | 101 | 2.559 | 2.582 | -0.023 | 88 | 1728039 | 80.0 | 80.1 | |
| 17 Ethyl ether | 59 | 2.796 | 2.820 | -0.024 | 91 | 738330 | 80.0 | 76.2 | |
| 18 Acrolein | 56 | 2.914 | 2.938 | -0.024 | 93 | 1043418 | 400.0 | 409.9 | |
| 21 1,1-Dichloroethene | 61 | 3.021 | 3.033 | -0.012 | 90 | 1458107 | 80.0 | 78.9 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 83 | 1047375 | 80.0 | 79.5 | |
| 22 Acetone | 43 | 3.068 | 3.080 | -0.012 | 74 | 501797 | 160.0 | 156.1 | |
| 23 Iodomethane | 142 | 3.175 | 3.199 | -0.024 | 98 | 1772860 | 80.0 | 77.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.246 | 3.258 | -0.012 | 98 | 3006958 | 80.0 | 72.8 | |
| 26 3-Chloro-1-propene | 41 | 3.353 | 3.365 | -0.012 | 83 | 1500878 | 80.0 | 77.5 | |
| 27 Methyl acetate | 43 | 3.377 | 3.389 | -0.012 | 97 | 1633788 | 160.0 | 147.8 | |
| 28 Methylene Chloride | 49 | 3.472 | 3.484 | -0.012 | 54 | 1113978 | 80.0 | 75.5 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.579 | 0.000 | 76 | 741744 | 800.0 | 616.8 | |
| 30 Acrylonitrile | 53 | 3.685 | 3.697 | -0.012 | 97 | 3868018 | 800.0 | 774.9 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.721 | 3.733 | -0.012 | 80 | 1369327 | 80.0 | 75.3 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 69 | 2537900 | 80.0 | 74.9 | |
| 33 Hexane | 57 | 3.970 | 3.982 | -0.012 | 91 | 1614587 | 80.0 | 81.3 | |
| 34 1,1-Dichloroethane | 63 | 4.100 | 4.112 | -0.012 | 85 | 1701003 | 80.0 | 79.3 | |
| 35 Vinyl acetate | 43 | 4.136 | 4.148 | -0.012 | 97 | 1593713 | 80.0 | 81.7 | |
| 41 2-Butanone (MEK) | 72 | 4.622 | 4.634 | -0.012 | 64 | 297238 | 160.0 | 162.1 | |
| 39 2,2-Dichloropropane | 77 | 4.622 | 4.634 | -0.012 | 58 | 1027916 | 80.0 | 79.7 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.634 | -0.012 | 68 | 1142993 | 80.0 | 76.0 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 71 | 714392 | 80.0 | 72.2 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 83 | 734202 | 160.0 | 154.9 | |
| 47 Chloroform | 83 | 4.895 | 4.907 | -0.012 | 68 | 1728769 | 80.0 | 77.7 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 89 | 1621508 | 80.0 | 80.9 | |
| 49 Cyclohexane | 84 | 5.132 | 5.144 | -0.012 | 87 | 1675220 | 80.0 | 79.8 | |
| 50 1,1-Dichloropropene | 75 | 5.215 | 5.227 | -0.012 | 92 | 1441115 | 80.0 | 79.0 | |
| 51 Carbon tetrachloride | 117 | 5.227 | 5.239 | -0.012 | 69 | 1528972 | 80.0 | 81.9 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 84 | 849021 | 2000.0 | 1980.1 | |
| 53 Benzene | 78 | 5.405 | 5.417 | -0.012 | 94 | 3923346 | 80.0 | 78.4 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 43 | 1220640 | 80.0 | 75.9 | |
| 56 n-Heptane | 57 | 5.630 | 5.642 | -0.012 | 91 | 884598 | 80.0 | 81.7 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 90 | 1225880 | 80.0 | 79.5 | |
| 60 Methylcyclohexane | 83 | 6.164 | 6.176 | -0.012 | 90 | 2029926 | 80.0 | 81.1 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 88 | 908144 | 80.0 | 80.8 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 85 | 784539 | 80.0 | 75.4 | |
| 64 1,4-Dioxane | 88 | 6.294 | 6.306 | -0.012 | 33 | 187742 | 1600.0 | 1694.3 | |
| 65 Dichlorobromomethane | 83 | 6.424 | 6.436 | -0.012 | 94 | 1286301 | 80.0 | 81.6 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 91 | 1392220 | 160.0 | 166.6 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 93 | 1511629 | 80.0 | 82.0 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 89 | 2377711 | 160.0 | 159.3 | |
| 70 Toluene | 91 | 7.160 | 7.172 | -0.012 | 94 | 4260144 | 80.0 | 79.6 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.349 | 7.361 | -0.012 | 82 | 1391341 | 80.0 | 80.9 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 88 | 1361372 | 80.0 | 83.5 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 67 | 859718 | 80.0 | 82.0 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 91 | 1297004 | 80.0 | 82.0 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 87 | 1458618 | 80.0 | 79.9 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 79 | 1795814 | 160.0 | 163.5 | |
| 79 Chlorodibromomethane | 129 | 7.919 | 7.931 | -0.012 | 88 | 1038431 | 80.0 | 82.9 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.037 | 8.049 | -0.012 | 97 | 938884 | 80.0 | 78.4 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 96 | 2784427 | 80.0 | 77.8 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 79 | 1003714 | 80.0 | 81.7 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 1565528 | 80.0 | 82.2 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 1910562 | 80.0 | 81.2 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 90 | 3100442 | 80.0 | 82.3 | |
| 86 o-Xylene | 106 | 9.140 | 9.152 | -0.012 | 93 | 1811249 | 80.0 | 79.8 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 99 | 849153 | 80.0 | 84.7 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 4856288 | 80.0 | 80.8 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 83 | 1352703 | 80.0 | 79.4 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 80 | 1269533 | 80.0 | 78.6 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 68 | 473318 | 80.0 | 78.5 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 52 | 430124 | 80.0 | 82.3 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 91 | 1402046 | 80.0 | 82.0 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 96 | 1168008 | 80.0 | 79.4 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 3997648 | 80.0 | 82.6 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 1220622 | 80.0 | 79.3 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 3727392 | 80.0 | 80.1 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 4098181 | 80.0 | 81.6 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 5357379 | 80.0 | 83.4 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 96 | 2421314 | 80.0 | 77.4 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 4693383 | 80.0 | 85.1 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 95 | 2449293 | 80.0 | 75.5 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 97 | 4087812 | 80.0 | 85.9 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 98 | 2259323 | 80.0 | 79.0 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 94 | 436864 | 80.0 | 86.1 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 1625332 | 80.0 | 82.7 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.196 | 0.012 | 86 | 876579 | 80.0 | 85.5 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 4711177 | 80.0 | 85.0 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 1552764 | 80.0 | 87.4 | |
| S 164 Total BTEX | 1 | | | | 0 | | 400.0 | 401.2 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 320.0 | 326.9 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 151.3 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 162.9 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 160.0 | 161.0 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 64.00 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 64.00 | Units: uL |
| vmrprimw_00292 | Amount Added: | 64.00 | Units: uL |
| vm50ss_00329 | Amount Added: | 64.00 | Units: uL |

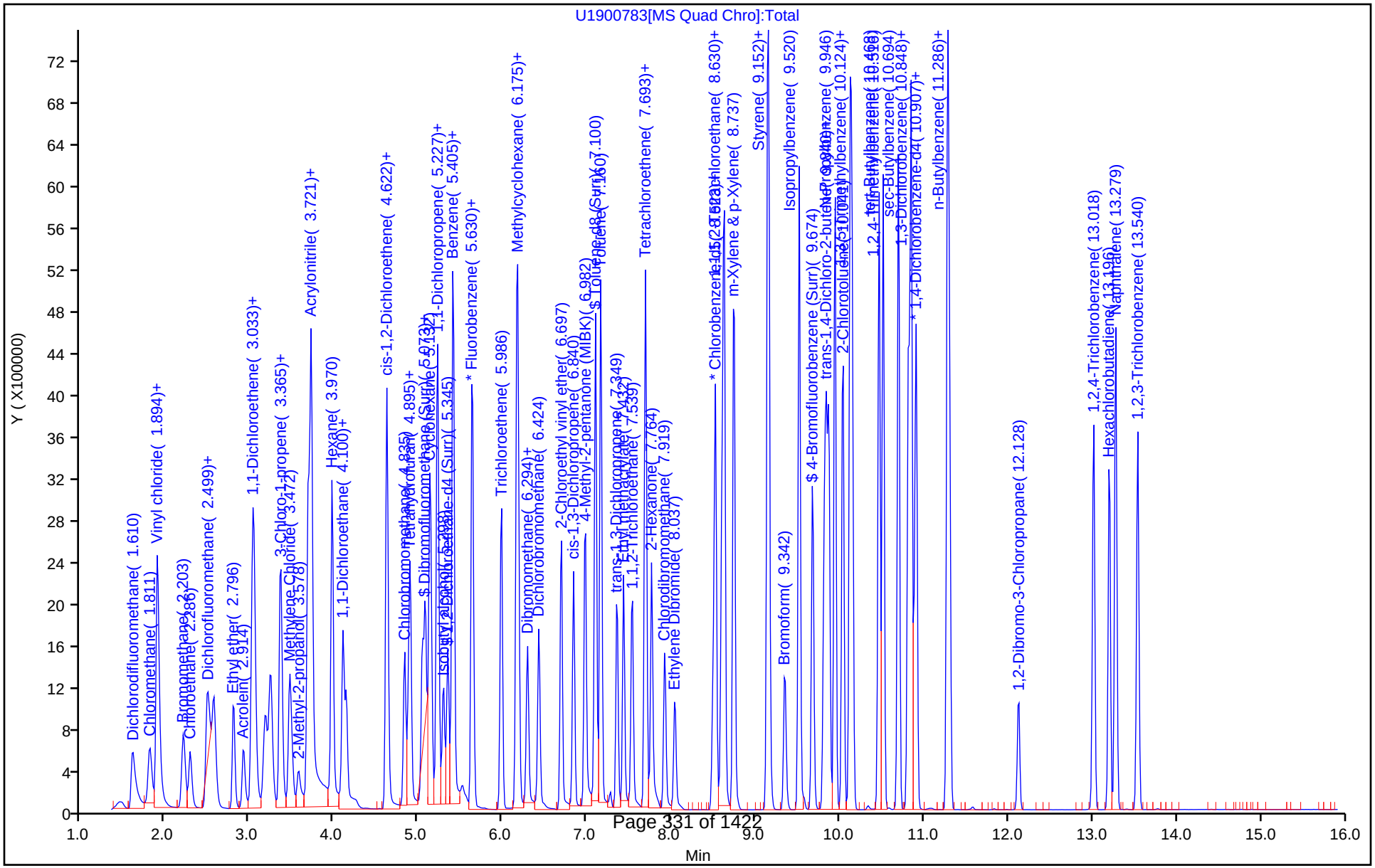
Report Date: 25-Jul-2018 10:13:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900783.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 17:50:49 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L7 | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900784.d
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Jul-2018 18:13:04 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:35 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:44:24

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 92 | 977352 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 767566 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.884 | 10.883 | 0.001 | 73 | 440038 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 63 | 758227 | 60.0 | 59.9 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 98 | 782592 | 60.0 | 58.4 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 89 | 2798059 | 60.0 | 60.6 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 92 | 1010844 | 60.0 | 56.9 | |
| 9 Dichlorodifluoromethane | 85 | 1.622 | 1.622 | 0.000 | 87 | 1134505 | 60.0 | 66.7 | |
| 10 Chloromethane | 50 | 1.824 | 1.823 | 0.001 | 78 | 955231 | 60.0 | 58.0 | |
| 12 Butadiene | 54 | 1.907 | 1.906 | 0.000 | 88 | 989374 | 60.0 | 61.8 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 82 | 993940 | 60.0 | 62.4 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 91 | 660888 | 60.0 | 55.2 | |
| 14 Chloroethane | 64 | 2.310 | 2.310 | 0.000 | 87 | 563348 | 60.0 | 58.2 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.511 | 0.000 | 83 | 1312016 | 60.0 | 57.4 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 87 | 1337225 | 60.0 | 61.9 | |
| 17 Ethyl ether | 59 | 2.808 | 2.820 | -0.012 | 90 | 580370 | 60.0 | 59.8 | |
| 18 Acrolein | 56 | 2.926 | 2.938 | -0.012 | 96 | 800130 | 300.0 | 313.8 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.033 | 0.012 | 89 | 1128785 | 60.0 | 61.0 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 74 | 793296 | 60.0 | 60.1 | |
| 22 Acetone | 43 | 3.081 | 3.080 | 0.001 | 88 | 459712 | 120.0 | 142.8 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 97 | 1363038 | 60.0 | 59.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 98 | 2317545 | 60.0 | 56.0 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 79 | 1159498 | 60.0 | 59.8 | |
| 27 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 1400331 | 120.0 | 126.5 | |
| 28 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 51 | 872855 | 60.0 | 59.1 | |
| 29 2-Methyl-2-propanol | 59 | 3.579 | 3.579 | 0.001 | 88 | 798354 | 600.0 | 662.9 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 3368428 | 600.0 | 673.8 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 47 | 2063462 | 60.0 | 60.8 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 71 | 1061569 | 60.0 | 58.3 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 89 | 1210166 | 60.0 | 60.9 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 84 | 1313347 | 60.0 | 61.1 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 1234805 | 60.0 | 63.2 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 67 | 896669 | 60.0 | 59.5 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 59 | 704769 | 60.0 | 54.6 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 79 | 241145 | 120.0 | 131.3 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 75 | 587580 | 60.0 | 59.3 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 618274 | 120.0 | 130.2 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 1353439 | 60.0 | 60.7 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 81 | 1224716 | 60.0 | 61.0 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 1279473 | 60.0 | 60.9 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 91 | 1102013 | 60.0 | 60.3 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 1167256 | 60.0 | 62.4 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 83 | 758926 | 1500.0 | 1767.3 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 46 | 954899 | 60.0 | 59.3 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 94 | 3064496 | 60.0 | 61.1 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 89 | 660181 | 60.0 | 60.2 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 928718 | 60.0 | 60.1 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 89 | 1566351 | 60.0 | 62.5 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 86 | 704987 | 60.0 | 62.6 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 88 | 630606 | 60.0 | 60.5 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 34 | 142512 | 1200.0 | 1284.2 | |
| 65 Dichlorobromomethane | 83 | 6.437 | 6.436 | 0.000 | 93 | 999127 | 60.0 | 63.3 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 86 | 1029389 | 120.0 | 123.0 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 95 | 1135535 | 60.0 | 61.5 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 93 | 1889071 | 120.0 | 126.4 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 94 | 3229981 | 60.0 | 59.1 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 80 | 1082760 | 60.0 | 61.6 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 87 | 1060082 | 60.0 | 63.6 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 73 | 666583 | 60.0 | 62.2 | |
| 75 Tetrachloroethene | 166 | 7.694 | 7.693 | 0.001 | 92 | 994717 | 60.0 | 61.5 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 87 | 1126088 | 60.0 | 60.4 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 79 | 1409861 | 120.0 | 125.6 | |
| 79 Chlorodibromomethane | 129 | 7.919 | 7.931 | -0.012 | 88 | 813124 | 60.0 | 63.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 733594 | 60.0 | 59.9 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 96 | 2173534 | 60.0 | 59.5 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 85 | 798193 | 60.0 | 63.6 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 1207976 | 60.0 | 62.1 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 1482266 | 60.0 | 61.7 | |
| 86 o-Xylene | 106 | 9.140 | 9.152 | -0.012 | 93 | 1435324 | 60.0 | 61.9 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 90 | 2428268 | 60.0 | 63.1 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 99 | 655265 | 60.0 | 64.0 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 3795594 | 60.0 | 61.8 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 83 | 1065677 | 60.0 | 60.8 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 80 | 988831 | 60.0 | 59.5 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 67 | 369092 | 60.0 | 59.4 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.876 | 9.875 | 0.001 | 52 | 326498 | 60.0 | 60.7 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 95 | 1083875 | 60.0 | 61.6 | |
| 96 2-Chlorotoluene | 126 | 10.042 | 10.041 | 0.001 | 96 | 918378 | 60.0 | 60.6 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.125 | 10.124 | 0.001 | 93 | 3091430 | 60.0 | 62.0 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 946982 | 60.0 | 59.8 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 76 | 2915643 | 60.0 | 60.9 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 3120829 | 60.0 | 60.4 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 93 | 4087764 | 60.0 | 61.8 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 90 | 1874897 | 60.0 | 58.2 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 3530033 | 60.0 | 62.2 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 94 | 1892443 | 60.0 | 56.6 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 97 | 3068191 | 60.0 | 62.6 | |
| 109 1,2-Dichlorobenzene | 146 | 11.299 | 11.298 | 0.001 | 98 | 1726550 | 60.0 | 58.6 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 94 | 330105 | 60.0 | 63.2 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 1132196 | 60.0 | 56.0 | |
| 113 Hexachlorobutadiene | 225 | 13.196 | 13.196 | 0.000 | 92 | 584967 | 60.0 | 55.4 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 3349616 | 60.0 | 58.7 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 1038523 | 60.0 | 56.8 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 240.0 | 251.5 | |
| S 164 Total BTEX | 1 | | | | 0 | | 300.0 | 305.8 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 117.8 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 123.1 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 120.0 | 123.5 | |

## Reagents:

| | | | |
|---|---|---|---|
| vmarolistdw_00256 | Amount Added: | 48.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 48.00 | Units: uL |
| vmrprimw_00292 | Amount Added: | 48.00 | Units: uL |
| vm50ss_00329 | Amount Added: | 48.00 | Units: uL |
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |

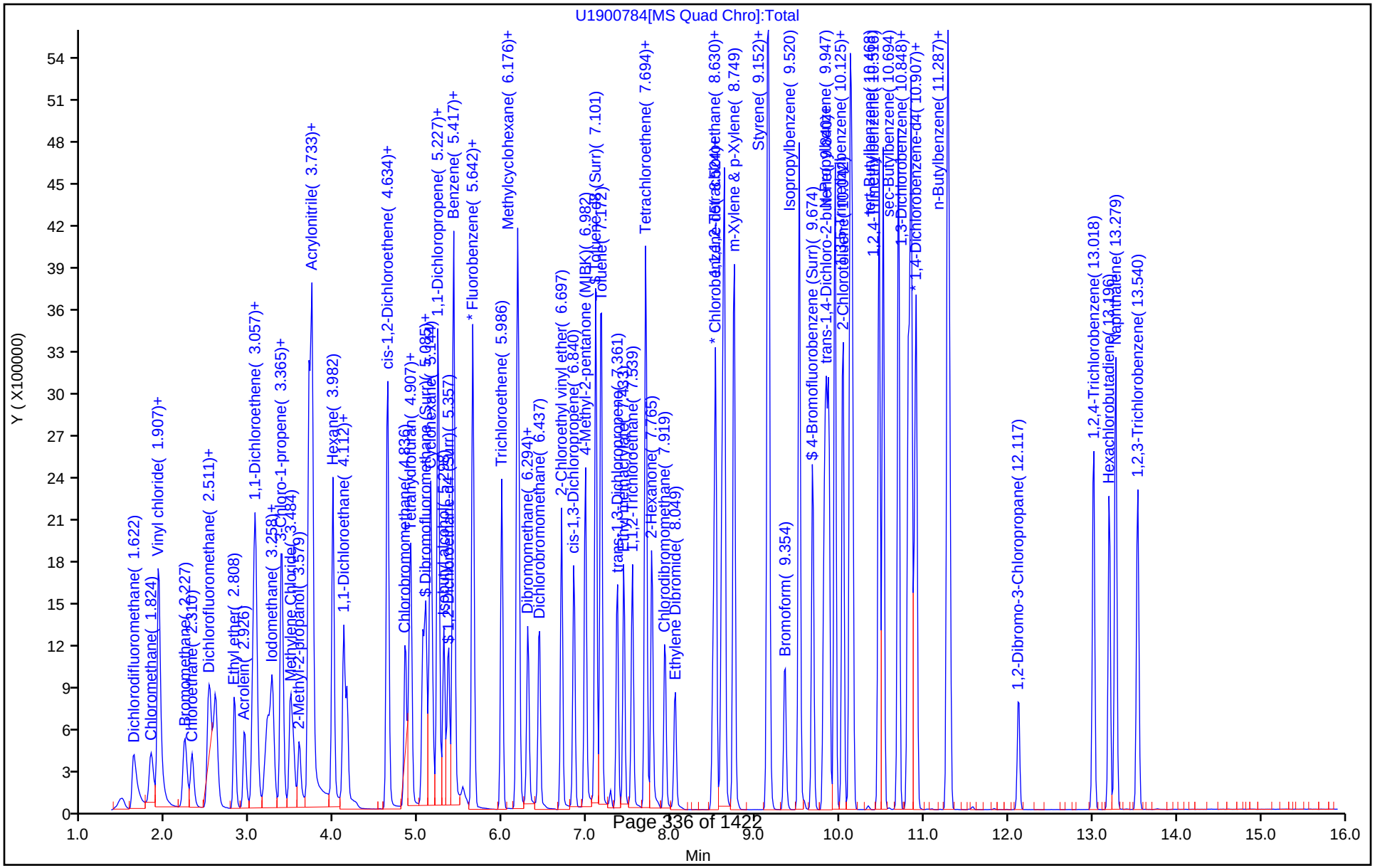
Report Date: 25-Jul-2018 10:13:37 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900784.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 18:13:04 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L6 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900790.d
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jul-2018 18:35:32 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-009
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:42 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:45:53

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 95 | 980424 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 764018 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 76 | 423933 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 60 | 483501 | 40.0 | 38.1 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.357 | -0.012 | 99 | 501017 | 40.0 | 37.2 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 92 | 1834190 | 40.0 | 39.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 91 | 659738 | 40.0 | 37.3 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.622 | -0.012 | 88 | 708511 | 40.0 | 41.5 | |
| 10 Chloromethane | 50 | 1.811 | 1.823 | -0.012 | 78 | 632033 | 40.0 | 38.3 | |
| 12 Butadiene | 54 | 1.894 | 1.906 | -0.012 | 87 | 631099 | 40.0 | 39.3 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.930 | -0.012 | 83 | 644632 | 40.0 | 40.3 | |
| 13 Bromomethane | 94 | 2.215 | 2.227 | -0.012 | 90 | 441425 | 40.0 | 36.7 | |
| 14 Chloroethane | 64 | 2.298 | 2.310 | -0.012 | 86 | 372825 | 40.0 | 38.4 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.511 | -0.012 | 83 | 879608 | 40.0 | 38.4 | |
| 16 Trichlorofluoromethane | 101 | 2.570 | 2.582 | -0.012 | 87 | 861954 | 40.0 | 39.8 | |
| 17 Ethyl ether | 59 | 2.808 | 2.820 | -0.012 | 88 | 370565 | 40.0 | 38.0 | |
| 18 Acrolein | 56 | 2.926 | 2.938 | -0.012 | 92 | 531628 | 200.0 | 207.9 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.033 | 0.000 | 89 | 716665 | 40.0 | 38.6 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 76 | 505930 | 40.0 | 38.2 | |
| 22 Acetone | 43 | 3.068 | 3.080 | -0.012 | 63 | 237768 | 80.0 | 73.6 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 96 | 903919 | 40.0 | 39.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.246 | 3.258 | -0.012 | 98 | 1496184 | 40.0 | 36.1 | |
| 26 3-Chloro-1-propene | 41 | 3.353 | 3.365 | -0.012 | 81 | 747474 | 40.0 | 38.4 | |
| 27 Methyl acetate | 43 | 3.377 | 3.389 | -0.012 | 96 | 828794 | 80.0 | 74.6 | |
| 28 Methylene Chloride | 49 | 3.472 | 3.484 | -0.012 | 53 | 566982 | 40.0 | 38.3 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.579 | 0.000 | 9 | 411966 | 400.0 | 341.0 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 1977138 | 400.0 | 394.3 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.721 | 3.733 | -0.012 | 78 | 684359 | 40.0 | 37.4 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 88 | 1350698 | 40.0 | 39.7 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 90 | 765779 | 40.0 | 38.4 | |
| 34 1,1-Dichloroethane | 63 | 4.100 | 4.112 | -0.012 | 85 | 860929 | 40.0 | 40.0 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 96 | 770166 | 40.0 | 39.3 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 74 | 153177 | 80.0 | 83.1 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 64 | 481767 | 40.0 | 37.2 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.634 | -0.012 | 62 | 582599 | 40.0 | 38.6 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 89 | 369472 | 40.0 | 37.2 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 372381 | 80.0 | 78.2 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 869181 | 40.0 | 38.9 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 89 | 801860 | 40.0 | 39.8 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 75 | 815868 | 40.0 | 38.7 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 90 | 708682 | 40.0 | 38.7 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 731238 | 40.0 | 39.0 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 70 | 449380 | 1000.0 | 1043.2 | |
| 53 Benzene | 78 | 5.405 | 5.417 | -0.012 | 93 | 2003056 | 40.0 | 39.8 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 47 | 617748 | 40.0 | 38.2 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 86 | 434651 | 40.0 | 38.6 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 608912 | 40.0 | 39.3 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 90 | 972024 | 40.0 | 38.6 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 86 | 465852 | 40.0 | 41.2 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 90 | 412829 | 40.0 | 39.5 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 32 | 91591 | 800.0 | 822.7 | |
| 65 Dichlorobromomethane | 83 | 6.424 | 6.436 | -0.012 | 94 | 649042 | 40.0 | 41.0 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 86 | 695808 | 80.0 | 82.9 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 93 | 757793 | 40.0 | 40.9 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 92 | 1213622 | 80.0 | 80.9 | |
| 70 Toluene | 91 | 7.160 | 7.172 | -0.012 | 94 | 2123092 | 40.0 | 39.0 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 80 | 710372 | 40.0 | 40.6 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 87 | 700245 | 40.0 | 42.2 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 73 | 444369 | 40.0 | 41.7 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 91 | 637692 | 40.0 | 39.6 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 87 | 743433 | 40.0 | 40.0 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 79 | 916606 | 80.0 | 82.1 | |
| 79 Chlorodibromomethane | 129 | 7.919 | 7.931 | -0.012 | 88 | 523153 | 40.0 | 41.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 483377 | 40.0 | 39.7 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 96 | 1428038 | 40.0 | 39.2 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 85 | 510579 | 40.0 | 40.9 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 780525 | 40.0 | 40.3 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 952249 | 40.0 | 39.8 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 89 | 1558780 | 40.0 | 40.7 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 86 | 911893 | 40.0 | 39.5 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 99 | 416502 | 40.0 | 40.9 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 2424662 | 40.0 | 39.7 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 87 | 686661 | 40.0 | 40.6 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 87 | 642419 | 40.0 | 40.1 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 68 | 241838 | 40.0 | 40.4 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 59 | 213375 | 40.0 | 41.2 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 95 | 680756 | 40.0 | 40.1 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 96 | 581507 | 40.0 | 39.9 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 1942019 | 40.0 | 40.5 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 607997 | 40.0 | 39.8 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 1803602 | 40.0 | 39.1 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 1964040 | 40.0 | 39.4 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 2509293 | 40.0 | 39.4 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 89 | 1193296 | 40.0 | 38.4 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 2169356 | 40.0 | 39.7 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 94 | 1214157 | 40.0 | 37.7 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 97 | 1846843 | 40.0 | 39.1 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 98 | 1090448 | 40.0 | 38.4 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 93 | 200822 | 40.0 | 39.9 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 719342 | 40.0 | 36.9 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.196 | 0.012 | 86 | 376786 | 40.0 | 37.0 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 2169342 | 40.0 | 39.5 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 684438 | 40.0 | 38.8 | |
| S 164 Total BTEX | 1 | | | | 0 | | 200.0 | 198.4 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 160.0 | 161.8 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 76.0 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 81.5 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 80.0 | 79.3 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 32.00 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 32.00 | Units: uL |
| vmrprimw_00292 | Amount Added: | 32.00 | Units: uL |
| vm50ss_00329 | Amount Added: | 32.00 | Units: uL |

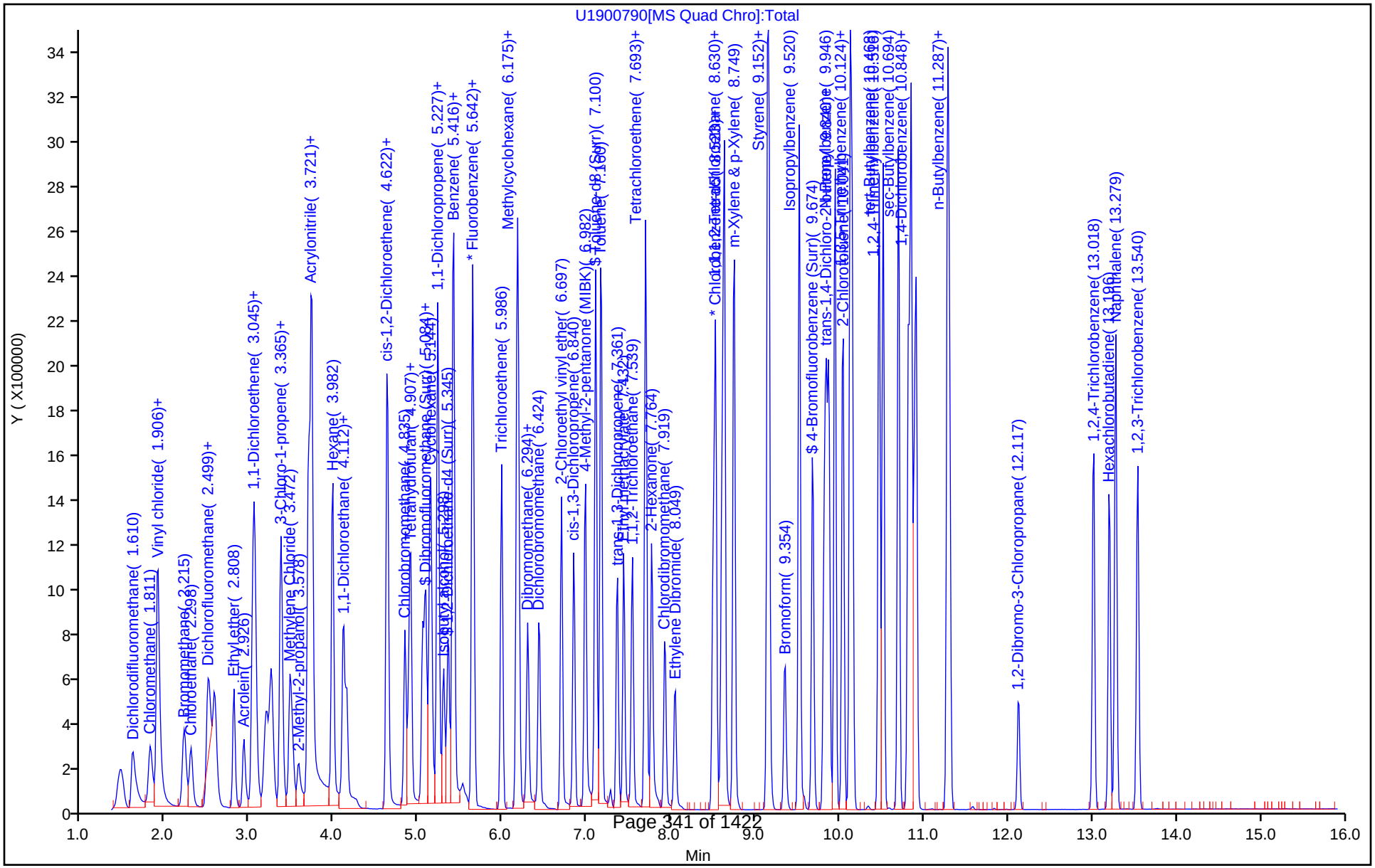
Report Date: 25-Jul-2018 10:13:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900790.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 18:35:32 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L5 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 25-Jul-2018 10:13:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900791.d
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 24-Jul-2018 18:57:47 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-010
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:48 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:47:40

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 96 | 929533 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 84 | 742668 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 89 | 433286 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 235239 | 20.0 | 19.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 98 | 247201 | 20.0 | 19.4 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 84 | 849081 | 20.0 | 19.0 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 91 | 320453 | 20.0 | 18.7 | |
| 9 Dichlorodifluoromethane | 85 | 1.622 | 1.622 | 0.000 | 87 | 328230 | 20.0 | 20.3 | |
| 10 Chloromethane | 50 | 1.823 | 1.823 | 0.000 | 89 | 315290 | 20.0 | 20.1 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 86 | 301883 | 20.0 | 19.8 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 74 | 312915 | 20.0 | 20.7 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 90 | 229239 | 20.0 | 20.1 | |
| 14 Chloroethane | 64 | 2.310 | 2.310 | 0.000 | 94 | 188891 | 20.0 | 20.5 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.511 | 0.000 | 83 | 439391 | 20.0 | 20.2 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 86 | 415720 | 20.0 | 20.2 | |
| 17 Ethyl ether | 59 | 2.820 | 2.820 | 0.000 | 89 | 180269 | 20.0 | 19.5 | |
| 18 Acrolein | 56 | 2.938 | 2.938 | 0.000 | 95 | 227879 | 100.0 | 94.0 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.033 | 0.000 | 90 | 347690 | 20.0 | 19.7 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 83 | 247358 | 20.0 | 19.7 | |
| 22 Acetone | 43 | 3.080 | 3.080 | 0.000 | 74 | 107763 | 40.0 | 35.2 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 98 | 440198 | 20.0 | 20.2 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 98 | 728690 | 20.0 | 18.5 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 82 | 355801 | 20.0 | 19.3 | |
| 27 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 391356 | 40.0 | 37.2 | |
| 28 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 51 | 279726 | 20.0 | 19.9 | |
| 29 2-Methyl-2-propanol | 59 | 3.579 | 3.579 | 0.000 | 7 | 215092 | 200.0 | 187.8 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 915892 | 200.0 | 192.6 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 88 | 654948 | 20.0 | 20.3 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 72 | 329454 | 20.0 | 19.0 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 91 | 356826 | 20.0 | 18.9 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 413734 | 20.0 | 20.3 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 357825 | 20.0 | 19.3 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 67 | 281663 | 20.0 | 19.7 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 61 | 247316 | 20.0 | 20.1 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 69 | 66486 | 40.0 | 38.1 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 72 | 180080 | 20.0 | 19.1 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 169823 | 40.0 | 37.6 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 422069 | 20.0 | 19.9 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 56 | 378348 | 20.0 | 19.8 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 386296 | 20.0 | 19.3 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 92 | 334178 | 20.0 | 19.2 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 345961 | 20.0 | 19.5 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 69 | 183028 | 500.0 | 448.2 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 45 | 289097 | 20.0 | 18.9 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 94 | 930203 | 20.0 | 19.5 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 84 | 216048 | 20.0 | 18.9 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 285190 | 20.0 | 19.4 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 89 | 461990 | 20.0 | 19.4 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 84 | 210992 | 20.0 | 19.7 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 93 | 196594 | 20.0 | 19.8 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 33 | 43840 | 400.0 | 415.4 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 290639 | 20.0 | 19.4 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 91 | 315645 | 40.0 | 39.7 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 91 | 347181 | 20.0 | 19.8 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 93 | 554613 | 40.0 | 39.0 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 94 | 985962 | 20.0 | 18.6 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 82 | 315763 | 20.0 | 18.6 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 87 | 305349 | 20.0 | 18.9 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 74 | 202390 | 20.0 | 19.5 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 97 | 300622 | 20.0 | 19.2 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 87 | 344194 | 20.0 | 19.1 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 79 | 411400 | 40.0 | 37.9 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.931 | 0.000 | 87 | 237418 | 20.0 | 19.2 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 223763 | 20.0 | 18.9 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 96 | 672294 | 20.0 | 19.0 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 86 | 245845 | 20.0 | 20.2 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 371072 | 20.0 | 19.7 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 455770 | 20.0 | 19.6 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 446659 | 20.0 | 19.9 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 88 | 733164 | 20.0 | 19.7 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 98 | 190577 | 20.0 | 19.2 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1178300 | 20.0 | 19.8 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 87 | 331847 | 20.0 | 19.2 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 80 | 313555 | 20.0 | 19.2 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 68 | 114884 | 20.0 | 18.8 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 52 | 97955 | 20.0 | 18.5 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 91 | 334963 | 20.0 | 19.3 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 94 | 293354 | 20.0 | 19.7 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 980405 | 20.0 | 20.0 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 300515 | 20.0 | 19.3 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 76 | 908078 | 20.0 | 19.3 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 1006317 | 20.0 | 19.8 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 1286147 | 20.0 | 19.7 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 84 | 598840 | 20.0 | 18.9 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 1117286 | 20.0 | 20.0 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 606688 | 20.0 | 18.4 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 98 | 958018 | 20.0 | 19.8 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 97 | 559506 | 20.0 | 19.3 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 92 | 99335 | 20.0 | 19.3 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 90 | 379757 | 20.0 | 19.1 | |
| 113 Hexachlorobutadiene | 225 | 13.196 | 13.196 | 0.000 | 92 | 199490 | 20.0 | 19.2 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 1094286 | 20.0 | 19.5 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 351575 | 20.0 | 19.5 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 77.7 | |
| S 164 Total BTEX | 1 | | | | 0 | | 100.0 | 97.3 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 40.0 | 39.5 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 16.00 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 16.00 | Units: uL |
| vmrprimw_00292 | Amount Added: | 16.00 | Units: uL |
| vm50ss_00329 | Amount Added: | 16.00 | Units: uL |

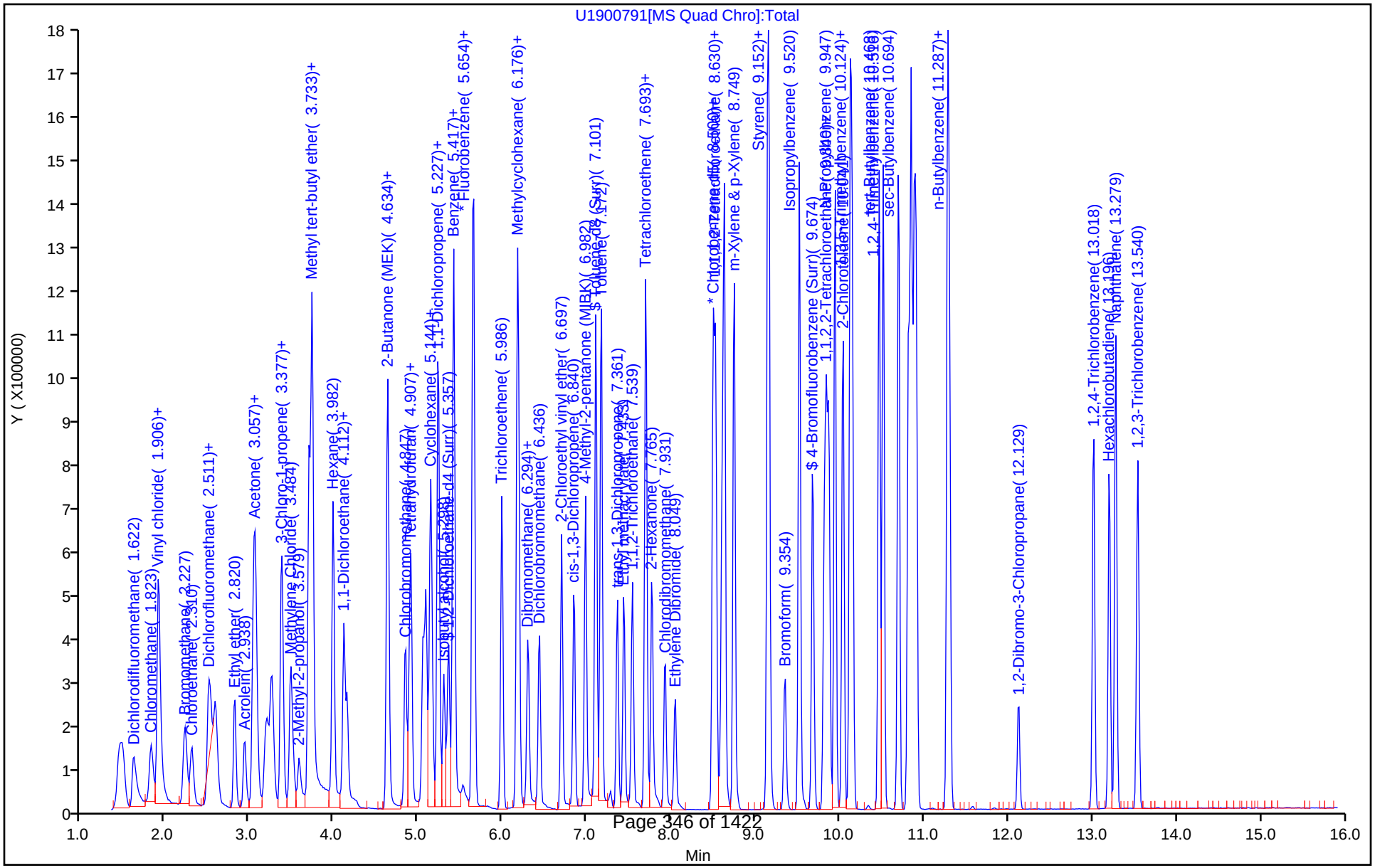
Report Date: 25-Jul-2018 10:13:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900791.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 18:57:47 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | ICIS L4 | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 25-Jul-2018 10:13:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900792.d
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jul-2018 19:20:02 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-011
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:13:54 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:49:18

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.653 | 5.654 | -0.001 | 98 | 952790 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 771801 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 92 | 425561 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 60 | 119809 | 10.0 | 9.71 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 90 | 125069 | 10.0 | 9.57 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 89 | 467380 | 10.0 | 10.1 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 91 | 172585 | 10.0 | 9.67 | |
| 9 Dichlorodifluoromethane | 85 | 1.598 | 1.622 | -0.024 | 86 | 151920 | 10.0 | 9.16 | |
| 10 Chloromethane | 50 | 1.811 | 1.823 | -0.012 | 78 | 155433 | 10.0 | 9.68 | |
| 12 Butadiene | 54 | 1.894 | 1.906 | -0.012 | 88 | 137925 | 10.0 | 8.83 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.930 | -0.012 | 73 | 148293 | 10.0 | 9.55 | |
| 13 Bromomethane | 94 | 2.214 | 2.227 | -0.013 | 91 | 114577 | 10.0 | 9.81 | |
| 14 Chloroethane | 64 | 2.297 | 2.310 | -0.013 | 94 | 93395 | 10.0 | 9.89 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.511 | -0.012 | 82 | 215631 | 10.0 | 9.68 | |
| 16 Trichlorofluoromethane | 101 | 2.570 | 2.582 | -0.012 | 98 | 187339 | 10.0 | 8.89 | |
| 17 Ethyl ether | 59 | 2.807 | 2.820 | -0.013 | 87 | 90620 | 10.0 | 9.57 | |
| 18 Acrolein | 56 | 2.926 | 2.938 | -0.012 | 95 | 106196 | 50.0 | 42.7 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.033 | 0.000 | 90 | 185910 | 10.0 | 10.3 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 76 | 134365 | 10.0 | 10.4 | |
| 22 Acetone | 43 | 3.068 | 3.080 | -0.012 | 55 | 52355 | 20.0 | 16.7 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 97 | 228493 | 10.0 | 10.2 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.246 | 3.258 | -0.012 | 98 | 387941 | 10.0 | 9.62 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 82 | 184068 | 10.0 | 9.73 | |
| 27 Methyl acetate | 43 | 3.377 | 3.389 | -0.012 | 84 | 197122 | 20.0 | 18.3 | |
| 28 Methylene Chloride | 49 | 3.471 | 3.484 | -0.013 | 57 | 144386 | 10.0 | 10.0 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.579 | 0.000 | 32 | 110777 | 100.0 | 94.4 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 448754 | 100.0 | 92.1 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.733 | -0.001 | 71 | 175373 | 10.0 | 9.87 | |
| 31 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 88 | 335243 | 10.0 | 10.1 | |
| 33 Hexane | 57 | 3.981 | 3.982 | -0.001 | 90 | 208123 | 10.0 | 10.7 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 97 | 213583 | 10.0 | 10.2 | |
| 35 Vinyl acetate | 43 | 4.147 | 4.148 | -0.001 | 96 | 187841 | 10.0 | 9.87 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 71 | 34072 | 20.0 | 19.0 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 65 | 134434 | 10.0 | 10.7 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.634 | -0.012 | 69 | 143871 | 10.0 | 9.80 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 84 | 89489 | 10.0 | 9.27 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 86462 | 20.0 | 18.7 | |
| 47 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 70 | 213657 | 10.0 | 9.83 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 90 | 206006 | 10.0 | 10.5 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 214696 | 10.0 | 10.5 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 93 | 182947 | 10.0 | 10.3 | |
| 51 Carbon tetrachloride | 117 | 5.238 | 5.239 | -0.001 | 69 | 187898 | 10.0 | 10.3 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 69 | 105355 | 250.0 | 251.7 | |
| 53 Benzene | 78 | 5.416 | 5.417 | -0.001 | 94 | 494183 | 10.0 | 10.1 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 46 | 152677 | 10.0 | 9.72 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 60 | 135257 | 10.0 | 10.5 | |
| 58 Trichloroethene | 130 | 5.985 | 5.986 | -0.001 | 91 | 155201 | 10.0 | 10.3 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 89 | 256970 | 10.0 | 10.5 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 84 | 110015 | 10.0 | 10.0 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 91 | 95707 | 10.0 | 9.42 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 33 | 23290 | 200.0 | 215.3 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 152581 | 10.0 | 9.92 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 86 | 171233 | 20.0 | 21.0 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 93 | 175580 | 10.0 | 9.76 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 93 | 308673 | 20.0 | 21.2 | |
| 70 Toluene | 91 | 7.171 | 7.172 | -0.001 | 94 | 544060 | 10.0 | 9.89 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 85 | 172822 | 10.0 | 9.78 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 88 | 166277 | 10.0 | 9.93 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 80 | 109350 | 10.0 | 10.1 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 91 | 166266 | 10.0 | 10.2 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 87 | 188817 | 10.0 | 10.1 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 80 | 235229 | 20.0 | 20.8 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.931 | -0.001 | 86 | 125585 | 10.0 | 9.75 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 121691 | 10.0 | 9.89 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 97 | 362449 | 10.0 | 9.86 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 80 | 126948 | 10.0 | 10.1 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 197845 | 10.0 | 10.1 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 245222 | 10.0 | 10.1 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 88 | 391122 | 10.0 | 10.1 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 240986 | 10.0 | 10.3 | |
| 88 Bromoform | 173 | 9.353 | 9.354 | -0.001 | 98 | 100560 | 10.0 | 9.77 | |
| 89 Isopropylbenzene | 105 | 9.519 | 9.520 | -0.001 | 95 | 636049 | 10.0 | 10.3 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 88 | 173948 | 10.0 | 10.3 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 87 | 164497 | 10.0 | 10.2 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 69 | 63108 | 10.0 | 10.5 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 64 | 51819 | 10.0 | 9.96 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 96 | 181166 | 10.0 | 10.6 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 96 | 151745 | 10.0 | 10.4 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 517511 | 10.0 | 10.7 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 160173 | 10.0 | 10.5 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 490442 | 10.0 | 10.6 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.515 | 10.516 | -0.001 | 70 | 518127 | 10.0 | 10.4 | |
| 102 sec-Butylbenzene | 105 | 10.693 | 10.694 | -0.001 | 94 | 681132 | 10.0 | 10.6 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 82 | 309437 | 10.0 | 9.93 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 91 | 582655 | 10.0 | 10.6 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 91 | 316046 | 10.0 | 9.78 | |
| 108 n-Butylbenzene | 91 | 11.274 | 11.275 | -0.001 | 97 | 498908 | 10.0 | 10.5 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 97 | 286113 | 10.0 | 10.0 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 88 | 48670 | 10.0 | 9.63 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 189226 | 10.0 | 9.67 | |
| 113 Hexachlorobutadiene | 225 | 13.207 | 13.196 | 0.011 | 85 | 103707 | 10.0 | 10.2 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 544587 | 10.0 | 9.87 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.539 | 13.540 | -0.001 | 96 | 177768 | 10.0 | 10.0 | |
| S 164 Total BTEX | 1 | | | | 0 | | 50.0 | 50.6 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 40.0 | 39.3 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 19.7 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 19.5 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 20.0 | 20.5 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 8.00 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 8.00 | Units: uL |
| vmrprimw_00292 | Amount Added: | 8.00 | Units: uL |
| vm50ss_00329 | Amount Added: | 8.00 | Units: uL |

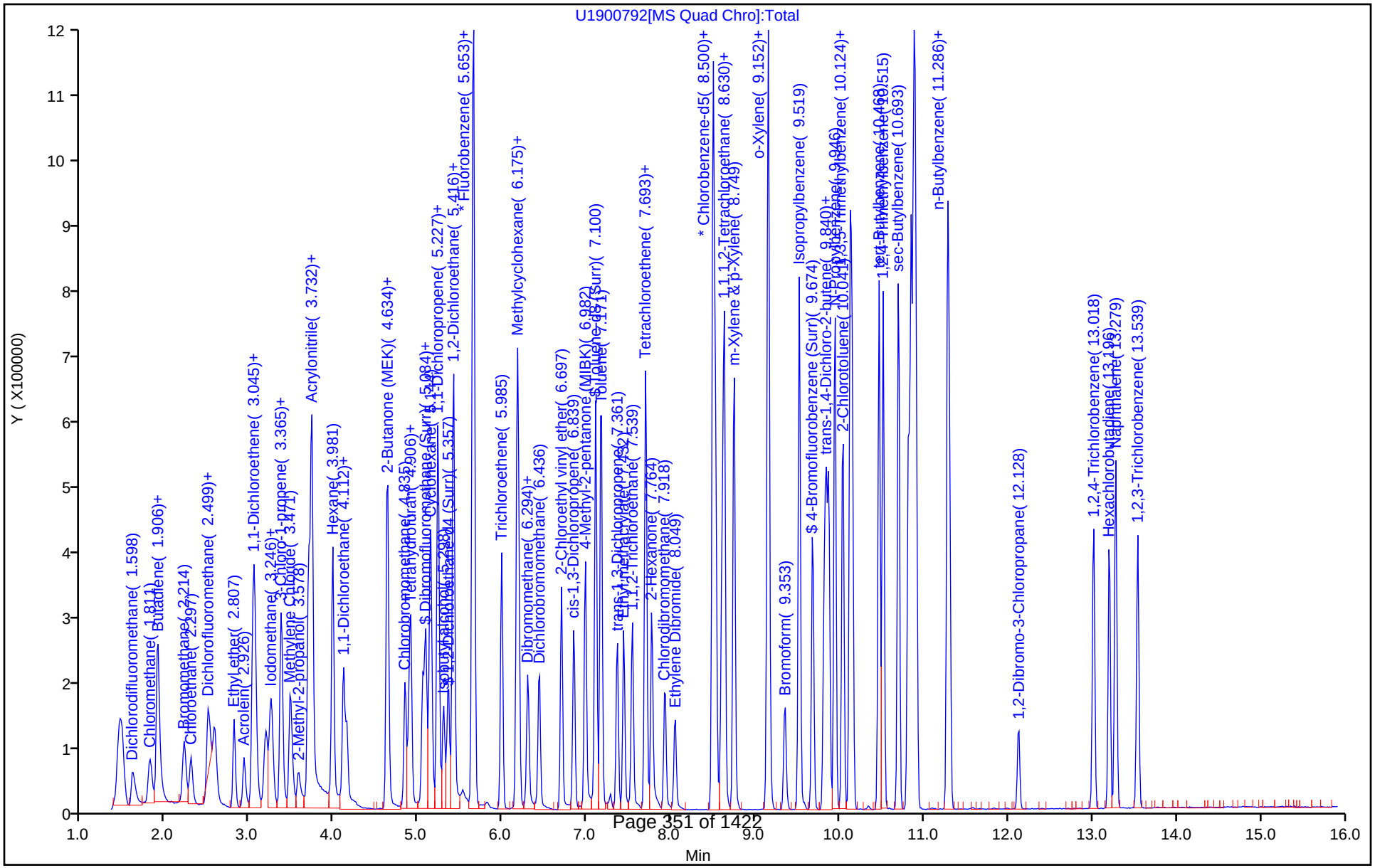
Report Date: 25-Jul-2018 10:13:56 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900792.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 19:20:02 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L3 | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900793.d
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jul-2018 19:42:05 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-012
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:14:00 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:51:22

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 894422 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 708670 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.884 | 10.883 | 0.001 | 93 | 428230 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 60 | 11849 | 1.00 | 1.02 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 88 | 13421 | 1.00 | 1.09 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 87 | 42636 | 1.00 | 1.00 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 86 | 17427 | 1.00 | 1.06 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.622 | -0.012 | 74 | 14647 | 1.00 | 0.9411 | |
| 10 Chloromethane | 50 | 1.812 | 1.823 | -0.011 | 89 | 16570 | 1.00 | 1.10 | |
| 12 Butadiene | 54 | 1.895 | 1.906 | -0.011 | 88 | 15313 | 1.00 | 1.04 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 70 | 15847 | 1.00 | 1.09 | |
| 13 Bromomethane | 94 | 2.215 | 2.227 | -0.012 | 77 | 12818 | 1.00 | 1.17 | |
| 14 Chloroethane | 64 | 2.298 | 2.310 | -0.012 | 70 | 9377 | 1.00 | 1.06 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.511 | -0.012 | 82 | 21989 | 1.00 | 1.05 | |
| 16 Trichlorofluoromethane | 101 | 2.559 | 2.582 | -0.023 | 73 | 20928 | 1.00 | 1.06 | |
| 17 Ethyl ether | 59 | 2.808 | 2.820 | -0.012 | 80 | 9442 | 1.00 | 1.06 | |
| 18 Acrolein | 56 | 2.926 | 2.938 | -0.012 | 86 | 11339 | 5.00 | 4.86 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.033 | 0.000 | 92 | 17119 | 1.00 | 1.01 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 63 | 12789 | 1.00 | 1.06 | |
| 22 Acetone | 43 | 3.069 | 3.080 | -0.011 | 66 | 7064 | 2.00 | 2.40 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 96 | 21574 | 1.00 | 1.03 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.247 | 3.258 | -0.011 | 96 | 43688 | 1.00 | 1.15 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 84 | 18985 | 1.00 | 1.07 | |
| 27 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 92 | 19667 | 2.00 | 1.94 | |
| 28 Methylene Chloride | 49 | 3.472 | 3.484 | -0.012 | 75 | 15117 | 1.00 | 1.12 | |
| 29 2-Methyl-2-propanol | 59 | 3.579 | 3.579 | 0.001 | 70 | 12788 | 10.0 | 11.6 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 100 | 41875 | 10.0 | 9.15 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 87 | 32315 | 1.00 | 1.04 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 73 | 17800 | 1.00 | 1.07 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 92 | 18280 | 1.00 | 1.00 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 83 | 19272 | 1.00 | 0.9804 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 95 | 16923 | 1.00 | 0.9468 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.634 | -0.012 | 78 | 14795 | 1.00 | 1.07 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 56 | 12773 | 1.00 | 1.08 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 60 | 3193 | 2.00 | 1.90 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 67 | 9868 | 1.00 | 1.09 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 84 | 9301 | 2.00 | 2.14 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 66 | 21458 | 1.00 | 1.05 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 80 | 17835 | 1.00 | 0.9707 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 82 | 19597 | 1.00 | 1.02 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 87 | 17455 | 1.00 | 1.04 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 75 | 17198 | 1.00 | 1.01 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 89 | 7910 | 25.0 | 20.1 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 50 | 15873 | 1.00 | 1.08 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 94 | 48419 | 1.00 | 1.06 | |
| 56 n-Heptane | 57 | 5.654 | 5.642 | 0.012 | 38 | 35642 | 1.00 | 1.01 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 84 | 14571 | 1.00 | 1.03 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 88 | 22689 | 1.00 | 0.9886 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 79 | 10704 | 1.00 | 1.04 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 82 | 9635 | 1.00 | 1.01 | |
| 64 1,4-Dioxane | 88 | 6.318 | 6.306 | 0.012 | 1 | 1478 | 20.0 | 14.6 | |
| 65 Dichlorobromomethane | 83 | 6.425 | 6.436 | -0.011 | 87 | 13539 | 1.00 | 0.9376 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 82 | 14128 | 2.00 | 1.84 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 76 | 17042 | 1.00 | 1.01 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 91 | 26811 | 2.00 | 1.96 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 93 | 51989 | 1.00 | 1.03 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 75 | 16254 | 1.00 | 1.00 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 77 | 14391 | 1.00 | 0.9357 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 74 | 9825 | 1.00 | 0.99 | |
| 75 Tetrachloroethene | 166 | 7.694 | 7.693 | 0.001 | 89 | 14983 | 1.00 | 1.00 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 77 | 17817 | 1.00 | 1.03 | |
| 77 2-Hexanone | 43 | 7.777 | 7.765 | 0.012 | 67 | 19416 | 2.00 | 1.87 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.931 | 0.000 | 74 | 11860 | 1.00 | 1.00 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 85 | 11944 | 1.00 | 1.06 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 65 | 36126 | 1.00 | 1.07 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 59 | 11650 | 1.00 | 1.01 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 96 | 18517 | 1.00 | 1.03 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 21784 | 1.00 | 0.9817 | |
| 86 o-Xylene | 106 | 9.140 | 9.152 | -0.012 | 91 | 20892 | 1.00 | 0.9751 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 88 | 33956 | 1.00 | 0.9551 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 82 | 8645 | 1.00 | 0.9144 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 91 | 55210 | 1.00 | 0.9739 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 77 | 17817 | 1.00 | 1.04 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 89 | 15559 | 1.00 | 0.9619 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 70 | 5494 | 1.00 | 0.9090 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.864 | 9.875 | -0.011 | 44 | 4738 | 1.00 | 0.9051 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 94 | 16107 | 1.00 | 0.9402 | |
| 96 2-Chlorotoluene | 126 | 10.042 | 10.041 | 0.001 | 93 | 15255 | 1.00 | 1.04 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.125 | 10.124 | 0.001 | 93 | 45567 | 1.00 | 0.9397 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 94 | 15545 | 1.00 | 1.01 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 88 | 47758 | 1.00 | 1.02 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 68 | 49545 | 1.00 | 0.9846 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 90 | 61320 | 1.00 | 0.9521 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 11 | 33191 | 1.00 | 1.06 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 82 | 50862 | 1.00 | 0.9208 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 52 | 35488 | 1.00 | 1.09 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 94 | 45503 | 1.00 | 0.9538 | |
| 109 1,2-Dichlorobenzene | 146 | 11.299 | 11.298 | 0.001 | 94 | 30581 | 1.00 | 1.07 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 47 | 4764 | 1.00 | 0.9369 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 82 | 21592 | 1.00 | 1.10 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.196 | 0.012 | 66 | 10992 | 1.00 | 1.07 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 93 | 57589 | 1.00 | 1.04 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 86 | 18094 | 1.00 | 1.02 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 4.00 | 3.91 | |
| S 164 Total BTEX | 1 | | | | 0 | | 5.00 | 5.07 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 2.14 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 2.01 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 2.00 | 1.96 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 0.80 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 0.80 | Units: uL |
| vmrprimw_00292 | Amount Added: | 0.80 | Units: uL |
| vm50ss_00329 | Amount Added: | 0.80 | Units: uL |

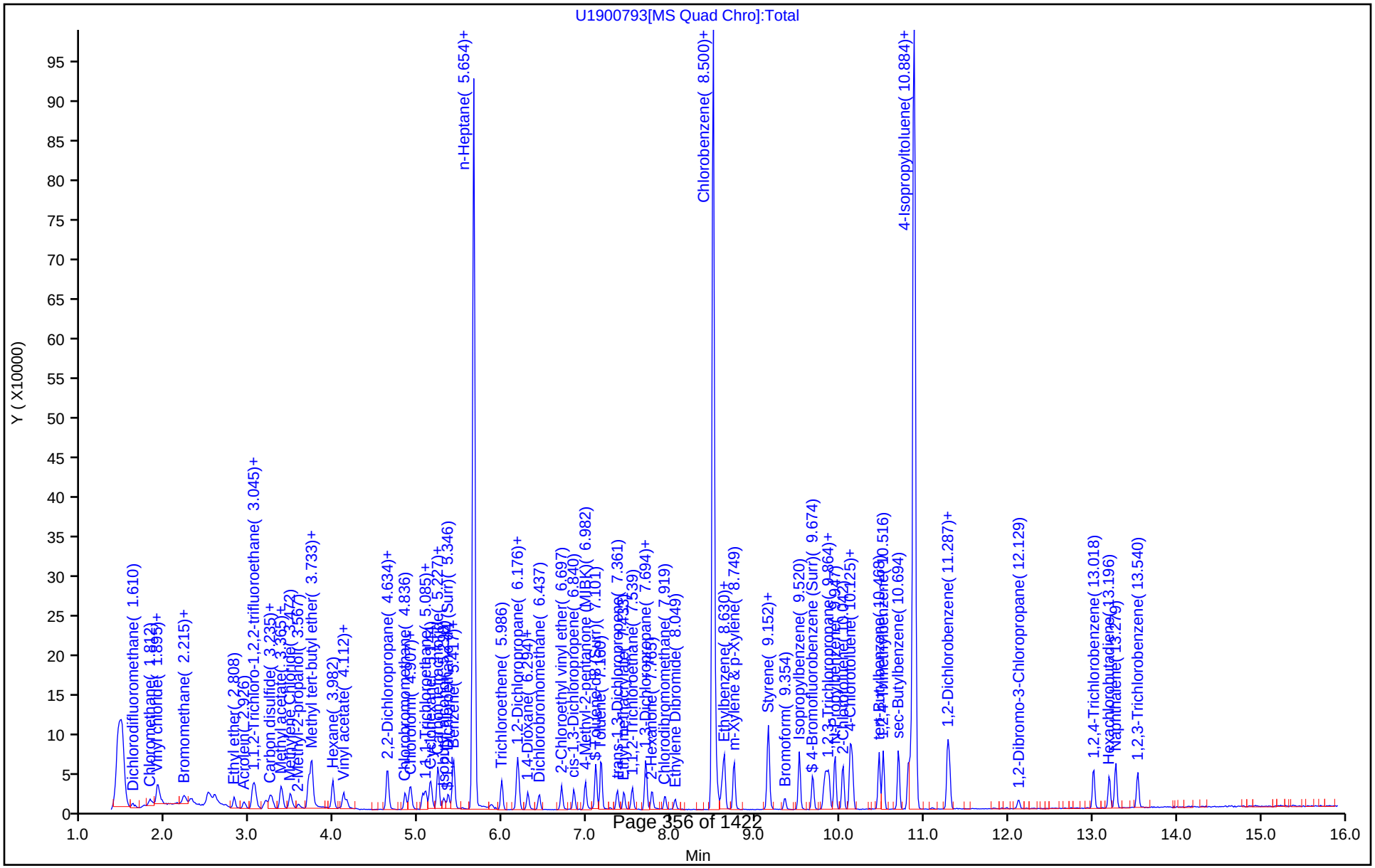
Report Date: 25-Jul-2018 10:14:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900793.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 19:42:05 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L2 | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 25-Jul-2018 10:14:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jul-2018 20:04:28 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078277-013
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 10:14:09 Calib Date: 24-Jul-2018 20:04:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: laveyt Date: 25-Jul-2018 09:56:53

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 923893 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 84 | 731189 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 428789 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 56 | 6754 | 0.5000 | 0.5647 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 75 | 7422 | 0.5000 | 0.5855 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 74 | 22890 | 0.5000 | 0.5200 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 79 | 10413 | 0.5000 | 0.6156 | |
| 9 Dichlorodifluoromethane | 85 | 1.633 | 1.622 | 0.011 | 62 | 6894 | 0.5000 | 0.4288 | |
| 10 Chloromethane | 50 | 1.823 | 1.823 | 0.000 | 71 | 8217 | 0.5000 | 0.5278 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 82 | 7871 | 0.5000 | 0.5198 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 64 | 6342 | 0.5000 | 0.4211 | |
| 13 Bromomethane | 94 | 2.238 | 2.227 | 0.011 | 71 | 6350 | 0.5000 | 0.5606 | |
| 14 Chloroethane | 64 | 2.309 | 2.310 | -0.001 | 60 | 4872 | 0.5000 | 0.5321 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.511 | 0.000 | 53 | 12059 | 0.5000 | 0.5584 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 75 | 10381 | 0.5000 | 0.5081 | |
| 17 Ethyl ether | 59 | 2.819 | 2.820 | -0.001 | 67 | 5066 | 0.5000 | 0.5520 | |
| 18 Acrolein | 56 | 2.938 | 2.938 | 0.000 | 82 | 6772 | 2.50 | 2.81 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.033 | 0.012 | 68 | 8796 | 0.5000 | 0.5026 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | -0.001 | 56 | 6009 | 0.5000 | 0.4815 | |
| 22 Acetone | 43 | | 3.080 | | | | ND | ND | U |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 82 | 10728 | 0.5000 | 0.4956 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.246 | 3.258 | -0.012 | 95 | 23708 | 0.5000 | 0.6063 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 77 | 9784 | 0.5000 | 0.5336 | |
| 27 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 86 | 13362 | 1.00 | 1.28 | |
| 28 Methylene Chloride | 49 | | 3.484 | | | | ND | ND | U |
| 29 2-Methyl-2-propanol | 59 | | 3.579 | | | | ND | ND | U |
| 30 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 26540 | 5.00 | 5.62 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.733 | -0.001 | 74 | 9868 | 0.5000 | 0.5730 | |
| 31 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 83 | 15911 | 0.5000 | 0.4958 | |
| 33 Hexane | 57 | 3.981 | 3.982 | -0.001 | 90 | 9277 | 0.5000 | 0.4936 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 54 | 9924 | 0.5000 | 0.4888 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 95 | 9654 | 0.5000 | 0.5229 | |
| 41 2-Butanone (MEK) | 72 | | 4.634 | | | | ND | ND | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 46 | 6159 | 0.5000 | 0.5045 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 56 | 7528 | 0.5000 | 0.5287 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 65 | 5651 | 0.5000 | 0.6036 | |
| 46 Tetrahydrofuran | 42 | 4.895 | 4.883 | 0.012 | 78 | 4596 | 1.00 | 1.02 | |
| 47 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 60 | 10692 | 0.5000 | 0.5074 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 72 | 9137 | 0.5000 | 0.4814 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 79 | 9806 | 0.5000 | 0.4936 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 85 | 8674 | 0.5000 | 0.5025 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | -0.001 | 69 | 8406 | 0.5000 | 0.4757 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 73 | 5482 | 12.5 | 13.5 | |
| 53 Benzene | 78 | 5.416 | 5.417 | -0.001 | 94 | 22844 | 0.5000 | 0.4820 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 40 | 8485 | 0.5000 | 0.5573 | |
| 56 n-Heptane | 57 | | 5.642 | | | | ND | ND | U |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 83 | 7211 | 0.5000 | 0.4940 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 83 | 11515 | 0.5000 | 0.4857 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 62 | 4734 | 0.5000 | 0.4448 | |
| 63 Dibromomethane | 174 | 6.306 | 6.294 | 0.012 | 67 | 5496 | 0.5000 | 0.5580 | |
| 64 1,4-Dioxane | 88 | | 6.306 | | | | ND | ND | U |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 71 | 7466 | 0.5000 | 0.5005 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 76 | 7395 | 1.00 | 0.9347 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 66 | 8313 | 0.5000 | 0.4764 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 86 | 13091 | 1.00 | 0.9263 | |
| 70 Toluene | 91 | 7.171 | 7.172 | -0.001 | 90 | 28549 | 0.5000 | 0.5479 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 72 | 8702 | 0.5000 | 0.5197 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 67 | 7650 | 0.5000 | 0.4821 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 65 | 4656 | 0.5000 | 0.4562 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 89 | 7470 | 0.5000 | 0.4851 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 73 | 8871 | 0.5000 | 0.4993 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 87 | 10457 | 1.00 | 0.9783 | |
| 79 Chlorodibromomethane | 129 | 7.919 | 7.931 | -0.012 | 51 | 5763 | 0.5000 | 0.4723 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 69 | 6061 | 0.5000 | 0.5198 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 47 | 18258 | 0.5000 | 0.5243 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 47 | 5213 | 0.5000 | 0.4361 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 92 | 8398 | 0.5000 | 0.4528 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 96 | 11276 | 0.5000 | 0.4925 | |
| 87 Styrene | 104 | 9.152 | 9.152 | 0.000 | 84 | 17512 | 0.5000 | 0.4774 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 82 | 10860 | 0.5000 | 0.4913 | |
| 88 Bromoform | 173 | | 9.354 | | | | ND | ND | U |
| 89 Isopropylbenzene | 105 | 9.519 | 9.520 | -0.001 | 87 | 28418 | 0.5000 | 0.4859 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 49 | 8105 | 0.5000 | 0.4742 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 80 | 8740 | 0.5000 | 0.5396 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 57 | 3387 | 0.5000 | 0.5596 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 36 | 2893 | 0.5000 | 0.5519 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 90 | 8359 | 0.5000 | 0.4873 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 86 | 6977 | 0.5000 | 0.4728 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 88 | 22067 | 0.5000 | 0.4545 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 89 | 7717 | 0.5000 | 0.4998 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 82 | 22397 | 0.5000 | 0.4799 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 62 | 24672 | 0.5000 | 0.4897 | |
| 102 sec-Butylbenzene | 105 | 10.693 | 10.694 | -0.001 | 78 | 30350 | 0.5000 | 0.4706 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 1 | 17372 | 0.5000 | 0.5533 | a |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 80 | 25586 | 0.5000 | 0.4626 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 42 | 19169 | 0.5000 | 0.5888 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.275 | 0.000 | 91 | 21675 | 0.5000 | 0.4537 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 87 | 14939 | 0.5000 | 0.5204 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 24 | 2566 | 0.5000 | 0.5040 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 65 | 10787 | 0.5000 | 0.5471 | |
| 113 Hexachlorobutadiene | 225 | 13.196 | 13.196 | 0.000 | 52 | 5347 | 0.5000 | 0.5195 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 81 | 27099 | 0.5000 | 0.4874 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 60 | 8865 | 0.5000 | 0.4972 | |
| S 164 Total BTEX | 1 | | | | 0 | | 2.50 | 2.47 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 2.00 | 1.48 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 1.10 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 1.00 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 1.00 | 0.9838 | |

## QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00255 | Amount Added: | 0.40 | Units: uL |
| vmarolistdw_00256 | Amount Added: | 0.40 | Units: uL |
| vmrprimw_00292 | Amount Added: | 0.40 | Units: uL |
| vm50ss_00329 | Amount Added: | 0.40 | Units: uL |

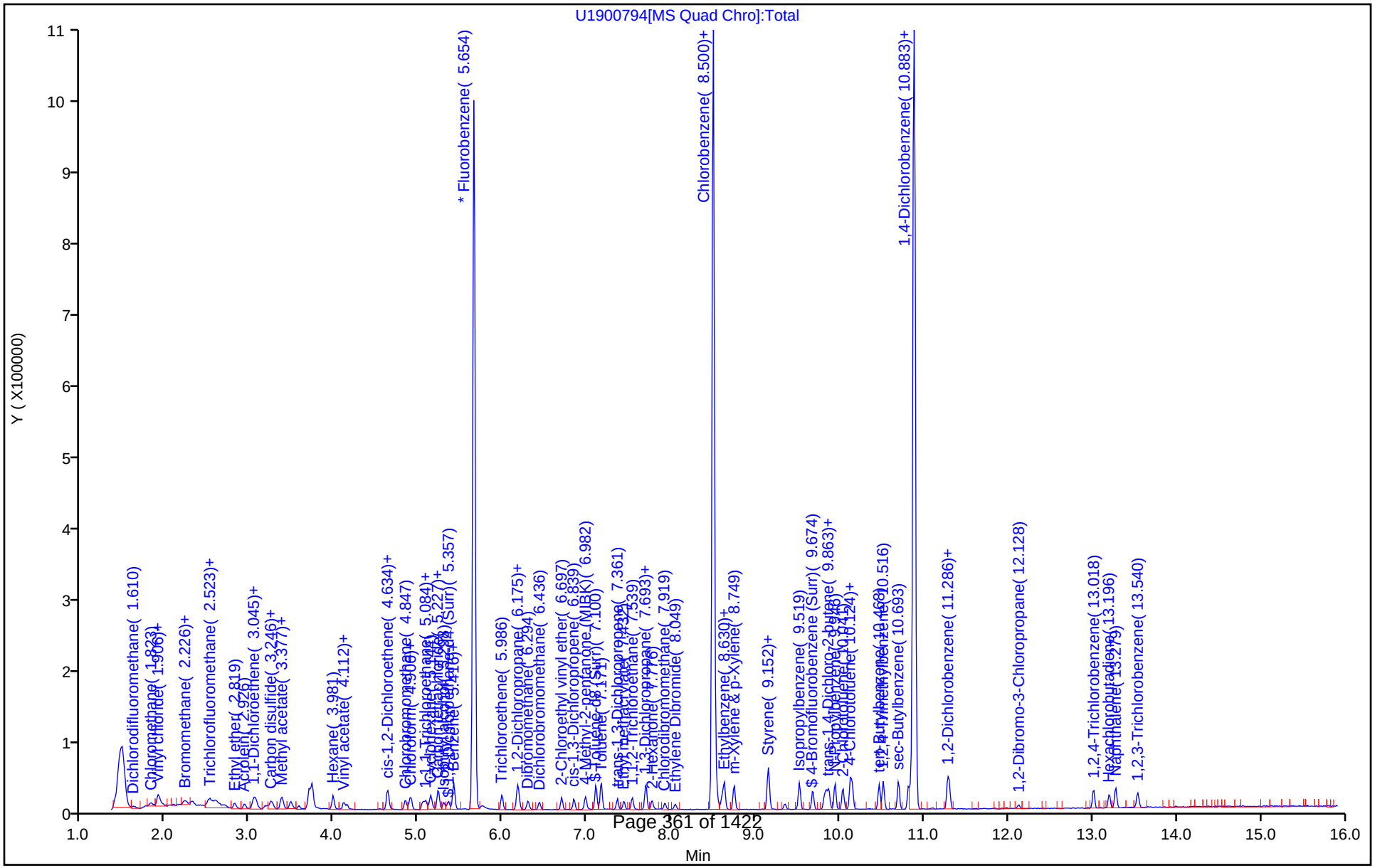
Report Date: 25-Jul-2018 10:14:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L1 | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

TestAmerica Canton

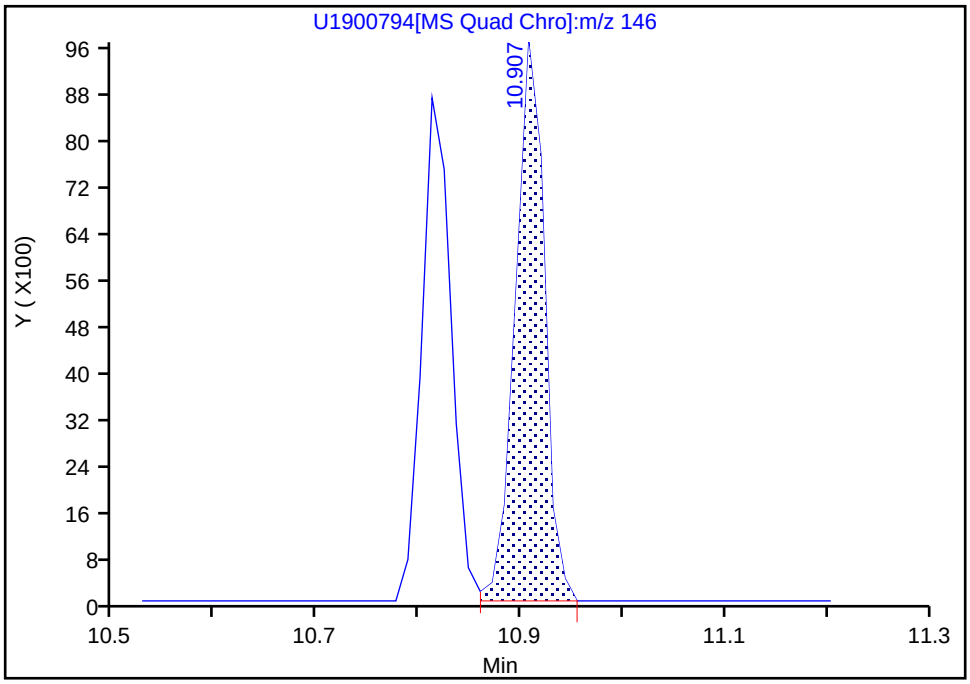
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d | | | | |
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 103 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

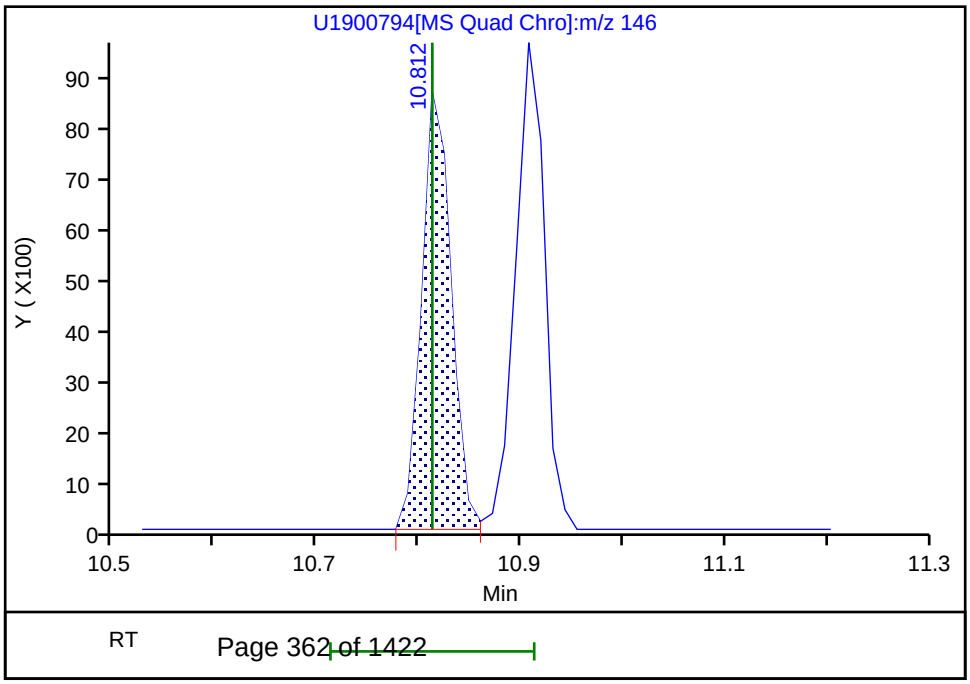
Processing Integration Results

RT: 10.91
Area: 19169
Amount: 0.600710
Amount Units: ug/l




Manual Integration Results

RT: 10.81
Area: 17372
Amount: 0.553299
Amount Units: ug/l






Reviewer: laveyt, 25-Jul-2018 09:51:37

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Injection Date: 24-Jul-2018 20:04:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

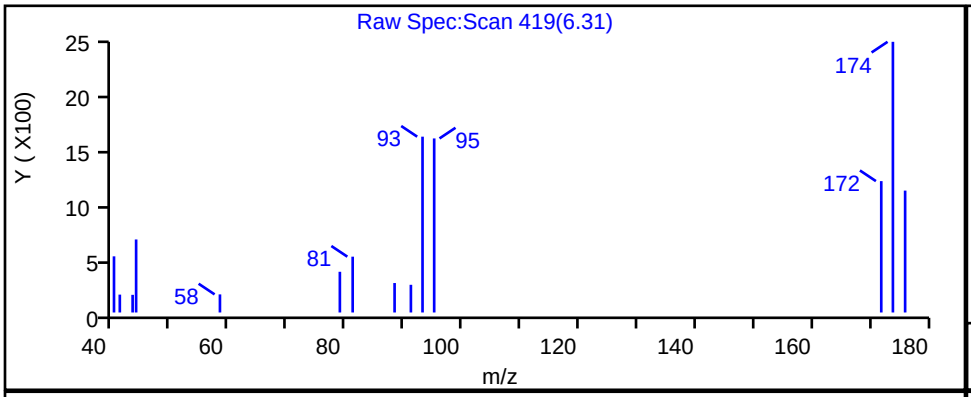
Injection Vol: 5.0 mL Dil. Factor: 1.0000

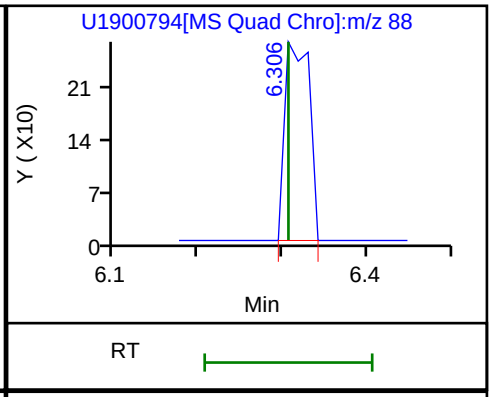
Method: 8260_19 Limit Group: MSV 8260C ICAL

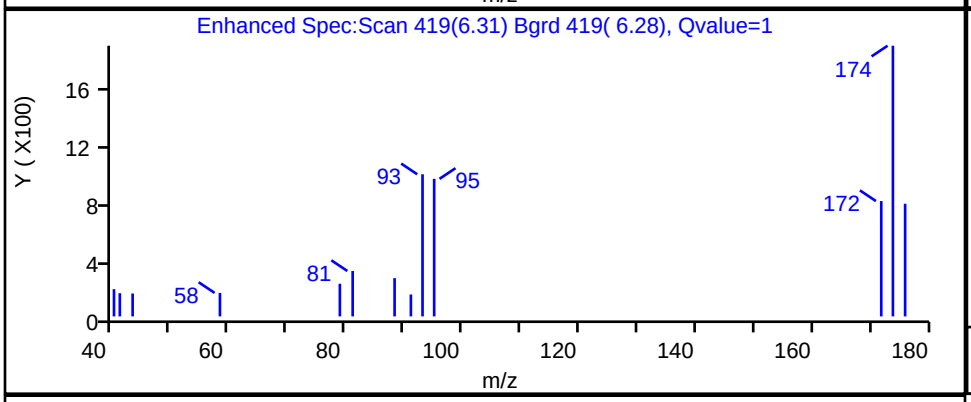
Column: DB-624 ( 0.18 mm) Detector MS SCAN

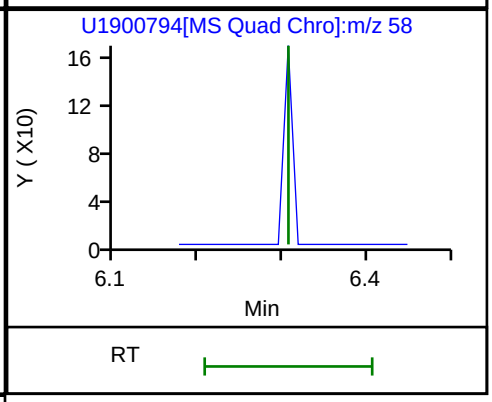
## 64 1,4-Dioxane, CAS: 123-91-1

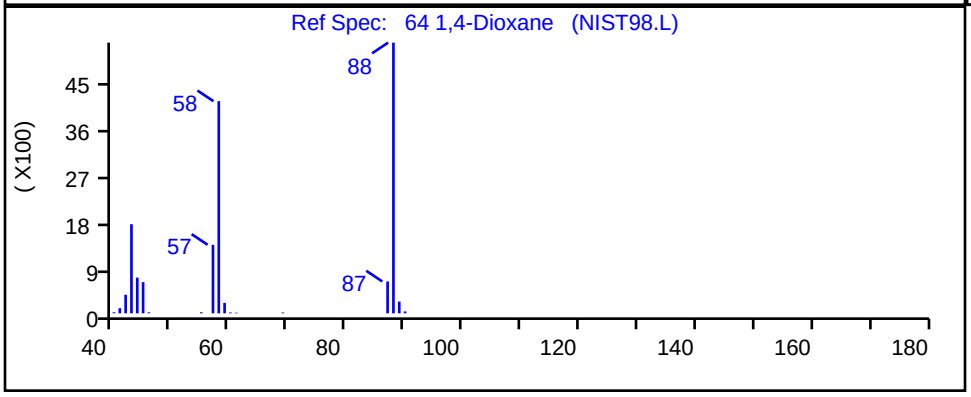
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.31 | 88.00 | 541 | 10.248924 |
| 6.31 | 58.00 | 0 | |

Reviewer: laveyt, 25-Jul-2018 10:11:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

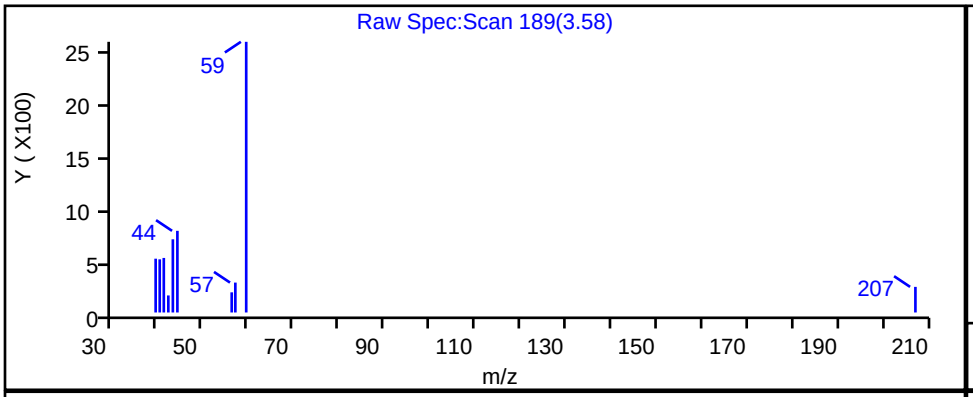
User Disabled Compound Report

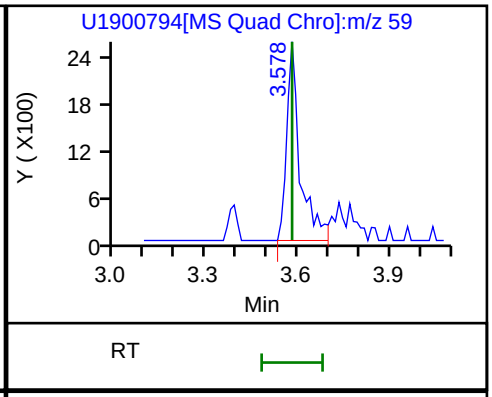
TestAmerica Canton

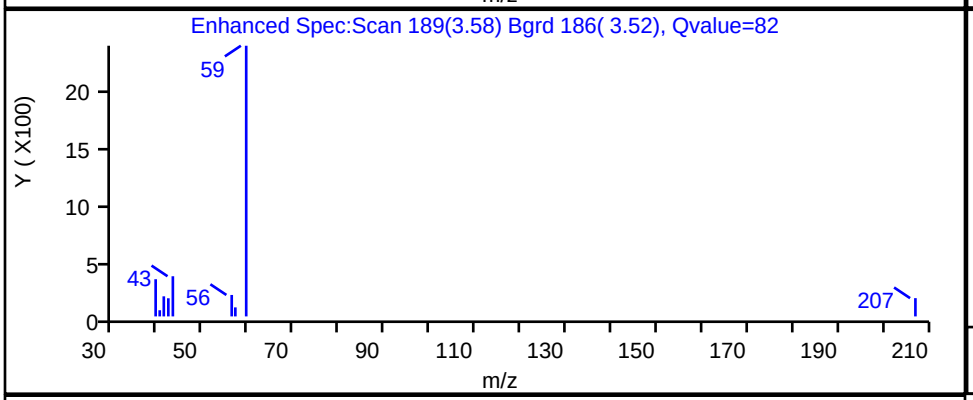
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d | | | | |
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

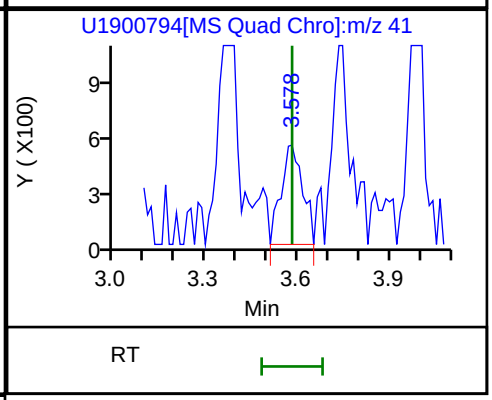
## 29 2-Methyl-2-propanol, CAS: 75-65-0

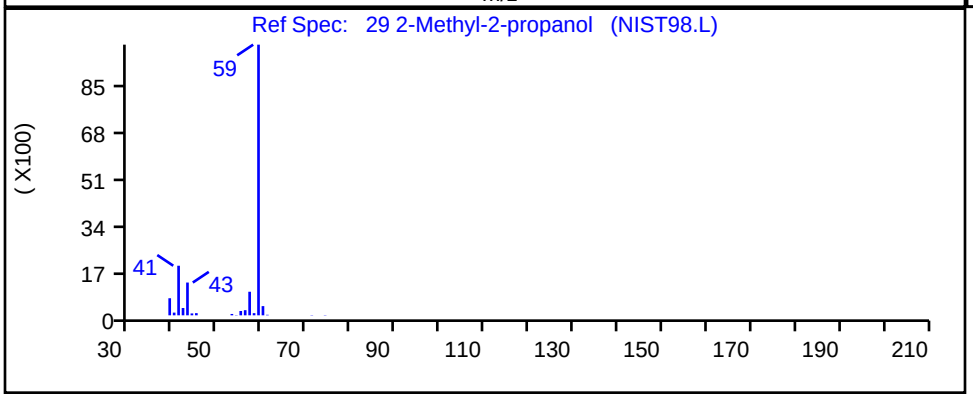
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.58 | 59.00 | 7655 | 6.614472 |
| 3.58 | 41.00 | 2500 | |

Reviewer: laveyt, 25-Jul-2018 09:53:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d

Injection Date: 24-Jul-2018 20:04:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

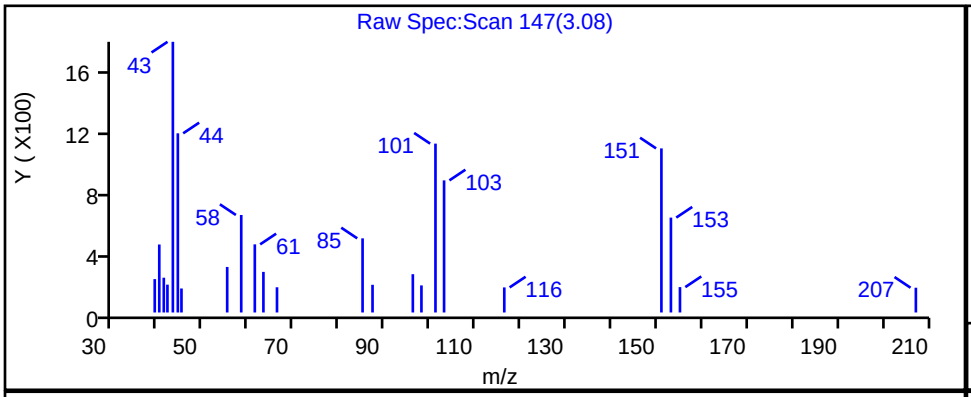
Injection Vol: 5.0 mL Dil. Factor: 1.0000

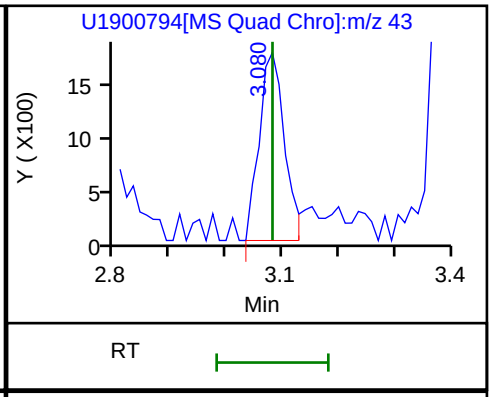
Method: 8260_19 Limit Group: MSV 8260C ICAL

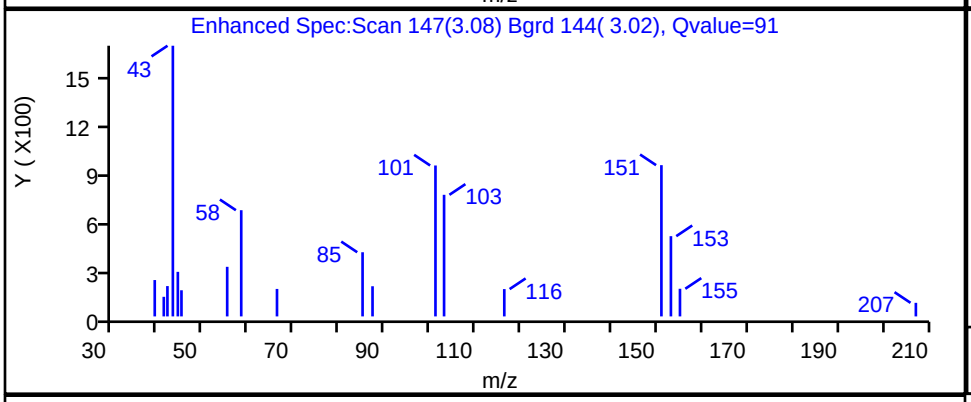
Column: DB-624 ( 0.18 mm) Detector MS SCAN

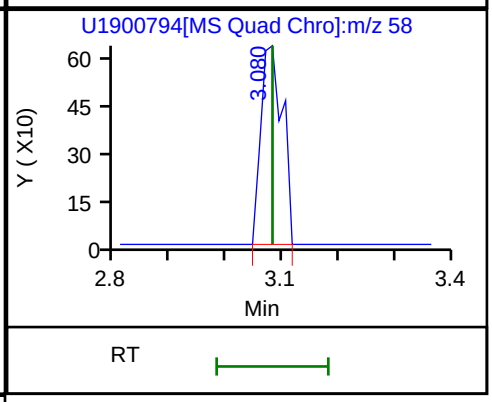
## 22 Acetone, CAS: 67-64-1

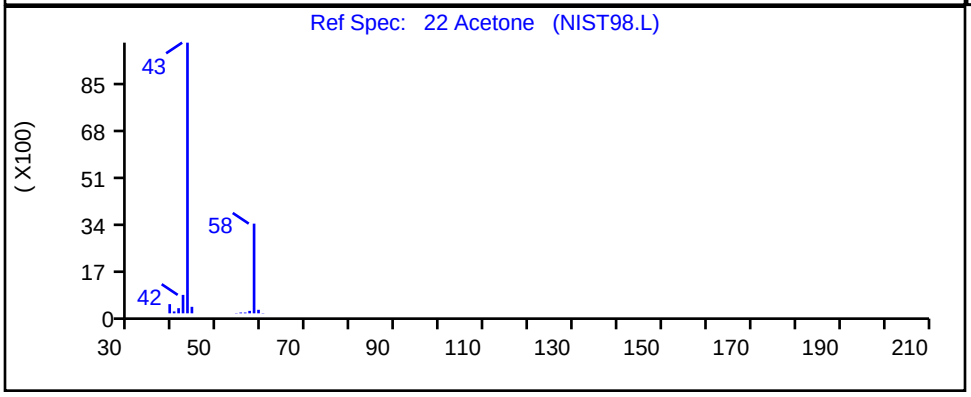
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.08 | 43.00 | 5518 | 1.624733 |
| 3.08 | 58.00 | 1707 | |

Reviewer: laveyt, 25-Jul-2018 09:52:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

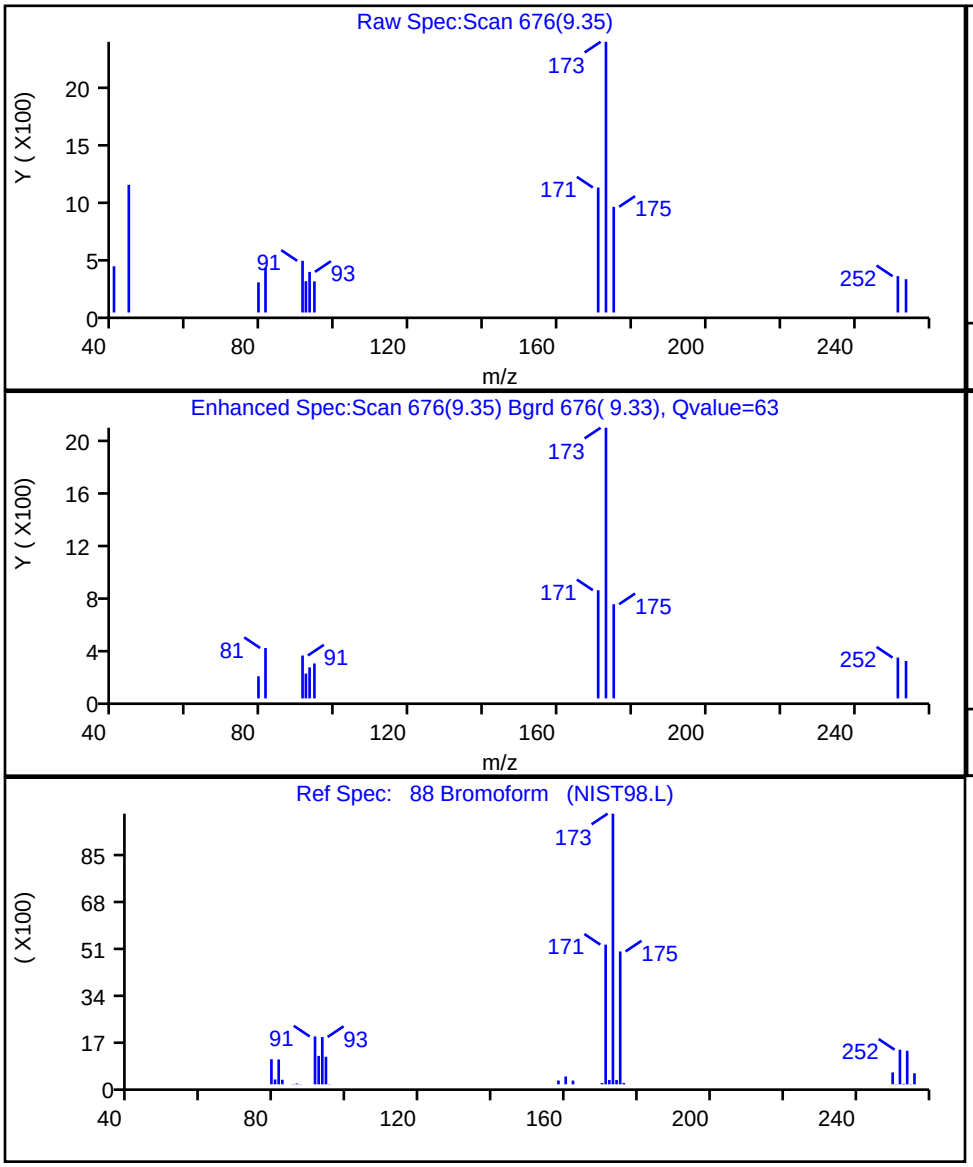
User Disabled Compound Report

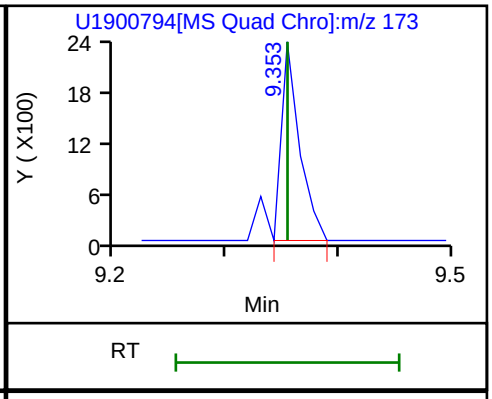
TestAmerica Canton

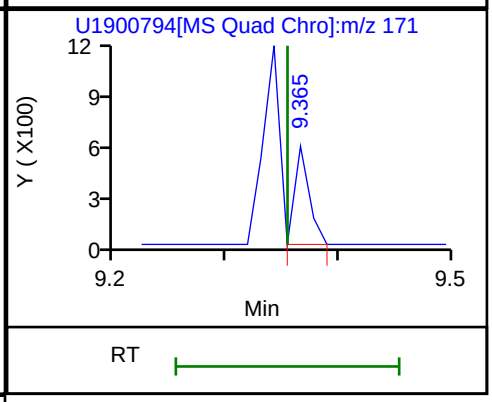
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d | | | | |
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 88 Bromoform, CAS: 75-25-2

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 9.35 | 173.00 | 2603 | 0.492517 |
| 9.37 | 171.00 | 513 | |

Reviewer: laveyt, 25-Jul-2018 09:54:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

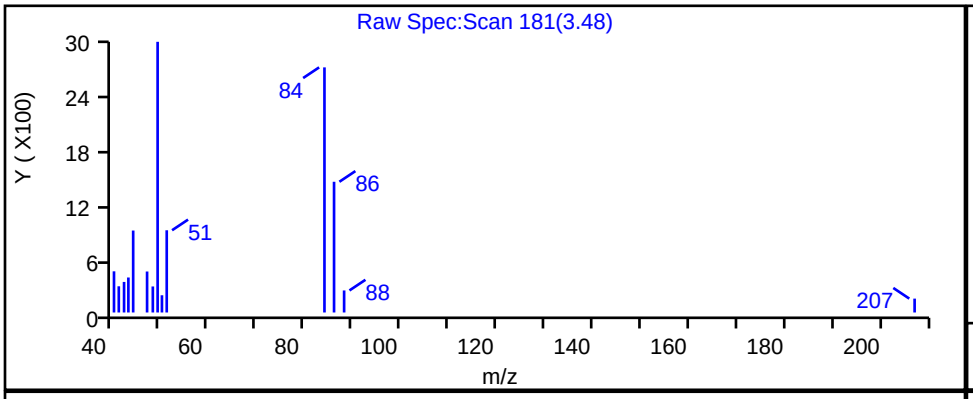
User Disabled Compound Report

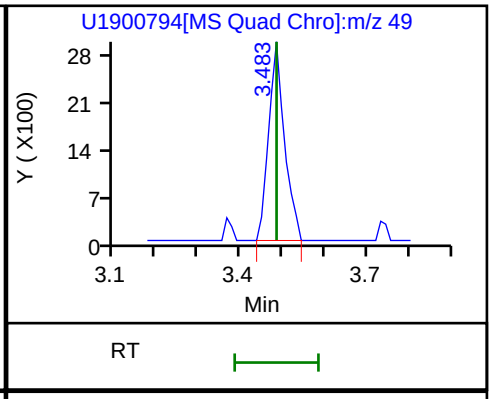
TestAmerica Canton

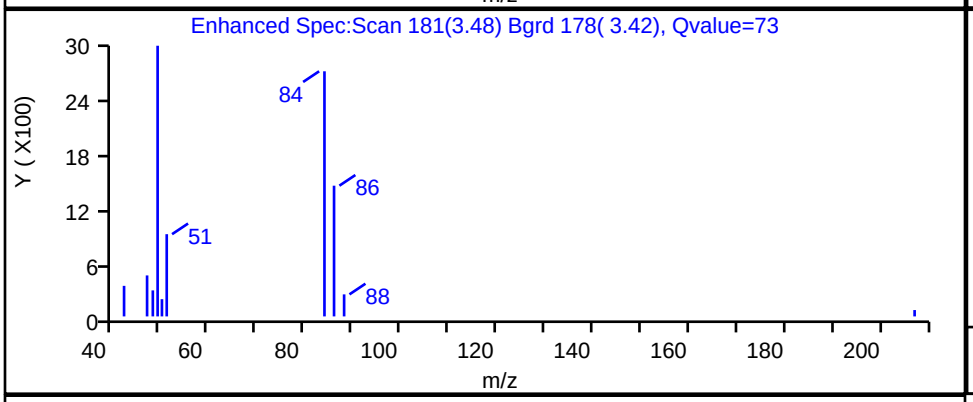
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d | | | | |
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

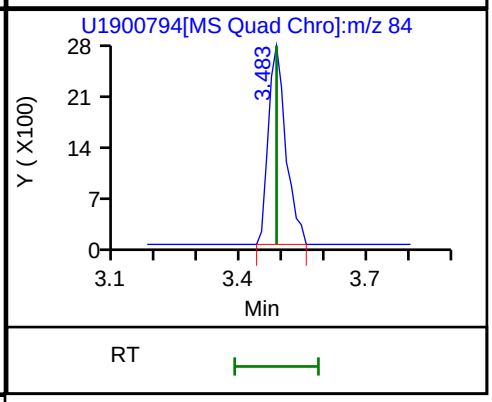
## 28 Methylene Chloride, CAS: 75-09-2

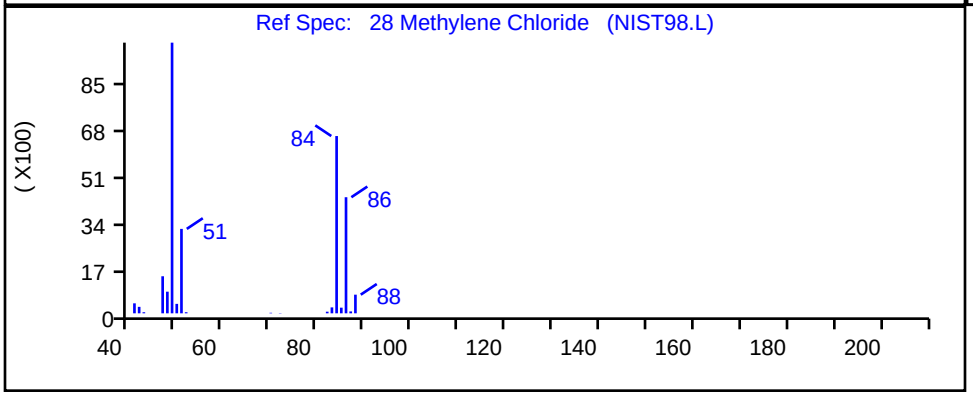
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.48 | 49.00 | 7846 | 0.551972 |
| 3.48 | 84.00 | 7835 | |

Reviewer: laveyt, 25-Jul-2018 09:52:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 25-Jul-2018 10:14:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

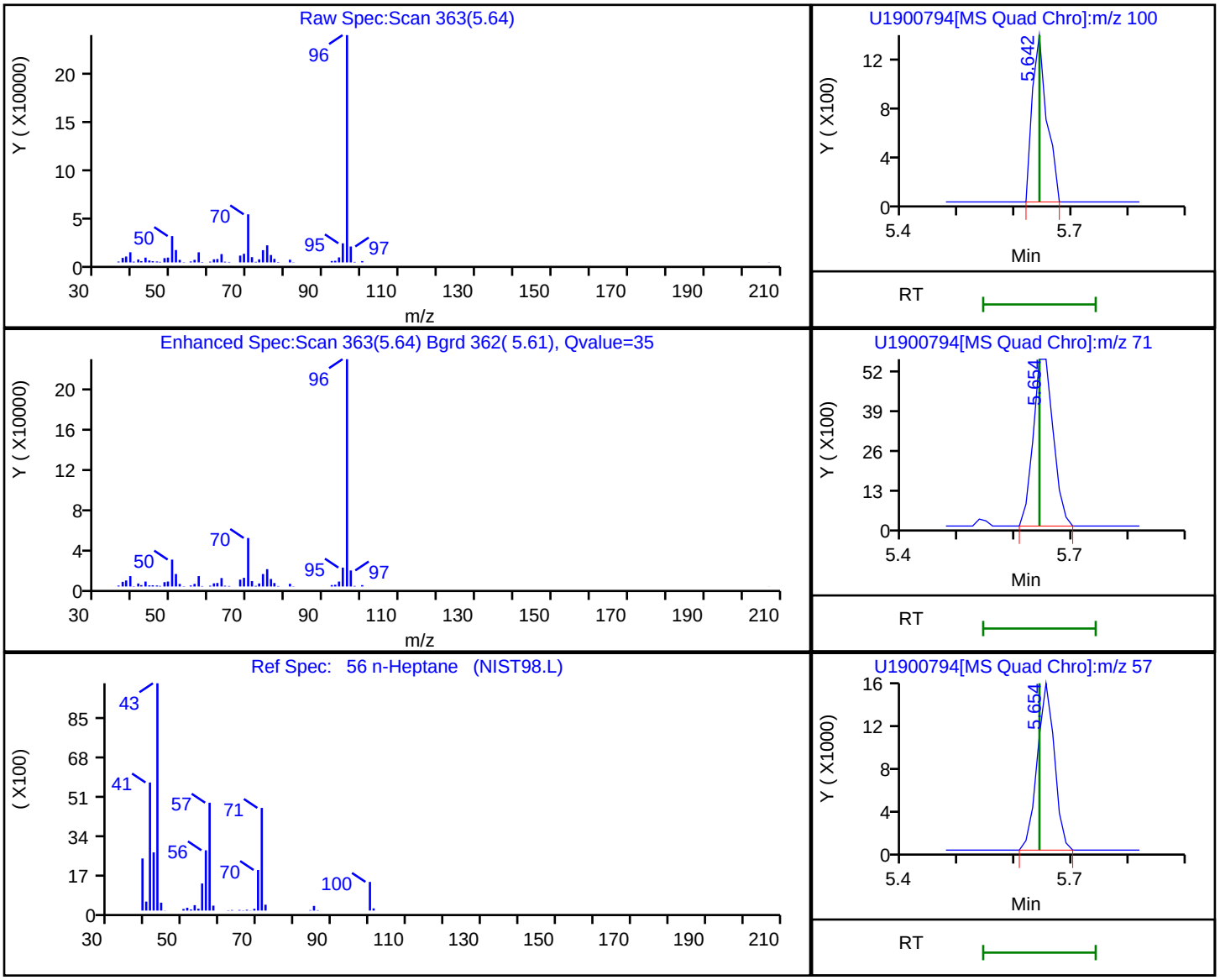
User Disabled Compound Report

TestAmerica Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\U1900794.d | | | | |
| Injection Date: | 24-Jul-2018 20:04:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 56 n-Heptane, CAS: 142-82-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.64 | 100.00 | 2448 | |
| 5.65 | 71.00 | 13746 | |
| 5.65 | 57.00 | 32874 | 0.539419 |

Reviewer: laveyt, 25-Jul-2018 09:54:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09  Calibration End Date: 08/27/2018 19:23  Calibration ID: 46687

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-342719/13 | U1901329.d |
| Level 2 | STD8260 240-342719/12 | U1901328.d |
| Level 3 | STD8260 240-342719/11 | U1901327.d |
| Level 4 | ICIS 240-342719/10 | U1901326.d |
| Level 5 | STD8260 240-342719/9 | U1901325.d |
| Level 6 | STD8260 240-342719/8 | U1901324.d |
| Level 7 | STD8260 240-342719/7 | U1901323.d |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dichlorodifluoromethane | 0.3252<br>0.4073 | 0.3858<br>0.4041 | 0.3902 | 0.3772 | 0.4052 | Ave | | 0.3850 | | | 0.1000 | 7.5 | | 20.0 | | | |
| Chloromethane | 0.3476<br>0.2860 | 0.2731<br>0.2757 | 0.2817 | 0.2748 | 0.2796 | Ave | | 0.2883 | | | 0.1000 | 9.2 | | 20.0 | | | |
| Butadiene | 0.2863<br>0.2923 | 0.2971<br>0.2827 | 0.2967 | 0.2831 | 0.2826 | Ave | | 0.2887 | | | | 2.3 | | 20.0 | | | |
| Vinyl chloride | 0.2799<br>0.3039 | 0.3000<br>0.2955 | 0.3102 | 0.2950 | 0.3013 | Ave | | 0.2980 | | | 0.1000 | 3.2 | | 20.0 | | | |
| Bromomethane | 0.2530<br>0.2308 | 0.2391<br>0.2251 | 0.2340 | 0.2259 | 0.2264 | Ave | | 0.2335 | | | 0.0500 | 4.3 | | 20.0 | | | |
| Chloroethane | 0.2052<br>0.1842 | 0.1766<br>0.1812 | 0.1882 | 0.1779 | 0.1807 | Ave | | 0.1848 | | | 0.0500 | 5.3 | | 20.0 | | | |
| Dichlorofluoromethane | 0.4944<br>0.4514 | 0.4567<br>0.4411 | 0.4677 | 0.4468 | 0.4490 | Ave | | 0.4581 | | | | 3.9 | | 20.0 | | | |
| Trichlorofluoromethane | 0.4941<br>0.5030 | 0.4893<br>0.4931 | 0.5122 | 0.4967 | 0.5003 | Ave | | 0.4984 | | | 0.1000 | 1.5 | | 20.0 | | | |
| Ethyl ether | 0.1731<br>0.1798 | 0.1898<br>0.1760 | 0.1849 | 0.1771 | 0.1791 | Ave | | 0.1800 | | | | 3.1 | | 20.0 | | | |
| Acrolein | 0.0495<br>0.0430 | 0.0446<br>0.0441 | 0.0420 | 0.0454 | 0.0427 | Ave | | 0.0445 | | | | 5.6 | | 20.0 | | | |
| 1,1-Dichloroethene | 0.3476<br>0.3661 | 0.3473<br>0.3597 | 0.3727 | 0.3582 | 0.3610 | Ave | | 0.3589 | | | 0.1000 | 2.6 | | 20.0 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2493<br>0.2658 | 0.2366<br>0.2616 | 0.2651 | 0.2563 | 0.2622 | Ave | | 0.2567 | | | 0.0500 | 4.1 | | 20.0 | | | |
| Acetone | +++++<br>0.0747 | 0.0941<br>0.0735 | 0.0766 | 0.0752 | 0.0764 | Ave | | 0.0784 | | | 0.0100 | 9.9 | | 20.0 | | | |
| Iodomethane | 0.4872<br>0.4597 | 0.4730<br>0.4538 | 0.4730 | 0.4575 | 0.4539 | Ave | | 0.4655 | | | | 2.7 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09  Calibration End Date: 08/27/2018 19:23  Calibration ID: 46687

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon disulfide | 0.8746<br>0.7168 | 0.8257<br>0.7023 | 0.7362 | 0.7031 | 0.7015 | Ave | | 0.7515 | | | 0.1000 | 9.3 | | 20.0 | | | |
| 3-Chloro-1-propene | 0.3735<br>0.3489 | 0.3837<br>0.3396 | 0.3586 | 0.3361 | 0.3385 | Ave | | 0.3541 | | | | 5.3 | | 20.0 | | | |
| Methyl acetate | 0.2638<br>0.2201 | 0.2366<br>0.2157 | 0.2398 | 0.2267 | 0.2267 | Ave | | 0.2328 | | | 0.1000 | 6.9 | | 20.0 | | | |
| Methylene Chloride | +++++<br>0.2751 | 0.3184<br>0.2694 | 0.2925 | 0.2792 | 0.2733 | Ave | | 0.2846 | | | 0.1000 | 6.5 | | 20.0 | | | |
| 2-Methyl-2-propanol | 0.0302<br>0.0245 | 0.0277<br>0.0251 | 0.0284 | 0.0260 | 0.0277 | Ave | | 0.0271 | | | | 7.4 | | 20.0 | | | |
| Acrylonitrile | 0.1006<br>0.0983 | 0.1046<br>0.0951 | 0.1079 | 0.0977 | 0.0997 | Ave | | 0.1006 | | | | 4.3 | | 20.0 | | | |
| trans-1,2-Dichloroethene | 0.3568<br>0.3338 | 0.3540<br>0.3216 | 0.3508 | 0.3269 | 0.3267 | Ave | | 0.3387 | | | 0.1000 | 4.4 | | 20.0 | | | |
| Methyl tert-butyl ether | 0.6459<br>0.7174 | 0.6970<br>0.7172 | 0.7178 | 0.6715 | 0.6899 | Ave | | 0.6938 | | | 0.1000 | 3.9 | | 20.0 | | | |
| Hexane | 0.3287<br>0.3643 | 0.3216<br>0.3693 | 0.3652 | 0.3577 | 0.3600 | Ave | | 0.3524 | | | | 5.4 | | 20.0 | | | |
| 1,1-Dichloroethane | 0.3877<br>0.4112 | 0.4141<br>0.3990 | 0.4182 | 0.3989 | 0.4043 | Ave | | 0.4048 | | | 0.2000 | 2.6 | | 20.0 | | | |
| Vinyl acetate | 0.4652<br>0.4557 | 0.4582<br>0.4625 | 0.4853 | 0.4584 | 0.4619 | Ave | | 0.4639 | | | | 2.1 | | 20.0 | | | |
| cis-1,2-Dichloroethene | 0.3057<br>0.2869 | 0.2992<br>0.2782 | 0.2948 | 0.2801 | 0.2786 | Ave | | 0.2891 | | | 0.1000 | 3.8 | | 20.0 | | | |
| 2,2-Dichloropropane | 0.2469<br>0.2502 | 0.2497<br>0.2458 | 0.2443 | 0.2181 | 0.2515 | Ave | | 0.2438 | | | | 4.8 | | 20.0 | | | |
| 2-Butanone (MEK) | 0.0487<br>0.0444 | 0.0481<br>0.0466 | 0.0506 | 0.0457 | 0.0465 | Ave | | 0.0472 | | | 0.0100 | 4.3 | | 20.0 | | | |
| Chlorobromomethane | 0.2347<br>0.1831 | 0.2161<br>0.1713 | 0.1973 | 0.1804 | 0.1790 | Ave | | 0.1945 | | | | 11.9 | | 20.0 | | | |
| Tetrahydrofuran | +++++<br>0.0978 | 0.2111<br>0.0981 | 0.1202 | 0.1027 | 0.1037 | Lin1 | 0.2460 | 0.0976 | | | | 7.4 | | | 0.9990 | | 0.9900 |
| Chloroform | 0.4336<br>0.4423 | 0.4430<br>0.4326 | 0.4702 | 0.4398 | 0.4415 | Ave | | 0.4433 | | | 0.2000 | 2.8 | | 20.0 | | | |
| 1,1,1-Trichloroethane | 0.3739<br>0.4296 | 0.4106<br>0.4262 | 0.4442 | 0.4096 | 0.4275 | Ave | | 0.4174 | | | 0.1000 | 5.4 | | 20.0 | | | |
| Cyclohexane | 0.3499<br>0.3999 | 0.3515<br>0.3986 | 0.3944 | 0.3825 | 0.3967 | Ave | | 0.3819 | | | 0.1000 | 5.8 | | 20.0 | | | |
| 1,1-Dichloropropene | 0.3411<br>0.3565 | 0.3509<br>0.3499 | 0.3664 | 0.3469 | 0.3516 | Ave | | 0.3519 | | | | 2.3 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09  Calibration End Date: 08/27/2018 19:23  Calibration ID: 46687

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon tetrachloride | 0.3818<br>0.4136 | 0.3781<br>0.4121 | 0.4219 | 0.3956 | 0.4130 | Ave | | 0.4023 | | | 0.1000 | 4.3 | | 20.0 | | | |
| Isobutyl alcohol | 0.0122<br>0.0101 | 0.0118<br>0.0103 | 0.0107 | 0.0108 | 0.0111 | Ave | | 0.0110 | | | | 7.0 | | 20.0 | | | |
| Benzene | 0.9270<br>0.9480 | 0.9546<br>0.9366 | 1.0106 | 0.9431 | 0.9423 | Ave | | 0.9518 | | | 0.5000 | 2.9 | | 20.0 | | | |
| 1,2-Dichloroethane | 0.3794<br>0.3459 | 0.3845<br>0.3369 | 0.3743 | 0.3513 | 0.3479 | Ave | | 0.3600 | | | 0.1000 | 5.2 | | 20.0 | | | |
| n-Heptane | +++++<br>0.1978 | 0.8214<br>0.1912 | 0.2589 | 0.2169 | 0.2053 | Lin1 | 0.6437 | 0.1861 | | | | 3.4 | | | 1.0000 | | 0.9900 |
| Trichloroethene | 0.3334<br>0.3137 | 0.3081<br>0.3106 | 0.3277 | 0.3076 | 0.3109 | Ave | | 0.3160 | | | 0.1500 | 3.3 | | 20.0 | | | |
| Methylcyclohexane | 0.4282<br>0.4825 | 0.4267<br>0.4698 | 0.4724 | 0.4580 | 0.4751 | Ave | | 0.4590 | | | 0.1000 | 5.0 | | 20.0 | | | |
| 1,2-Dichloropropane | 0.2171<br>0.2187 | 0.2141<br>0.2164 | 0.2362 | 0.2209 | 0.2218 | Ave | | 0.2208 | | | 0.1000 | 3.3 | | 20.0 | | | |
| Dibromomethane | 0.2410<br>0.2204 | 0.2408<br>0.2155 | 0.2336 | 0.2191 | 0.2191 | Ave | | 0.2271 | | | | 4.9 | | 20.0 | | | |
| 1,4-Dioxane | +++++<br>0.0025 | 0.0016<br>0.0027 | 0.0021 | 0.0026 | 0.0028 | Ave | | 0.0024 | | | | 17.9 | | 20.0 | | | |
| Dichlorobromomethane | 0.3399<br>0.3440 | 0.3630<br>0.3379 | 0.3620 | 0.3462 | 0.3426 | Ave | | 0.3479 | | | 0.1500 | 3.0 | | 20.0 | | | |
| 2-Chloroethyl vinyl ether | 0.1593<br>0.1741 | 0.1654<br>0.1828 | 0.1943 | 0.1818 | 0.1815 | Ave | | 0.1770 | | | | 6.6 | | 20.0 | | | |
| cis-1,3-Dichloropropene | 0.3743<br>0.3841 | 0.3867<br>0.3870 | 0.4032 | 0.3827 | 0.3872 | Ave | | 0.3865 | | | 0.1500 | 2.2 | | 20.0 | | | |
| 4-Methyl-2-pentanone (MIBK) | 0.3150<br>0.3064 | 0.3110<br>0.3144 | 0.3487 | 0.3229 | 0.3240 | Ave | | 0.3203 | | | 0.0500 | 4.4 | | 20.0 | | | |
| Toluene | 1.3762<br>1.3312 | 1.3706<br>1.3223 | 1.4018 | 1.3282 | 1.3309 | Ave | | 1.3516 | | | 0.4000 | 2.3 | | 20.0 | | | |
| trans-1,3-Dichloropropene | 0.4999<br>0.4712 | 0.5033<br>0.4805 | 0.4835 | 0.4641 | 0.4704 | Ave | | 0.4818 | | | 0.1000 | 3.1 | | 20.0 | | | |
| Ethyl methacrylate | 0.3824<br>0.4408 | 0.4001<br>0.4600 | 0.4577 | 0.4462 | 0.4540 | Ave | | 0.4344 | | | | 7.1 | | 20.0 | | | |
| 1,1,2-Trichloroethane | 0.2808<br>0.2823 | 0.2821<br>0.2821 | 0.2973 | 0.2798 | 0.2847 | Ave | | 0.2842 | | | 0.1000 | 2.1 | | 20.0 | | | |
| Tetrachloroethene | 0.4234<br>0.4375 | 0.4194<br>0.4317 | 0.4508 | 0.4248 | 0.4314 | Ave | | 0.4313 | | | 0.1500 | 2.4 | | 20.0 | | | |
| 1,3-Dichloropropane | 0.4988<br>0.4724 | 0.4733<br>0.4772 | 0.5009 | 0.4686 | 0.4705 | Ave | | 0.4802 | | | | 2.8 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09  Calibration End Date: 08/27/2018 19:23  Calibration ID: 46687

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Hexanone | 0.2781<br>0.3092 | 0.3020<br>0.3219 | 0.3438 | 0.3247 | 0.3245 | Ave | | 0.3149 | | | 0.0500 | 6.6 | | 20.0 | | | |
| Chlorodibromomethane | 0.3308<br>0.3663 | 0.3497<br>0.3646 | 0.3736 | 0.3604 | 0.3630 | Ave | | 0.3583 | | | | 3.9 | | 20.0 | | | |
| Ethylene Dibromide | 0.3770<br>0.3214 | 0.3321<br>0.3219 | 0.3422 | 0.3286 | 0.3194 | Ave | | 0.3346 | | | | 6.1 | | 20.0 | | | |
| Chlorobenzene | 0.9370<br>0.9055 | 0.9832<br>0.8914 | 0.9544 | 0.9002 | 0.9056 | Ave | | 0.9253 | | | 0.3000 | 3.7 | | 20.0 | | | |
| 1,1,1,2-Tetrachloroethane | 0.3225<br>0.3380 | 0.3313<br>0.3315 | 0.3490 | 0.3282 | 0.3347 | Ave | | 0.3336 | | | | 2.5 | | 20.0 | | | |
| Ethylbenzene | 0.4566<br>0.4899 | 0.4640<br>0.4838 | 0.5159 | 0.4863 | 0.4886 | Ave | | 0.4836 | | | | 4.0 | | 20.0 | | | |
| m-Xylene & p-Xylene | 0.5709<br>0.5980 | 0.5535<br>0.5943 | 0.6142 | 0.5959 | 0.5965 | Ave | | 0.5890 | | | | 3.4 | | 20.0 | | | |
| o-Xylene | 0.5188<br>0.5706 | 0.5578<br>0.5579 | 0.5806 | 0.5638 | 0.5683 | Ave | | 0.5597 | | | | 3.5 | | 20.0 | | | |
| Styrene | 0.8915<br>0.9829 | 0.9056<br>0.9730 | 1.0088 | 0.9699 | 0.9794 | Ave | | 0.9588 | | | 0.3000 | 4.5 | | 20.0 | | | |
| Bromoform | 0.2892<br>0.2933 | 0.2907<br>0.2979 | 0.3020 | 0.2847 | 0.2951 | Ave | | 0.2933 | | | 0.1000 | 2.0 | | 20.0 | | | |
| Isopropylbenzene | 1.3694<br>1.5447 | 1.4922<br>1.4942 | 1.5808 | 1.5060 | 1.5314 | Ave | | 1.5027 | | | 0.1000 | 4.4 | | 20.0 | | | |
| 1,1,2,2-Tetrachloroethane | 0.7123<br>0.7674 | 0.7872<br>0.7661 | 0.8261 | 0.7624 | 0.7730 | Ave | | 0.7706 | | | 0.3000 | 4.4 | | 20.0 | | | |
| Bromobenzene | 0.7562<br>0.7639 | 0.7920<br>0.7473 | 0.8125 | 0.7532 | 0.7575 | Ave | | 0.7690 | | | | 3.1 | | 20.0 | | | |
| 1,2,3-Trichloropropane | 0.2805<br>0.2866 | 0.2903<br>0.2882 | 0.3178 | 0.2884 | 0.2929 | Ave | | 0.2921 | | | | 4.1 | | 20.0 | | | |
| trans-1,4-Dichloro-2-butene | +++++<br>0.2667 | 0.2763<br>0.2751 | 0.2902 | 0.2665 | 0.2675 | Ave | | 0.2737 | | | | 3.3 | | 20.0 | | | |
| N-Propylbenzene | 0.7009<br>0.7973 | 0.7492<br>0.7772 | 0.8251 | 0.7710 | 0.7894 | Ave | | 0.7729 | | | | 5.1 | | 20.0 | | | |
| 2-Chlorotoluene | 0.6131<br>0.6732 | 0.6212<br>0.6509 | 0.7079 | 0.6539 | 0.6587 | Ave | | 0.6541 | | | | 4.9 | | 20.0 | | | |
| 1,3,5-Trimethylbenzene | 2.1099<br>2.2883 | 2.1099<br>2.2183 | 2.3988 | 2.1936 | 2.2594 | Ave | | 2.2255 | | | | 4.6 | | 20.0 | | | |
| 4-Chlorotoluene | 0.7307<br>0.7048 | 0.6944<br>0.6840 | 0.7470 | 0.7010 | 0.6888 | Ave | | 0.7072 | | | | 3.3 | | 20.0 | | | |
| tert-Butylbenzene | 1.9093<br>2.2037 | 2.0260<br>2.1009 | 2.2785 | 2.0983 | 2.1715 | Ave | | 2.1126 | | | | 5.7 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09  Calibration End Date: 08/27/2018 19:23  Calibration ID: 46687

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,2,4-Trimethylbenzene | 2.0996<br>2.3002 | 2.2590<br>2.2368 | 2.3762 | 2.2406 | 2.2826 | Ave | | 2.2564 | | | | 3.7 | | 20.0 | | | |
| sec-Butylbenzene | 2.5921<br>3.0046 | 2.6994<br>2.8685 | 2.9965 | 2.8235 | 2.9285 | Ave | | 2.8447 | | | | 5.4 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.4791<br>1.3933 | 1.5035<br>1.3394 | 1.4385 | 1.3676 | 1.3647 | Ave | | 1.4123 | | | 0.6000 | 4.4 | | 20.0 | | | |
| 4-Isopropyltoluene | 2.2955<br>2.5970 | 2.3910<br>2.5362 | 2.6099 | 2.4625 | 2.5496 | Ave | | 2.4917 | | | | 4.6 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.6054<br>1.4113 | 1.5675<br>1.3669 | 1.4816 | 1.3825 | 1.3984 | Ave | | 1.4591 | | | 0.5000 | 6.5 | | 20.0 | | | |
| n-Butylbenzene | 1.8944<br>2.1259 | 2.0232<br>2.0712 | 2.1091 | 2.0276 | 2.0953 | Ave | | 2.0495 | | | | 3.8 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.3437<br>1.2534 | 1.3687<br>1.2318 | 1.3105 | 1.2348 | 1.2330 | Ave | | 1.2823 | | | 0.4000 | 4.5 | | 20.0 | | | |
| 1,2-Dibromo-3-Chloropropane | 0.2630<br>0.2491 | 0.2219<br>0.2547 | 0.2430 | 0.2371 | 0.2465 | Ave | | 0.2450 | | | 0.0500 | 5.4 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 0.9409<br>0.8412 | 0.9494<br>0.8737 | 0.8099 | 0.7792 | 0.7909 | Ave | | 0.8550 | | | 0.2000 | 8.1 | | 20.0 | | | |
| Hexachlorobutadiene | 0.4751<br>0.4459 | 0.4859<br>0.4196 | 0.4201 | 0.4076 | 0.4202 | Ave | | 0.4392 | | | | 7.0 | | 20.0 | | | |
| Naphthalene | +++++<br>2.4081 | 2.5248<br>2.5673 | 2.2519 | 2.1428 | 2.2829 | Ave | | 2.3630 | | | | 7.0 | | 20.0 | | | |
| 1,2,3-Trichlorobenzene | 0.7893<br>0.7724 | 0.8277<br>0.8517 | 0.7383 | 0.6846 | 0.7103 | Ave | | 0.7677 | | | | 7.9 | | 20.0 | | | |
| Dibromofluoromethane (Surr) | 0.2950<br>0.2630 | 0.2820<br>0.2531 | 0.2707 | 0.2587 | 0.2619 | Ave | | 0.2692 | | | | 5.5 | | 20.0 | | | |
| 1,2-Dichloroethane-d4 (Surr) | 0.3515<br>0.2903 | 0.3408<br>0.2779 | 0.3137 | 0.2940 | 0.2963 | Ave | | 0.3092 | | | | 8.9 | | 20.0 | | | |
| Toluene-d8 (Surr) | 1.2799<br>1.1805 | 1.2018<br>1.1653 | 1.2236 | 1.1594 | 1.1844 | Ave | | 1.1993 | | | | 3.5 | | 20.0 | | | |
| 4-Bromofluorobenzene (Surr) | 0.5295<br>0.4325 | 0.4716<br>0.4172 | 0.4467 | 0.4309 | 0.4307 | Ave | | 0.4513 | | | | 8.5 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-342719/13 | U1901329.d |
| Level 2 | STD8260 240-342719/12 | U1901328.d |
| Level 3 | STD8260 240-342719/11 | U1901327.d |
| Level 4 | ICIS 240-342719/10 | U1901326.d |
| Level 5 | STD8260 240-342719/9 | U1901325.d |
| Level 6 | STD8260 240-342719/8 | U1901324.d |
| Level 7 | STD8260 240-342719/7 | U1901323.d |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane | FB | Ave | 7625<br>1180992 | 18328<br>1552738 | 186223 | 366772 | 792590 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloromethane | FB | Ave | 8152<br>829233 | 12972<br>1059365 | 134420 | 267203 | 546909 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Butadiene | FB | Ave | 6713<br>847603 | 14115<br>1086231 | 141609 | 275330 | 552757 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl chloride | FB | Ave | 6564<br>881108 | 14250<br>1135494 | 148037 | 286894 | 589426 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromomethane | FB | Ave | 5934<br>669257 | 11360<br>864872 | 111689 | 219651 | 442826 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloroethane | FB | Ave | 4812<br>533953 | 8387<br>696179 | 89838 | 172968 | 353502 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dichlorofluoromethane | FB | Ave | 11593<br>1308784 | 21694<br>1694878 | 223205 | 434465 | 878380 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichlorofluoromethane | FB | Ave | 11587<br>1458414 | 23241<br>1894654 | 244417 | 483006 | 978643 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl ether | FB | Ave | 4060<br>521372 | 9015<br>676475 | 88252 | 172224 | 350377 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acrolein | FB | Ave | 5804<br>622965 | 10600<br>846753 | 100203 | 220720 | 417769 | 2.50<br>300 | 5.00<br>400 | 50.0 | 100 | 200 |
| 1,1-Dichloroethene | FB | Ave | 8152<br>1061526 | 16498<br>1382045 | 177882 | 348307 | 706289 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroetha ne | FB | Ave | 5847<br>770733 | 11240<br>1005400 | 126531 | 249289 | 512861 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acetone | FB | Ave | +++++<br>433055 | 8941<br>564923 | 73077 | 146204 | 298968 | +++++<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Iodomethane | FB | Ave | 11424<br>1332936 | 22471<br>1743886 | 225726 | 444884 | 888035 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon disulfide | FB | Ave | 20511<br>2078244 | 39223<br>2698750 | 351356 | 683722 | 1372316 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 3-Chloro-1-propene | FB | Ave | 8759<br>1011692 | 18227<br>1304832 | 171118 | 326833 | 662138 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl acetate | FB | Ave | 12374<br>1276471 | 22480<br>1658043 | 228841 | 440913 | 886871 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Methylene Chloride | FB | Ave | +++++<br>797526 | 15126<br>1035294 | 139613 | 271471 | 534613 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Methyl-2-propanol | FB | Ave | 7089<br>709594 | 13140<br>963916 | 135517 | 252801 | 542388 | 5.00<br>600 | 10.0<br>800 | 100 | 200 | 400 |
| Acrylonitrile | FB | Ave | 23600<br>2849701 | 49680<br>3654042 | 514757 | 950386 | 1951040 | 5.00<br>600 | 10.0<br>800 | 100 | 200 | 400 |
| trans-1,2-Dichloroethene | FB | Ave | 8368<br>967924 | 16818<br>1235776 | 167419 | 317885 | 639131 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl tert-butyl ether | FB | Ave | 15146<br>2079947 | 33109<br>2755910 | 342568 | 653045 | 1349603 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexane | FB | Ave | 7709<br>1056328 | 15276<br>1419117 | 174299 | 347875 | 704185 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloroethane | FB | Ave | 9092<br>1192355 | 19673<br>1533220 | 199597 | 387941 | 790957 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl acetate | FB | Ave | 10910<br>1321142 | 21765<br>1777280 | 231586 | 445770 | 903595 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| cis-1,2-Dichloroethene | FB | Ave | 7168<br>831715 | 14212<br>1069027 | 140685 | 272438 | 545012 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2,2-Dichloropropane | FB | Ave | 5791<br>725393 | 11860<br>944363 | 116583 | 212094 | 491954 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Butanone (MEK) | FB | Ave | 2283<br>257675 | 4567<br>358198 | 48290 | 88909 | 181887 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Chlorobromomethane | FB | Ave | 5503<br>530825 | 10266<br>658069 | 94139 | 175479 | 350082 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrahydrofuran | FB | Lin1 | +++++<br>566965 | 20056<br>753652 | 114720 | 199816 | 405539 | +++++<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Chloroform | FB | Ave | 10169<br>1282514 | 21044<br>1662428 | 224371 | 427697 | 863672 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1-Trichloroethane | FB | Ave | 8767<br>1245609 | 19503<br>1637723 | 211997 | 398309 | 836381 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Cyclohexane | FB | Ave | 8206<br>1159393 | 16696<br>1531667 | 188221 | 372006 | 776128 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloropropene | FB | Ave | 7998<br>1033663 | 16667<br>1344377 | 174842 | 337392 | 687882 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon tetrachloride | FB | Ave | 8954<br>1199313 | 17959<br>1583649 | 201366 | 384700 | 807965 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isobutyl alcohol | FB | Ave | 7140<br>731439 | 14010<br>985172 | 127213 | 263438 | 540692 | 12.5<br>1500 | 25.0<br>2000 | 250 | 500 | 1000 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Benzene | FB | Ave | 21738<br>2748682 | 45349<br>3599104 | 482300 | 917150 | 1843426 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane | FB | Ave | 8896<br>1002994 | 18266<br>1294416 | 178638 | 341638 | 680627 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Heptane | FB | Lin1 | +++++<br>573367 | 39021<br>734621 | 123554 | 210893 | 401639 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichloroethene | FB | Ave | 7819<br>909646 | 14636<br>1193487 | 156409 | 299123 | 608172 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methylcyclohexane | FB | Ave | 10042<br>1399000 | 20268<br>1805108 | 225444 | 445411 | 929492 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloropropane | FB | Ave | 5092<br>634222 | 10172<br>831616 | 112735 | 214790 | 433884 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromomethane | FB | Ave | 5652<br>638964 | 11437<br>828119 | 111478 | 213090 | 428543 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,4-Dioxane | FB | Ave | +++++<br>147508 | 1560<br>204613 | 20257 | 50489 | 108387 | +++++<br>1200 | 20.0<br>1600 | 200 | 400 | 800 |
| Dichlorobromomethane | FB | Ave | 7972<br>997303 | 17242<br>1298324 | 172767 | 336655 | 670319 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chloroethyl vinyl ether | FB | Ave | 7473<br>1009556 | 15714<br>1404589 | 185460 | 353595 | 710198 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| cis-1,3-Dichloropropene | FB | Ave | 8778<br>1113655 | 18371<br>1486992 | 192411 | 372198 | 757475 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Methyl-2-pentanone (MIBK) | FB | Ave | 14774<br>1776570 | 29549<br>2416341 | 332777 | 627983 | 1267570 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Toluene | CBNZ d5 | Ave | 25413<br>3039879 | 50838<br>4036837 | 544474 | 1040131 | 2085055 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| trans-1,3-Dichloropropene | CBNZ d5 | Ave | 9232<br>1076004 | 18668<br>1466824 | 187797 | 363416 | 737016 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl methacrylate | CBNZ d5 | Ave | 7062<br>1006534 | 14839<br>1404401 | 177753 | 349427 | 711262 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloroethane | CBNZ d5 | Ave | 5186<br>644677 | 10462<br>861140 | 115489 | 219105 | 445968 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrachloroethene | CBNZ d5 | Ave | 7818<br>999011 | 15556<br>1317893 | 175104 | 332664 | 675866 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichloropropane | CBNZ d5 | Ave | 9211<br>1078694 | 17554<br>1456758 | 194537 | 366944 | 737142 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Hexanone | CBNZ d5 | Ave | 10272<br>1411899 | 22402<br>1965782 | 267096 | 508487 | 1016835 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| Chlorodibromomethane | CBNZ d5 | Ave | 6108<br>836499 | 12969<br>1113195 | 145120 | 282195 | 568645 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylene Dibromide | CBNZ d5 | Ave | 6962<br>733806 | 12317<br>982631 | 132926 | 257341 | 500324 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Chlorobenzene | CBNZ d5 | Ave | 17303<br>2067581 | 36469<br>2721351 | 370702 | 704913 | 1418747 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1,2-Tetrachloroethane | CBNZ d5 | Ave | 5956<br>771705 | 12290<br>1012040 | 135561 | 257026 | 524311 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylbenzene | CBNZ d5 | Ave | 8431<br>1118678 | 17209<br>1476959 | 200390 | 380861 | 765441 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| m-Xylene & p-Xylene | CBNZ d5 | Ave | 10542<br>1365436 | 20530<br>1814431 | 238543 | 466651 | 934583 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| o-Xylene | CBNZ d5 | Ave | 9580<br>1302937 | 20689<br>1703380 | 225509 | 441487 | 890297 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Styrene | CBNZ d5 | Ave | 16463<br>2244503 | 33591<br>2970527 | 391834 | 759556 | 1534422 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromoform | CBNZ d5 | Ave | 5340<br>669771 | 10783<br>909465 | 117306 | 222929 | 462320 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isopropylbenzene | CBNZ d5 | Ave | 25288<br>3527221 | 55346<br>4561888 | 613985 | 1179370 | 2399226 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2,2-Tetrachloroethane | DCBd 4 | Ave | 7218<br>951258 | 16261<br>1271933 | 172140 | 328526 | 660294 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromobenzene | DCBd 4 | Ave | 7663<br>946835 | 16361<br>1240722 | 169316 | 324573 | 647055 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichloropropane | DCBd 4 | Ave | 2842<br>355186 | 5997<br>478494 | 66218 | 124262 | 250203 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| trans-1,4-Dichloro-2-butene | DCBd 4 | Ave | +++++<br>330637 | 5707<br>456736 | 60466 | 114842 | 228469 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| N-Propylbenzene | DCBd 4 | Ave | 7103<br>988262 | 15476<br>1290307 | 171938 | 332244 | 674293 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chlorotoluene | DCBd 4 | Ave | 6213<br>834423 | 12831<br>1080636 | 147510 | 281753 | 562614 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3,5-Trimethylbenzene | DCBd 4 | Ave | 21381<br>2836427 | 43584<br>3682951 | 499875 | 945225 | 1929863 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Chlorotoluene | DCBd 4 | Ave | 7405<br>873575 | 14345<br>1135643 | 155656 | 302046 | 588358 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| tert-Butylbenzene | DCBd 4 | Ave | 19348<br>2731529 | 41850<br>3487952 | 474813 | 904165 | 1854784 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trimethylbenzene | DCBd 4 | Ave | 21277<br>2851175 | 46663<br>3713592 | 495166 | 965487 | 1949684 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| sec-Butylbenzene | DCBd 4 | Ave | 26267<br>3724288 | 55760<br>4762339 | 624437 | 1216655 | 2501406 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichlorobenzene | DCBd 4 | Ave | 14989<br>1726981 | 31057<br>2223773 | 299776 | 589299 | 1165661 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Isopropyltoluene | DCBd 4 | Ave | 23262<br>3219084 | 49391<br>4210777 | 543873 | 1061108 | 2177763 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 1,4-Dichlorobenzene | DCBd 4 | Ave | 16269<br>1749380 | 32379<br>2269476 | 308743 | 595729 | 1194426 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Butylbenzene | DCBd 4 | Ave | 19197<br>2635155 | 41792<br>3438646 | 439518 | 873706 | 1789693 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichlorobenzene | DCBd 4 | Ave | 13617<br>1553579 | 28272<br>2045057 | 273092 | 532075 | 1053180 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dibromo-3-Chloropropane | DCBd 4 | Ave | 2665<br>308798 | 4583<br>422865 | 50642 | 102189 | 210526 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trichlorobenzene | DCBd 4 | Ave | 9535<br>1042664 | 19612<br>1450610 | 168774 | 335760 | 675526 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexachlorobutadiene | DCBd 4 | Ave | 4814<br>552719 | 10037<br>696652 | 87534 | 175651 | 358938 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Naphthalene | DCBd 4 | Ave | +++++<br>2984863 | 52154<br>4262332 | 469280 | 923339 | 1949946 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichlorobenzene | DCBd 4 | Ave | 7998<br>957428 | 17097<br>1414051 | 153843 | 295011 | 606712 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromofluoromethane (Surr) | FB | Ave | 6919<br>762443 | 13395<br>972724 | 129168 | 251584 | 512374 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane-d4 (Surr) | FB | Ave | 8242<br>841615 | 16187<br>1067780 | 149716 | 285917 | 579615 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Toluene-d8 (Surr) | CBNZ d5 | Ave | 23636<br>2695636 | 44577<br>3557725 | 475254 | 907923 | 1855495 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Bromofluorobenzene (Surr) | CBNZ d5 | Ave | 9778<br>987516 | 17494<br>1273707 | 173480 | 337411 | 674745 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 342719

SDG No.:

Instrument ID: A3UX19 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/27/2018 17:09 Calibration End Date: 08/27/2018 19:23 Calibration ID: 46687

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-342719/13 | U1901329.d |
| Level 2 | STD8260 240-342719/12 | U1901328.d |
| Level 3 | STD8260 240-342719/11 | U1901327.d |
| Level 4 | ICIS 240-342719/10 | U1901326.d |
| Level 5 | STD8260 240-342719/9 | U1901325.d |
| Level 6 | STD8260 240-342719/8 | U1901324.d |
| Level 7 | STD8260 240-342719/7 | U1901323.d |

| ANALYTE | PERCENT ERROR | | | | | | PERCENT ERROR LIMIT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 # LVL 7 # | LVL 2 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1 LVL 7 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
| Tetrahydrofuran | +++++ | -9.7 | | | | | | 50 | | | | |
| n-Heptane | +++++ | -4.5 | | | | | | 50 | | | | |

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901323.d
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Aug-2018 17:09:10 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-003
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:27:48 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 17:37:20

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 92 | 960659 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 763247 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 68 | 415062 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 63 | 972724 | 80.0 | 75.2 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.345 | 0.000 | 100 | 1067780 | 80.0 | 71.9 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | 0.000 | 93 | 3557725 | 80.0 | 77.7 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 90 | 1273707 | 80.0 | 74.0 | |
| 9 Dichlorodifluoromethane | 85 | 1.598 | 1.610 | -0.012 | 88 | 1552738 | 80.0 | 84.0 | |
| 10 Chloromethane | 50 | 1.811 | 1.812 | -0.001 | 78 | 1059365 | 80.0 | 76.5 | |
| 12 Butadiene | 54 | 1.894 | 1.906 | -0.012 | 89 | 1086231 | 80.0 | 78.3 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 82 | 1135494 | 80.0 | 79.3 | |
| 13 Bromomethane | 94 | 2.215 | 2.227 | -0.013 | 84 | 864872 | 80.0 | 77.1 | |
| 14 Chloroethane | 64 | 2.286 | 2.298 | -0.012 | 86 | 696179 | 80.0 | 78.4 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.499 | 0.000 | 83 | 1694878 | 80.0 | 77.0 | |
| 16 Trichlorofluoromethane | 101 | 2.570 | 2.582 | -0.012 | 87 | 1894654 | 80.0 | 79.1 | |
| 17 Ethyl ether | 59 | 2.807 | 2.808 | -0.001 | 88 | 676475 | 80.0 | 78.2 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 91 | 846753 | 400.0 | 396.4 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.045 | -0.012 | 90 | 1382045 | 80.0 | 80.2 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 78 | 1005400 | 80.0 | 81.5 | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 79 | 564923 | 160.0 | 150.0 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 99 | 1743886 | 80.0 | 78.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 89 | 2698750 | 80.0 | 74.8 | |
| 26 3-Chloro-1-propene | 41 | 3.353 | 3.365 | -0.012 | 81 | 1304832 | 80.0 | 76.7 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 1658043 | 160.0 | 148.3 | |
| 28 Methylene Chloride | 49 | 3.483 | 3.495 | -0.012 | 52 | 1035294 | 80.0 | 75.7 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.567 | 0.011 | 69 | 963916 | 800.0 | 741.0 | |
| 30 Acrylonitrile | 53 | 3.685 | 3.685 | 0.000 | 98 | 3654042 | 800.0 | 756.5 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.721 | 3.721 | 0.000 | 79 | 1235776 | 80.0 | 76.0 | |
| 31 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 89 | 2755910 | 80.0 | 82.7 | |
| 33 Hexane | 57 | 3.970 | 3.982 | -0.012 | 93 | 1419117 | 80.0 | 83.8 | |
| 34 1,1-Dichloroethane | 63 | 4.100 | 4.112 | -0.012 | 85 | 1533220 | 80.0 | 78.9 | |
| 35 Vinyl acetate | 43 | 4.147 | 4.148 | -0.001 | 97 | 1777280 | 80.0 | 79.8 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.622 | 0.000 | 63 | 1069027 | 80.0 | 77.0 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 66 | 944363 | 80.0 | 80.7 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 96 | 358198 | 160.0 | 157.9 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 81 | 658069 | 80.0 | 70.4 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 83 | 753652 | 160.0 | 158.3 | |
| 47 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 70 | 1662428 | 80.0 | 78.1 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 91 | 1637723 | 80.0 | 81.7 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 75 | 1531667 | 80.0 | 83.5 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 89 | 1344377 | 80.0 | 79.5 | |
| 51 Carbon tetrachloride | 117 | 5.238 | 5.239 | -0.001 | 71 | 1583649 | 80.0 | 82.0 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 88 | 985172 | 2000.0 | 1867.6 | |
| 53 Benzene | 78 | 5.404 | 5.417 | -0.013 | 95 | 3599104 | 80.0 | 78.7 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 51 | 1294416 | 80.0 | 74.9 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 86 | 734621 | 80.0 | 78.7 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 88 | 1193487 | 80.0 | 78.6 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 89 | 1805108 | 80.0 | 81.9 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 81 | 831616 | 80.0 | 78.4 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 85 | 828119 | 80.0 | 75.9 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 33 | 204613 | 1600.0 | 1782.8 | |
| 65 Dichlorobromomethane | 83 | 6.424 | 6.436 | -0.012 | 93 | 1298324 | 80.0 | 77.7 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 92 | 1404589 | 160.0 | 165.2 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 91 | 1486992 | 80.0 | 80.1 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 83 | 2416341 | 160.0 | 157.0 | |
| 70 Toluene | 91 | 7.171 | 7.172 | -0.001 | 94 | 4036837 | 80.0 | 78.3 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 83 | 1466824 | 80.0 | 79.8 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 87 | 1404401 | 80.0 | 84.7 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 861140 | 80.0 | 79.4 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 93 | 1317893 | 80.0 | 80.1 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 89 | 1456758 | 80.0 | 79.5 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 79 | 1965782 | 160.0 | 163.6 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.919 | 0.011 | 87 | 1113195 | 80.0 | 81.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 982631 | 80.0 | 76.9 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 92 | 2721351 | 80.0 | 77.1 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 88 | 1012040 | 80.0 | 79.5 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 1476959 | 80.0 | 80.0 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 1814431 | 80.0 | 80.7 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 1703380 | 80.0 | 79.8 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 2970527 | 80.0 | 81.2 | |
| 88 Bromoform | 173 | 9.353 | 9.354 | -0.001 | 98 | 909465 | 80.0 | 81.3 | |
| 89 Isopropylbenzene | 105 | 9.519 | 9.520 | -0.001 | 95 | 4561888 | 80.0 | 79.6 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 84 | 1271933 | 80.0 | 79.5 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 81 | 1240722 | 80.0 | 77.7 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 65 | 478494 | 80.0 | 78.9 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 62 | 456736 | 80.0 | 80.4 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 92 | 1290307 | 80.0 | 80.4 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 1080636 | 80.0 | 79.6 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 3682951 | 80.0 | 79.7 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 1135643 | 80.0 | 77.4 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 3487952 | 80.0 | 79.6 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 71 | 3713592 | 80.0 | 79.3 | |
| 102 sec-Butylbenzene | 105 | 10.693 | 10.694 | -0.001 | 94 | 4762339 | 80.0 | 80.7 | |
| 103 1,3-Dichlorobenzene | 146 | 10.824 | 10.812 | 0.012 | 95 | 2223773 | 80.0 | 75.9 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 4210777 | 80.0 | 81.4 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 94 | 2269476 | 80.0 | 74.9 | |
| 108 n-Butylbenzene | 91 | 11.286 | 11.287 | -0.001 | 96 | 3438646 | 80.0 | 80.8 | |
| 109 1,2-Dichlorobenzene | 146 | 11.310 | 11.298 | 0.012 | 98 | 2045057 | 80.0 | 76.9 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 92 | 422865 | 80.0 | 83.2 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 1450610 | 80.0 | 81.7 | |
| 113 Hexachlorobutadiene | 225 | 13.207 | 13.208 | -0.001 | 88 | 696652 | 80.0 | 76.4 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 97 | 4262332 | 80.0 | 86.9 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 1414051 | 80.0 | 88.7 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 320.0 | 318.4 | |
| S 164 Total BTEX | 1 | | | | 0 | | 400.0 | 397.5 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 153.0 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 159.9 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 160.0 | 160.5 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 64.00 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 64.00 | Units: uL |
| vmrprimw_00297 | Amount Added: | 64.00 | Units: uL |
| vm50ss_00333 | Amount Added: | 64.00 | Units: uL |

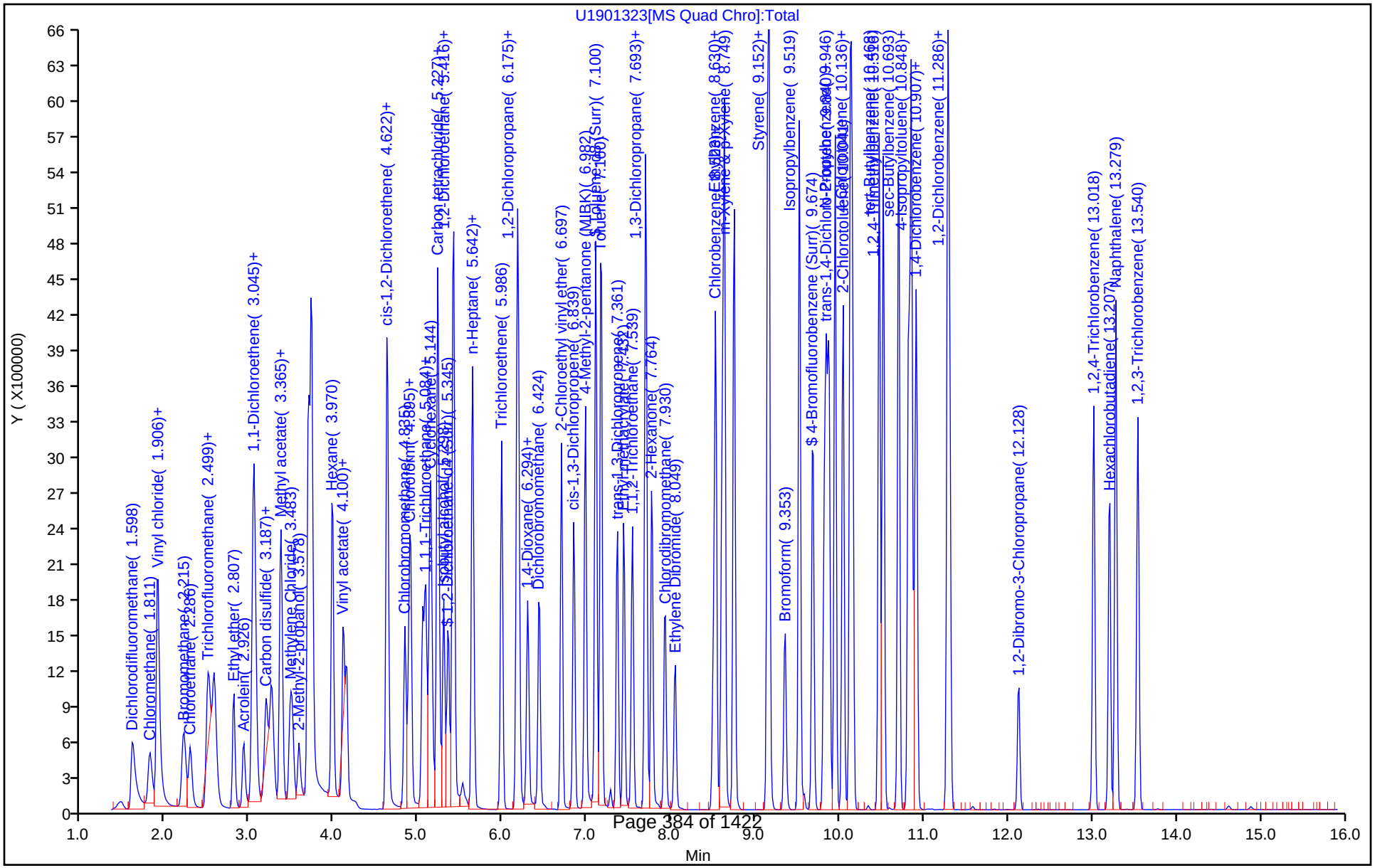
Report Date: 27-Aug-2018 21:27:50 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901323.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 17:09:10 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L7 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901324.d
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 27-Aug-2018 17:31:36 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:27:54 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:08:38

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 92 | 966455 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 761160 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 74 | 413175 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 762443 | 60.0 | 58.6 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.345 | 0.012 | 99 | 841615 | 60.0 | 56.3 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | 0.000 | 86 | 2695636 | 60.0 | 59.1 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 90 | 987516 | 60.0 | 57.5 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 80 | 1180992 | 60.0 | 63.5 | |
| 10 Chloromethane | 50 | 1.823 | 1.812 | 0.011 | 77 | 829233 | 60.0 | 59.5 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 88 | 847603 | 60.0 | 60.8 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 81 | 881108 | 60.0 | 61.2 | |
| 13 Bromomethane | 94 | 2.226 | 2.227 | -0.001 | 89 | 669257 | 60.0 | 59.3 | |
| 14 Chloroethane | 64 | 2.298 | 2.298 | 0.000 | 94 | 533953 | 60.0 | 59.8 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 82 | 1308784 | 60.0 | 59.1 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 88 | 1458414 | 60.0 | 60.6 | |
| 17 Ethyl ether | 59 | 2.807 | 2.808 | -0.001 | 90 | 521372 | 60.0 | 59.9 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 95 | 622965 | 300.0 | 289.9 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 89 | 1061526 | 60.0 | 61.2 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 79 | 770733 | 60.0 | 62.1 | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 64 | 433055 | 120.0 | 114.3 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 99 | 1332936 | 60.0 | 59.3 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 99 | 2078244 | 60.0 | 57.2 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 74 | 1011692 | 60.0 | 59.1 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 1276471 | 120.0 | 113.5 | |
| 28 Methylene Chloride | 49 | 3.483 | 3.495 | -0.012 | 53 | 797526 | 60.0 | 58.0 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.567 | 0.011 | 86 | 709594 | 600.0 | 542.2 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.685 | 0.012 | 98 | 2849701 | 600.0 | 586.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.721 | 0.011 | 69 | 967924 | 60.0 | 59.1 | |
| 31 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 89 | 2079947 | 60.0 | 62.0 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 89 | 1056328 | 60.0 | 62.0 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 1192355 | 60.0 | 61.0 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 1321142 | 60.0 | 58.9 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.622 | 0.000 | 63 | 831715 | 60.0 | 59.5 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 90 | 257675 | 120.0 | 112.9 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 62 | 725393 | 60.0 | 61.6 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 68 | 530825 | 60.0 | 56.5 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 85 | 566965 | 120.0 | 117.7 | |
| 47 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 70 | 1282514 | 60.0 | 59.9 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 89 | 1245609 | 60.0 | 61.8 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 1159393 | 60.0 | 62.8 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 91 | 1033663 | 60.0 | 60.8 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 1199313 | 60.0 | 61.7 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 82 | 731439 | 1500.0 | 1378.3 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 49 | 1002994 | 60.0 | 57.7 | |
| 53 Benzene | 78 | 5.416 | 5.417 | -0.001 | 94 | 2748682 | 60.0 | 59.8 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 87 | 573367 | 60.0 | 60.3 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 93 | 909646 | 60.0 | 59.6 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 89 | 1399000 | 60.0 | 63.1 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 79 | 634222 | 60.0 | 59.5 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 86 | 638964 | 60.0 | 58.2 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 32 | 147508 | 1200.0 | 1277.5 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 94 | 997303 | 60.0 | 59.3 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 92 | 1009556 | 120.0 | 118.0 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 93 | 1113655 | 60.0 | 59.6 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 82 | 1776570 | 120.0 | 114.8 | |
| 70 Toluene | 91 | 7.171 | 7.172 | -0.001 | 94 | 3039879 | 60.0 | 59.1 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 87 | 1076004 | 60.0 | 58.7 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 88 | 1006534 | 60.0 | 60.9 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 644677 | 60.0 | 59.6 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 93 | 999011 | 60.0 | 60.9 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 89 | 1078694 | 60.0 | 59.0 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 79 | 1411899 | 120.0 | 117.8 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.919 | 0.011 | 87 | 836499 | 60.0 | 61.3 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 733806 | 60.0 | 57.6 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 95 | 2067581 | 60.0 | 58.7 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 88 | 771705 | 60.0 | 60.8 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 1118678 | 60.0 | 60.8 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 1365436 | 60.0 | 60.9 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 1302937 | 60.0 | 61.2 | |
| 87 Styrene | 104 | 9.152 | 9.164 | -0.012 | 88 | 2244503 | 60.0 | 61.5 | |
| 88 Bromoform | 173 | 9.353 | 9.354 | -0.001 | 98 | 669771 | 60.0 | 60.0 | |
| 89 Isopropylbenzene | 105 | 9.519 | 9.520 | -0.001 | 95 | 3527221 | 60.0 | 61.7 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 84 | 951258 | 60.0 | 59.8 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 87 | 946835 | 60.0 | 59.6 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 63 | 355186 | 60.0 | 58.9 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 61 | 330637 | 60.0 | 58.5 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 91 | 988262 | 60.0 | 61.9 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 834423 | 60.0 | 61.7 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 2836427 | 60.0 | 61.7 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 873575 | 60.0 | 59.8 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 2731529 | 60.0 | 62.6 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 2851175 | 60.0 | 61.2 | |
| 102 sec-Butylbenzene | 105 | 10.693 | 10.694 | -0.001 | 94 | 3724288 | 60.0 | 63.4 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 90 | 1726981 | 60.0 | 59.2 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 3219084 | 60.0 | 62.5 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 94 | 1749380 | 60.0 | 58.0 | |
| 108 n-Butylbenzene | 91 | 11.275 | 11.287 | -0.012 | 98 | 2635155 | 60.0 | 62.2 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 97 | 1553579 | 60.0 | 58.6 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 91 | 308798 | 60.0 | 61.0 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 1042664 | 60.0 | 59.0 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 88 | 552719 | 60.0 | 60.9 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 2984863 | 60.0 | 61.1 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 957428 | 60.0 | 60.4 | |
| S 164 Total BTEX | 1 | | | | 0 | | 300.0 | 301.7 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 240.0 | 240.5 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 118.7 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 118.3 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 120.0 | 122.1 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 48.00 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 48.00 | Units: uL |
| vmrprimw_00297 | Amount Added: | 48.00 | Units: uL |
| vm50ss_00333 | Amount Added: | 48.00 | Units: uL |

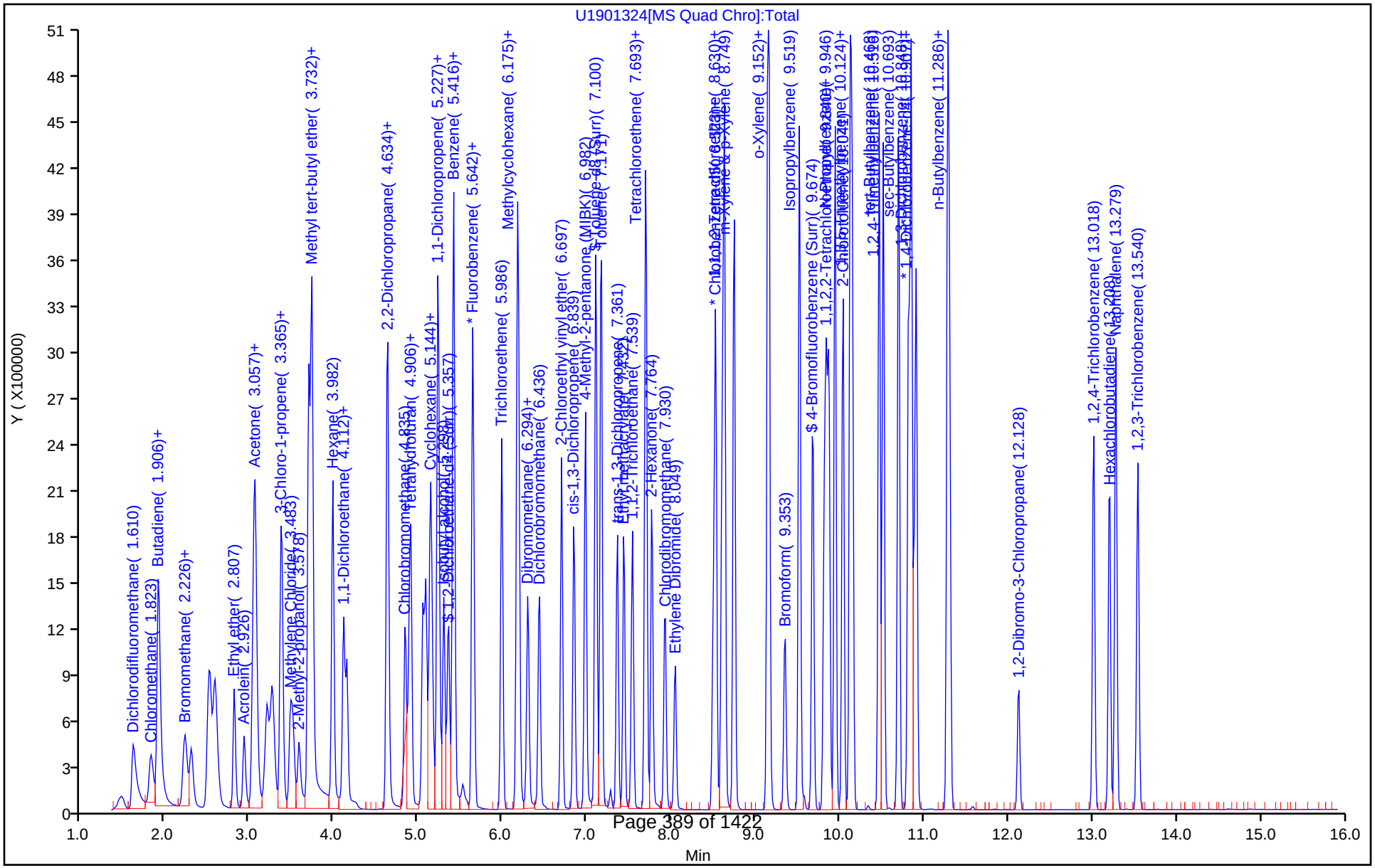
Report Date: 27-Aug-2018 21:27:59 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901324.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 17:31:36 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L6 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901325.d
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Aug-2018 17:53:51 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-009
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:08 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:49:15

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 95 | 978140 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 783329 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 75 | 427081 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 60 | 512374 | 40.0 | 38.9 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.345 | 0.000 | 100 | 579615 | 40.0 | 38.3 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 86 | 1855495 | 40.0 | 39.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 89 | 674745 | 40.0 | 38.2 | |
| 9 Dichlorodifluoromethane | 85 | 1.598 | 1.610 | -0.012 | 88 | 792590 | 40.0 | 42.1 | |
| 10 Chloromethane | 50 | 1.812 | 1.812 | 0.000 | 78 | 546909 | 40.0 | 38.8 | |
| 12 Butadiene | 54 | 1.895 | 1.906 | -0.011 | 89 | 552757 | 40.0 | 39.2 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 83 | 589426 | 40.0 | 40.4 | |
| 13 Bromomethane | 94 | 2.215 | 2.227 | -0.012 | 85 | 442826 | 40.0 | 38.8 | |
| 14 Chloroethane | 64 | 2.298 | 2.298 | 0.000 | 82 | 353502 | 40.0 | 39.1 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.499 | 0.000 | 83 | 878380 | 40.0 | 39.2 | |
| 16 Trichlorofluoromethane | 101 | 2.571 | 2.582 | -0.012 | 87 | 978643 | 40.0 | 40.2 | |
| 17 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 88 | 350377 | 40.0 | 39.8 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 95 | 417769 | 200.0 | 192.1 | |
| 21 1,1-Dichloroethene | 61 | 3.033 | 3.045 | -0.012 | 90 | 706289 | 40.0 | 40.2 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 72 | 512861 | 40.0 | 40.8 | |
| 22 Acetone | 43 | 3.069 | 3.069 | 0.000 | 82 | 298968 | 80.0 | 78.0 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 99 | 888035 | 40.0 | 39.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 89 | 1372316 | 40.0 | 37.3 | |
| 26 3-Chloro-1-propene | 41 | 3.353 | 3.365 | -0.012 | 73 | 662138 | 40.0 | 38.2 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 886871 | 80.0 | 77.9 | |
| 28 Methylene Chloride | 49 | 3.484 | 3.495 | -0.011 | 51 | 534613 | 40.0 | 38.4 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.567 | 0.011 | 69 | 542388 | 400.0 | 409.5 | |
| 30 Acrylonitrile | 53 | 3.685 | 3.685 | 0.000 | 97 | 1951040 | 400.0 | 396.7 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.721 | 3.721 | 0.000 | 74 | 639131 | 40.0 | 38.6 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 87 | 1349603 | 40.0 | 39.8 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 92 | 704185 | 40.0 | 40.9 | |
| 34 1,1-Dichloroethane | 63 | 4.100 | 4.112 | -0.012 | 85 | 790957 | 40.0 | 40.0 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 903595 | 40.0 | 39.8 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.622 | 0.000 | 69 | 545012 | 40.0 | 38.6 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 66 | 491954 | 40.0 | 41.3 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 96 | 181887 | 80.0 | 78.7 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 80 | 350082 | 40.0 | 36.8 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 84 | 405539 | 80.0 | 82.5 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 68 | 863672 | 40.0 | 39.8 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 90 | 836381 | 40.0 | 41.0 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 75 | 776128 | 40.0 | 41.6 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 89 | 687882 | 40.0 | 40.0 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 807965 | 40.0 | 41.1 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 88 | 540692 | 1000.0 | 1006.7 | |
| 53 Benzene | 78 | 5.405 | 5.417 | -0.012 | 95 | 1843426 | 40.0 | 39.6 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 51 | 680627 | 40.0 | 38.7 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 84 | 401639 | 40.0 | 40.7 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 608172 | 40.0 | 39.4 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 88 | 929492 | 40.0 | 41.4 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 80 | 433884 | 40.0 | 40.2 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 86 | 428543 | 40.0 | 38.6 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 35 | 108387 | 800.0 | 927.5 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 670319 | 40.0 | 39.4 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 92 | 710198 | 80.0 | 82.0 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 92 | 757475 | 40.0 | 40.1 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 82 | 1267570 | 80.0 | 80.9 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 95 | 2085055 | 40.0 | 39.4 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 83 | 737016 | 40.0 | 39.1 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 88 | 711262 | 40.0 | 41.8 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 445968 | 40.0 | 40.1 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 675866 | 40.0 | 40.0 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 89 | 737142 | 40.0 | 39.2 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 79 | 1016835 | 80.0 | 82.4 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.919 | 0.012 | 87 | 568645 | 40.0 | 40.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 500324 | 40.0 | 38.2 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 97 | 1418747 | 40.0 | 39.1 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 87 | 524311 | 40.0 | 40.1 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 765441 | 40.0 | 40.4 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 934583 | 40.0 | 40.5 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 890297 | 40.0 | 40.6 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 1534422 | 40.0 | 40.9 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 98 | 462320 | 40.0 | 40.2 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 96 | 2399226 | 40.0 | 40.8 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 88 | 660294 | 40.0 | 40.1 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 81 | 647055 | 40.0 | 39.4 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 70 | 250203 | 40.0 | 40.1 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 61 | 228469 | 40.0 | 39.1 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 91 | 674293 | 40.0 | 40.9 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 562614 | 40.0 | 40.3 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 1929863 | 40.0 | 40.6 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 588358 | 40.0 | 39.0 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 1854784 | 40.0 | 41.1 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 1949684 | 40.0 | 40.5 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 2501406 | 40.0 | 41.2 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 90 | 1165661 | 40.0 | 38.7 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 91 | 2177763 | 40.0 | 40.9 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 94 | 1194426 | 40.0 | 38.3 | |
| 108 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 97 | 1789693 | 40.0 | 40.9 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 96 | 1053180 | 40.0 | 38.5 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 92 | 210526 | 40.0 | 40.2 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 91 | 675526 | 40.0 | 37.0 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 88 | 358938 | 40.0 | 38.3 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 1949946 | 40.0 | 38.6 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 93 | 606712 | 40.0 | 37.0 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 160.0 | 160.0 | |
| S 164 Total BTEX | 1 | | | | 0 | | 200.0 | 200.5 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 77.1 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 79.1 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 80.0 | 81.1 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 32.00 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 32.00 | Units: uL |
| vmrprimw_00297 | Amount Added: | 32.00 | Units: uL |
| vm50ss_00333 | Amount Added: | 32.00 | Units: uL |

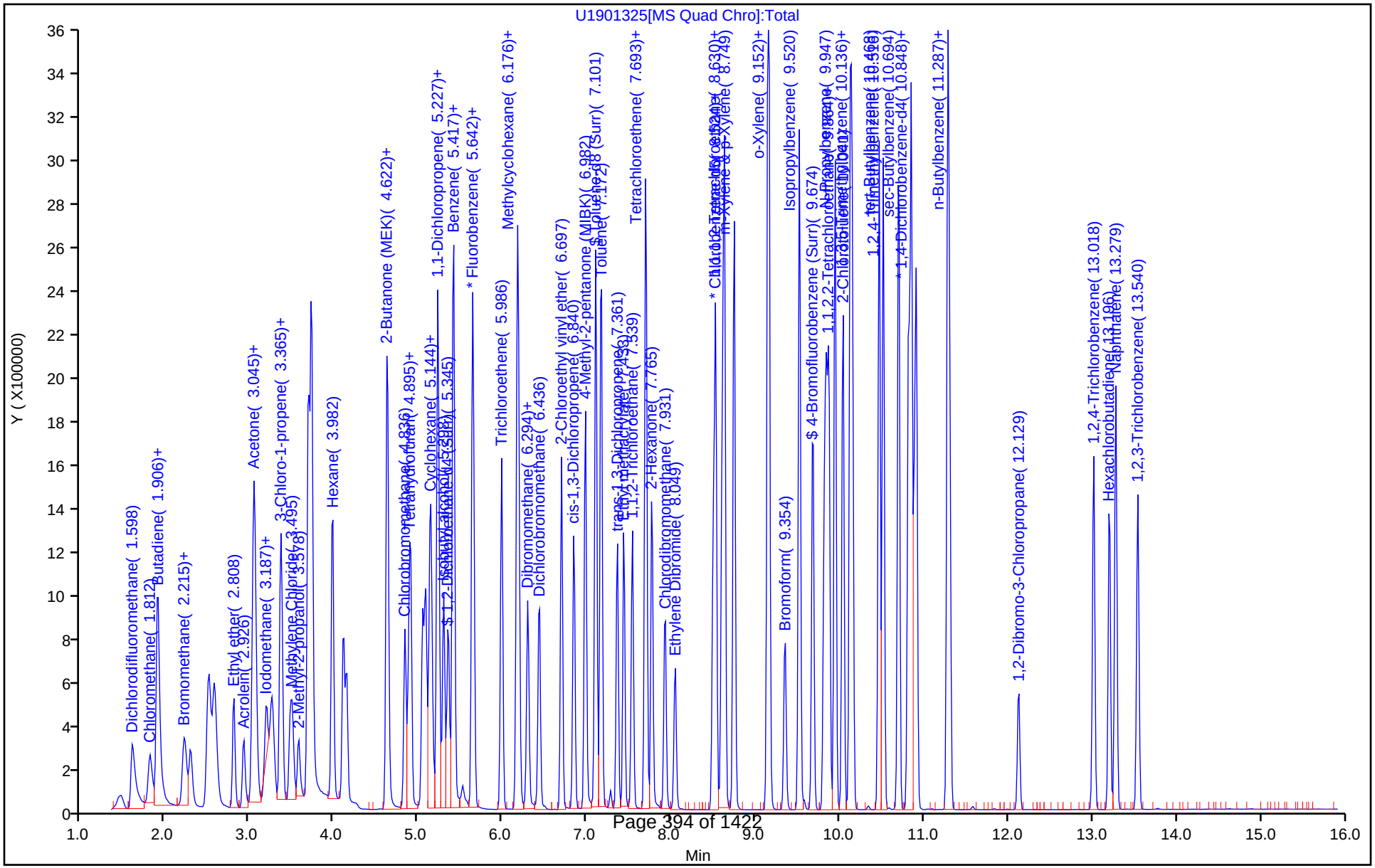
Report Date: 27-Aug-2018 21:28:11 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901325.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 17:53:51 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L5 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Aug-2018 21:28:23 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901326.d
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 27-Aug-2018 18:16:31 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0079307-010
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:20 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 18:47:30

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 972482 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 783101 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 430906 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 251584 | 20.0 | 19.2 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.345 | 0.000 | 99 | 285917 | 20.0 | 19.0 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 86 | 907923 | 20.0 | 19.3 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 90 | 337411 | 20.0 | 19.1 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 66 | 366772 | 20.0 | 19.6 | |
| 10 Chloromethane | 50 | 1.812 | 1.812 | 0.000 | 77 | 267203 | 20.0 | 19.1 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 88 | 275330 | 20.0 | 19.6 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 70 | 286894 | 20.0 | 19.8 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 90 | 219651 | 20.0 | 19.3 | |
| 14 Chloroethane | 64 | 2.298 | 2.298 | 0.000 | 95 | 172968 | 20.0 | 19.2 | |
| 15 Dichlorofluoromethane | 67 | 2.499 | 2.499 | 0.000 | 83 | 434465 | 20.0 | 19.5 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 86 | 483006 | 20.0 | 19.9 | |
| 17 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 88 | 172224 | 20.0 | 19.7 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 95 | 220720 | 100.0 | 102.1 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 89 | 348307 | 20.0 | 20.0 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 80 | 249289 | 20.0 | 20.0 | |
| 22 Acetone | 43 | 3.069 | 3.069 | 0.000 | 68 | 146204 | 40.0 | 38.3 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 99 | 444884 | 20.0 | 19.7 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 99 | 683722 | 20.0 | 18.7 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 80 | 326833 | 20.0 | 19.0 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 440913 | 40.0 | 39.0 | |
| 28 Methylene Chloride | 49 | 3.495 | 3.495 | 0.000 | 55 | 271471 | 20.0 | 19.6 | |
| 29 2-Methyl-2-propanol | 59 | 3.567 | 3.567 | 0.000 | 51 | 252801 | 200.0 | 192.0 | |
| 30 Acrylonitrile | 53 | 3.685 | 3.685 | 0.000 | 98 | 950386 | 200.0 | 194.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.721 | 3.721 | 0.000 | 72 | 317885 | 20.0 | 19.3 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 78 | 653045 | 20.0 | 19.4 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 91 | 347875 | 20.0 | 20.3 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 387941 | 20.0 | 19.7 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 445770 | 20.0 | 19.8 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.622 | 0.000 | 69 | 272438 | 20.0 | 19.4 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 95 | 88909 | 40.0 | 38.7 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 63 | 212094 | 20.0 | 17.9 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 81 | 175479 | 20.0 | 18.6 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 84 | 199816 | 40.0 | 39.6 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 427697 | 20.0 | 19.8 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 89 | 398309 | 20.0 | 19.6 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 75 | 372006 | 20.0 | 20.0 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 90 | 337392 | 20.0 | 19.7 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 384700 | 20.0 | 19.7 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 88 | 263438 | 500.0 | 493.3 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 51 | 341638 | 20.0 | 19.5 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 94 | 917150 | 20.0 | 19.8 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 76 | 210893 | 20.0 | 19.9 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 299123 | 20.0 | 19.5 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 88 | 445411 | 20.0 | 20.0 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 81 | 214790 | 20.0 | 20.0 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 87 | 213090 | 20.0 | 19.3 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 35 | 50489 | 400.0 | 434.6 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 336655 | 20.0 | 19.9 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 93 | 353595 | 40.0 | 41.1 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 92 | 372198 | 20.0 | 19.8 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 83 | 627983 | 40.0 | 40.3 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 94 | 1040131 | 20.0 | 19.7 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 85 | 363416 | 20.0 | 19.3 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 88 | 349427 | 20.0 | 20.5 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 86 | 219105 | 20.0 | 19.7 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 332664 | 20.0 | 19.7 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 82 | 366944 | 20.0 | 19.5 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 80 | 508487 | 40.0 | 41.2 | |
| 79 Chlorodibromomethane | 129 | 7.919 | 7.919 | 0.000 | 89 | 282195 | 20.0 | 20.1 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 257341 | 20.0 | 19.6 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 97 | 704913 | 20.0 | 19.5 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 87 | 257026 | 20.0 | 19.7 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 380861 | 20.0 | 20.1 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 466651 | 20.0 | 20.2 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 441487 | 20.0 | 20.1 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 759556 | 20.0 | 20.2 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 98 | 222929 | 20.0 | 19.4 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1179370 | 20.0 | 20.0 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 88 | 328526 | 20.0 | 19.8 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 88 | 324573 | 20.0 | 19.6 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 71 | 124262 | 20.0 | 19.7 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 65 | 114842 | 20.0 | 19.5 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 96 | 332244 | 20.0 | 20.0 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 96 | 281753 | 20.0 | 20.0 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 945225 | 20.0 | 19.7 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 302046 | 20.0 | 19.8 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 78 | 904165 | 20.0 | 19.9 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 72 | 965487 | 20.0 | 19.9 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 1216655 | 20.0 | 19.9 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 84 | 589299 | 20.0 | 19.4 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 1061108 | 20.0 | 19.8 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 92 | 595729 | 20.0 | 19.0 | |
| 108 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 96 | 873706 | 20.0 | 19.8 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 97 | 532075 | 20.0 | 19.3 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 91 | 102189 | 20.0 | 19.4 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 335760 | 20.0 | 18.2 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 88 | 175651 | 20.0 | 18.6 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 923339 | 20.0 | 18.1 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 92 | 295011 | 20.0 | 17.8 | |
| S 164 Total BTEX | 1 | | | | 0 | | 100.0 | 100.0 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 79.3 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 40.0 | 40.4 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 16.00 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 16.00 | Units: uL |
| vmrprimw_00297 | Amount Added: | 16.00 | Units: uL |
| vm50ss_00333 | Amount Added: | 16.00 | Units: uL |

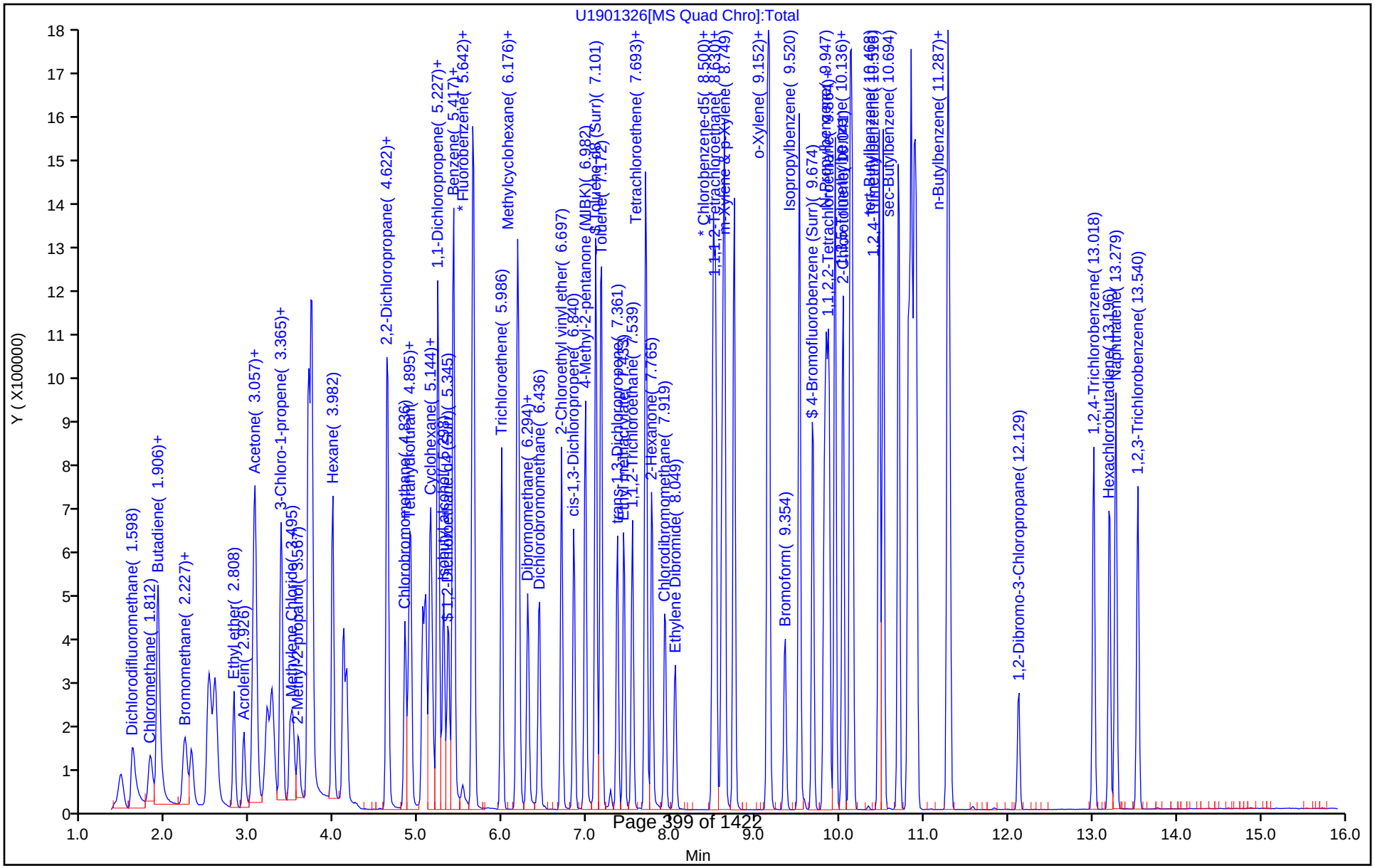
Report Date: 27-Aug-2018 21:28:24 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901326.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 18:16:31 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | ICIS L4 | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901327.d
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Aug-2018 18:38:57 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:30 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:29:46

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 954461 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 776799 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 92 | 416777 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 129168 | 10.0 | 10.1 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.345 | 0.012 | 99 | 149716 | 10.0 | 10.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.001 | 86 | 475254 | 10.0 | 10.2 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 89 | 173480 | 10.0 | 9.90 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 66 | 186223 | 10.0 | 10.1 | |
| 10 Chloromethane | 50 | 1.823 | 1.812 | 0.011 | 81 | 134420 | 10.0 | 9.77 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 90 | 141609 | 10.0 | 10.3 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 82 | 148037 | 10.0 | 10.4 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 90 | 111689 | 10.0 | 10.0 | |
| 14 Chloroethane | 64 | 2.310 | 2.298 | 0.012 | 94 | 89838 | 10.0 | 10.2 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 83 | 223205 | 10.0 | 10.2 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 86 | 244417 | 10.0 | 10.3 | |
| 17 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 90 | 88252 | 10.0 | 10.3 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 96 | 100203 | 50.0 | 47.2 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 90 | 177882 | 10.0 | 10.4 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 78 | 126531 | 10.0 | 10.3 | |
| 22 Acetone | 43 | 3.069 | 3.069 | 0.000 | 71 | 73077 | 20.0 | 19.5 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 99 | 225726 | 10.0 | 10.2 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.270 | 3.258 | 0.012 | 98 | 351356 | 10.0 | 9.80 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 76 | 171118 | 10.0 | 10.1 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 95 | 228841 | 20.0 | 20.6 | |
| 28 Methylene Chloride | 49 | 3.484 | 3.495 | -0.011 | 73 | 139613 | 10.0 | 10.3 | |
| 29 2-Methyl-2-propanol | 59 | 3.579 | 3.567 | 0.012 | 89 | 135517 | 100.0 | 104.9 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.685 | 0.012 | 98 | 514757 | 100.0 | 107.3 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.721 | 0.012 | 68 | 167419 | 10.0 | 10.4 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 89 | 342568 | 10.0 | 10.3 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 93 | 174299 | 10.0 | 10.4 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 199597 | 10.0 | 10.3 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 231586 | 10.0 | 10.5 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 68 | 140685 | 10.0 | 10.2 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 61 | 116583 | 10.0 | 10.0 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 92 | 48290 | 20.0 | 21.4 | |
| 45 Chlorobromomethane | 49 | 4.836 | 4.836 | 0.000 | 68 | 94139 | 10.0 | 10.1 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 84 | 114720 | 20.0 | 22.1 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 71 | 224371 | 10.0 | 10.6 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 90 | 211997 | 10.0 | 10.6 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 86 | 188221 | 10.0 | 10.3 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 92 | 174842 | 10.0 | 10.4 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 201366 | 10.0 | 10.5 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 68 | 127213 | 250.0 | 242.7 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 94 | 482300 | 10.0 | 10.6 | |
| 54 1,2-Dichloroethane | 62 | 5.417 | 5.417 | 0.000 | 48 | 178638 | 10.0 | 10.4 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 64 | 123554 | 10.0 | 10.5 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 156409 | 10.0 | 10.4 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 87 | 225444 | 10.0 | 10.3 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 78 | 112735 | 10.0 | 10.7 | |
| 63 Dibromomethane | 174 | 6.306 | 6.294 | 0.012 | 81 | 111478 | 10.0 | 10.3 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 24 | 20257 | 200.0 | 177.6 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 172767 | 10.0 | 10.4 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 93 | 185460 | 20.0 | 22.0 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 93 | 192411 | 10.0 | 10.4 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 83 | 332777 | 20.0 | 21.8 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 95 | 544474 | 10.0 | 10.4 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 80 | 187797 | 10.0 | 10.0 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 88 | 177753 | 10.0 | 10.5 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 87 | 115489 | 10.0 | 10.5 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 91 | 175104 | 10.0 | 10.5 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 89 | 194537 | 10.0 | 10.4 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 79 | 267096 | 20.0 | 21.8 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.919 | 0.012 | 88 | 145120 | 10.0 | 10.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 97 | 132926 | 10.0 | 10.2 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 96 | 370702 | 10.0 | 10.3 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 88 | 135561 | 10.0 | 10.5 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 200390 | 10.0 | 10.7 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 238543 | 10.0 | 10.4 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 225509 | 10.0 | 10.4 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 391834 | 10.0 | 10.5 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 98 | 117306 | 10.0 | 10.3 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 96 | 613985 | 10.0 | 10.5 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 90 | 172140 | 10.0 | 10.7 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 88 | 169316 | 10.0 | 10.6 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 71 | 66218 | 10.0 | 10.9 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 63 | 60466 | 10.0 | 10.6 | |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 90 | 171938 | 10.0 | 10.7 | |
| 96 2-Chlorotoluene | 126 | 10.042 | 10.041 | 0.001 | 97 | 147510 | 10.0 | 10.8 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.125 | 10.124 | 0.000 | 93 | 499875 | 10.0 | 10.8 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 155656 | 10.0 | 10.6 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 78 | 474813 | 10.0 | 10.8 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 72 | 495166 | 10.0 | 10.5 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 94 | 624437 | 10.0 | 10.5 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 83 | 299776 | 10.0 | 10.2 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 543873 | 10.0 | 10.5 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 90 | 308743 | 10.0 | 10.2 | |
| 108 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 96 | 439518 | 10.0 | 10.3 | |
| 109 1,2-Dichlorobenzene | 146 | 11.299 | 11.298 | 0.001 | 97 | 273092 | 10.0 | 10.2 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 89 | 50642 | 10.0 | 9.92 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 168774 | 10.0 | 9.47 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 90 | 87534 | 10.0 | 9.56 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 97 | 469280 | 10.0 | 9.53 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 95 | 153843 | 10.0 | 9.62 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 40.0 | 41.7 | |
| S 164 Total BTEX | 1 | | | | 0 | | 50.0 | 52.5 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 20.6 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 20.5 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 20.0 | 20.8 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 8.00 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 8.00 | Units: uL |
| vmrprimw_00297 | Amount Added: | 8.00 | Units: uL |
| vm50ss_00333 | Amount Added: | 8.00 | Units: uL |

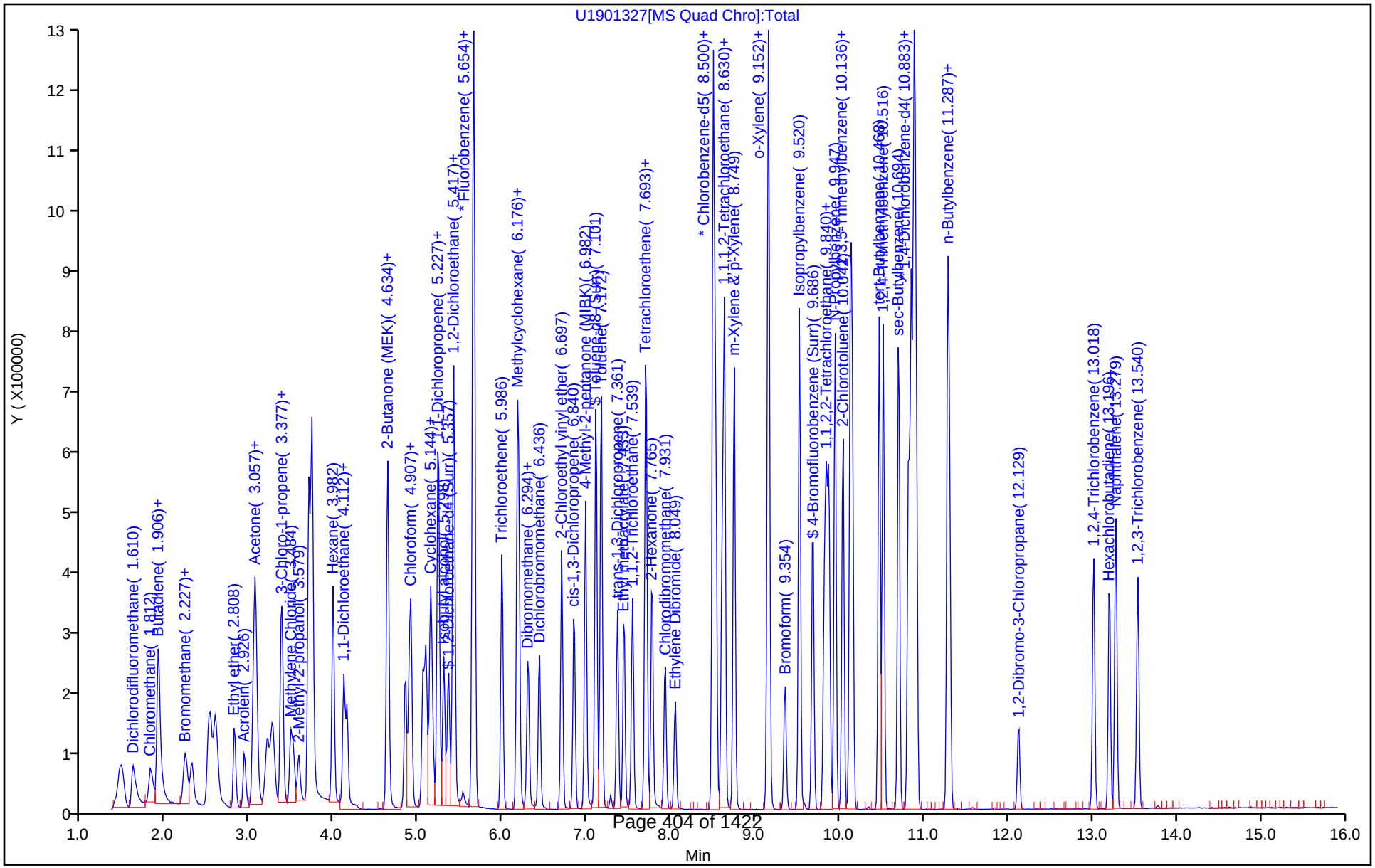
Report Date: 27-Aug-2018 21:28:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901327.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 18:38:57 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L3 | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Aug-2018 21:28:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901328.d
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Aug-2018 19:01:13 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:42 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:32:38

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.653 | 5.654 | -0.001 | 99 | 950066 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 741822 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 413134 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 60 | 13395 | 1.00 | 1.05 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.345 | 0.000 | 98 | 16187 | 1.00 | 1.10 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | 0.000 | 84 | 44577 | 1.00 | 1.00 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 85 | 17494 | 1.00 | 1.05 | |
| 9 Dichlorodifluoromethane | 85 | 1.598 | 1.610 | -0.012 | 61 | 18328 | 1.00 | 1.00 | |
| 10 Chloromethane | 50 | 1.811 | 1.812 | -0.001 | 83 | 12972 | 1.00 | 0.9471 | |
| 12 Butadiene | 54 | 1.894 | 1.906 | -0.012 | 89 | 14115 | 1.00 | 1.03 | |
| 11 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 47 | 14250 | 1.00 | 1.01 | |
| 13 Bromomethane | 94 | 2.238 | 2.227 | 0.011 | 86 | 11360 | 1.00 | 1.02 | |
| 14 Chloroethane | 64 | 2.297 | 2.298 | -0.001 | 81 | 8387 | 1.00 | 0.9552 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 76 | 21694 | 1.00 | 1.00 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 84 | 23241 | 1.00 | 0.9817 | |
| 17 Ethyl ether | 59 | 2.807 | 2.808 | -0.001 | 83 | 9015 | 1.00 | 1.05 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 86 | 10600 | 5.00 | 5.02 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 86 | 16498 | 1.00 | 0.9676 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.057 | -0.012 | 67 | 11240 | 1.00 | 0.9217 | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 90 | 8941 | 2.00 | 2.40 | |
| 23 Iodomethane | 142 | 3.187 | 3.199 | -0.012 | 96 | 22471 | 1.00 | 1.02 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 97 | 39223 | 1.00 | 1.10 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 76 | 18227 | 1.00 | 1.08 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 22480 | 2.00 | 2.03 | |
| 28 Methylene Chloride | 49 | 3.483 | 3.495 | -0.012 | 78 | 15126 | 1.00 | 1.12 | |
| 29 2-Methyl-2-propanol | 59 | 3.566 | 3.567 | -0.001 | 88 | 13140 | 10.0 | 10.2 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.685 | 0.012 | 99 | 49680 | 10.0 | 10.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.721 | 0.011 | 72 | 16818 | 1.00 | 1.05 | |
| 31 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 89 | 33109 | 1.00 | 1.00 | |
| 33 Hexane | 57 | 3.981 | 3.982 | -0.001 | 93 | 15276 | 1.00 | 0.9125 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 76 | 19673 | 1.00 | 1.02 | |
| 35 Vinyl acetate | 43 | 4.147 | 4.148 | -0.001 | 96 | 21765 | 1.00 | 0.9877 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.622 | 4.622 | 0.000 | 70 | 14212 | 1.00 | 1.03 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 91 | 4567 | 2.00 | 2.04 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 58 | 11860 | 1.00 | 1.02 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 64 | 10266 | 1.00 | 1.11 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 85 | 20056 | 2.00 | 1.81 | |
| 47 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 67 | 21044 | 1.00 | 1.00 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 84 | 19503 | 1.00 | 0.9837 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 16696 | 1.00 | 0.9202 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 88 | 16667 | 1.00 | 1.00 | |
| 51 Carbon tetrachloride | 117 | 5.238 | 5.239 | -0.001 | 77 | 17959 | 1.00 | 0.9397 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 78 | 14010 | 25.0 | 26.9 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 52 | 18266 | 1.00 | 1.07 | |
| 53 Benzene | 78 | 5.416 | 5.417 | -0.001 | 95 | 45349 | 1.00 | 1.00 | |
| 56 n-Heptane | 57 | 5.653 | 5.642 | 0.011 | 38 | 39021 | 1.00 | 0.9553 | |
| 58 Trichloroethene | 130 | 5.985 | 5.986 | -0.001 | 90 | 14636 | 1.00 | 0.9750 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 87 | 20268 | 1.00 | 0.9296 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 78 | 10172 | 1.00 | 0.9700 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 83 | 11437 | 1.00 | 1.06 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 1 | 1560 | 20.0 | 13.7 | |
| 65 Dichlorobromomethane | 83 | 6.424 | 6.436 | -0.012 | 86 | 17242 | 1.00 | 1.04 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 90 | 15714 | 2.00 | 1.87 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 72 | 18371 | 1.00 | 1.00 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 81 | 29549 | 2.00 | 1.94 | |
| 70 Toluene | 91 | 7.171 | 7.172 | -0.001 | 86 | 50838 | 1.00 | 1.01 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 79 | 18668 | 1.00 | 1.04 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 70 | 14839 | 1.00 | 0.9209 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 87 | 10462 | 1.00 | 0.99 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 95 | 15556 | 1.00 | 0.9725 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 79 | 17554 | 1.00 | 0.9855 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 94 | 22402 | 2.00 | 1.92 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.919 | 0.011 | 80 | 12969 | 1.00 | 0.9758 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 85 | 12317 | 1.00 | 0.99 | |
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 60 | 36469 | 1.00 | 1.06 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 75 | 12290 | 1.00 | 0.99 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 17209 | 1.00 | 0.9594 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 20530 | 1.00 | 0.9397 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 87 | 20689 | 1.00 | 1.00 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 92 | 33591 | 1.00 | 0.9446 | |
| 88 Bromoform | 173 | 9.353 | 9.354 | -0.001 | 89 | 10783 | 1.00 | 0.99 | |
| 89 Isopropylbenzene | 105 | 9.519 | 9.520 | -0.001 | 93 | 55346 | 1.00 | 0.99 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 75 | 16261 | 1.00 | 1.02 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 89 | 16361 | 1.00 | 1.03 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 66 | 5997 | 1.00 | 0.99 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 38 | 5707 | 1.00 | 1.01 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 95 | 15476 | 1.00 | 0.9694 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 92 | 12831 | 1.00 | 0.9496 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 91 | 43584 | 1.00 | 0.9481 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 14345 | 1.00 | 0.9819 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 73 | 41850 | 1.00 | 0.9590 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.515 | 10.516 | -0.001 | 67 | 46663 | 1.00 | 1.00 | |
| 102 sec-Butylbenzene | 105 | 10.693 | 10.694 | -0.001 | 92 | 55760 | 1.00 | 0.9489 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 11 | 31057 | 1.00 | 1.06 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 77 | 49391 | 1.00 | 0.9596 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 49 | 32379 | 1.00 | 1.07 | |
| 108 n-Butylbenzene | 91 | 11.286 | 11.287 | -0.001 | 95 | 41792 | 1.00 | 0.9871 | |
| 109 1,2-Dichlorobenzene | 146 | 11.310 | 11.298 | 0.012 | 93 | 28272 | 1.00 | 1.07 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 57 | 4583 | 1.00 | 0.9054 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 83 | 19612 | 1.00 | 1.11 | |
| 113 Hexachlorobutadiene | 225 | 13.207 | 13.208 | -0.001 | 72 | 10037 | 1.00 | 1.11 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 94 | 52154 | 1.00 | 1.07 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.539 | 13.540 | -0.001 | 86 | 17097 | 1.00 | 1.08 | |
| S 164 Total BTEX | 1 | | | | 0 | | 5.00 | 4.91 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 4.00 | 4.01 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 2.08 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 2.05 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 2.00 | 1.94 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 0.80 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 0.80 | Units: uL |
| vmrprimw_00297 | Amount Added: | 0.80 | Units: uL |
| vm50ss_00333 | Amount Added: | 0.80 | Units: uL |

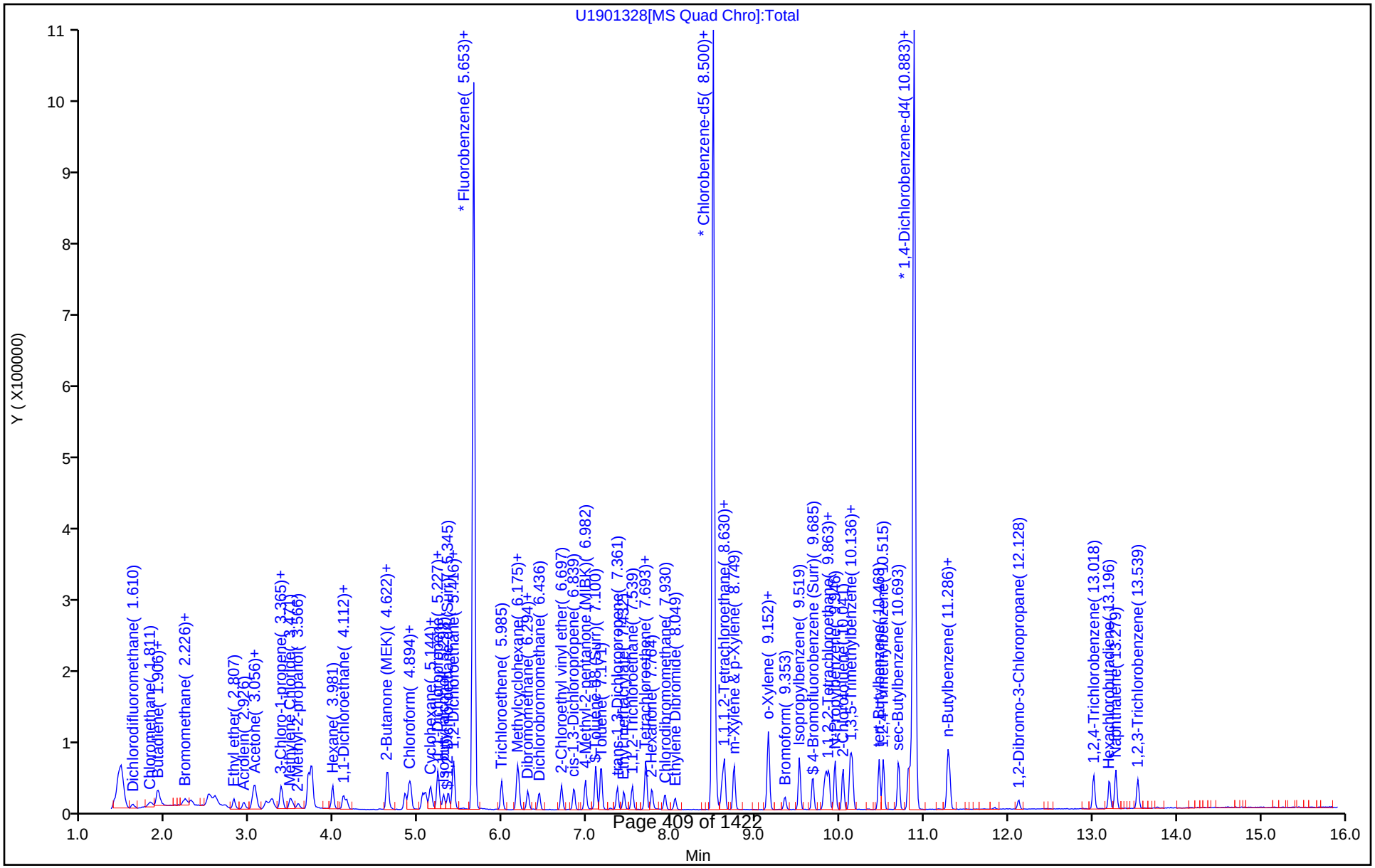
Report Date: 27-Aug-2018 21:28:46 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901328.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 19:01:13 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L2 | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Aug-2018 21:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Aug-2018 19:23:28 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:28:54 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: laveyt Date: 27-Aug-2018 19:52:01

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 938021 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 738667 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 405345 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 56 | 6919 | 0.5000 | 0.5480 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.345 | 0.012 | 94 | 8242 | 0.5000 | 0.5683 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | 0.000 | 74 | 23636 | 0.5000 | 0.5336 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 82 | 9778 | 0.5000 | 0.5866 | |
| 9 Dichlorodifluoromethane | 85 | 1.622 | 1.610 | 0.012 | 56 | 7625 | 0.5000 | 0.4223 | |
| 10 Chloromethane | 50 | 1.812 | 1.812 | 0.000 | 70 | 8152 | 0.5000 | 0.6028 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 92 | 6713 | 0.5000 | 0.4958 | |
| 11 Vinyl chloride | 62 | 1.942 | 1.918 | 0.024 | 39 | 6564 | 0.5000 | 0.4697 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 83 | 5934 | 0.5000 | 0.5419 | |
| 14 Chloroethane | 64 | 2.310 | 2.298 | 0.012 | 73 | 4812 | 0.5000 | 0.5551 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 55 | 11593 | 0.5000 | 0.5395 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 76 | 11587 | 0.5000 | 0.4957 | |
| 17 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 84 | 4060 | 0.5000 | 0.4810 | |
| 18 Acrolein | 56 | 2.938 | 2.926 | 0.012 | 73 | 5804 | 2.50 | 2.78 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 72 | 8152 | 0.5000 | 0.4842 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 55 | 5847 | 0.5000 | 0.4856 | |
| 22 Acetone | 43 | | 3.069 | | | | ND | ND | U |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 93 | 11424 | 0.5000 | 0.5233 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 95 | 20511 | 0.5000 | 0.5820 | |
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 70 | 8759 | 0.5000 | 0.5274 | |
| 27 Methyl acetate | 43 | 3.389 | 3.377 | 0.012 | 94 | 12374 | 1.00 | 1.13 | |
| 28 Methylene Chloride | 49 | | 3.495 | | | | ND | ND | U |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.567 | 0.011 | 76 | 7089 | 5.00 | 5.58 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.685 | 0.012 | 98 | 23600 | 5.00 | 5.00 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.721 | 0.012 | 68 | 8368 | 0.5000 | 0.5268 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 83 | 15146 | 0.5000 | 0.4655 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 81 | 7709 | 0.5000 | 0.4664 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 57 | 9092 | 0.5000 | 0.4789 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 96 | 10910 | 0.5000 | 0.5015 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 63 | 7168 | 0.5000 | 0.5287 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 48 | 5791 | 0.5000 | 0.5065 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 82 | 2283 | 1.00 | 1.03 | |
| 45 Chlorobromomethane | 49 | 4.847 | 4.836 | 0.011 | 57 | 5503 | 0.5000 | 0.6031 | |
| 46 Tetrahydrofuran | 42 | | 4.883 | | | | ND | ND | U |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 71 | 10169 | 0.5000 | 0.4891 | |
| 48 1,1,1-Trichloroethane | 97 | 5.085 | 5.085 | 0.000 | 78 | 8767 | 0.5000 | 0.4479 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 8206 | 0.5000 | 0.4581 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 80 | 7998 | 0.5000 | 0.4846 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 77 | 8954 | 0.5000 | 0.4745 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 52 | 7140 | 12.5 | 13.9 | |
| 53 Benzene | 78 | 5.417 | 5.417 | 0.000 | 95 | 21738 | 0.5000 | 0.4870 | |
| 54 1,2-Dichloroethane | 62 | 5.428 | 5.417 | 0.011 | 58 | 8896 | 0.5000 | 0.5268 | |
| 56 n-Heptane | 57 | | 5.642 | | | | ND | ND | U |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 77 | 7819 | 0.5000 | 0.5276 | |
| 60 Methylcyclohexane | 83 | 6.176 | 6.176 | 0.000 | 85 | 10042 | 0.5000 | 0.4665 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 64 | 5092 | 0.5000 | 0.4918 | |
| 63 Dibromomethane | 174 | 6.306 | 6.294 | 0.012 | 66 | 5652 | 0.5000 | 0.5307 | |
| 64 1,4-Dioxane | 88 | | 6.306 | | | | ND | ND | U |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 75 | 7972 | 0.5000 | 0.4885 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 83 | 7473 | 1.00 | 0.9000 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 60 | 8778 | 0.5000 | 0.4843 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 90 | 14774 | 1.00 | 0.9834 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 94 | 25413 | 0.5000 | 0.5091 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 76 | 9232 | 0.5000 | 0.5188 | |
| 72 Ethyl methacrylate | 69 | 7.433 | 7.433 | 0.000 | 70 | 7062 | 0.5000 | 0.4401 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 79 | 5186 | 0.5000 | 0.4942 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 86 | 7818 | 0.5000 | 0.4908 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 72 | 9211 | 0.5000 | 0.5193 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 88 | 10272 | 1.00 | 0.8832 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.919 | 0.012 | 54 | 6108 | 0.5000 | 0.4615 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 74 | 6962 | 0.5000 | 0.5633 | |
| 82 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 45 | 17303 | 0.5000 | 0.5063 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | 0.000 | 55 | 5956 | 0.5000 | 0.4834 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 94 | 8431 | 0.5000 | 0.4721 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 96 | 10542 | 0.5000 | 0.4846 | |
| 86 o-Xylene | 106 | 9.140 | 9.152 | -0.012 | 88 | 9580 | 0.5000 | 0.4635 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 83 | 16463 | 0.5000 | 0.4649 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 77 | 5340 | 0.5000 | 0.4930 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 90 | 25288 | 0.5000 | 0.4556 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 62 | 7218 | 0.5000 | 0.4621 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 88 | 7663 | 0.5000 | 0.4917 | |
| 93 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 66 | 2842 | 0.5000 | 0.4801 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | | 9.875 | | | | ND | ND | U |
| 95 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 91 | 7103 | 0.5000 | 0.4535 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 82 | 6213 | 0.5000 | 0.4687 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 91 | 21381 | 0.5000 | 0.4740 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 91 | 7405 | 0.5000 | 0.5166 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 70 | 19348 | 0.5000 | 0.4519 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 63 | 21277 | 0.5000 | 0.4653 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 88 | 26267 | 0.5000 | 0.4556 | |
| 103 1,3-Dichlorobenzene | 146 | 10.824 | 10.812 | 0.012 | 1 | 14989 | 0.5000 | 0.5237 | a |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 68 | 23262 | 0.5000 | 0.4606 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 39 | 16269 | 0.5000 | 0.5502 | |
| 108 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 91 | 19197 | 0.5000 | 0.4622 | |
| 109 1,2-Dichlorobenzene | 146 | 11.298 | 11.298 | 0.000 | 87 | 13617 | 0.5000 | 0.5240 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 31 | 2665 | 0.5000 | 0.5366 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 63 | 9535 | 0.5000 | 0.5502 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 55 | 4814 | 0.5000 | 0.5408 | |
| 114 Naphthalene | 128 | | 13.279 | | | | ND | ND | U |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 72 | 7998 | 0.5000 | 0.5140 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 2.00 | 1.93 | |
| S 164 Total BTEX | 1 | | | | 0 | | 2.50 | 2.42 | |
| S 124 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 1.06 | |
| S 125 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 1.00 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 1.00 | 0.9480 | |

## QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

a - User Assigned ID

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00259 | Amount Added: | 0.40 | Units: uL |
| vmarolistdw_00260 | Amount Added: | 0.40 | Units: uL |
| vmrprimw_00297 | Amount Added: | 0.40 | Units: uL |
| vm50ss_00333 | Amount Added: | 0.40 | Units: uL |

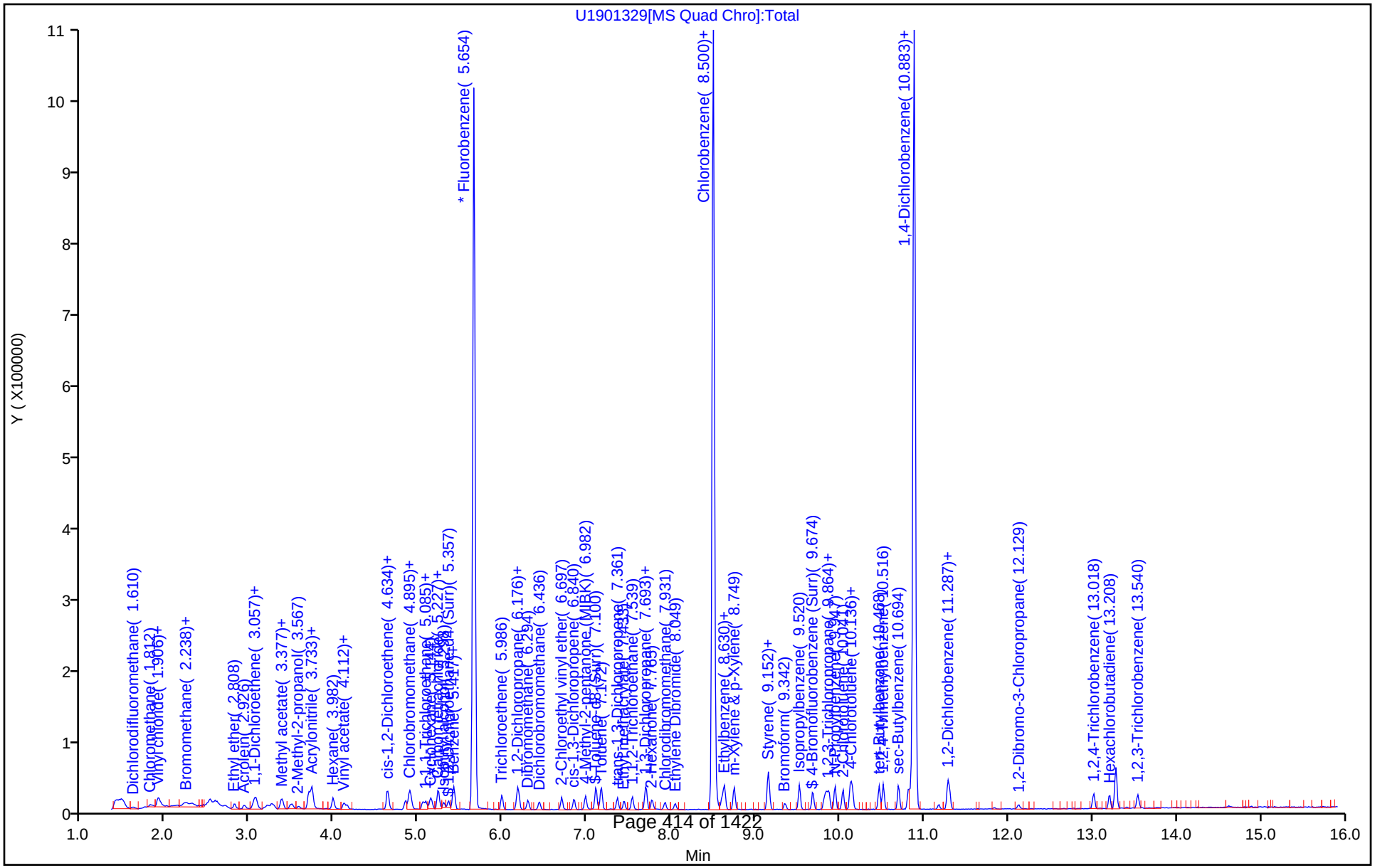
Report Date: 27-Aug-2018 21:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | std8260 L1 | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

TestAmerica Canton

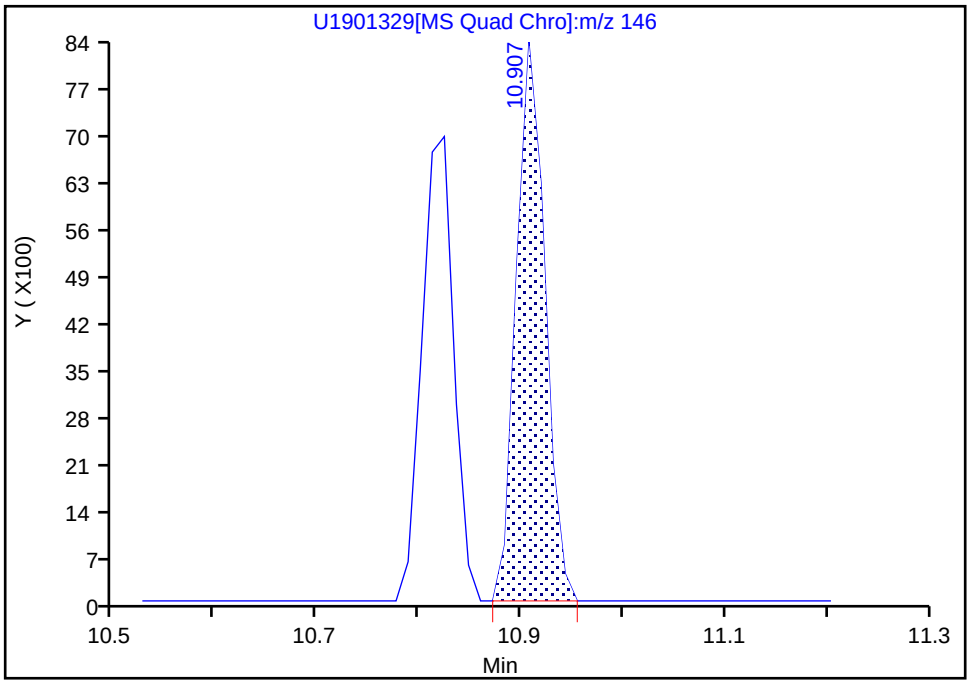
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | | | |
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 103 1,3-Dichlorobenzene, CAS: 541-73-1

Signal: 1

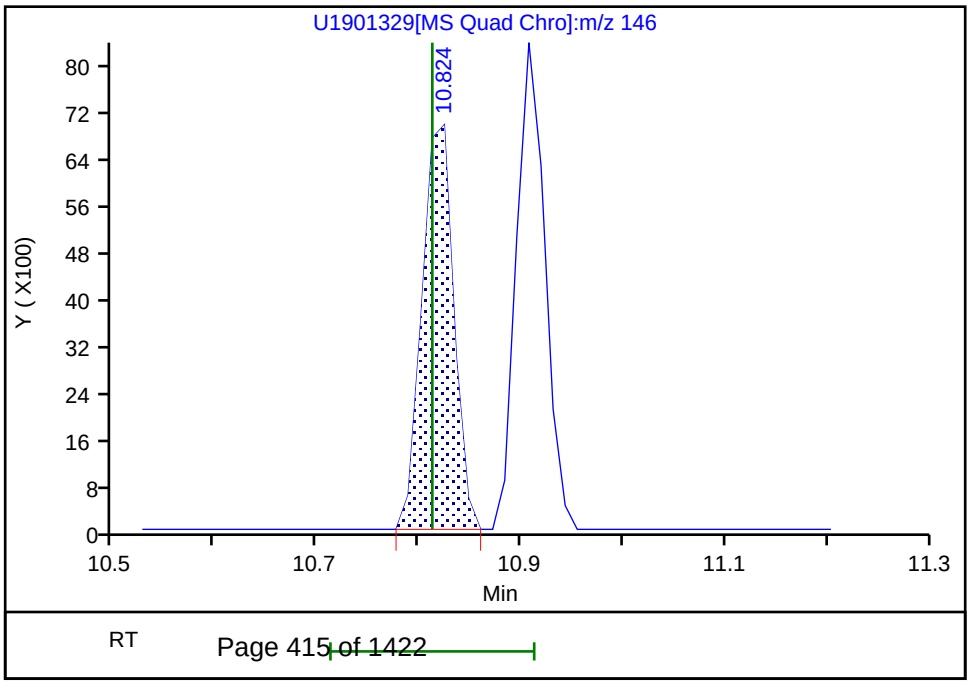
Processing Integration Results

RT: 10.91
Area: 16269
Amount: 0.561209
Amount Units: ug/l




Manual Integration Results

RT: 10.82
Area: 14989
Amount: 0.523661
Amount Units: ug/l






Reviewer: laveyt, 27-Aug-2018 19:47:35

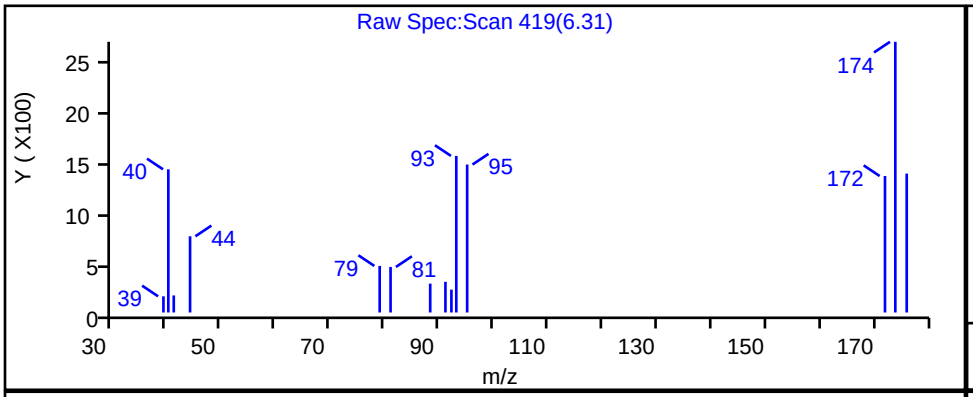
User Disabled Compound Report

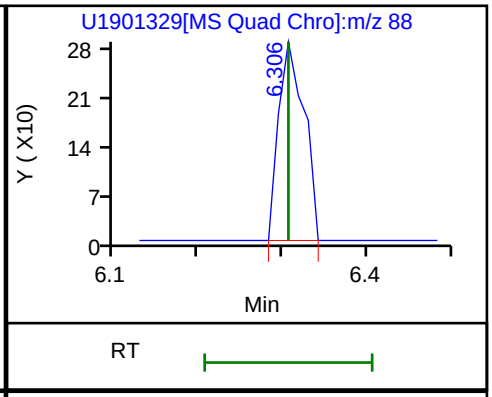
TestAmerica Canton

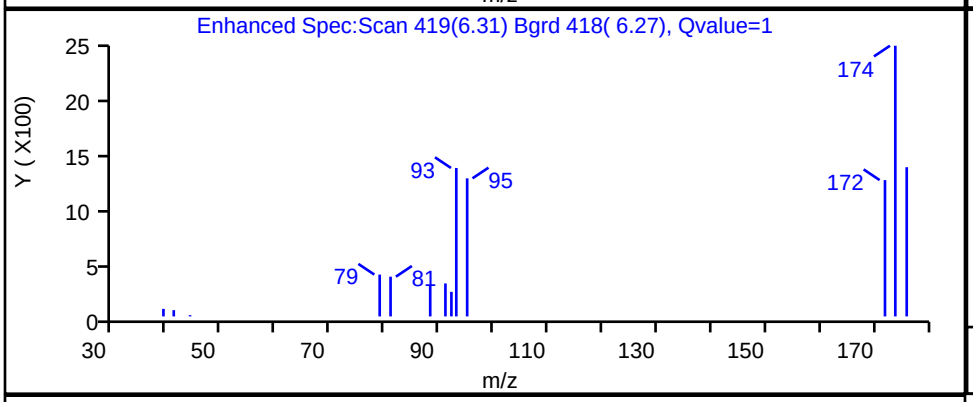
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | | | |
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

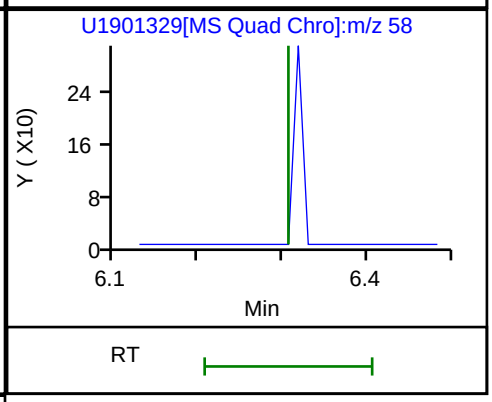
## 64 1,4-Dioxane, CAS: 123-91-1

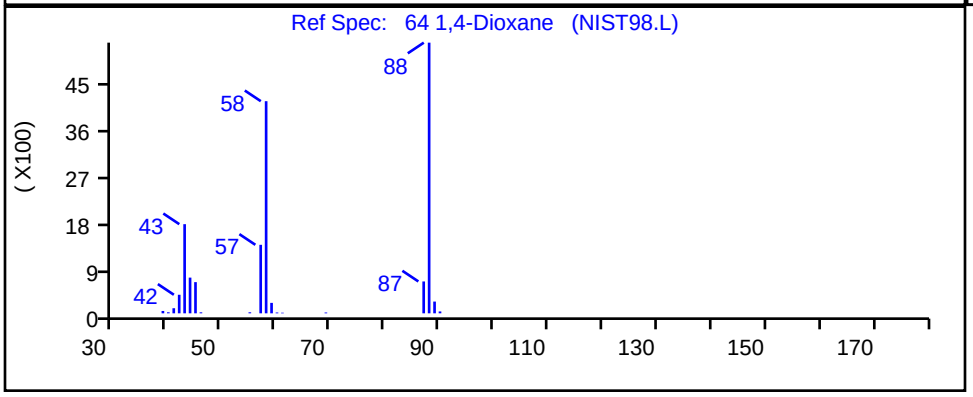
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.31 | 88.00 | 601 | 11.604682 |
| 6.31 | 58.00 | 0 | |

Reviewer: laveyt, 27-Aug-2018 19:49:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

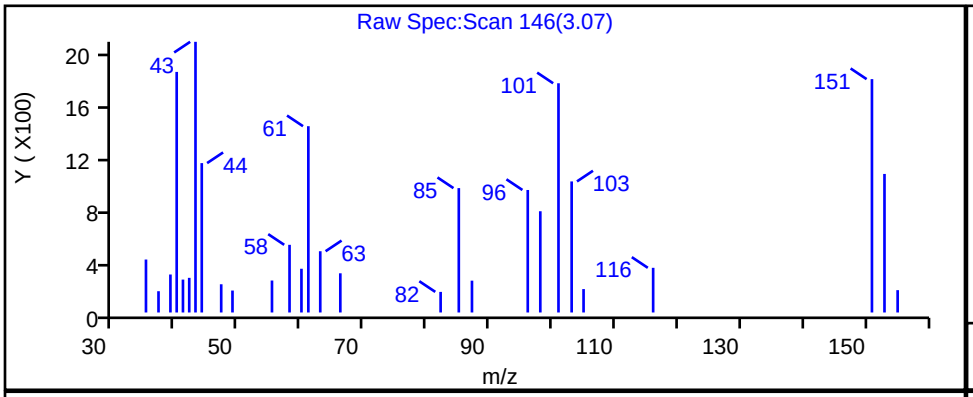
Injection Vol: 5.0 mL Dil. Factor: 1.0000

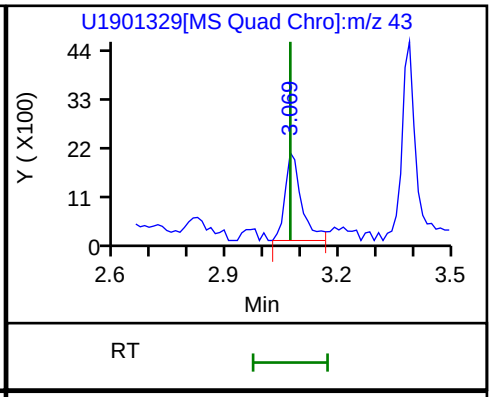
Method: 8260_19 Limit Group: MSV 8260C ICAL

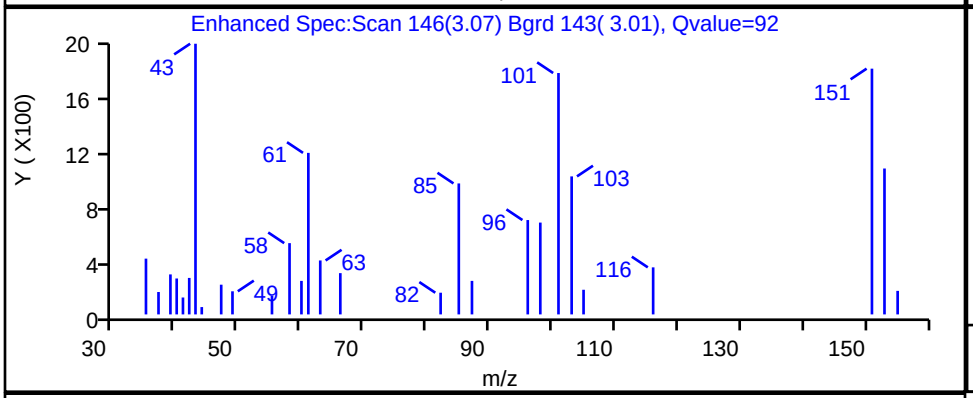
Column: DB-624 ( 0.18 mm) Detector MS SCAN

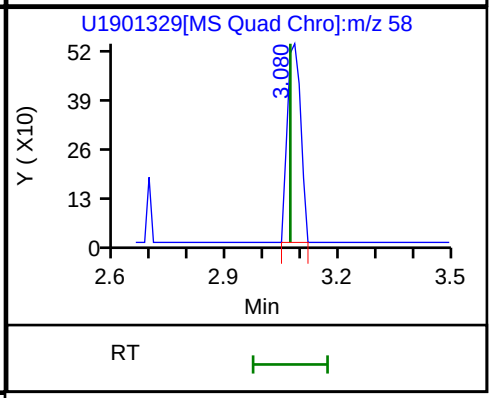
## 22 Acetone, CAS: 67-64-1

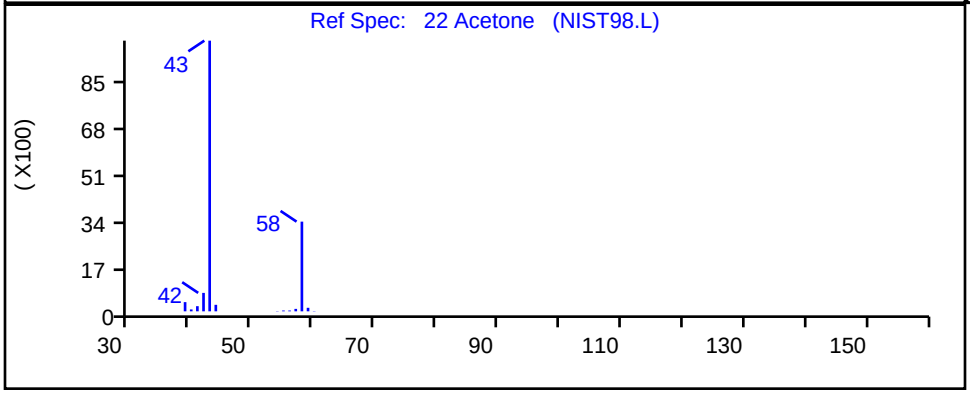
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.07 | 43.00 | 6224 | 1.077444 |
| 3.08 | 58.00 | 1333 | |

Reviewer: laveyt, 27-Aug-2018 19:48:05

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

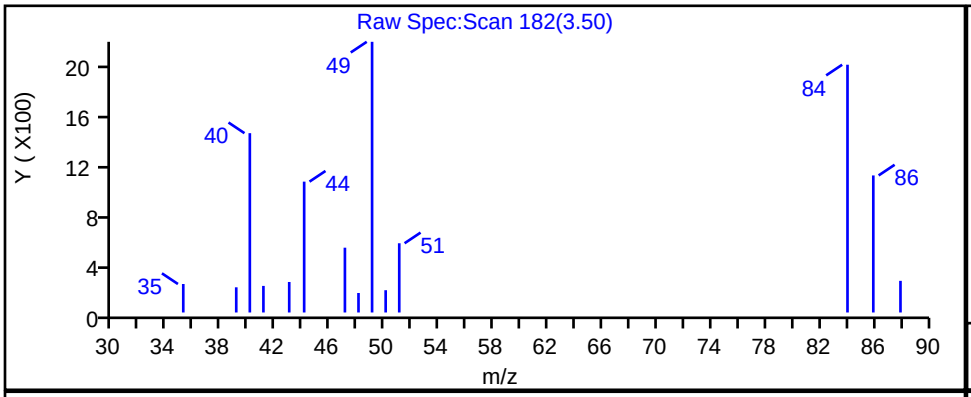
User Disabled Compound Report

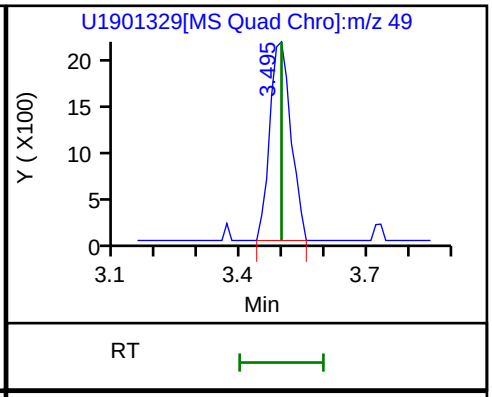
TestAmerica Canton

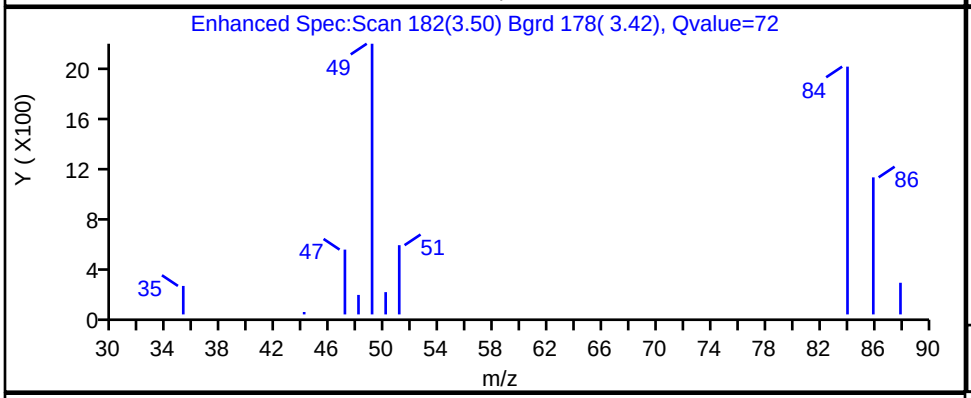
| | | | |
|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | |
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 |
| Lims ID: | std8260 L1 | | |
| Client ID: | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 Worklist Smp#: 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN |

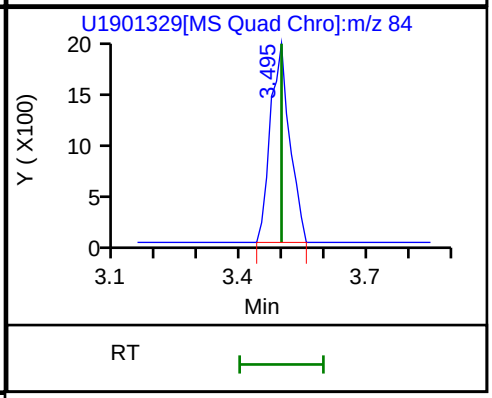
## 28 Methylene Chloride, CAS: 75-09-2

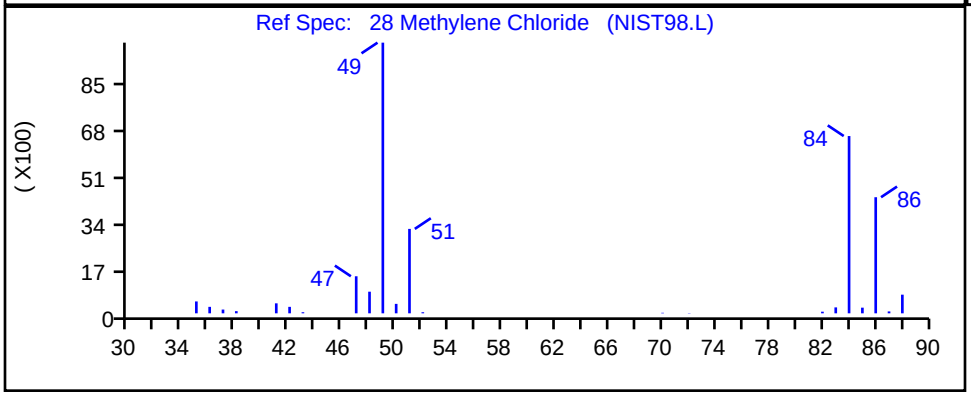
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.50 | 49.00 | 7484 | 0.551047 |
| 3.50 | 84.00 | 6258 | |

Reviewer: laveyt, 27-Aug-2018 19:48:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 27-Aug-2018 21:29:03 Chrom Revision: 2.3 19-Jul-2018 15:14:50

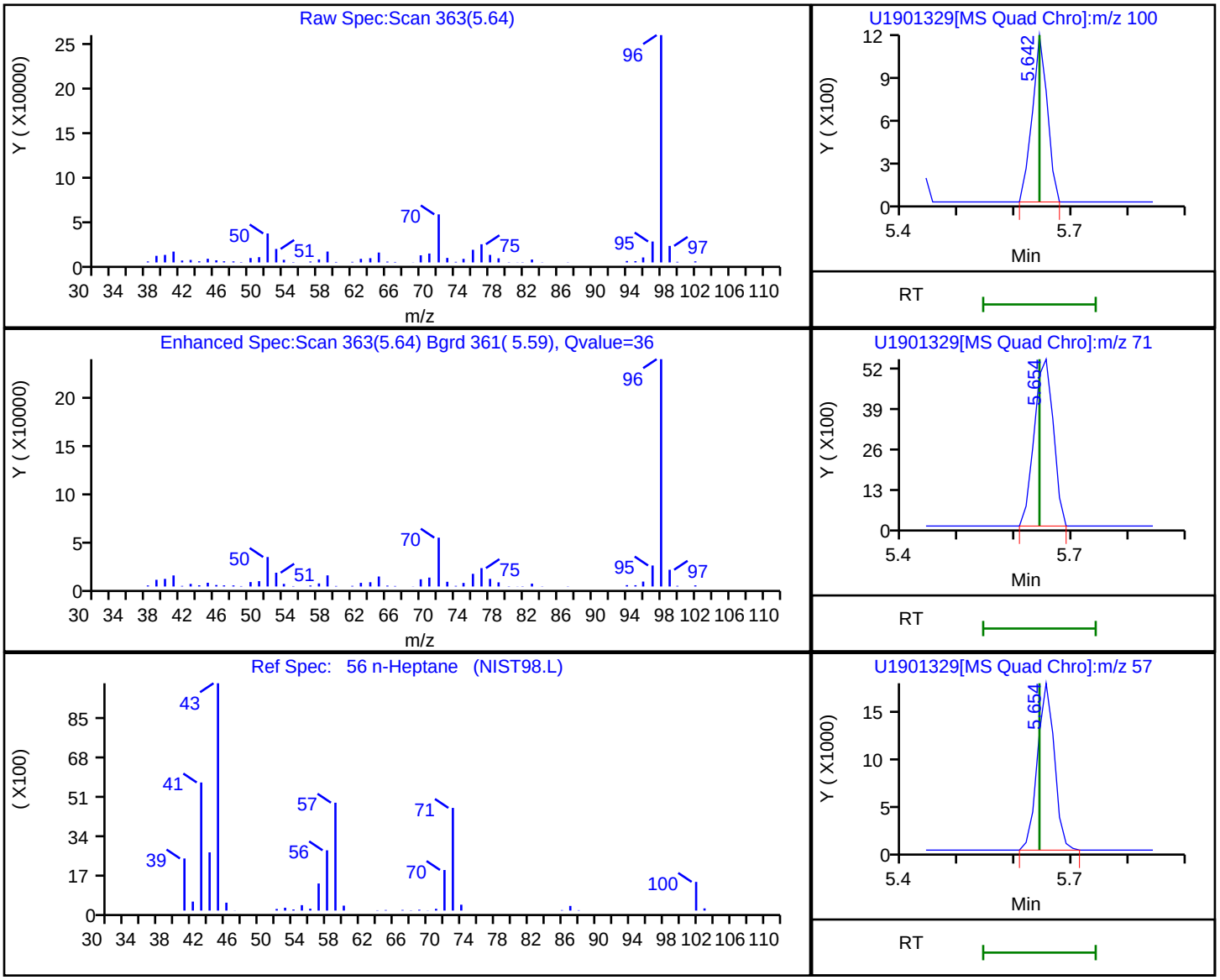
User Disabled Compound Report

TestAmerica Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | | | |
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 56 n-Heptane, CAS: 142-82-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.64 | 100.00 | 2131 | |
| 5.65 | 71.00 | 12900 | |
| 5.65 | 57.00 | 35542 | 0.539390 |

Reviewer: laveyt, 27-Aug-2018 19:48:44

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

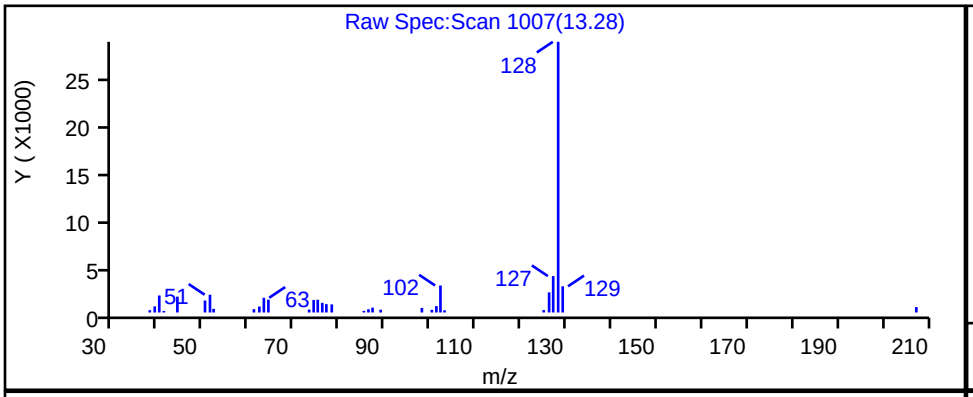
User Disabled Compound Report

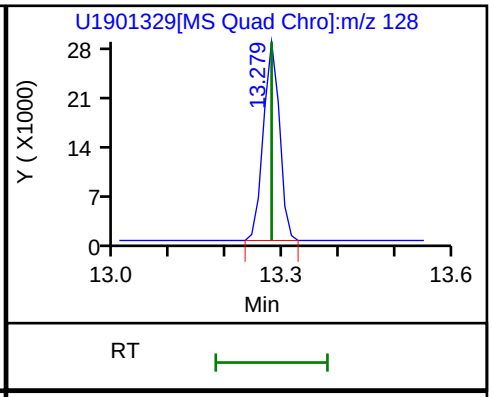
TestAmerica Canton

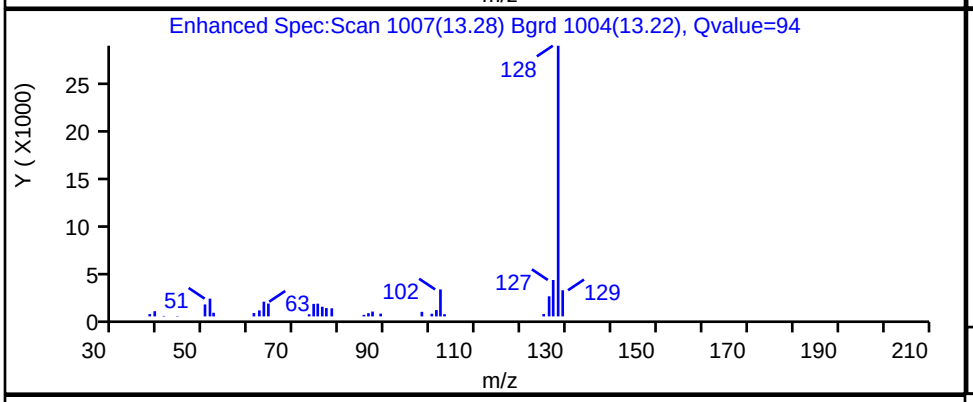
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | | | |
| Injection Date: | 27-Aug-2018 19:23:28 | Instrument ID: | A3UX19 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

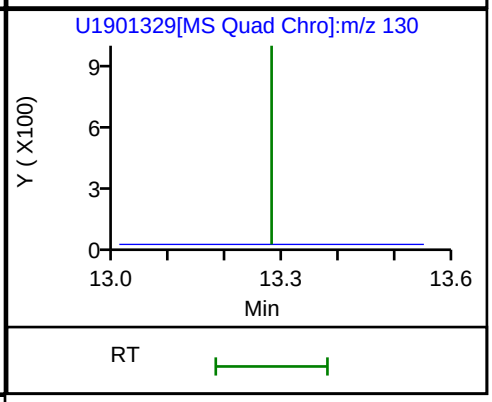
## 114 Naphthalene, CAS: 91-20-3

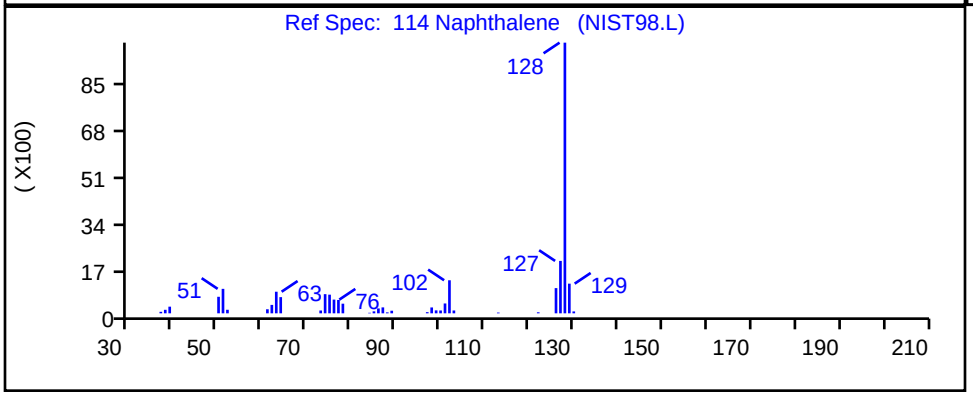
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 13.28 | 128.00 | 56279 | 0.769368 |
| 13.28 | 130.00 | 0 | |

Reviewer: laveyt, 27-Aug-2018 20:00:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

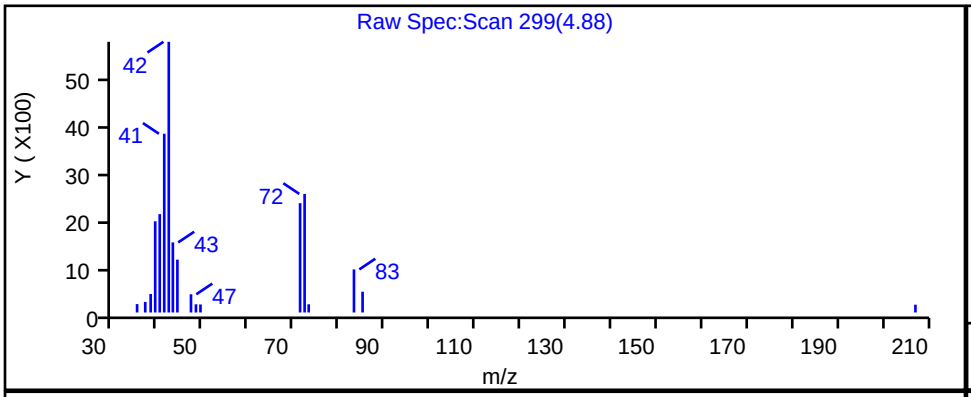
Injection Vol: 5.0 mL Dil. Factor: 1.0000

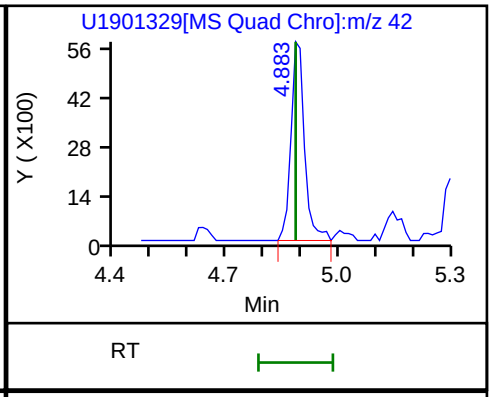
Method: 8260_19 Limit Group: MSV 8260C ICAL

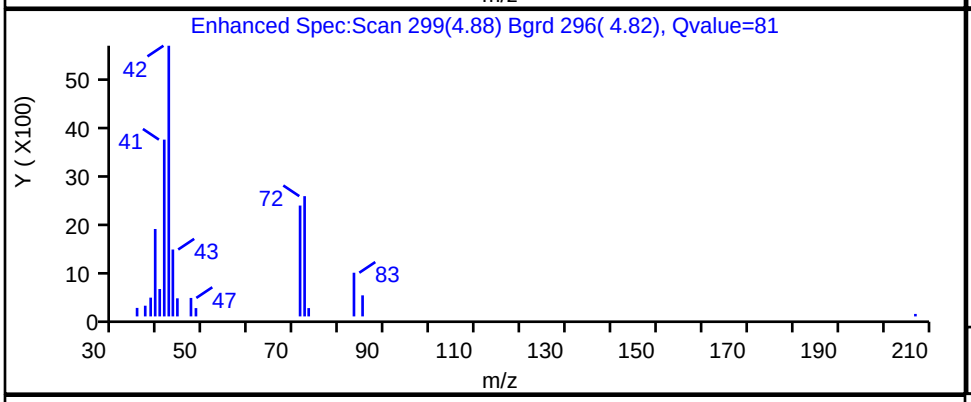
Column: DB-624 ( 0.18 mm) Detector MS SCAN

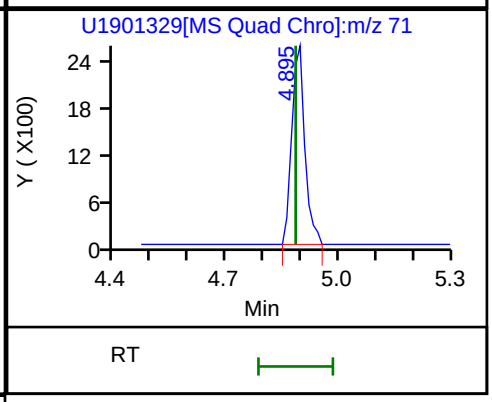
## 46 Tetrahydrofuran, CAS: 109-99-9

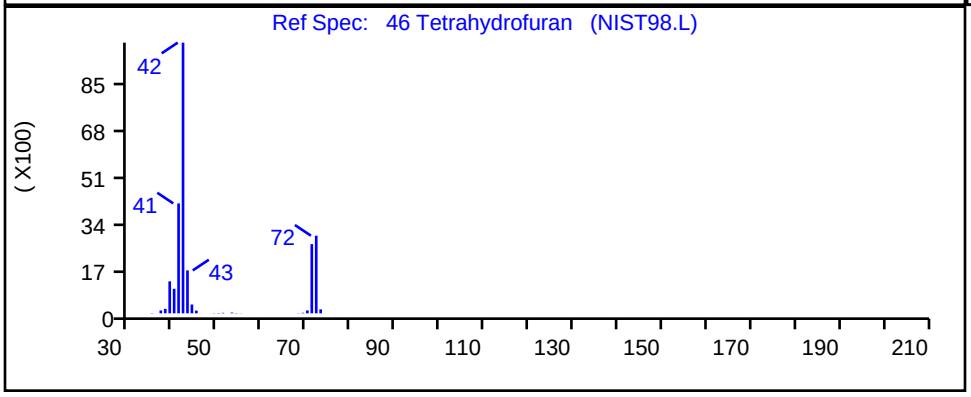
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.88 | 42.00 | 14557 | 0.882444 |
| 4.89 | 71.00 | 6288 | |

Reviewer: laveyt, 27-Aug-2018 19:48:29

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Injection Date: 27-Aug-2018 19:23:28 Instrument ID: A3UX19

Lims ID: std8260 L1

Client ID:

Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 13

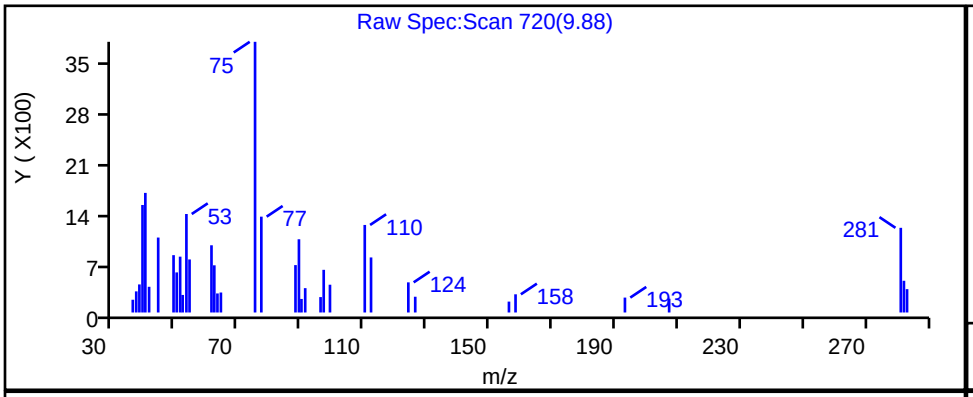
Injection Vol: 5.0 mL Dil. Factor: 1.0000

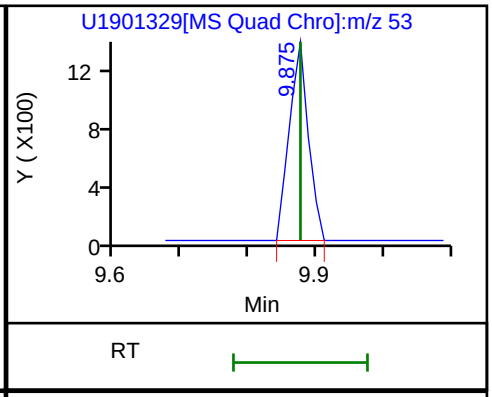
Method: 8260_19 Limit Group: MSV 8260C ICAL

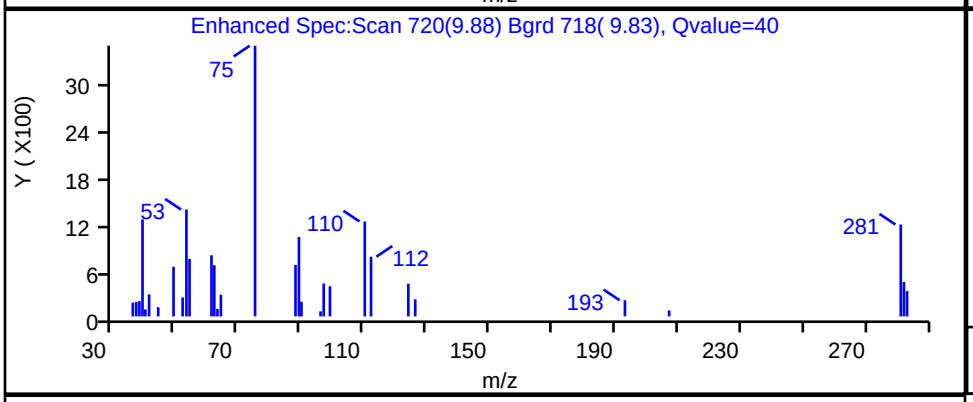
Column: DB-624 ( 0.18 mm) Detector MS SCAN

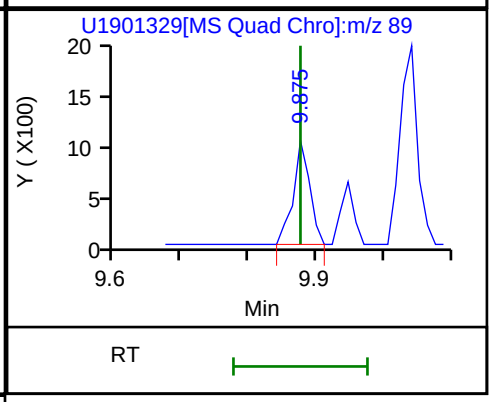
## 94 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

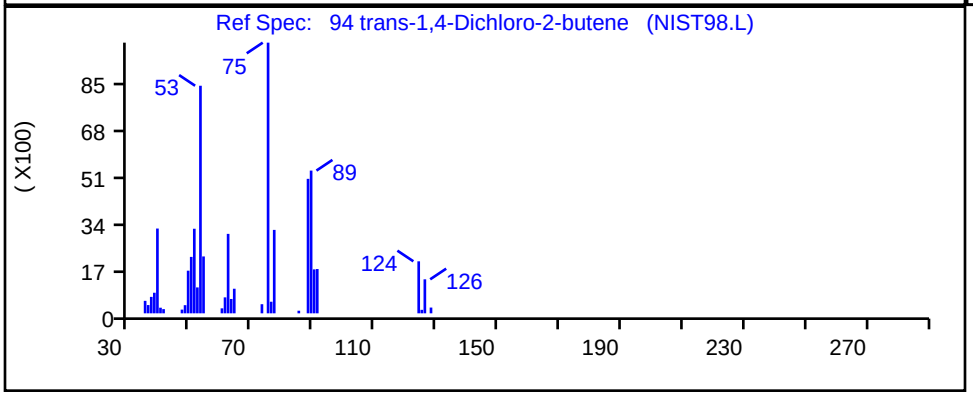
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 9.88 | 53.00 | 2712 | 0.490436 |
| 9.88 | 89.00 | 1752 | |

Reviewer: laveyt, 27-Aug-2018 19:50:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-337917/14  Calibration Date: 07/25/2018 15:37

Instrument ID: A3UX19  Calib Start Date: 07/24/2018 17:50

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 07/24/2018 20:04

Lab File ID: U1900808.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane (Surr) | Ave | 0.2589 | 0.2758 | | 0.0213 | 0.0200 | 6.5 | 30.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2744 | 0.2888 | | 0.0211 | 0.0200 | 5.3 | 30.0 |
| Toluene-d8 (Surr) | Ave | 1.204 | 1.258 | | 0.0209 | 0.0200 | 4.5 | 30.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4627 | 0.4749 | | 0.0205 | 0.0200 | 2.6 | 30.0 |

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Jul-2018 15:37:29 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-014
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:24 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 882991 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 707956 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 83 | 413254 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 84 | 243481 | 20.0 | 21.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.357 | -0.012 | 96 | 255028 | 20.0 | 21.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 93 | 890649 | 20.0 | 20.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 90 | 336222 | 20.0 | 20.5 | |
| 25 Acetonitrile | 41 | 3.329 | 3.329 | 0.000 | 100 | 288916 | 200.0 | 164.3 | |
| 36 Isopropyl ether | 87 | 4.171 | 4.171 | 0.000 | 94 | 210236 | 20.0 | 20.6 | |
| 37 2-Chloro-1,3-butadiene | 53 | 4.195 | 4.195 | 0.000 | 86 | 354575 | 20.0 | 20.2 | |
| 38 Tert-butyl ethyl ether | 59 | 4.492 | 4.491 | 0.001 | 97 | 657887 | 20.0 | 20.5 | |
| 42 Ethyl acetate | 43 | 4.681 | 4.681 | 0.000 | 96 | 486199 | 40.0 | 36.6 | |
| 43 Propionitrile | 54 | 4.681 | 4.681 | 0.000 | 59 | 348995 | 200.0 | 193.9 | |
| 44 Methacrylonitrile | 41 | 4.824 | 4.823 | 0.001 | 91 | 1700375 | 200.0 | 210.7 | |
| 55 Tert-amyl methyl ether | 73 | 5.500 | 5.499 | 0.001 | 91 | 691178 | 20.0 | 20.3 | |
| 57 n-Butanol | 56 | 5.891 | 5.891 | 0.000 | 85 | 188747 | 500.0 | 456.8 | |
| 59 Ethyl acrylate | 55 | 6.057 | 6.057 | 0.000 | 99 | 329918 | 20.0 | 20.2 | |
| 62 Methyl methacrylate | 41 | 6.270 | 6.270 | 0.000 | 91 | 440657 | 40.0 | 40.6 | |
| 66 2-Nitropropane | 41 | 6.638 | 6.638 | 0.000 | 98 | 128315 | 40.0 | 40.0 | |
| 78 n-Butyl acetate | 43 | 7.883 | 7.883 | 0.000 | 99 | 386791 | 20.0 | 20.4 | |
| 81 1-Chlorohexane | 91 | 8.488 | 8.488 | 0.000 | 74 | 315130 | 20.0 | 19.3 | |
| 90 Cyclohexanone | 55 | 9.615 | 9.614 | 0.000 | 91 | 97723 | 200.0 | 202.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 100 Pentachloroethane | 167 | 10.492 | 10.492 | 0.000 | 86 | 279031 | 40.0 | 39.0 | |
| 106 1,2,3-Trimethylbenzene | 105 | 10.966 | 10.966 | 0.000 | 86 | 994788 | 20.0 | 21.2 | |
| 107 Benzyl chloride | 91 | 11.049 | 11.049 | 0.000 | 97 | 499238 | 20.0 | 18.8 | |
| 111 1,3,5-Trichlorobenzene | 180 | 12.354 | 12.354 | 0.000 | 97 | 414514 | 20.0 | 19.6 | |
| 116 2-Methylnaphthalene | 142 | 14.619 | 14.619 | 0.000 | 89 | 1147583 | 40.0 | 38.8 | |

## Reagents:

| | | | |
|---|---|---|---|
| VMFASA9W_00194 | Amount Added: 16.00 | Units: uL | |
| vm50ss_stk_00077 | Amount Added: 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00121 | Amount Added: 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00001 | Amount Added: 2.00 | Units: uL | Run Reagent |

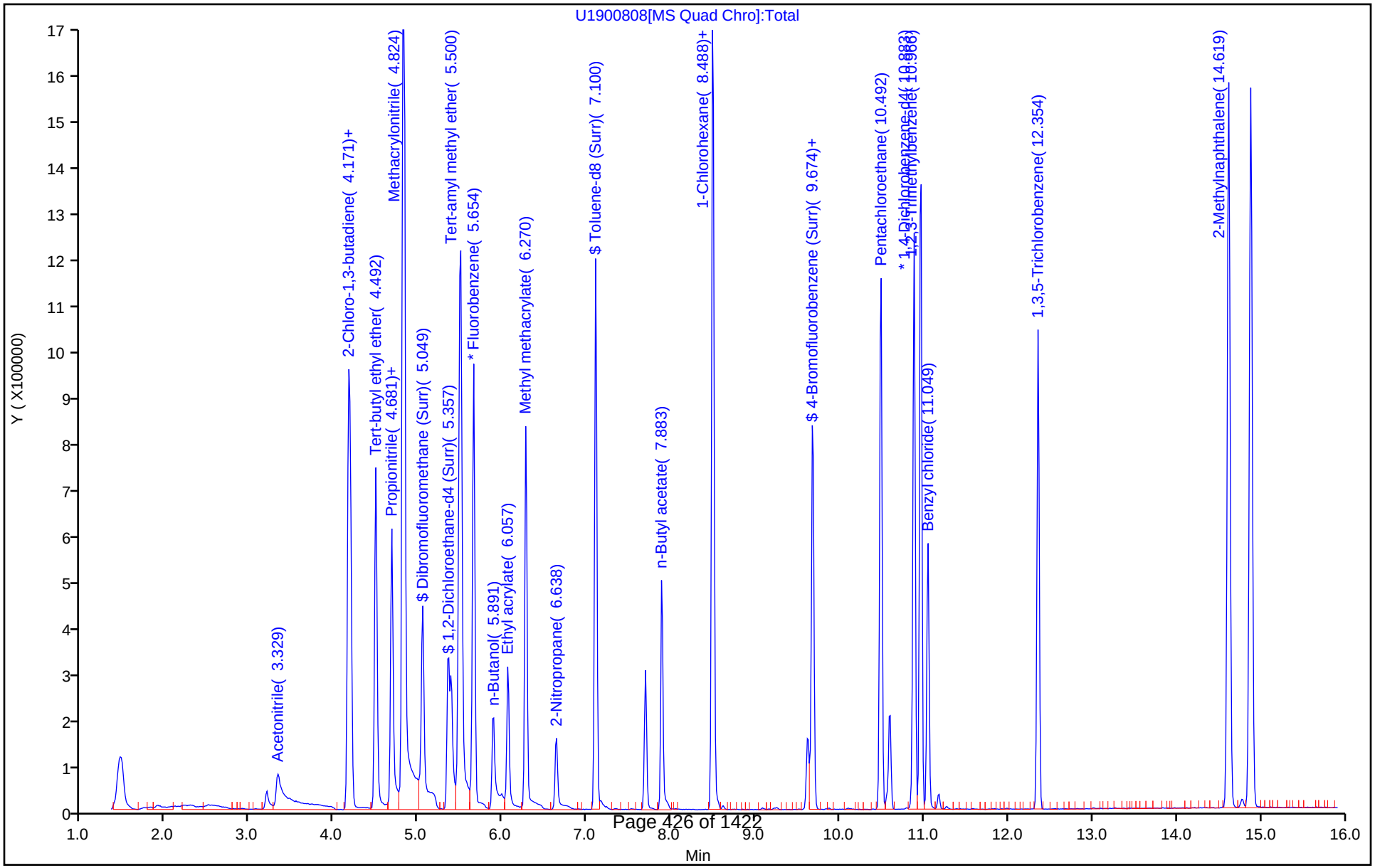
Report Date: 25-Jul-2018 16:30:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Jul-2018 15:37:29 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-337917/14  Calibration Date: 07/25/2018 15:37

Instrument ID: A3UX19  Calib Start Date: 07/25/2018 13:24

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 07/25/2018 15:15

Lab File ID: U1900808.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | Lin1 | | 0.0327 | | 0.164 | 0.200 | -17.8 | 30.0 |
| Isopropyl ether | Ave | 0.2313 | 0.2381 | | 0.0206 | 0.0200 | 3.0 | 30.0 |
| 2-Chloro-1,3-butadiene | Ave | 0.3979 | 0.4016 | | 0.0202 | 0.0200 | 0.9 | 30.0 |
| Tert-butyl ethyl ether | Ave | 0.7258 | 0.7451 | | 0.0205 | 0.0200 | 2.7 | 30.0 |
| Ethyl acetate | Ave | 0.3007 | 0.2753 | | 0.0366 | 0.0400 | -8.5 | 50.0 |
| Propionitrile | Ave | 0.0408 | 0.0395 | | 0.194 | 0.200 | -3.0 | 30.0 |
| Methacrylonitrile | Ave | 0.1828 | 0.1926 | | 0.211 | 0.200 | 5.3 | 30.0 |
| Tert-amyl methyl ether | Ave | 0.7700 | 0.7828 | | 0.0203 | 0.0200 | 1.7 | 30.0 |
| n-Butanol | Ave | 0.0094 | 0.0086 | | 0.457 | 0.500 | -8.6 | 30.0 |
| Ethyl acrylate | Ave | 0.3703 | 0.3736 | | 0.0202 | 0.0200 | 0.9 | 30.0 |
| Methyl methacrylate | Ave | 0.2459 | 0.2495 | | 0.0406 | 0.0400 | 1.5 | 30.0 |
| 2-Nitropropane | Ave | 0.0726 | 0.0727 | | 0.0400 | 0.0400 | 0.1 | 30.0 |
| n-Butyl acetate | Ave | 0.5364 | 0.5464 | | 0.0204 | 0.0200 | 1.9 | 30.0 |
| 1-Chlorohexane | Ave | 0.4610 | 0.4451 | | 0.0193 | 0.0200 | -3.4 | 30.0 |
| Cyclohexanone | Ave | 0.0137 | 0.0138 | | 0.202 | 0.200 | 1.0 | 30.0 |
| Pentachloroethane | Ave | 0.3462 | 0.3376 | | 0.0390 | 0.0400 | -2.5 | 30.0 |
| 1,2,3-Trimethylbenzene | Ave | 2.276 | 2.407 | | 0.0212 | 0.0200 | 5.8 | 30.0 |
| Benzyl chloride | Ave | 1.286 | 1.208 | | 0.0188 | 0.0200 | -6.1 | 30.0 |
| 1,3,5-Trichlorobenzene | Ave | 1.021 | 1.003 | | 0.0196 | 0.0200 | -1.8 | 30.0 |
| 2-Methylnaphthalene | Ave | 1.433 | 1.388 | | 0.0388 | 0.0400 | -3.1 | 30.0 |

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Jul-2018 15:37:29 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0078311-014
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 25-Jul-2018 16:30:24 Calib Date: 25-Jul-2018 15:15:13
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK026

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 882991 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 707956 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 83 | 413254 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 84 | 243481 | 20.0 | 21.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.345 | 5.357 | -0.012 | 96 | 255028 | 20.0 | 21.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 93 | 890649 | 20.0 | 20.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 90 | 336222 | 20.0 | 20.5 | |
| 25 Acetonitrile | 41 | 3.329 | 3.329 | 0.000 | 100 | 288916 | 200.0 | 164.3 | |
| 36 Isopropyl ether | 87 | 4.171 | 4.171 | 0.000 | 94 | 210236 | 20.0 | 20.6 | |
| 37 2-Chloro-1,3-butadiene | 53 | 4.195 | 4.195 | 0.000 | 86 | 354575 | 20.0 | 20.2 | |
| 38 Tert-butyl ethyl ether | 59 | 4.492 | 4.491 | 0.001 | 97 | 657887 | 20.0 | 20.5 | |
| 42 Ethyl acetate | 43 | 4.681 | 4.681 | 0.000 | 96 | 486199 | 40.0 | 36.6 | |
| 43 Propionitrile | 54 | 4.681 | 4.681 | 0.000 | 59 | 348995 | 200.0 | 193.9 | |
| 44 Methacrylonitrile | 41 | 4.824 | 4.823 | 0.001 | 91 | 1700375 | 200.0 | 210.7 | |
| 55 Tert-amyl methyl ether | 73 | 5.500 | 5.499 | 0.001 | 91 | 691178 | 20.0 | 20.3 | |
| 57 n-Butanol | 56 | 5.891 | 5.891 | 0.000 | 85 | 188747 | 500.0 | 456.8 | |
| 59 Ethyl acrylate | 55 | 6.057 | 6.057 | 0.000 | 99 | 329918 | 20.0 | 20.2 | |
| 62 Methyl methacrylate | 41 | 6.270 | 6.270 | 0.000 | 91 | 440657 | 40.0 | 40.6 | |
| 66 2-Nitropropane | 41 | 6.638 | 6.638 | 0.000 | 98 | 128315 | 40.0 | 40.0 | |
| 78 n-Butyl acetate | 43 | 7.883 | 7.883 | 0.000 | 99 | 386791 | 20.0 | 20.4 | |
| 81 1-Chlorohexane | 91 | 8.488 | 8.488 | 0.000 | 74 | 315130 | 20.0 | 19.3 | |
| 90 Cyclohexanone | 55 | 9.615 | 9.614 | 0.000 | 91 | 97723 | 200.0 | 202.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 100 Pentachloroethane | 167 | 10.492 | 10.492 | 0.000 | 86 | 279031 | 40.0 | 39.0 | |
| 106 1,2,3-Trimethylbenzene | 105 | 10.966 | 10.966 | 0.000 | 86 | 994788 | 20.0 | 21.2 | |
| 107 Benzyl chloride | 91 | 11.049 | 11.049 | 0.000 | 97 | 499238 | 20.0 | 18.8 | |
| 111 1,3,5-Trichlorobenzene | 180 | 12.354 | 12.354 | 0.000 | 97 | 414514 | 20.0 | 19.6 | |
| 116 2-Methylnaphthalene | 142 | 14.619 | 14.619 | 0.000 | 89 | 1147583 | 40.0 | 38.8 | |

## Reagents:

| | | | |
|---|---|---|---|
| VMFASA9W_00194 | Amount Added: 16.00 | Units: uL | |
| vm50ss_stk_00077 | Amount Added: 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00121 | Amount Added: 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00001 | Amount Added: 2.00 | Units: uL | Run Reagent |

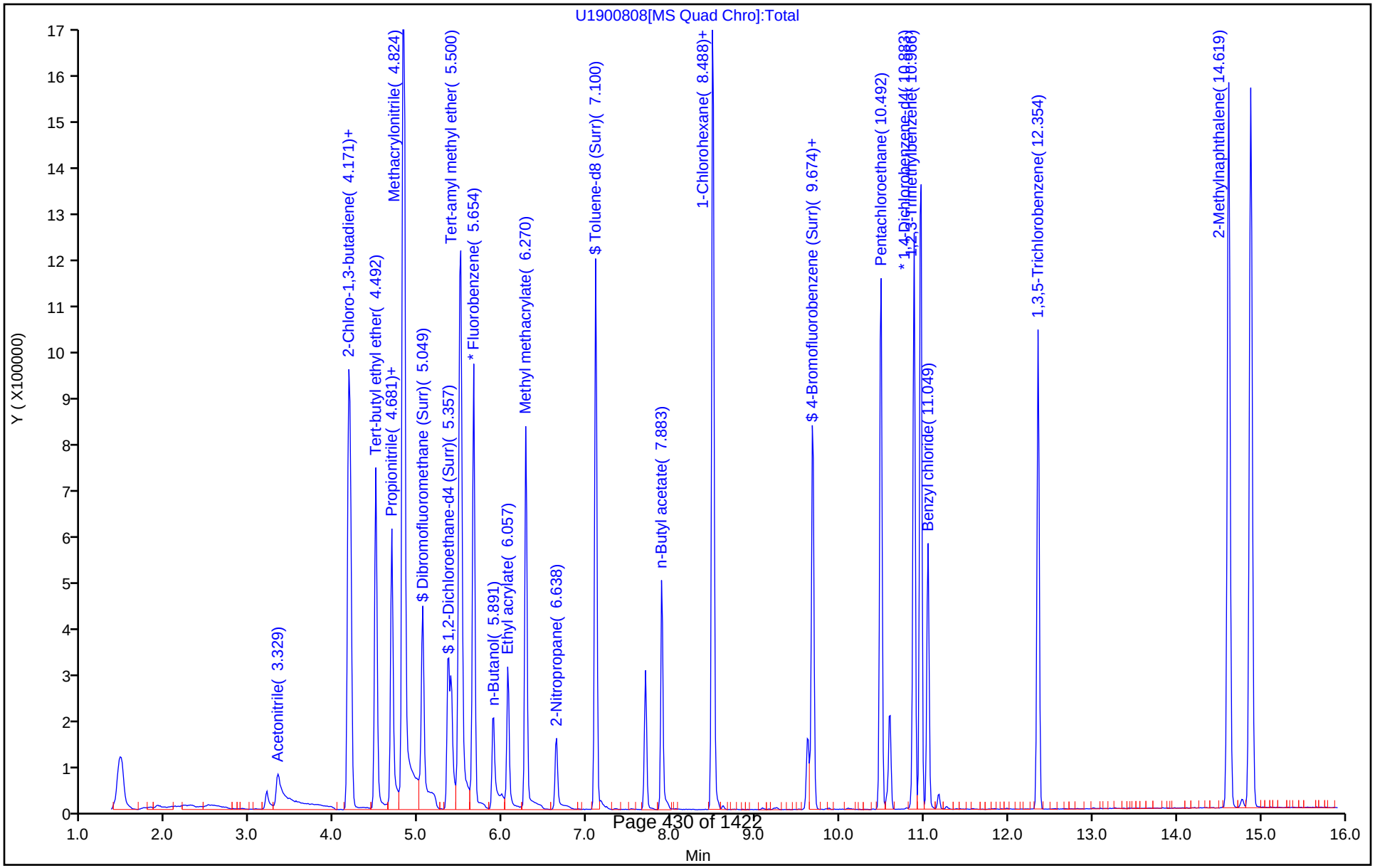
Report Date: 25-Jul-2018 16:30:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900808.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Jul-2018 15:37:29 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-342719/14 Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19 Calib Start Date: 08/27/2018 17:09

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.d Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.3850 | 0.2913 | 0.1000 | 0.0151 | 0.0200 | -24.3 | 30.0 |
| Chloromethane | Ave | 0.2883 | 0.2492 | 0.1000 | 0.0173 | 0.0200 | -13.6 | 30.0 |
| Butadiene | Ave | 0.2887 | 0.2477 | | 0.0172 | 0.0200 | -14.2 | 30.0 |
| Vinyl chloride | Ave | 0.2980 | 0.2874 | 0.1000 | 0.0193 | 0.0200 | -3.5 | 30.0 |
| Bromomethane | Ave | 0.2335 | 0.2187 | 0.0500 | 0.0187 | 0.0200 | -6.3 | 30.0 |
| Chloroethane | Ave | 0.1848 | 0.1799 | 0.0500 | 0.0195 | 0.0200 | -2.7 | 30.0 |
| Dichlorofluoromethane | Ave | 0.4581 | 0.4762 | | 0.0208 | 0.0200 | 3.9 | 30.0 |
| Trichlorofluoromethane | Ave | 0.4984 | 0.5062 | 0.1000 | 0.0203 | 0.0200 | 1.6 | 30.0 |
| Ethyl ether | Ave | 0.1800 | 0.1933 | | 0.0215 | 0.0200 | 7.4 | 30.0 |
| Acrolein | Ave | 0.0445 | 0.0361 | | 0.0812 | 0.100 | -18.8 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.3589 | 0.3889 | 0.1000 | 0.0217 | 0.0200 | 8.3 | 30.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave | 0.2567 | 0.2852 | 0.0500 | 0.0222 | 0.0200 | 11.1 | 30.0 |
| Acetone | Ave | 0.0784 | 0.0730 | 0.0100 | 0.0372 | 0.0400 | -6.9 | 50.0 |
| Iodomethane | Ave | 0.4655 | 0.4827 | | 0.0207 | 0.0200 | 3.7 | 30.0 |
| Carbon disulfide | Ave | 0.7515 | 0.7522 | 0.1000 | 0.0200 | 0.0200 | 0.0 | 30.0 |
| 3-Chloro-1-propene | Ave | 0.3541 | 0.3611 | | 0.0204 | 0.0200 | 2.0 | 30.0 |
| Methyl acetate | Ave | 0.2328 | 0.2202 | 0.1000 | 0.0378 | 0.0400 | -5.4 | 30.0 |
| Methylene Chloride | Ave | 0.2846 | 0.2847 | 0.1000 | 0.0200 | 0.0200 | 0.0 | 50.0 |
| 2-Methyl-2-propanol | Ave | 0.0271 | 0.0283 | | 0.209 | 0.200 | 4.3 | 50.0 |
| Acrylonitrile | Ave | 0.1006 | 0.1020 | | 0.203 | 0.200 | 1.4 | 30.0 |
| Methyl tert-butyl ether | Ave | 0.6938 | 0.7063 | 0.1000 | 0.0204 | 0.0200 | 1.8 | 30.0 |
| trans-1,2-Dichloroethene | Ave | 0.3387 | 0.3554 | 0.1000 | 0.0210 | 0.0200 | 4.9 | 30.0 |
| Hexane | Ave | 0.3524 | 0.3872 | | 0.0220 | 0.0200 | 9.9 | 30.0 |
| 1,1-Dichloroethane | Ave | 0.4048 | 0.4171 | 0.2000 | 0.0206 | 0.0200 | 3.0 | 30.0 |
| Vinyl acetate | Ave | 0.4639 | 0.5080 | | 0.0219 | 0.0200 | 9.5 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.2438 | 0.2691 | | 0.0221 | 0.0200 | 10.4 | 30.0 |
| 2-Butanone (MEK) | Ave | 0.0472 | 0.0464 | 0.0100 | 0.0393 | 0.0400 | -1.8 | 30.0 |
| cis-1,2-Dichloroethene | Ave | 0.2891 | 0.2867 | 0.1000 | 0.0198 | 0.0200 | -0.8 | 30.0 |
| Chlorobromomethane | Ave | 0.1945 | 0.1891 | | 0.0194 | 0.0200 | -2.8 | 30.0 |
| Tetrahydrofuran | Lin1 | | 0.1082 | | 0.0418 | 0.0400 | 4.6 | 30.0 |
| Chloroform | Ave | 0.4433 | 0.4563 | 0.2000 | 0.0206 | 0.0200 | 2.9 | 30.0 |
| 1,1,1-Trichloroethane | Ave | 0.4174 | 0.4498 | 0.1000 | 0.0216 | 0.0200 | 7.8 | 30.0 |
| Cyclohexane | Ave | 0.3819 | 0.4119 | 0.1000 | 0.0216 | 0.0200 | 7.8 | 30.0 |
| 1,1-Dichloropropene | Ave | 0.3519 | 0.3667 | | 0.0208 | 0.0200 | 4.2 | 30.0 |
| Carbon tetrachloride | Ave | 0.4023 | 0.4240 | 0.1000 | 0.0211 | 0.0200 | 5.4 | 30.0 |
| Isobutyl alcohol | Ave | 0.0110 | 0.0112 | | 0.508 | 0.500 | 1.6 | 30.0 |
| 1,2-Dichloroethane | Ave | 0.3600 | 0.3604 | 0.1000 | 0.0200 | 0.0200 | 0.1 | 30.0 |
| Benzene | Ave | 0.9518 | 0.9713 | 0.5000 | 0.0204 | 0.0200 | 2.1 | 30.0 |
| n-Heptane | Lin1 | | 0.2300 | | 0.0213 | 0.0200 | 6.3 | 30.0 |
| Trichloroethene | Ave | 0.3160 | 0.3196 | 0.1500 | 0.0202 | 0.0200 | 1.1 | 30.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-342719/14  Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.4590 | 0.4761 | 0.1000 | 0.0207 | 0.0200 | 3.7 | 30.0 |
| 1,2-Dichloropropane | Ave | 0.2208 | 0.2306 | 0.1000 | 0.0209 | 0.0200 | 4.5 | 30.0 |
| Dibromomethane | Ave | 0.2271 | 0.2193 | | 0.0193 | 0.0200 | -3.4 | 30.0 |
| 1,4-Dioxane | Ave | 0.0024 | 0.0028 | | 0.474 | 0.400 | 18.4 | 50.0 |
| Dichlorobromomethane | Ave | 0.3479 | 0.3495 | 0.1500 | 0.0201 | 0.0200 | 0.4 | 30.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1770 | 0.1822 | | 0.0206 | 0.0200 | 2.9 | 30.0 |
| cis-1,3-Dichloropropene | Ave | 0.3865 | 0.4060 | 0.1500 | 0.0210 | 0.0200 | 5.1 | 30.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.3203 | 0.3230 | 0.0500 | 0.0403 | 0.0400 | 0.8 | 30.0 |
| Toluene | Ave | 1.352 | 1.362 | 0.4000 | 0.0201 | 0.0200 | 0.7 | 30.0 |
| trans-1,3-Dichloropropene | Ave | 0.4818 | 0.4613 | 0.1000 | 0.0191 | 0.0200 | -4.3 | 30.0 |
| Ethyl methacrylate | Ave | 0.4344 | 0.4432 | | 0.0204 | 0.0200 | 2.0 | 30.0 |
| 1,1,2-Trichloroethane | Ave | 0.2842 | 0.2905 | 0.1000 | 0.0204 | 0.0200 | 2.2 | 30.0 |
| Tetrachloroethene | Ave | 0.4313 | 0.4447 | 0.1500 | 0.0206 | 0.0200 | 3.1 | 30.0 |
| 1,3-Dichloropropane | Ave | 0.4802 | 0.4738 | | 0.0197 | 0.0200 | -1.3 | 30.0 |
| 2-Hexanone | Ave | 0.3149 | 0.3202 | 0.0500 | 0.0407 | 0.0400 | 1.7 | 30.0 |
| Chlorodibromomethane | Ave | 0.3583 | 0.3632 | | 0.0203 | 0.0200 | 1.3 | 30.0 |
| Ethylene Dibromide | Ave | 0.3346 | 0.3230 | | 0.0193 | 0.0200 | -3.5 | 30.0 |
| Chlorobenzene | Ave | 0.9253 | 0.9231 | 0.3000 | 0.0200 | 0.0200 | -0.2 | 30.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3336 | 0.3465 | | 0.0208 | 0.0200 | 3.9 | 30.0 |
| Ethylbenzene | Ave | 0.4836 | 0.4959 | | 0.0205 | 0.0200 | 2.5 | 30.0 |
| m-Xylene & p-Xylene | Ave | 0.5890 | 0.6110 | | 0.0207 | 0.0200 | 3.7 | 30.0 |
| o-Xylene | Ave | 0.5597 | 0.5768 | | 0.0206 | 0.0200 | 3.1 | 30.0 |
| Styrene | Ave | 0.9588 | 0.9701 | 0.3000 | 0.0202 | 0.0200 | 1.2 | 30.0 |
| Bromoform | Ave | 0.2933 | 0.2923 | 0.1000 | 0.0199 | 0.0200 | -0.3 | 30.0 |
| Isopropylbenzene | Ave | 1.503 | 1.583 | 0.1000 | 0.0211 | 0.0200 | 5.3 | 30.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.7706 | 0.7768 | 0.3000 | 0.0202 | 0.0200 | 0.8 | 30.0 |
| Bromobenzene | Ave | 0.7690 | 0.7545 | | 0.0196 | 0.0200 | -1.9 | 30.0 |
| 1,2,3-Trichloropropane | Ave | 0.2921 | 0.3010 | | 0.0206 | 0.0200 | 3.0 | 30.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.2737 | 0.2785 | | 0.0203 | 0.0200 | 1.7 | 30.0 |
| N-Propylbenzene | Ave | 0.7729 | 0.7998 | | 0.0207 | 0.0200 | 3.5 | 30.0 |
| 2-Chlorotoluene | Ave | 0.6541 | 0.6592 | | 0.0202 | 0.0200 | 0.8 | 30.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.225 | 2.303 | | 0.0207 | 0.0200 | 3.5 | 30.0 |
| 4-Chlorotoluene | Ave | 0.7072 | 0.7078 | | 0.0200 | 0.0200 | 0.0 | 30.0 |
| tert-Butylbenzene | Ave | 2.113 | 2.203 | | 0.0209 | 0.0200 | 4.3 | 30.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.256 | 2.278 | | 0.0202 | 0.0200 | 1.0 | 30.0 |
| sec-Butylbenzene | Ave | 2.845 | 3.009 | | 0.0212 | 0.0200 | 5.8 | 30.0 |
| 1,3-Dichlorobenzene | Ave | 1.412 | 1.370 | 0.6000 | 0.0194 | 0.0200 | -3.0 | 30.0 |
| 4-Isopropyltoluene | Ave | 2.492 | 2.628 | | 0.0211 | 0.0200 | 5.5 | 30.0 |
| 1,4-Dichlorobenzene | Ave | 1.459 | 1.395 | 0.5000 | 0.0191 | 0.0200 | -4.4 | 30.0 |
| n-Butylbenzene | Ave | 2.050 | 2.114 | | 0.0206 | 0.0200 | 3.1 | 30.0 |
| 1,2-Dichlorobenzene | Ave | 1.282 | 1.257 | 0.4000 | 0.0196 | 0.0200 | -2.0 | 30.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-342719/14  Calibration Date: 08/27/2018 19:45

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1901330.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.2450 | 0.2412 | 0.0500 | 0.0197 | 0.0200 | -1.6 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.8550 | 0.8004 | 0.2000 | 0.0187 | 0.0200 | -6.4 | 50.0 |
| Hexachlorobutadiene | Ave | 0.4392 | 0.4373 | | 0.0199 | 0.0200 | -0.4 | 30.0 |
| Naphthalene | Ave | 2.363 | 2.262 | | 0.0191 | 0.0200 | -4.3 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.7677 | 0.7284 | | 0.0190 | 0.0200 | -5.1 | 30.0 |
| Dibromofluoromethane (Surr) | Ave | 0.2692 | 0.2770 | | 0.0206 | 0.0200 | 2.9 | 30.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.3092 | 0.3266 | | 0.0211 | 0.0200 | 5.6 | 30.0 |
| Toluene-d8 (Surr) | Ave | 1.199 | 1.238 | | 0.0206 | 0.0200 | 3.2 | 30.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4513 | 0.4759 | | 0.0211 | 0.0200 | 5.5 | 30.0 |

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901330.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Aug-2018 19:45:31 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Operator ID: 001904 Instrument ID: A3UX19
Sublist:

Method: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 27-Aug-2018 21:12:05 Calib Date: 27-Aug-2018 19:23:28
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: XAWRK010

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 96 | 955207 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 83 | 765531 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 87 | 424750 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 264542 | 20.0 | 20.6 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.345 | 0.012 | 100 | 311954 | 20.0 | 21.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | 0.000 | 86 | 947747 | 20.0 | 20.6 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 89 | 364329 | 20.0 | 21.1 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 88 | 278240 | 20.0 | 15.1 | |
| 10 Chloromethane | 50 | 1.823 | 1.812 | 0.011 | 78 | 238040 | 20.0 | 17.3 | |
| 12 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 87 | 236605 | 20.0 | 17.2 | |
| 11 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 82 | 274549 | 20.0 | 19.3 | |
| 13 Bromomethane | 94 | 2.227 | 2.227 | 0.000 | 92 | 208903 | 20.0 | 18.7 | |
| 14 Chloroethane | 64 | 2.298 | 2.298 | 0.000 | 95 | 171871 | 20.0 | 19.5 | |
| 15 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 83 | 454821 | 20.0 | 20.8 | |
| 16 Trichlorofluoromethane | 101 | 2.582 | 2.582 | 0.000 | 88 | 483563 | 20.0 | 20.3 | |
| 17 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 90 | 184629 | 20.0 | 21.5 | |
| 18 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 94 | 172494 | 100.0 | 81.2 | |
| 21 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 89 | 371471 | 20.0 | 21.7 | |
| 20 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 81 | 272453 | 20.0 | 22.2 | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 72 | 139402 | 40.0 | 37.2 | |
| 23 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 99 | 461057 | 20.0 | 20.7 | |
| 24 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 99 | 718482 | 20.0 | 20.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 26 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 74 | 344875 | 20.0 | 20.4 | |
| 27 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 420737 | 40.0 | 37.8 | |
| 28 Methylene Chloride | 49 | 3.484 | 3.495 | -0.011 | 55 | 271908 | 20.0 | 20.0 | |
| 29 2-Methyl-2-propanol | 59 | 3.578 | 3.567 | 0.011 | 87 | 269854 | 200.0 | 208.6 | |
| 30 Acrylonitrile | 53 | 3.697 | 3.685 | 0.012 | 98 | 973795 | 200.0 | 202.8 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.721 | 0.012 | 68 | 339431 | 20.0 | 21.0 | |
| 31 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 89 | 674668 | 20.0 | 20.4 | |
| 33 Hexane | 57 | 3.982 | 3.982 | 0.000 | 92 | 369879 | 20.0 | 22.0 | |
| 34 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 398379 | 20.0 | 20.6 | |
| 35 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 485201 | 20.0 | 21.9 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 68 | 273831 | 20.0 | 19.8 | |
| 41 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 92 | 88581 | 40.0 | 39.3 | |
| 39 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 65 | 257071 | 20.0 | 22.1 | |
| 45 Chlorobromomethane | 49 | 4.835 | 4.836 | -0.001 | 70 | 180641 | 20.0 | 19.4 | |
| 46 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 83 | 206721 | 40.0 | 41.8 | |
| 47 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 71 | 435869 | 20.0 | 20.6 | |
| 48 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 90 | 429620 | 20.0 | 21.6 | |
| 49 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 86 | 393450 | 20.0 | 21.6 | |
| 50 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 90 | 350261 | 20.0 | 20.8 | |
| 51 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 405050 | 20.0 | 21.1 | |
| 52 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 83 | 266481 | 500.0 | 508.1 | |
| 54 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 50 | 344294 | 20.0 | 20.0 | |
| 53 Benzene | 78 | 5.416 | 5.417 | -0.001 | 94 | 927804 | 20.0 | 20.4 | |
| 56 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 82 | 219666 | 20.0 | 21.3 | |
| 58 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 305241 | 20.0 | 20.2 | |
| 60 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 87 | 454812 | 20.0 | 20.7 | |
| 61 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 80 | 220275 | 20.0 | 20.9 | |
| 63 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 89 | 209471 | 20.0 | 19.3 | |
| 64 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 35 | 54068 | 400.0 | 473.8 | |
| 65 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 333796 | 20.0 | 20.1 | |
| 67 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 93 | 174029 | 20.0 | 20.6 | |
| 68 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 89 | 387819 | 20.0 | 21.0 | |
| 69 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 83 | 617114 | 40.0 | 40.3 | |
| 70 Toluene | 91 | 7.172 | 7.172 | 0.000 | 94 | 1042380 | 20.0 | 20.1 | |
| 71 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 85 | 353136 | 20.0 | 19.1 | |
| 72 Ethyl methacrylate | 69 | 7.432 | 7.433 | -0.001 | 89 | 339271 | 20.0 | 20.4 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 86 | 222400 | 20.0 | 20.4 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 340390 | 20.0 | 20.6 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 90 | 362713 | 20.0 | 19.7 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | -0.001 | 79 | 490171 | 40.0 | 40.7 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.919 | 0.012 | 88 | 278002 | 20.0 | 20.3 | |
| 80 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 247260 | 20.0 | 19.3 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 82 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 92 | 706649 | 20.0 | 20.0 | |
| 83 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.607 | -0.001 | 87 | 265224 | 20.0 | 20.8 | |
| 84 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 379588 | 20.0 | 20.5 | |
| 85 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 100 | 467728 | 20.0 | 20.7 | |
| 86 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 441586 | 20.0 | 20.6 | |
| 87 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 742653 | 20.0 | 20.2 | |
| 88 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 98 | 223782 | 20.0 | 19.9 | |
| 89 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 96 | 1211475 | 20.0 | 21.1 | |
| 91 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 88 | 329964 | 20.0 | 20.2 | |
| 92 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 89 | 320488 | 20.0 | 19.6 | |
| 93 1,2,3-Trichloropropane | 110 | 9.863 | 9.864 | -0.001 | 69 | 127830 | 20.0 | 20.6 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 61 | 118291 | 20.0 | 20.3 | |
| 95 N-Propylbenzene | 120 | 9.946 | 9.947 | -0.001 | 96 | 339730 | 20.0 | 20.7 | |
| 96 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 279994 | 20.0 | 20.2 | |
| 97 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 95 | 978383 | 20.0 | 20.7 | |
| 98 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 98 | 300639 | 20.0 | 20.0 | |
| 99 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 78 | 935547 | 20.0 | 20.9 | |
| 101 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 71 | 967584 | 20.0 | 20.2 | |
| 102 sec-Butylbenzene | 105 | 10.694 | 10.694 | 0.000 | 93 | 1277861 | 20.0 | 21.2 | |
| 103 1,3-Dichlorobenzene | 146 | 10.812 | 10.812 | 0.000 | 84 | 581709 | 20.0 | 19.4 | |
| 104 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 91 | 1116328 | 20.0 | 21.1 | |
| 105 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 92 | 592339 | 20.0 | 19.1 | |
| 108 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 97 | 897771 | 20.0 | 20.6 | |
| 109 1,2-Dichlorobenzene | 146 | 11.310 | 11.298 | 0.012 | 98 | 533790 | 20.0 | 19.6 | |
| 110 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 89 | 102428 | 20.0 | 19.7 | |
| 112 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 339973 | 20.0 | 18.7 | |
| 113 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 88 | 185743 | 20.0 | 19.9 | |
| 114 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 960764 | 20.0 | 19.1 | |
| 115 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 93 | 309386 | 20.0 | 19.0 | |
| S 164 Total BTEX | 1 | | | | 0 | | 100.0 | 102.4 | |
| S 127 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 80.9 | |
| S 126 Xylenes, Total | 106 | | | | 0 | | 40.0 | 41.4 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00271 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00246 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00264 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00077 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00123 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00001 | Amount Added: | 2.00 | Units: uL | Run Reagent |

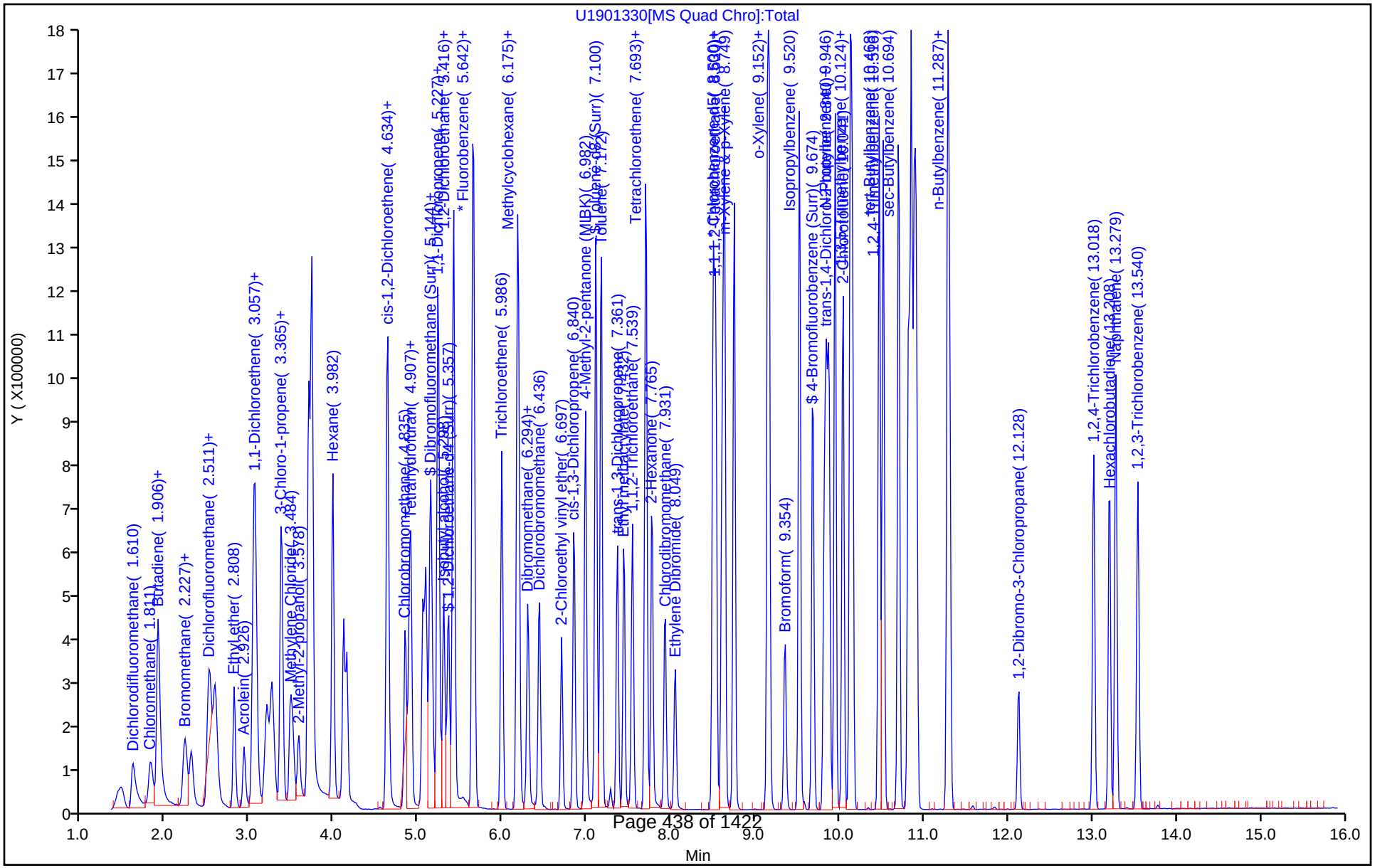
Report Date: 27-Aug-2018 21:12:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901330.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 19:45:31 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380285/4  Calibration Date: 05/08/2019 16:19

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907216.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.3850 | 0.3496 | 0.1000 | 0.0182 | 0.0200 | -9.2 | 20.0 |
| Chloromethane | Ave | 0.2883 | 0.3434 | 0.1000 | 0.0238 | 0.0200 | 19.1 | 20.0 |
| Butadiene | Ave | 0.2887 | 0.3362 | | 0.0233 | 0.0200 | 16.5 | 20.0 |
| Vinyl chloride | Ave | 0.2980 | 0.3485 | 0.1000 | 0.0234 | 0.0200 | 17.0 | 20.0 |
| Bromomethane | Ave | 0.2335 | 0.2456 | 0.0500 | 0.0210 | 0.0200 | 5.2 | 20.0 |
| Chloroethane | Ave | 0.1848 | 0.2123 | 0.0500 | 0.0230 | 0.0200 | 14.9 | 20.0 |
| Dichlorofluoromethane | Ave | 0.4581 | 0.4669 | | 0.0204 | 0.0200 | 1.9 | 20.0 |
| Trichlorofluoromethane | Ave | 0.4984 | 0.4599 | 0.1000 | 0.0185 | 0.0200 | -7.7 | 20.0 |
| Ethyl ether | Ave | 0.1800 | 0.2053 | | 0.0228 | 0.0200 | 14.0 | 20.0 |
| Acrolein | Ave | 0.0445 | 0.0420 | | 0.0945 | 0.100 | -5.5 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.3589 | 0.3559 | 0.1000 | 0.0198 | 0.0200 | -0.8 | 20.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave | 0.2567 | 0.2649 | 0.0500 | 0.0206 | 0.0200 | 3.2 | 20.0 |
| Acetone | Ave | 0.0784 | 0.1026 | 0.0100 | 0.0523 | 0.0400 | 30.8 | 50.0 |
| Iodomethane | Ave | 0.4655 | 0.4314 | | 0.0185 | 0.0200 | -7.3 | 20.0 |
| Carbon disulfide | Ave | 0.7515 | 0.7913 | 0.1000 | 0.0211 | 0.0200 | 5.3 | 20.0 |
| 3-Chloro-1-propene | Ave | 0.3541 | 0.3599 | | 0.0203 | 0.0200 | 1.6 | 20.0 |
| Methyl acetate | Ave | 0.2328 | 0.2631 | 0.1000 | 0.0452 | 0.0400 | 13.0 | 20.0 |
| Methylene Chloride | Ave | 0.2846 | 0.3049 | 0.1000 | 0.0214 | 0.0200 | 7.1 | 50.0 |
| 2-Methyl-2-propanol | Ave | 0.0271 | 0.0360 | | 0.266 | 0.200 | 32.8 | 50.0 |
| Acrylonitrile | Ave | 0.1006 | 0.1370 | | 0.272 | 0.200 | 36.2* | 20.0 |
| Methyl tert-butyl ether | Ave | 0.6938 | 0.6675 | 0.1000 | 0.0192 | 0.0200 | -3.8 | 20.0 |
| trans-1,2-Dichloroethene | Ave | 0.3387 | 0.3458 | 0.1000 | 0.0204 | 0.0200 | 2.1 | 20.0 |
| Hexane | Ave | 0.3524 | 0.3816 | | 0.0217 | 0.0200 | 8.3 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.4048 | 0.4341 | 0.2000 | 0.0214 | 0.0200 | 7.2 | 20.0 |
| Vinyl acetate | Ave | 0.4639 | 0.4405 | | 0.0190 | 0.0200 | -5.0 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.2438 | 0.2508 | | 0.0206 | 0.0200 | 2.9 | 20.0 |
| 2-Butanone (MEK) | Ave | 0.0472 | 0.0542 | 0.0100 | 0.0459 | 0.0400 | 14.8 | 20.0 |
| cis-1,2-Dichloroethene | Ave | 0.2891 | 0.3069 | 0.1000 | 0.0212 | 0.0200 | 6.2 | 20.0 |
| Chlorobromomethane | Ave | 0.1945 | 0.1989 | | 0.0204 | 0.0200 | 2.2 | 20.0 |
| Tetrahydrofuran | Lin1 | | 0.1191 | | 0.0463 | 0.0400 | 15.8 | 20.0 |
| Chloroform | Ave | 0.4433 | 0.4477 | 0.2000 | 0.0202 | 0.0200 | 1.0 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.4174 | 0.3801 | 0.1000 | 0.0182 | 0.0200 | -8.9 | 20.0 |
| Cyclohexane | Ave | 0.3819 | 0.4148 | 0.1000 | 0.0217 | 0.0200 | 8.6 | 20.0 |
| 1,1-Dichloropropene | Ave | 0.3519 | 0.3585 | | 0.0204 | 0.0200 | 1.9 | 20.0 |
| Carbon tetrachloride | Ave | 0.4023 | 0.3576 | 0.1000 | 0.0178 | 0.0200 | -11.1 | 20.0 |
| Isobutyl alcohol | Ave | 0.0110 | 0.0142 | | 0.646 | 0.500 | 29.3* | 20.0 |
| 1,2-Dichloroethane | Ave | 0.3600 | 0.3095 | 0.1000 | 0.0172 | 0.0200 | -14.0 | 20.0 |
| Benzene | Ave | 0.9518 | 1.052 | 0.5000 | 0.0221 | 0.0200 | 10.5 | 20.0 |
| n-Heptane | Lin1 | | 0.2105 | | 0.0192 | 0.0200 | -4.2 | 20.0 |
| Trichloroethene | Ave | 0.3160 | 0.2907 | 0.1500 | 0.0184 | 0.0200 | -8.0 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380285/4  Calibration Date: 05/08/2019 16:19

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907216.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.4590 | 0.4969 | 0.1000 | 0.0217 | 0.0200 | 8.3 | 20.0 |
| 1,2-Dichloropropane | Ave | 0.2208 | 0.2353 | 0.1000 | 0.0213 | 0.0200 | 6.6 | 20.0 |
| 1,4-Dioxane | Ave | 0.0024 | 0.0040 | | 0.670 | 0.400 | 67.5* | 50.0 |
| Dibromomethane | Ave | 0.2271 | 0.1995 | | 0.0176 | 0.0200 | -12.1 | 20.0 |
| Dichlorobromomethane | Ave | 0.3479 | 0.3250 | 0.1500 | 0.0187 | 0.0200 | -6.6 | 20.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1770 | 0.1832 | | 0.0414 | 0.0400 | 3.5 | 20.0 |
| cis-1,3-Dichloropropene | Ave | 0.3865 | 0.3770 | 0.1500 | 0.0195 | 0.0200 | -2.4 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.3203 | 0.3324 | 0.0500 | 0.0415 | 0.0400 | 3.8 | 20.0 |
| Toluene | Ave | 1.352 | 1.390 | 0.4000 | 0.0206 | 0.0200 | 2.9 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.4818 | 0.4327 | 0.1000 | 0.0180 | 0.0200 | -10.2 | 20.0 |
| Ethyl methacrylate | Ave | 0.4344 | 0.4517 | | 0.0208 | 0.0200 | 4.0 | 20.0 |
| 1,1,2-Trichloroethane | Ave | 0.2842 | 0.2941 | 0.1000 | 0.0207 | 0.0200 | 3.5 | 20.0 |
| Tetrachloroethene | Ave | 0.4313 | 0.3942 | 0.1500 | 0.0183 | 0.0200 | -8.6 | 20.0 |
| 1,3-Dichloropropane | Ave | 0.4802 | 0.4843 | | 0.0202 | 0.0200 | 0.9 | 20.0 |
| 2-Hexanone | Ave | 0.3149 | 0.3237 | 0.0500 | 0.0411 | 0.0400 | 2.8 | 20.0 |
| Chlorodibromomethane | Ave | 0.3583 | 0.3351 | | 0.0187 | 0.0200 | -6.5 | 20.0 |
| Ethylene Dibromide | Ave | 0.3346 | 0.3190 | | 0.0191 | 0.0200 | -4.7 | 20.0 |
| Chlorobenzene | Ave | 0.9253 | 0.9035 | 0.3000 | 0.0195 | 0.0200 | -2.4 | 20.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3336 | 0.3194 | | 0.0191 | 0.0200 | -4.3 | 20.0 |
| Ethylbenzene | Ave | 0.4836 | 0.4995 | | 0.0207 | 0.0200 | 3.3 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.5890 | 0.6168 | | 0.0209 | 0.0200 | 4.7 | 20.0 |
| o-Xylene | Ave | 0.5597 | 0.5907 | | 0.0211 | 0.0200 | 5.5 | 20.0 |
| Styrene | Ave | 0.9588 | 0.9935 | 0.3000 | 0.0207 | 0.0200 | 3.6 | 20.0 |
| Bromoform | Ave | 0.2933 | 0.2546 | 0.1000 | 0.0174 | 0.0200 | -13.2 | 20.0 |
| Isopropylbenzene | Ave | 1.503 | 1.552 | 0.1000 | 0.0207 | 0.0200 | 3.3 | 20.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.7706 | 0.9617 | 0.3000 | 0.0250 | 0.0200 | 24.8* | 20.0 |
| Bromobenzene | Ave | 0.7690 | 0.7592 | | 0.0197 | 0.0200 | -1.3 | 20.0 |
| 1,2,3-Trichloropropane | Ave | 0.2921 | 0.3129 | | 0.0214 | 0.0200 | 7.1 | 20.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.2737 | 0.2516 | | 0.0184 | 0.0200 | -8.1 | 20.0 |
| N-Propylbenzene | Ave | 0.7729 | 0.8605 | | 0.0223 | 0.0200 | 11.3 | 20.0 |
| 2-Chlorotoluene | Ave | 0.6541 | 0.7128 | | 0.0218 | 0.0200 | 9.0 | 20.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.225 | 2.423 | | 0.0218 | 0.0200 | 8.9 | 20.0 |
| 4-Chlorotoluene | Ave | 0.7072 | 0.7386 | | 0.0209 | 0.0200 | 4.4 | 20.0 |
| tert-Butylbenzene | Ave | 2.113 | 2.269 | | 0.0215 | 0.0200 | 7.4 | 20.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.256 | 2.475 | | 0.0219 | 0.0200 | 9.7 | 20.0 |
| sec-Butylbenzene | Ave | 2.845 | 3.200 | | 0.0225 | 0.0200 | 12.5 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.412 | 1.419 | 0.6000 | 0.0201 | 0.0200 | 0.4 | 20.0 |
| 4-Isopropyltoluene | Ave | 2.492 | 2.685 | | 0.0216 | 0.0200 | 7.8 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.459 | 1.444 | 0.5000 | 0.0198 | 0.0200 | -1.0 | 20.0 |
| n-Butylbenzene | Ave | 2.050 | 2.194 | | 0.0214 | 0.0200 | 7.0 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.282 | 1.280 | 0.4000 | 0.0200 | 0.0200 | -0.1 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380285/4  Calibration Date: 05/08/2019 16:19

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907216.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.2450 | 0.2126 | 0.0500 | 0.0173 | 0.0200 | -13.3 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.8550 | 0.6316 | 0.2000 | 0.0148 | 0.0200 | -26.1 | 50.0 |
| Hexachlorobutadiene | Ave | 0.4392 | 0.3140 | | 0.0143 | 0.0200 | -28.5* | 20.0 |
| Naphthalene | Ave | 2.363 | 1.873 | | 0.0159 | 0.0200 | -20.7 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.7677 | 0.5643 | | 0.0147 | 0.0200 | -26.5* | 20.0 |
| Dibromofluoromethane (Surr) | Ave | 0.2692 | 0.2624 | | 0.0195 | 0.0200 | -2.5 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.3092 | 0.2853 | | 0.0185 | 0.0200 | -7.7 | 20.0 |
| Toluene-d8 (Surr) | Ave | 1.199 | 1.231 | | 0.0205 | 0.0200 | 2.6 | 20.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4513 | 0.4570 | | 0.0203 | 0.0200 | 1.3 | 20.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907216.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 08-May-2019 16:19:13 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 16:44:53 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 16:44:53

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 856543 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 666855 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 334920 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 58 | 224768 | 20.0 | 19.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 97 | 244379 | 20.0 | 18.5 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 88 | 820653 | 20.0 | 20.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 88 | 304753 | 20.0 | 20.3 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 70 | 299462 | 20.0 | 18.2 | |
| 10 Chloromethane | 50 | 1.823 | 1.823 | 0.000 | 78 | 294145 | 20.0 | 23.8 | |
| 11 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 83 | 288002 | 20.0 | 23.3 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 73 | 298486 | 20.0 | 23.4 | |
| 13 Bromomethane | 94 | 2.226 | 2.226 | 0.000 | 90 | 210340 | 20.0 | 21.0 | |
| 15 Chloroethane | 64 | 2.310 | 2.310 | 0.000 | 94 | 181852 | 20.0 | 23.0 | |
| 16 Dichlorofluoromethane | 67 | 2.511 | 2.511 | 0.000 | 82 | 399920 | 20.0 | 20.4 | |
| 17 Trichlorofluoromethane | 101 | 2.570 | 2.570 | 0.000 | 88 | 393902 | 20.0 | 18.5 | |
| 18 Ethyl ether | 59 | 2.819 | 2.819 | 0.000 | 87 | 175802 | 20.0 | 22.8 | |
| 19 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 93 | 180006 | 100.0 | 94.5 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 87 | 304881 | 20.0 | 19.8 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 78 | 226920 | 20.0 | 20.6 | |
| 22 Acetone | 43 | 3.080 | 3.080 | 0.000 | 87 | 175703 | 40.0 | 52.3 | |
| 24 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 97 | 369467 | 20.0 | 18.5 | |
| 25 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 98 | 677781 | 20.0 | 21.1 | |
| 27 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 65 | 308272 | 20.0 | 20.3 | |
| 28 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 450629 | 40.0 | 45.2 | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 79 | 261187 | 20.0 | 21.4 | |
| 30 2-Methyl-2-propanol | 59 | 3.578 | 3.578 | 0.000 | 96 | 308085 | 200.0 | 265.6 | |
| 31 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 1173148 | 200.0 | 272.4 | |
| 33 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 88 | 571764 | 20.0 | 19.2 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 72 | 296157 | 20.0 | 20.4 | |
| 34 Hexane | 57 | 3.982 | 3.982 | 0.000 | 89 | 326867 | 20.0 | 21.7 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 96 | 371802 | 20.0 | 21.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 377313 | 20.0 | 19.0 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 66 | 262839 | 20.0 | 21.2 | |
| 42 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 58 | 214790 | 20.0 | 20.6 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 95 | 92881 | 40.0 | 45.9 | |
| 46 Chlorobromomethane | 49 | 4.835 | 4.835 | 0.000 | 76 | 170342 | 20.0 | 20.4 | |
| 47 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 88 | 204091 | 40.0 | 46.3 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 383471 | 20.0 | 20.2 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.084 | 0.000 | 76 | 325535 | 20.0 | 18.2 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 85 | 355271 | 20.0 | 21.7 | |
| 51 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 91 | 307080 | 20.0 | 20.4 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 68 | 306298 | 20.0 | 17.8 | |
| 53 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 88 | 303978 | 500.0 | 646.3 | |
| 54 Benzene | 78 | 5.416 | 5.416 | 0.000 | 93 | 901082 | 20.0 | 22.1 | |
| 55 1,2-Dichloroethane | 62 | 5.416 | 5.416 | 0.000 | 44 | 265110 | 20.0 | 17.2 | |
| 57 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 84 | 180305 | 20.0 | 19.2 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 94 | 249020 | 20.0 | 18.4 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.175 | 0.000 | 88 | 425640 | 20.0 | 21.7 | |
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 83 | 201575 | 20.0 | 21.3 | |
| 64 Dibromomethane | 174 | 6.306 | 6.306 | 0.000 | 83 | 170871 | 20.0 | 17.6 | |
| 65 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 39 | 68570 | 400.0 | 670.1 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 278332 | 20.0 | 18.7 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 91 | 313892 | 40.0 | 41.4 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.840 | 6.840 | 0.000 | 93 | 322918 | 20.0 | 19.5 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 92 | 569490 | 40.0 | 41.5 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 96 | 927160 | 20.0 | 20.6 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 85 | 288560 | 20.0 | 18.0 | |
| 73 Ethyl methacrylate | 69 | 7.432 | 7.432 | 0.000 | 87 | 301225 | 20.0 | 20.8 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 83 | 196098 | 20.0 | 20.7 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 262842 | 20.0 | 18.3 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 80 | 322977 | 20.0 | 20.2 | |
| 77 2-Hexanone | 43 | 7.764 | 7.764 | 0.000 | 78 | 431681 | 40.0 | 41.1 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.931 | 0.000 | 83 | 223464 | 20.0 | 18.7 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 212694 | 20.0 | 19.1 | |
| 83 Chlorobenzene | 112 | 8.523 | 8.523 | 0.000 | 95 | 602515 | 20.0 | 19.5 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.606 | 0.000 | 86 | 212993 | 20.0 | 19.1 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 333094 | 20.0 | 20.7 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 411313 | 20.0 | 20.9 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 393882 | 20.0 | 21.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 662541 | 20.0 | 20.7 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 97 | 169781 | 20.0 | 17.4 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1034779 | 20.0 | 20.7 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 85 | 322099 | 20.0 | 25.0 | |
| 95 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 90 | 254257 | 20.0 | 19.7 | |
| 96 1,2,3-Trichloropropane | 110 | 9.863 | 9.863 | 0.000 | 68 | 104803 | 20.0 | 21.4 | |
| 97 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 62 | 84259 | 20.0 | 18.4 | |
| 98 N-Propylbenzene | 120 | 9.946 | 9.946 | 0.000 | 94 | 288190 | 20.0 | 22.3 | |
| 100 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 238723 | 20.0 | 21.8 | |
| 101 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 94 | 811566 | 20.0 | 21.8 | |
| 102 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 247363 | 20.0 | 20.9 | |
| 103 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 77 | 760039 | 20.0 | 21.5 | |
| 105 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 70 | 828779 | 20.0 | 21.9 | |
| 106 sec-Butylbenzene | 105 | 10.705 | 10.705 | 0.000 | 93 | 1071899 | 20.0 | 22.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.824 | 0.000 | 81 | 475108 | 20.0 | 20.1 | |
| 108 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 899320 | 20.0 | 21.6 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 483642 | 20.0 | 19.8 | |
| 112 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 94 | 734742 | 20.0 | 21.4 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 428835 | 20.0 | 20.0 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.128 | 0.000 | 90 | 71189 | 20.0 | 17.3 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 90 | 211532 | 20.0 | 14.8 | |
| 117 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 86 | 105174 | 20.0 | 14.3 | |
| 118 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 627422 | 20.0 | 15.9 | |
| 119 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 95 | 189008 | 20.0 | 14.7 | |
| S 125 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 74.9 | |
| S 124 Total BTEX | 1 | | | | 0 | | 100.0 | 105.4 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 42.0 | |

## Reagents:

| | | | |
|---|---|---|---|
| vmrgas_00292 | Amount Added: 16.00 | Units: uL | |
| vmarolistdw_00295 | Amount Added: 16.00 | Units: uL | |
| vmrprimw_00332 | Amount Added: 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: 2.00 | Units: uL | Run Reagent |

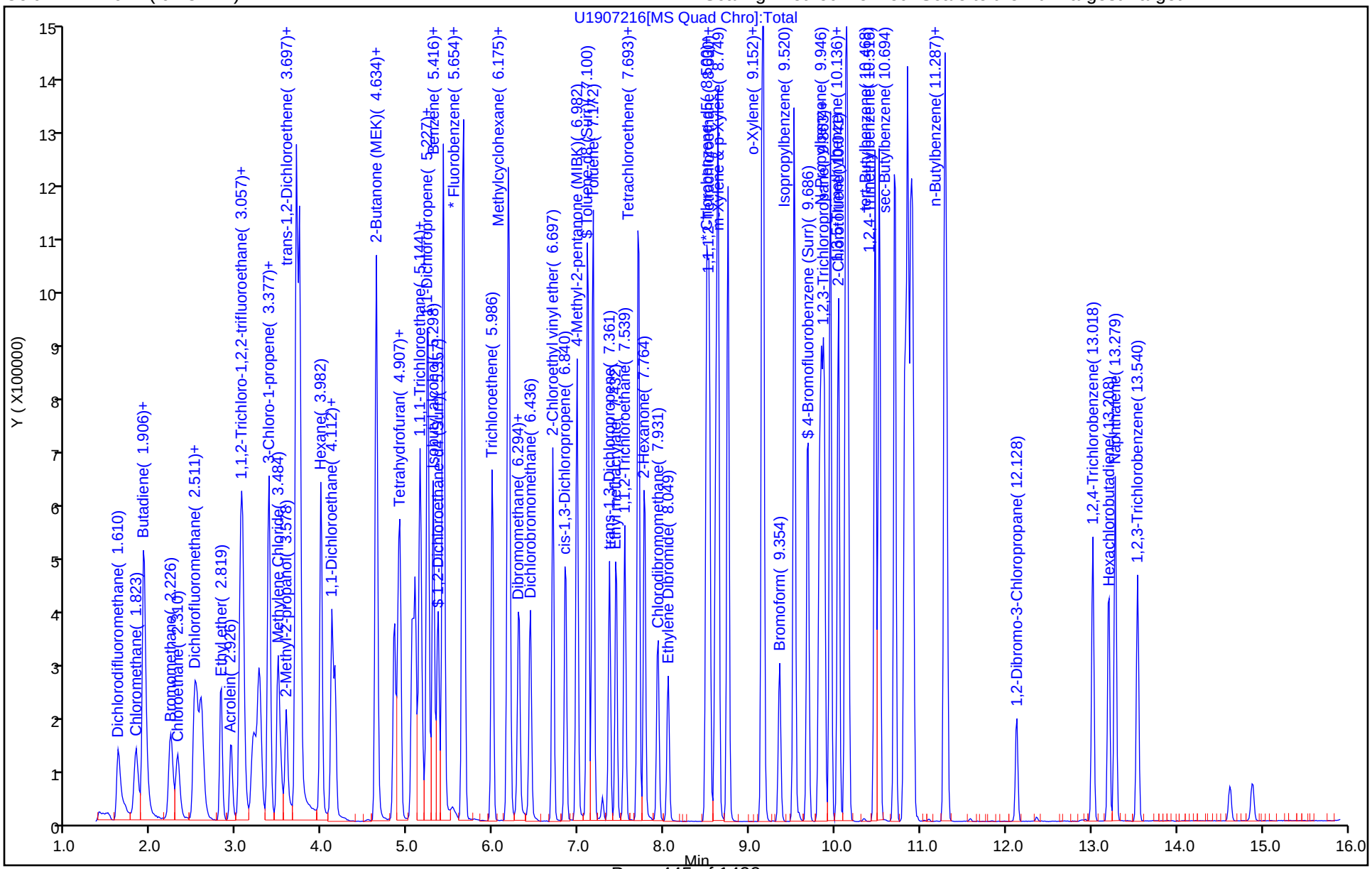
Report Date: 08-May-2019 16:44:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907216.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 16:19:13 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | CCVIS | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380508/4  Calibration Date: 05/09/2019 17:35

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907247.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.3850 | 0.3213 | 0.1000 | 0.0167 | 0.0200 | -16.6 | 20.0 |
| Chloromethane | Ave | 0.2883 | 0.3077 | 0.1000 | 0.0213 | 0.0200 | 6.7 | 20.0 |
| Butadiene | Ave | 0.2887 | 0.3300 | | 0.0229 | 0.0200 | 14.3 | 20.0 |
| Vinyl chloride | Ave | 0.2980 | 0.3245 | 0.1000 | 0.0218 | 0.0200 | 8.9 | 20.0 |
| Bromomethane | Ave | 0.2335 | 0.2363 | 0.0500 | 0.0202 | 0.0200 | 1.2 | 20.0 |
| Chloroethane | Ave | 0.1848 | 0.2023 | 0.0500 | 0.0219 | 0.0200 | 9.5 | 20.0 |
| Dichlorofluoromethane | Ave | 0.4581 | 0.4353 | | 0.0190 | 0.0200 | -5.0 | 20.0 |
| Trichlorofluoromethane | Ave | 0.4984 | 0.4264 | 0.1000 | 0.0171 | 0.0200 | -14.4 | 20.0 |
| Ethyl ether | Ave | 0.1800 | 0.1972 | | 0.0219 | 0.0200 | 9.6 | 20.0 |
| Acrolein | Ave | 0.0445 | 0.0483 | | 0.109 | 0.100 | 8.7 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.3589 | 0.3222 | 0.1000 | 0.0180 | 0.0200 | -10.2 | 20.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave | 0.2567 | 0.2369 | 0.0500 | 0.0185 | 0.0200 | -7.7 | 20.0 |
| Acetone | Ave | 0.0784 | 0.1090 | 0.0100 | 0.0556 | 0.0400 | 38.9 | 50.0 |
| Iodomethane | Ave | 0.4655 | 0.3891 | | 0.0167 | 0.0200 | -16.4 | 20.0 |
| Carbon disulfide | Ave | 0.7515 | 0.7085 | 0.1000 | 0.0189 | 0.0200 | -5.7 | 20.0 |
| 3-Chloro-1-propene | Ave | 0.3541 | 0.3291 | | 0.0186 | 0.0200 | -7.1 | 20.0 |
| Methyl acetate | Ave | 0.2328 | 0.2489 | 0.1000 | 0.0428 | 0.0400 | 6.9 | 20.0 |
| Methylene Chloride | Ave | 0.2846 | 0.2807 | 0.1000 | 0.0197 | 0.0200 | -1.4 | 50.0 |
| 2-Methyl-2-propanol | Ave | 0.0271 | 0.0395 | | 0.292 | 0.200 | 45.8 | 50.0 |
| Acrylonitrile | Ave | 0.1006 | 0.1369 | | 0.272 | 0.200 | 36.2* | 20.0 |
| Methyl tert-butyl ether | Ave | 0.6938 | 0.6391 | 0.1000 | 0.0184 | 0.0200 | -7.9 | 20.0 |
| trans-1,2-Dichloroethene | Ave | 0.3387 | 0.3260 | 0.1000 | 0.0193 | 0.0200 | -3.7 | 20.0 |
| Hexane | Ave | 0.3524 | 0.3542 | | 0.0201 | 0.0200 | 0.5 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.4048 | 0.4123 | 0.2000 | 0.0204 | 0.0200 | 1.9 | 20.0 |
| Vinyl acetate | Ave | 0.4639 | 0.4709 | | 0.0203 | 0.0200 | 1.5 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.2438 | 0.2389 | | 0.0196 | 0.0200 | -2.0 | 20.0 |
| 2-Butanone (MEK) | Ave | 0.0472 | 0.0531 | 0.0100 | 0.0450 | 0.0400 | 12.4 | 20.0 |
| cis-1,2-Dichloroethene | Ave | 0.2891 | 0.2945 | 0.1000 | 0.0204 | 0.0200 | 1.9 | 20.0 |
| Chlorobromomethane | Ave | 0.1945 | 0.1931 | | 0.0199 | 0.0200 | -0.7 | 20.0 |
| Tetrahydrofuran | Lin1 | | 0.1168 | | 0.0454 | 0.0400 | 13.4 | 20.0 |
| Chloroform | Ave | 0.4433 | 0.4302 | 0.2000 | 0.0194 | 0.0200 | -3.0 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.4174 | 0.3650 | 0.1000 | 0.0175 | 0.0200 | -12.6 | 20.0 |
| Cyclohexane | Ave | 0.3819 | 0.3946 | 0.1000 | 0.0207 | 0.0200 | 3.3 | 20.0 |
| 1,1-Dichloropropene | Ave | 0.3519 | 0.3492 | | 0.0198 | 0.0200 | -0.8 | 20.0 |
| Carbon tetrachloride | Ave | 0.4023 | 0.3402 | 0.1000 | 0.0169 | 0.0200 | -15.4 | 20.0 |
| Isobutyl alcohol | Ave | 0.0110 | 0.0140 | | 0.638 | 0.500 | 27.6* | 20.0 |
| 1,2-Dichloroethane | Ave | 0.3600 | 0.3032 | 0.1000 | 0.0168 | 0.0200 | -15.8 | 20.0 |
| Benzene | Ave | 0.9518 | 1.025 | 0.5000 | 0.0215 | 0.0200 | 7.7 | 20.0 |
| n-Heptane | Lin1 | | 0.2130 | | 0.0194 | 0.0200 | -2.8 | 20.0 |
| Trichloroethene | Ave | 0.3160 | 0.2905 | 0.1500 | 0.0184 | 0.0200 | -8.1 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380508/4  Calibration Date: 05/09/2019 17:35

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907247.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.4590 | 0.4730 | 0.1000 | 0.0206 | 0.0200 | 3.1 | 20.0 |
| 1,2-Dichloropropane | Ave | 0.2208 | 0.2376 | 0.1000 | 0.0215 | 0.0200 | 7.6 | 20.0 |
| Dibromomethane | Ave | 0.2271 | 0.1934 | | 0.0170 | 0.0200 | -14.8 | 20.0 |
| 1,4-Dioxane | Ave | 0.0024 | 0.0040 | | 0.670 | 0.400 | 67.6* | 50.0 |
| Dichlorobromomethane | Ave | 0.3479 | 0.3189 | 0.1500 | 0.0183 | 0.0200 | -8.4 | 20.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1770 | 0.1874 | | 0.0424 | 0.0400 | 5.9 | 20.0 |
| cis-1,3-Dichloropropene | Ave | 0.3865 | 0.3721 | 0.1500 | 0.0193 | 0.0200 | -3.7 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.3203 | 0.3302 | 0.0500 | 0.0412 | 0.0400 | 3.1 | 20.0 |
| Toluene | Ave | 1.352 | 1.384 | 0.4000 | 0.0205 | 0.0200 | 2.4 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.4818 | 0.4311 | 0.1000 | 0.0179 | 0.0200 | -10.5 | 20.0 |
| Ethyl methacrylate | Ave | 0.4344 | 0.4447 | | 0.0205 | 0.0200 | 2.4 | 20.0 |
| 1,1,2-Trichloroethane | Ave | 0.2842 | 0.2908 | 0.1000 | 0.0205 | 0.0200 | 2.4 | 20.0 |
| Tetrachloroethene | Ave | 0.4313 | 0.3820 | 0.1500 | 0.0177 | 0.0200 | -11.4 | 20.0 |
| 1,3-Dichloropropane | Ave | 0.4802 | 0.4918 | | 0.0205 | 0.0200 | 2.4 | 20.0 |
| 2-Hexanone | Ave | 0.3149 | 0.3248 | 0.0500 | 0.0413 | 0.0400 | 3.2 | 20.0 |
| Chlorodibromomethane | Ave | 0.3583 | 0.3272 | | 0.0183 | 0.0200 | -8.7 | 20.0 |
| Ethylene Dibromide | Ave | 0.3346 | 0.3136 | | 0.0187 | 0.0200 | -6.3 | 20.0 |
| Chlorobenzene | Ave | 0.9253 | 0.9001 | 0.3000 | 0.0195 | 0.0200 | -2.7 | 20.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3336 | 0.3139 | | 0.0188 | 0.0200 | -5.9 | 20.0 |
| Ethylbenzene | Ave | 0.4836 | 0.4892 | | 0.0202 | 0.0200 | 1.2 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.5890 | 0.6095 | | 0.0207 | 0.0200 | 3.5 | 20.0 |
| o-Xylene | Ave | 0.5597 | 0.5907 | | 0.0211 | 0.0200 | 5.5 | 20.0 |
| Styrene | Ave | 0.9588 | 0.9879 | 0.3000 | 0.0206 | 0.0200 | 3.0 | 20.0 |
| Bromoform | Ave | 0.2933 | 0.2501 | 0.1000 | 0.0171 | 0.0200 | -14.7 | 20.0 |
| Isopropylbenzene | Ave | 1.503 | 1.558 | 0.1000 | 0.0207 | 0.0200 | 3.7 | 20.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.7706 | 0.9153 | 0.3000 | 0.0238 | 0.0200 | 18.8 | 20.0 |
| Bromobenzene | Ave | 0.7690 | 0.7544 | | 0.0196 | 0.0200 | -1.9 | 20.0 |
| 1,2,3-Trichloropropane | Ave | 0.2921 | 0.3048 | | 0.0209 | 0.0200 | 4.4 | 20.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.2737 | 0.2192 | | 0.0160 | 0.0200 | -19.9 | 20.0 |
| N-Propylbenzene | Ave | 0.7729 | 0.8351 | | 0.0216 | 0.0200 | 8.0 | 20.0 |
| 2-Chlorotoluene | Ave | 0.6541 | 0.7025 | | 0.0215 | 0.0200 | 7.4 | 20.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.225 | 2.402 | | 0.0216 | 0.0200 | 7.9 | 20.0 |
| 4-Chlorotoluene | Ave | 0.7072 | 0.7392 | | 0.0209 | 0.0200 | 4.5 | 20.0 |
| tert-Butylbenzene | Ave | 2.113 | 2.211 | | 0.0209 | 0.0200 | 4.7 | 20.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.256 | 2.455 | | 0.0218 | 0.0200 | 8.8 | 20.0 |
| sec-Butylbenzene | Ave | 2.845 | 3.142 | | 0.0221 | 0.0200 | 10.5 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.412 | 1.424 | 0.6000 | 0.0202 | 0.0200 | 0.8 | 20.0 |
| 4-Isopropyltoluene | Ave | 2.492 | 2.690 | | 0.0216 | 0.0200 | 8.0 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.459 | 1.421 | 0.5000 | 0.0195 | 0.0200 | -2.6 | 20.0 |
| n-Butylbenzene | Ave | 2.050 | 2.239 | | 0.0219 | 0.0200 | 9.3 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.282 | 1.306 | 0.4000 | 0.0204 | 0.0200 | 1.8 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVIS 240-380508/4  Calibration Date: 05/09/2019 17:35

Instrument ID: A3UX19  Calib Start Date: 08/27/2018 17:09

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 08/27/2018 19:23

Lab File ID: U1907247.d  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.2450 | 0.2266 | 0.0500 | 0.0185 | 0.0200 | -7.5 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.8550 | 0.6844 | 0.2000 | 0.0160 | 0.0200 | -20.0 | 50.0 |
| Hexachlorobutadiene | Ave | 0.4392 | 0.3201 | | 0.0146 | 0.0200 | -27.1* | 20.0 |
| Naphthalene | Ave | 2.363 | 2.017 | | 0.0171 | 0.0200 | -14.6 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.7677 | 0.6042 | | 0.0157 | 0.0200 | -21.3* | 20.0 |
| Dibromofluoromethane (Surr) | Ave | 0.2692 | 0.2555 | | 0.0190 | 0.0200 | -5.1 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.3092 | 0.2728 | | 0.0176 | 0.0200 | -11.8 | 20.0 |
| Toluene-d8 (Surr) | Ave | 1.199 | 1.208 | | 0.0201 | 0.0200 | 0.7 | 20.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4513 | 0.4494 | | 0.0199 | 0.0200 | -0.4 | 20.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907247.d
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 09-May-2019 17:35:18 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086952-004
Operator ID: 001904 Instrument ID: A3UX19
Sublist: chrom-8260_19*sub1

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 17:56:50 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 17:56:50

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 882170 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 84 | 695162 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 78 | 360633 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 57 | 225433 | 20.0 | 19.0 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 96 | 240666 | 20.0 | 17.6 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 88 | 839714 | 20.0 | 20.1 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 87 | 312413 | 20.0 | 19.9 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 86 | 283404 | 20.0 | 16.7 | |
| 10 Chloromethane | 50 | 1.823 | 1.823 | 0.000 | 77 | 271465 | 20.0 | 21.3 | |
| 11 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 82 | 291110 | 20.0 | 22.9 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 82 | 286258 | 20.0 | 21.8 | |
| 13 Bromomethane | 94 | 2.226 | 2.226 | 0.000 | 90 | 208459 | 20.0 | 20.2 | |
| 15 Chloroethane | 64 | 2.309 | 2.309 | 0.000 | 98 | 178493 | 20.0 | 21.9 | |
| 16 Dichlorofluoromethane | 67 | 2.499 | 2.499 | 0.000 | 83 | 384040 | 20.0 | 19.0 | |
| 17 Trichlorofluoromethane | 101 | 2.570 | 2.570 | 0.000 | 99 | 376110 | 20.0 | 17.1 | |
| 18 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 89 | 173974 | 20.0 | 21.9 | |
| 19 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 90 | 213131 | 100.0 | 108.7 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 88 | 284247 | 20.0 | 18.0 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 75 | 208962 | 20.0 | 18.5 | |
| 22 Acetone | 43 | 3.068 | 3.068 | 0.000 | 88 | 192217 | 40.0 | 55.6 | |
| 24 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 97 | 343278 | 20.0 | 16.7 | |
| 25 Carbon disulfide | 76 | 3.270 | 3.270 | 0.000 | 88 | 625013 | 20.0 | 18.9 | |
| 27 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 80 | 290316 | 20.0 | 18.6 | |
| 28 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 439080 | 40.0 | 42.8 | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 53 | 247655 | 20.0 | 19.7 | |
| 30 2-Methyl-2-propanol | 59 | 3.578 | 3.578 | 0.000 | 66 | 348387 | 200.0 | 291.7 | |
| 31 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 1207830 | 200.0 | 272.3 | |
| 33 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 88 | 563748 | 20.0 | 18.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 72 | 287614 | 20.0 | 19.3 | |
| 34 Hexane | 57 | 3.982 | 3.982 | 0.000 | 88 | 312452 | 20.0 | 20.1 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 363742 | 20.0 | 20.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 97 | 415447 | 20.0 | 20.3 | |
| 42 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 58 | 210776 | 20.0 | 19.6 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 66 | 259778 | 20.0 | 20.4 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 94 | 93638 | 40.0 | 45.0 | |
| 46 Chlorobromomethane | 49 | 4.835 | 4.835 | 0.000 | 77 | 170367 | 20.0 | 19.9 | |
| 47 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 206104 | 40.0 | 45.4 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 69 | 379486 | 20.0 | 19.4 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.084 | 0.000 | 89 | 321965 | 20.0 | 17.5 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 83 | 348097 | 20.0 | 20.7 | |
| 51 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 84 | 308047 | 20.0 | 19.8 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 68 | 300135 | 20.0 | 16.9 | |
| 53 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 88 | 309165 | 500.0 | 638.2 | |
| 54 Benzene | 78 | 5.416 | 5.416 | 0.000 | 93 | 903951 | 20.0 | 21.5 | |
| 55 1,2-Dichloroethane | 62 | 5.416 | 5.416 | 0.000 | 44 | 267511 | 20.0 | 16.8 | |
| 57 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 81 | 187906 | 20.0 | 19.4 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 95 | 256267 | 20.0 | 18.4 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.175 | 0.000 | 88 | 417272 | 20.0 | 20.6 | |
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 85 | 209582 | 20.0 | 21.5 | |
| 64 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 90 | 170564 | 20.0 | 17.0 | |
| 65 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 39 | 70651 | 400.0 | 670.3 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 99 | 281304 | 20.0 | 18.3 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 89 | 330705 | 40.0 | 42.4 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.851 | 6.851 | 0.000 | 93 | 328238 | 20.0 | 19.3 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 92 | 582594 | 40.0 | 41.2 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 96 | 962271 | 20.0 | 20.5 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 84 | 299677 | 20.0 | 17.9 | |
| 73 Ethyl methacrylate | 69 | 7.432 | 7.432 | 0.000 | 84 | 309117 | 20.0 | 20.5 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 202178 | 20.0 | 20.5 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 265523 | 20.0 | 17.7 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 86 | 341908 | 20.0 | 20.5 | |
| 77 2-Hexanone | 43 | 7.764 | 7.764 | 0.000 | 78 | 451600 | 40.0 | 41.3 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.930 | 0.000 | 89 | 227443 | 20.0 | 18.3 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 218017 | 20.0 | 18.7 | |
| 83 Chlorobenzene | 112 | 8.523 | 8.523 | 0.000 | 92 | 625680 | 20.0 | 19.5 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.606 | 0.000 | 85 | 218231 | 20.0 | 18.8 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 340094 | 20.0 | 20.2 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 423699 | 20.0 | 20.7 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 410617 | 20.0 | 21.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 686770 | 20.0 | 20.6 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 97 | 173875 | 20.0 | 17.1 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1083206 | 20.0 | 20.7 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 70 | 330099 | 20.0 | 23.8 | |
| 95 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 89 | 272045 | 20.0 | 19.6 | |
| 96 1,2,3-Trichloropropane | 110 | 9.863 | 9.863 | 0.000 | 69 | 109928 | 20.0 | 20.9 | |
| 97 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 59 | 79057 | 20.0 | 16.0 | |
| 98 N-Propylbenzene | 120 | 9.946 | 9.946 | 0.000 | 94 | 301157 | 20.0 | 21.6 | |
| 100 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 96 | 253354 | 20.0 | 21.5 | |
| 101 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 93 | 866243 | 20.0 | 21.6 | |
| 102 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 266580 | 20.0 | 20.9 | |
| 103 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 71 | 797418 | 20.0 | 20.9 | |
| 105 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 71 | 885248 | 20.0 | 21.8 | |
| 106 sec-Butylbenzene | 105 | 10.705 | 10.705 | 0.000 | 93 | 1133204 | 20.0 | 22.1 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.824 | 0.000 | 82 | 513528 | 20.0 | 20.2 | |
| 108 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 90 | 970082 | 20.0 | 21.6 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 512372 | 20.0 | 19.5 | |
| 112 n-Butylbenzene | 91 | 11.286 | 11.286 | 0.000 | 94 | 807633 | 20.0 | 21.9 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 470859 | 20.0 | 20.4 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.128 | 0.000 | 87 | 81718 | 20.0 | 18.5 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 92 | 246799 | 20.0 | 16.0 | |
| 117 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 87 | 115439 | 20.0 | 14.6 | |
| 118 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 727424 | 20.0 | 17.1 | |
| 119 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 95 | 217902 | 20.0 | 15.7 | |
| S 124 Total BTEX | 1 | | | | 0 | | 100.0 | 104.1 | |
| S 125 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 73.1 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 41.8 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmrgas_00292 | Amount Added: | 16.00 | Units: uL | |
| vmarolistdw_00296 | Amount Added: | 16.00 | Units: uL | |
| vmrprimw_00333 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

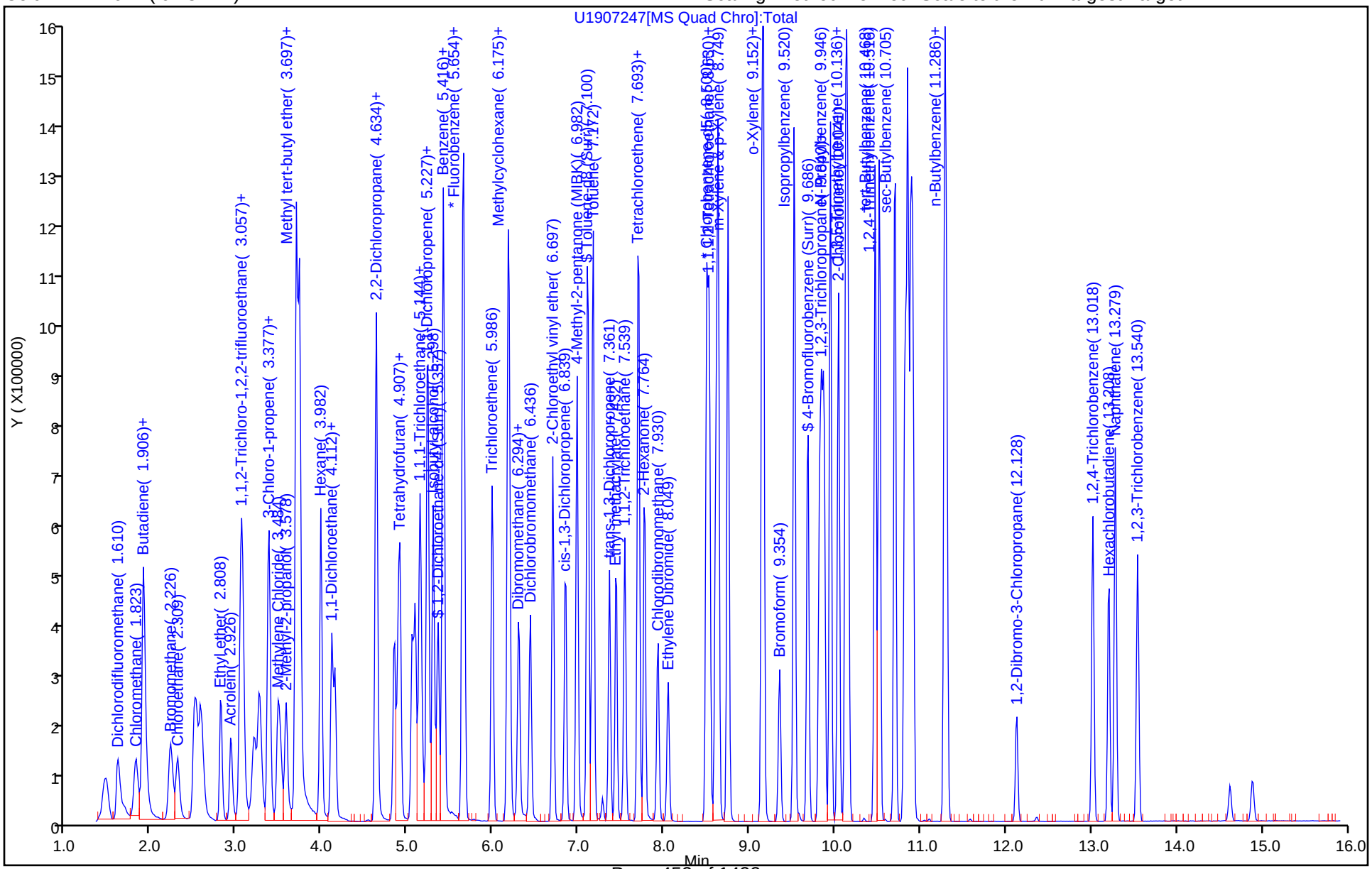
Report Date: 09-May-2019 17:56:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907247.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 17:35:18 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | CCVIS | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 24-Jul-2018 18:26:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d | | | | |
| Lims ID: | BFB | | | | |
| Client ID: | | | | | |
| Sample Type: | BFB | | | | |
| Inject. Date: | 24-Jul-2018 17:22:19 | ALS Bottle#: | 0 | Worklist Smp#: | 1 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0078277-001 | | | | |
| Operator ID: | 001904 | Instrument ID: | A3UX19 | | |
| Method: | \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\8260_19.m | | | | |
| Limit Group: | MSV 8260C ICAL | | | | |
| Last Update: | 24-Jul-2018 18:26:01 | Calib Date: | 01-Jan-0001 00:00:00 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Internal Standard | Quant By: | Initial Calibration | | |
| Column 1 : | DB-624 ( 0.18 mm) | | Det: MS SCAN | | |
| Process Host: | XAWRK002 | | | | |
| First Level Reviewer: laveyt | | Date: | 24-Jul-2018 18:26:01 | | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 4.698 | 4.698 | 0.000 | 0 | 1090680 | NR | NR | |

## QC Flag Legend

Processing Flags

NR - Missing Quant Standard

## Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d

Injection Date: 24-Jul-2018 17:22:19 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

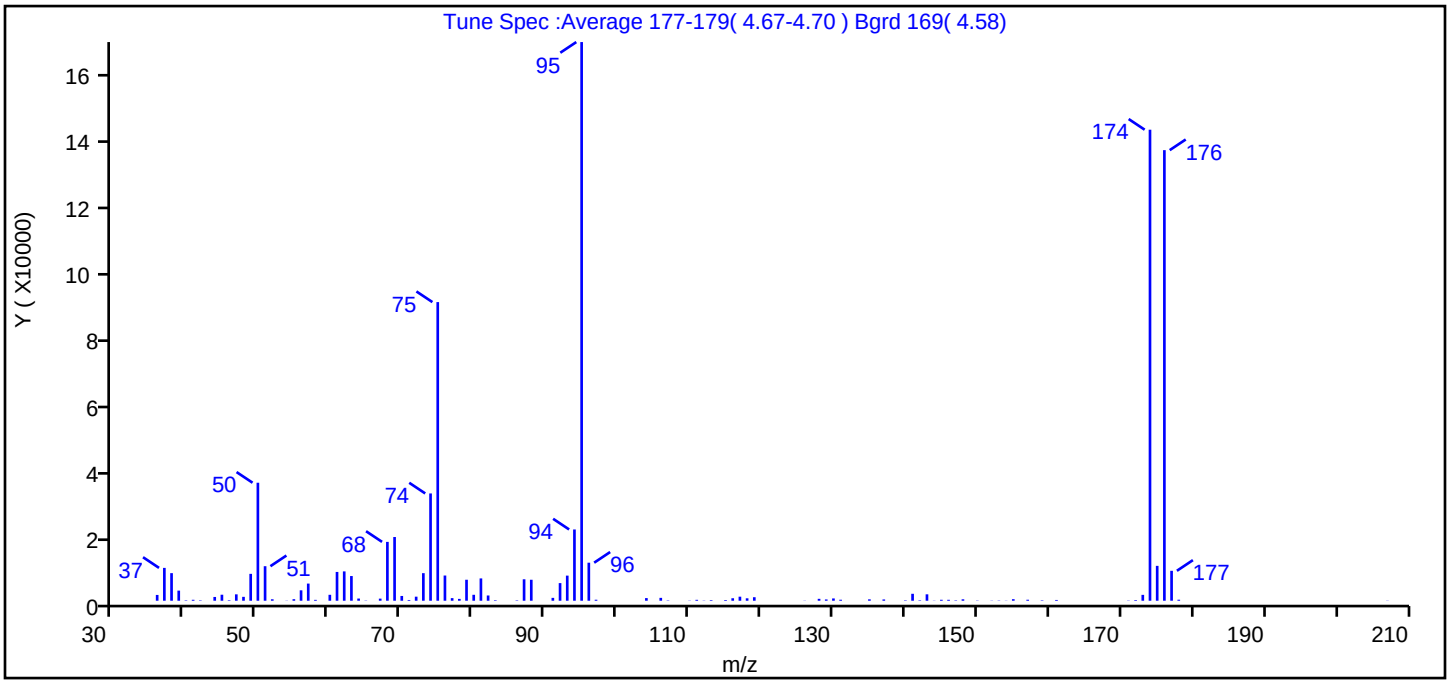
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 21.1 |
| 75 | 30 to 60% of m/z 95 | 53.5 |
| 96 | 5 to 9% of m/z 95 | 6.8 |
| 173 | Less than 2% of m/z 174 | 1.1 (1.2) |
| 174 | 50 to 120% of m/z 95 | 84.3 |
| 175 | 5 to 9% of m/z 174 | 6.2 (7.4) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 80.7 (95.7) |
| 177 | 5 to 9% of m/z 176 | 5.4 (6.6) |

Report Date: 24-Jul-2018 18:26:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d\8260_19.rslt\spectra.d

Injection Date: 24-Jul-2018 17:22:19

Spectrum: Tune Spec :Average 177-179( 4.67-4.70 ) Bgrd 169( 4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 99

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1706 | 64.00 | 645 | 94.00 | 20976 | 142.00 | 135 |
| 37.00 | 9667 | 65.00 | 75 | 95.00 | 164416 | 143.00 | 1887 |
| 38.00 | 8121 | 67.00 | 620 | 96.00 | 11195 | 144.00 | 54 |
| 39.00 | 2976 | 68.00 | 17320 | 97.00 | 297 | 145.00 | 282 |
| 40.00 | 128 | 69.00 | 18752 | 104.00 | 777 | 146.00 | 275 |
| 41.00 | 280 | 70.00 | 1405 | 106.00 | 846 | 147.00 | 123 |
| 42.00 | 120 | 71.00 | 220 | 107.00 | 102 | 148.00 | 420 |
| 44.00 | 1112 | 72.00 | 1196 | 110.00 | 66 | 150.00 | 76 |
| 45.00 | 1770 | 73.00 | 8112 | 111.00 | 269 | 152.00 | 57 |
| 46.00 | 157 | 74.00 | 31576 | 112.00 | 68 | 153.00 | 83 |
| 47.00 | 1883 | 75.00 | 87888 | 113.00 | 186 | 154.00 | 50 |
| 48.00 | 1146 | 76.00 | 7419 | 115.00 | 214 | 155.00 | 454 |
| 49.00 | 7909 | 77.00 | 768 | 116.00 | 734 | 157.00 | 295 |
| 50.00 | 34728 | 78.00 | 542 | 117.00 | 1191 | 159.00 | 132 |
| 51.00 | 10164 | 79.00 | 6178 | 118.00 | 715 | 161.00 | 228 |
| 52.00 | 428 | 80.00 | 1749 | 119.00 | 1035 | 171.00 | 76 |
| 54.00 | 52 | 81.00 | 6569 | 126.00 | 50 | 172.00 | 196 |
| 55.00 | 455 | 82.00 | 1544 | 128.00 | 562 | 173.00 | 1730 |
| 56.00 | 3065 | 83.00 | 158 | 129.00 | 380 | 174.00 | 138624 |
| 57.00 | 5049 | 86.00 | 123 | 130.00 | 675 | 175.00 | 10263 |
| 58.00 | 260 | 87.00 | 6315 | 131.00 | 295 | 176.00 | 132608 |
| 60.00 | 1747 | 88.00 | 6174 | 135.00 | 411 | 177.00 | 8811 |
| 61.00 | 8473 | 91.00 | 844 | 137.00 | 377 | 178.00 | 300 |
| 62.00 | 8634 | 92.00 | 5187 | 140.00 | 129 | 207.00 | 54 |
| 63.00 | 7267 | 93.00 | 7390 | 141.00 | 2044 | | |

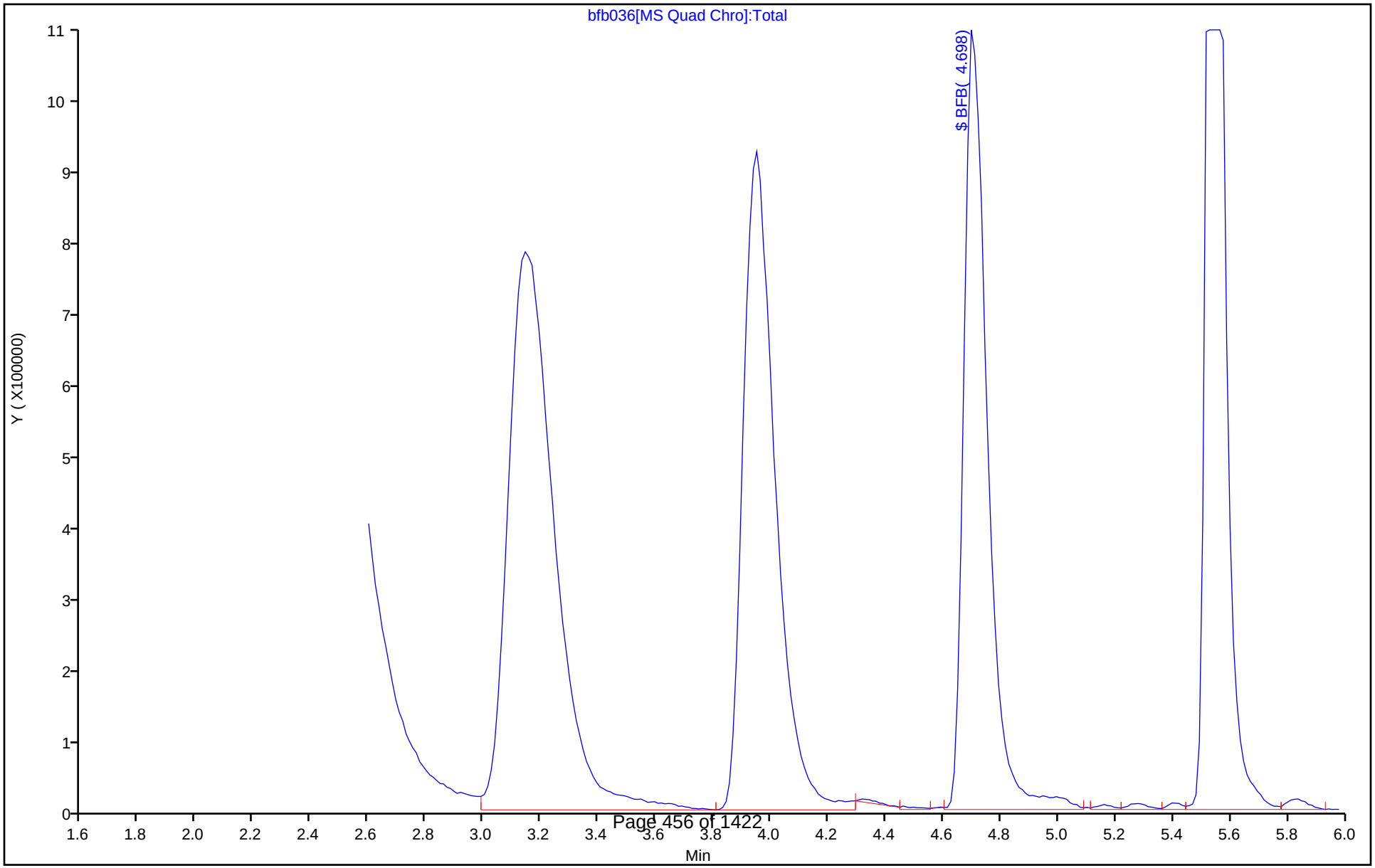
Report Date: 24-Jul-2018 18:26:02 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180724-78277.b\bfb036.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 24-Jul-2018 17:22:19 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d | | | | |
| Lims ID: | BFB | | | | |
| Client ID: | | | | | |
| Sample Type: | BFB | | | | |
| Inject. Date: | 25-Jul-2018 11:28:13 | ALS Bottle#: | 0 | Worklist Smp#: | 1 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0078311-001 | | | | |
| Operator ID: | 001904 | Instrument ID: | A3UX19 | | |
| Method: | \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\8260_19.m | | | | |
| Limit Group: | MSV 8260C ICAL | | | | |
| Last Update: | 25-Jul-2018 16:32:06 | Calib Date: | 25-Jul-2018 15:15:13 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Internal Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\U1900807.d | | | | |
| Column 1 : | DB-624 ( 0.18 mm) | | Det: MS SCAN | | |
| Process Host: | XAWRK026 | | | | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 4.686 | 4.686 | 0.000 | 0 | 1106546 | NR | NR | |

## QC Flag Legend

Processing Flags

NR - Missing Quant Standard

## Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

Report Date: 25-Jul-2018 16:32:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d

Injection Date: 25-Jul-2018 11:28:13 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

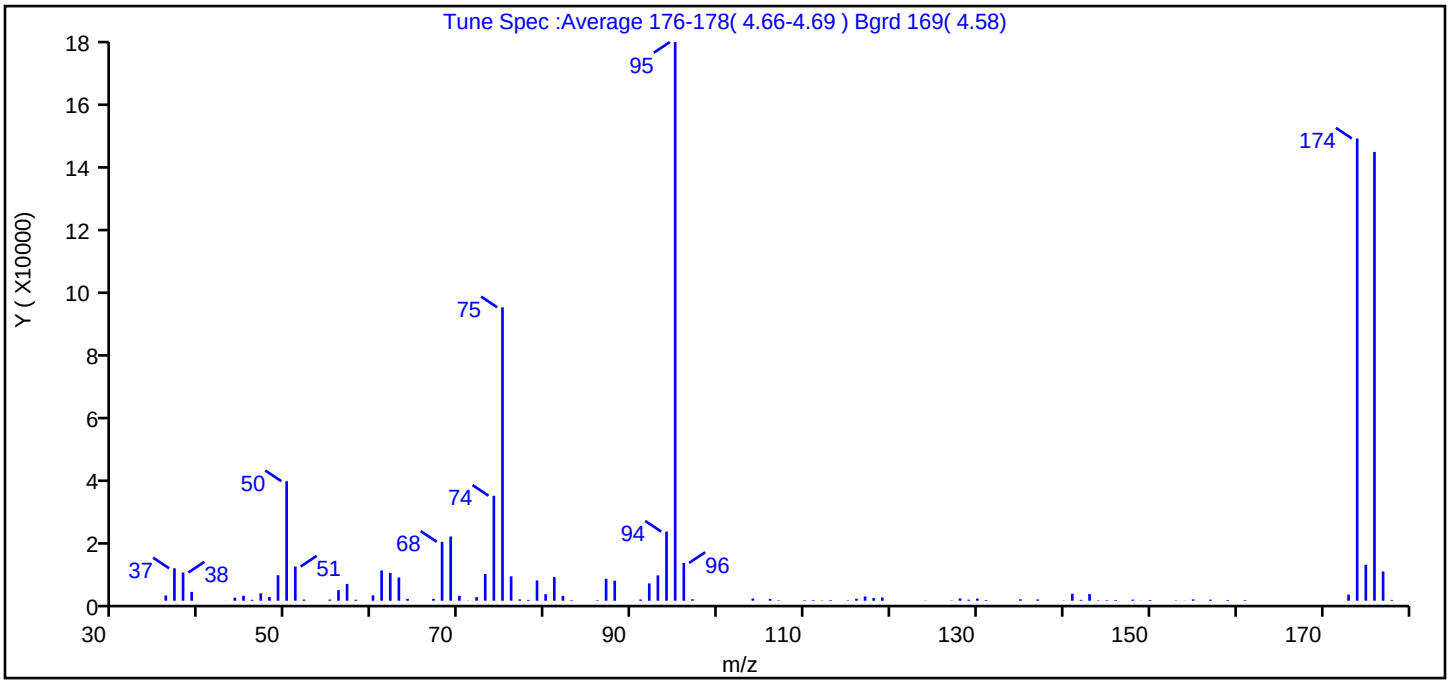
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 21.4 |
| 75 | 30 to 60% of m/z 95 | 52.5 |
| 96 | 5 to 9% of m/z 95 | 6.8 |
| 173 | Less than 2% of m/z 174 | 1.1 (1.3) |
| 174 | 50 to 120% of m/z 95 | 82.7 |
| 175 | 5 to 9% of m/z 174 | 6.4 (7.8) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 80.3 (97.1) |
| 177 | 5 to 9% of m/z 176 | 5.2 (6.5) |

Report Date: 25-Jul-2018 16:32:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d\8260_19.rslt\spectra.d

Injection Date: 25-Jul-2018 11:28:13

Spectrum: Tune Spec :Average 176-178( 4.66-4.69 ) Bgrd 169( 4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 92

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1628 | 67.00 | 581 | 94.00 | 21384 | 137.00 | 409 |
| 37.00 | 10027 | 68.00 | 18224 | 95.00 | 172800 | 140.00 | 80 |
| 38.00 | 8737 | 69.00 | 19856 | 96.00 | 11689 | 141.00 | 2163 |
| 39.00 | 2738 | 70.00 | 1521 | 97.00 | 441 | 142.00 | 263 |
| 43.00 | 20 | 71.00 | 65 | 104.00 | 670 | 143.00 | 2064 |
| 44.00 | 922 | 72.00 | 1099 | 106.00 | 557 | 144.00 | 132 |
| 45.00 | 1551 | 73.00 | 8295 | 107.00 | 144 | 145.00 | 176 |
| 46.00 | 292 | 74.00 | 32464 | 110.00 | 165 | 146.00 | 215 |
| 47.00 | 2293 | 75.00 | 90760 | 111.00 | 202 | 148.00 | 348 |
| 48.00 | 1156 | 76.00 | 7539 | 112.00 | 94 | 149.00 | 57 |
| 49.00 | 7894 | 77.00 | 416 | 113.00 | 196 | 150.00 | 232 |
| 50.00 | 36968 | 78.00 | 262 | 115.00 | 145 | 153.00 | 106 |
| 51.00 | 10570 | 79.00 | 6264 | 116.00 | 614 | 154.00 | 54 |
| 52.00 | 361 | 80.00 | 2025 | 117.00 | 1332 | 155.00 | 412 |
| 55.00 | 352 | 81.00 | 7320 | 118.00 | 827 | 157.00 | 327 |
| 56.00 | 3282 | 82.00 | 1495 | 119.00 | 1001 | 159.00 | 239 |
| 57.00 | 5195 | 83.00 | 170 | 124.00 | 70 | 161.00 | 201 |
| 58.00 | 322 | 86.00 | 159 | 127.00 | 96 | 173.00 | 1900 |
| 60.00 | 1660 | 87.00 | 6806 | 128.00 | 700 | 174.00 | 142976 |
| 61.00 | 9391 | 88.00 | 6205 | 129.00 | 329 | 175.00 | 11113 |
| 62.00 | 8617 | 91.00 | 385 | 130.00 | 667 | 176.00 | 138816 |
| 63.00 | 7197 | 92.00 | 5382 | 131.00 | 228 | 177.00 | 9062 |
| 64.00 | 572 | 93.00 | 7843 | 135.00 | 442 | 178.00 | 262 |

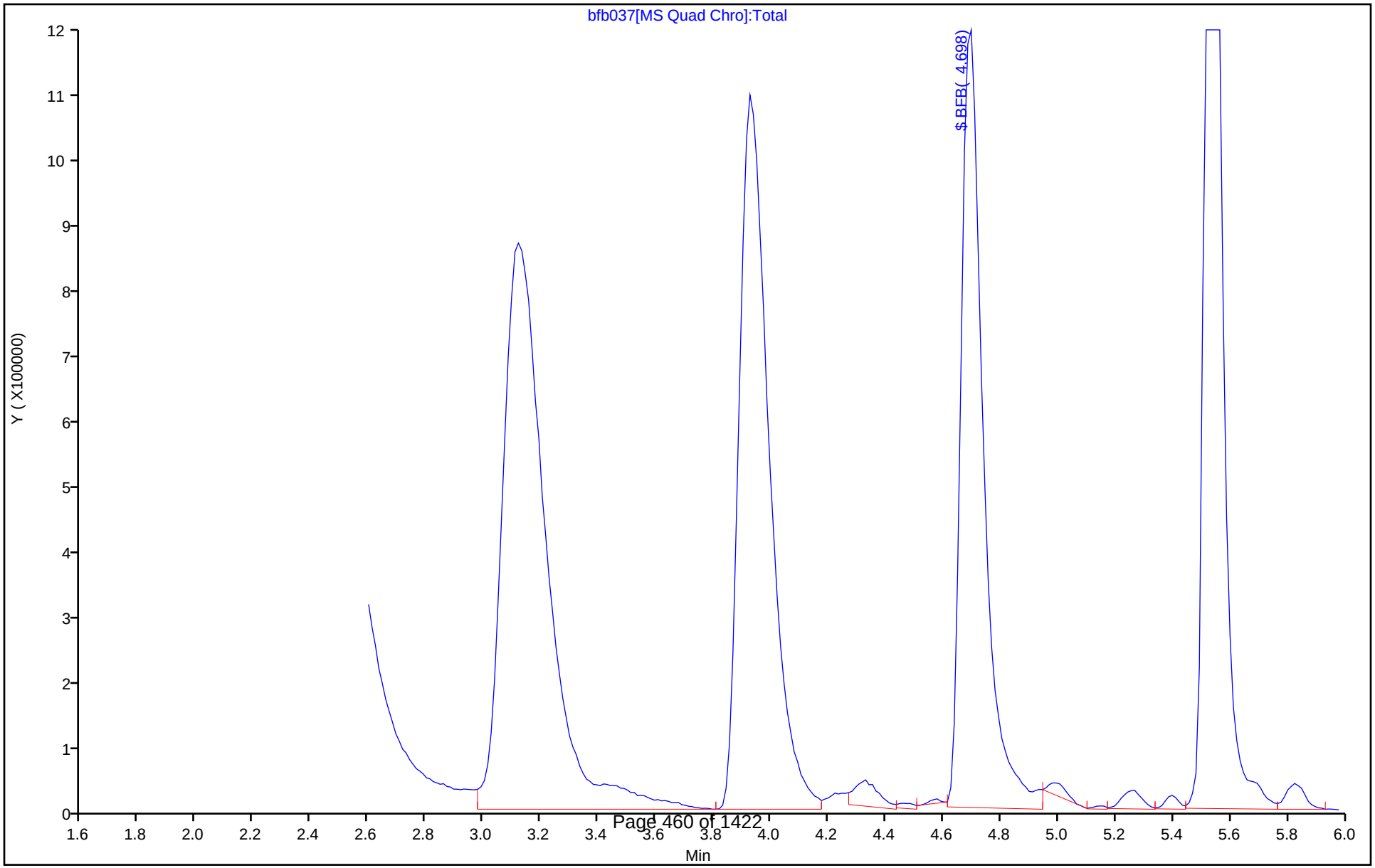
Report Date: 25-Jul-2018 16:32:07 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180725-78311.b\bfb037.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Jul-2018 11:28:13 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Canton

Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d | | | | |
| Lims ID: | BFB | | | | |
| Client ID: | | | | | |
| Sample Type: | BFB | | | | |
| Inject. Date: | 27-Aug-2018 16:23:35 | ALS Bottle#: | 0 | Worklist Smp#: | 1 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0079307-001 | | | | |
| Operator ID: | 001904 | Instrument ID: | A3UX19 | | |
| Method: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\8260_19.m | | | | |
| Limit Group: | MSV 8260C ICAL | | | | |
| Last Update: | 27-Aug-2018 20:00:43 | Calib Date: | 27-Aug-2018 19:23:28 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Internal Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\U1901329.d | | | | |
| Column 1 : | DB-624 ( 0.18 mm) | | Det: MS SCAN | | |
| Process Host: | XAWRK010 | | | | |
| First Level Reviewer: laveyt | | Date: | 27-Aug-2018 19:59:46 | | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 4.698 | 4.698 | 0.000 | 0 | 1569511 | NR | NR | |

## QC Flag Legend

Processing Flags

NR - Missing Quant Standard

## Reagents:

vmbfb_00020 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d

Injection Date: 27-Aug-2018 16:23:35 Instrument ID: A3UX19

Lims ID: BFB

Client ID:

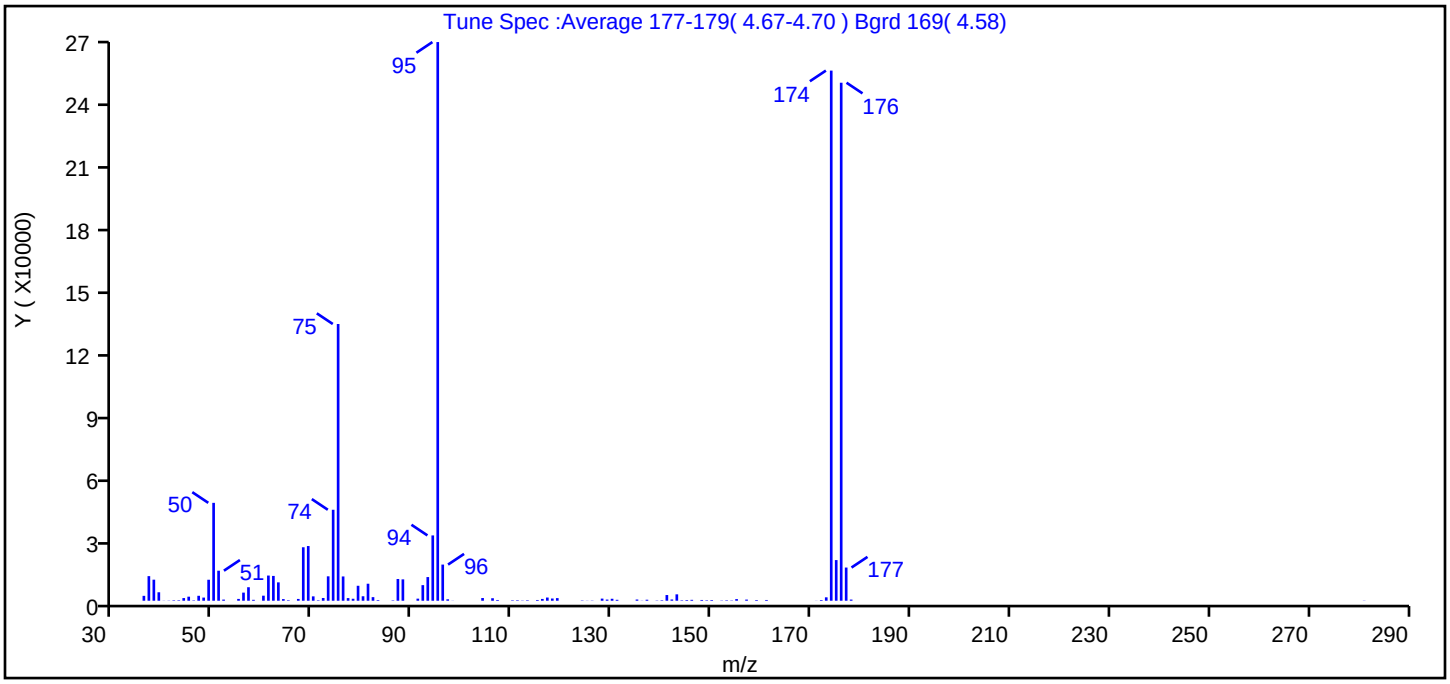
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 mL Dil. Factor: 1.0000

Method: 8260_19 Limit Group: MSV 8260C ICAL

Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 17.5 |
| 75 | 30 to 60% of m/z 95 | 49.5 |
| 96 | 5 to 9% of m/z 95 | 6.5 |
| 173 | Less than 2% of m/z 174 | 0.6 (0.6) |
| 174 | 50 to 120% of m/z 95 | 94.9 |
| 175 | 5 to 9% of m/z 174 | 7.3 (7.7) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 92.7 (97.7) |
| 177 | 5 to 9% of m/z 176 | 5.9 (6.4) |

Report Date: 27-Aug-2018 20:00:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d\8260_19.rslt\spectra.d

Injection Date: 27-Aug-2018 16:23:35

Spectrum: Tune Spec :Average 177-179( 4.67-4.70 ) Bgrd 169( 4.58)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 104

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 2349 | 65.00 | 256 | 96.00 | 17360 | 140.00 | 251 |
| 37.00 | 11809 | 67.00 | 862 | 97.00 | 688 | 141.00 | 2734 |
| 38.00 | 10107 | 68.00 | 25672 | 98.00 | 58 | 142.00 | 600 |
| 39.00 | 4064 | 69.00 | 26264 | 104.00 | 1300 | 143.00 | 3067 |
| 40.00 | 66 | 70.00 | 2099 | 106.00 | 1203 | 144.00 | 221 |
| 41.00 | 100 | 71.00 | 235 | 107.00 | 359 | 145.00 | 322 |
| 42.00 | 232 | 72.00 | 1321 | 110.00 | 224 | 146.00 | 434 |
| 43.00 | 243 | 73.00 | 11723 | 111.00 | 256 | 148.00 | 370 |
| 44.00 | 1279 | 74.00 | 43680 | 112.00 | 119 | 149.00 | 227 |
| 45.00 | 1945 | 75.00 | 132864 | 113.00 | 246 | 150.00 | 326 |
| 46.00 | 198 | 76.00 | 11659 | 115.00 | 360 | 152.00 | 127 |
| 47.00 | 2373 | 77.00 | 1269 | 116.00 | 866 | 153.00 | 224 |
| 48.00 | 1513 | 78.00 | 954 | 117.00 | 1530 | 154.00 | 142 |
| 49.00 | 10079 | 79.00 | 7185 | 118.00 | 1063 | 155.00 | 786 |
| 50.00 | 47000 | 80.00 | 2148 | 119.00 | 1259 | 157.00 | 556 |
| 51.00 | 14416 | 81.00 | 8168 | 124.00 | 158 | 159.00 | 325 |
| 52.00 | 549 | 82.00 | 1723 | 125.00 | 69 | 161.00 | 362 |
| 55.00 | 872 | 83.00 | 325 | 126.00 | 112 | 171.00 | 51 |
| 56.00 | 3900 | 86.00 | 204 | 128.00 | 1021 | 172.00 | 331 |
| 57.00 | 6486 | 87.00 | 10430 | 129.00 | 555 | 173.00 | 1639 |
| 58.00 | 440 | 88.00 | 10260 | 130.00 | 946 | 174.00 | 254528 |
| 60.00 | 2424 | 91.00 | 1000 | 131.00 | 447 | 175.00 | 19520 |
| 61.00 | 12091 | 92.00 | 7487 | 135.00 | 583 | 176.00 | 248704 |
| 62.00 | 11912 | 93.00 | 11359 | 136.00 | 73 | 177.00 | 15935 |
| 63.00 | 8822 | 94.00 | 31360 | 137.00 | 488 | 178.00 | 556 |
| 64.00 | 782 | 95.00 | 268224 | 139.00 | 133 | 281.00 | 85 |

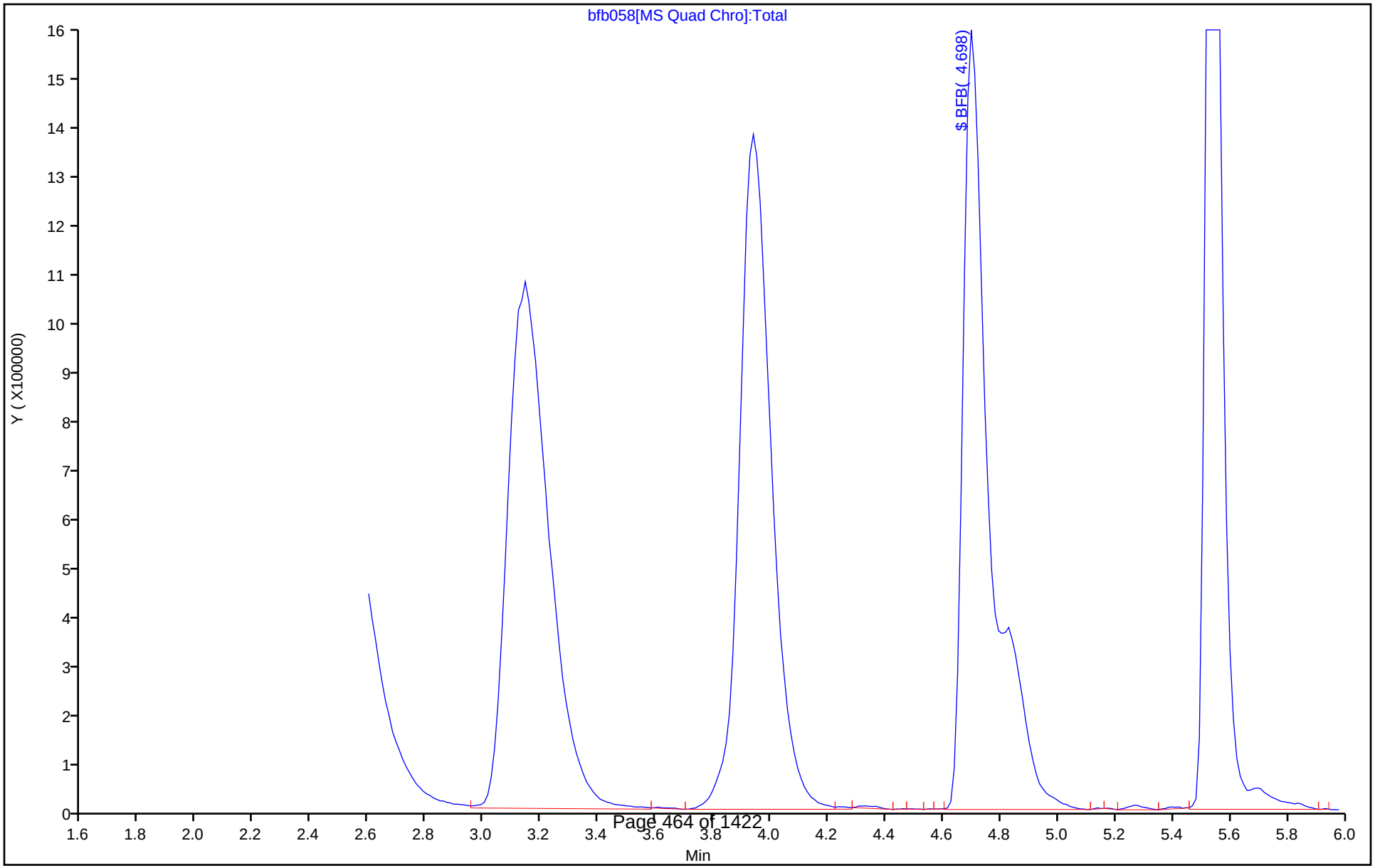
Report Date: 27-Aug-2018 20:00:44 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX19\20180827-79307.b\bfb058.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 27-Aug-2018 16:23:35 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\bfb253.d
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 08-May-2019 15:32:26 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-001
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 16:09:41 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 16:09:40

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 4.703 | 4.703 | 0.000 | 0 | 1419008 | NR | NR | |

## QC Flag Legend

Processing Flags
NR - Missing Quant Standard

## Reagents:

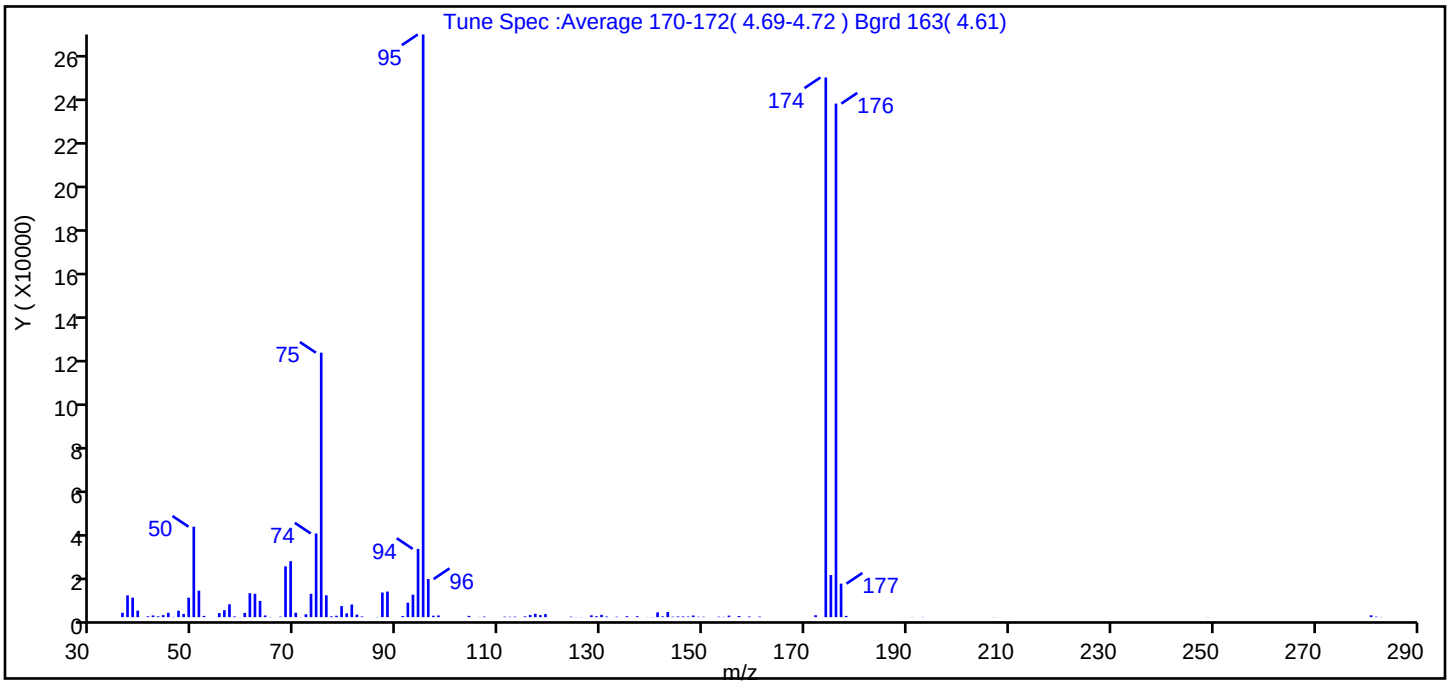
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\bfb253.d
Injection Date: 08-May-2019 15:32:26 Instrument ID: A3UX19
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 15.5 |
| 75 | 30 to 60% of m/z 95 | 45.4 |
| 96 | 5 to 9% of m/z 95 | 6.5 |
| 173 | Less than 2% of m/z 174 | 0.0 (0.0) |
| 174 | 50 to 120% of m/z 95 | 92.6 |
| 175 | 5 to 9% of m/z 174 | 7.2 (7.8) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 88.1 (95.2) |
| 177 | 5 to 9% of m/z 176 | 5.7 (6.5) |

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\bfb253.d\8260_19.rslt\spectra.d
Injection Date: 08-May-2019 15:32:26
Spectrum: Tune Spec :Average 170-172( 4.69-4.72 ) Bgrd 163( 4.61)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 107

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1988 | 67.00 | 213 | 98.00 | 761 | 144.00 | 214 |
| 37.00 | 9809 | 68.00 | 22912 | 104.00 | 574 | 145.00 | 330 |
| 38.00 | 8785 | 69.00 | 25232 | 106.00 | 82 | 146.00 | 306 |
| 39.00 | 2926 | 70.00 | 1988 | 107.00 | 251 | 147.00 | 259 |
| 41.00 | 390 | 71.00 | 65 | 111.00 | 219 | 148.00 | 739 |
| 42.00 | 780 | 72.00 | 1304 | 112.00 | 187 | 149.00 | 172 |
| 43.00 | 365 | 73.00 | 10517 | 113.00 | 234 | 150.00 | 191 |
| 44.00 | 917 | 74.00 | 37728 | 115.00 | 345 | 153.00 | 208 |
| 45.00 | 1966 | 75.00 | 119272 | 116.00 | 954 | 154.00 | 120 |
| 46.00 | 106 | 76.00 | 9861 | 117.00 | 1512 | 155.00 | 699 |
| 47.00 | 2897 | 77.00 | 368 | 118.00 | 902 | 157.00 | 514 |
| 48.00 | 1432 | 78.00 | 648 | 119.00 | 1373 | 159.00 | 310 |
| 49.00 | 8774 | 79.00 | 5000 | 124.00 | 222 | 161.00 | 254 |
| 50.00 | 40800 | 80.00 | 1712 | 125.00 | 66 | 172.00 | 875 |
| 51.00 | 11941 | 81.00 | 5707 | 126.00 | 76 | 174.00 | 243392 |
| 52.00 | 562 | 82.00 | 1143 | 128.00 | 829 | 175.00 | 19000 |
| 55.00 | 1831 | 83.00 | 322 | 129.00 | 436 | 176.00 | 231616 |
| 56.00 | 3154 | 86.00 | 89 | 130.00 | 1038 | 177.00 | 15105 |
| 57.00 | 5801 | 87.00 | 11107 | 131.00 | 294 | 178.00 | 561 |
| 58.00 | 337 | 88.00 | 11531 | 133.00 | 209 | 191.00 | 72 |
| 59.00 | 52 | 91.00 | 487 | 135.00 | 438 | 193.00 | 104 |
| 60.00 | 1893 | 92.00 | 6511 | 137.00 | 427 | 207.00 | 64 |
| 61.00 | 10778 | 93.00 | 10139 | 139.00 | 57 | 249.00 | 68 |
| 62.00 | 10535 | 94.00 | 30784 | 140.00 | 73 | 281.00 | 836 |
| 63.00 | 7311 | 95.00 | 262784 | 141.00 | 2162 | 282.00 | 232 |
| 64.00 | 774 | 96.00 | 17184 | 142.00 | 333 | 283.00 | 84 |
| 65.00 | 90 | 97.00 | 651 | 143.00 | 2329 | | |

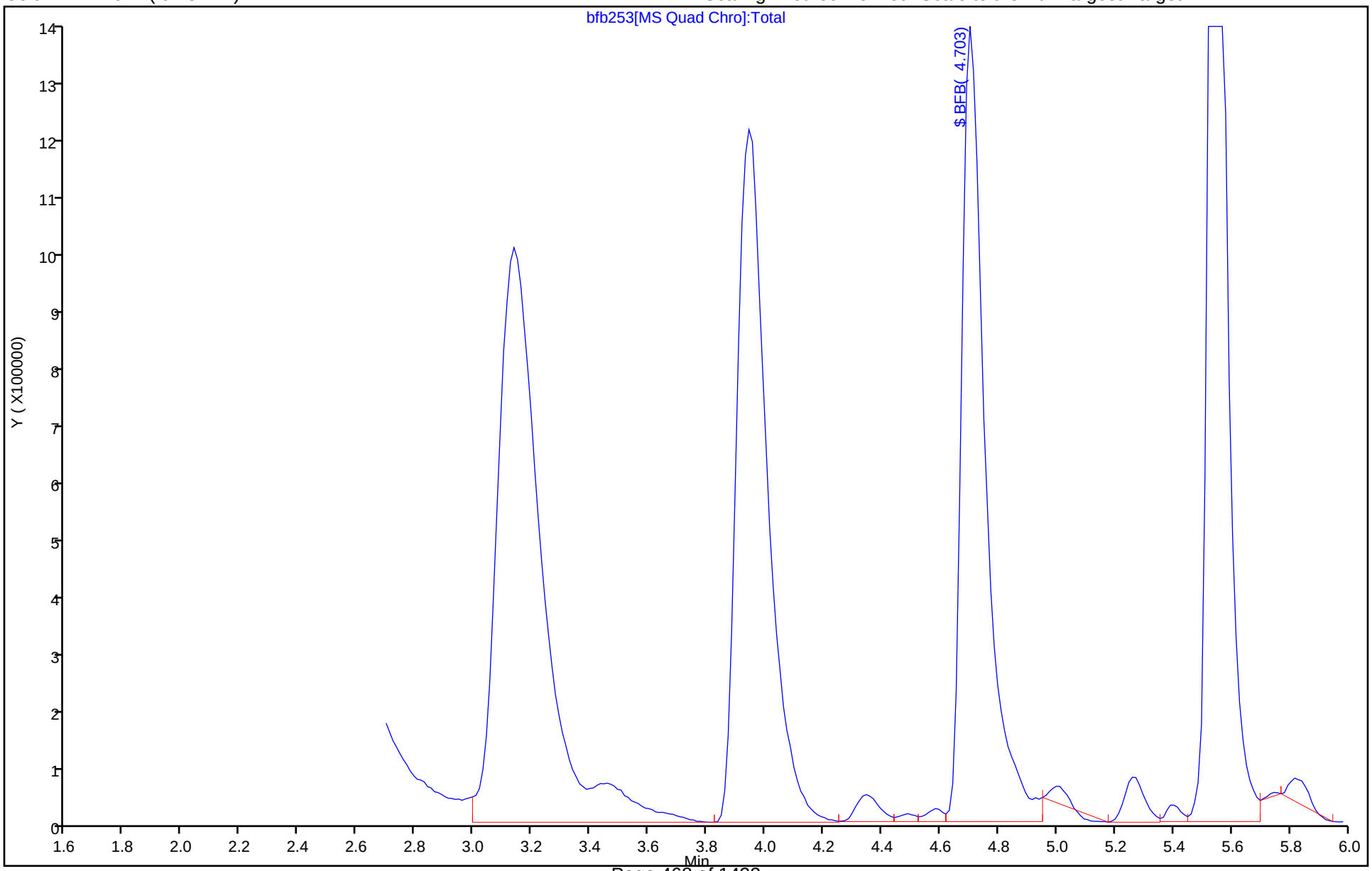
Report Date: 08-May-2019 16:09:42 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\bfb253.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 15:32:26 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\bfb254.d | | | | |
| Lims ID: | BFB | | | | |
| Client ID: | | | | | |
| Sample Type: | BFB | | | | |
| Inject. Date: | 09-May-2019 16:50:59 | ALS Bottle#: | 0 | Worklist Smp#: | 1 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0086952-001 | | | | |
| Operator ID: | 001904 | Instrument ID: | A3UX19 | | |
| Method: | \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m | | | | |
| Limit Group: | MSV 8260C ICAL | | | | |
| Last Update: | 09-May-2019 17:08:12 | Calib Date: | 10-Oct-2018 20:18:55 | | |
| Integrator: | RTE | ID Type: | RT Order ID | | |
| Quant Method: | Internal Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D | | | | |
| Column 1 : | DB-624 ( 0.18 mm) | | Det: MS SCAN | | |
| Process Host: | CTX0302 | | | | |
| First Level Reviewer: laveyt | | Date: | 09-May-2019 17:08:12 | | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 4.703 | 4.703 | 0.000 | 0 | 1212754 | NR | NR | |

## QC Flag Legend

Processing Flags

NR - Missing Quant Standard

## Reagents:

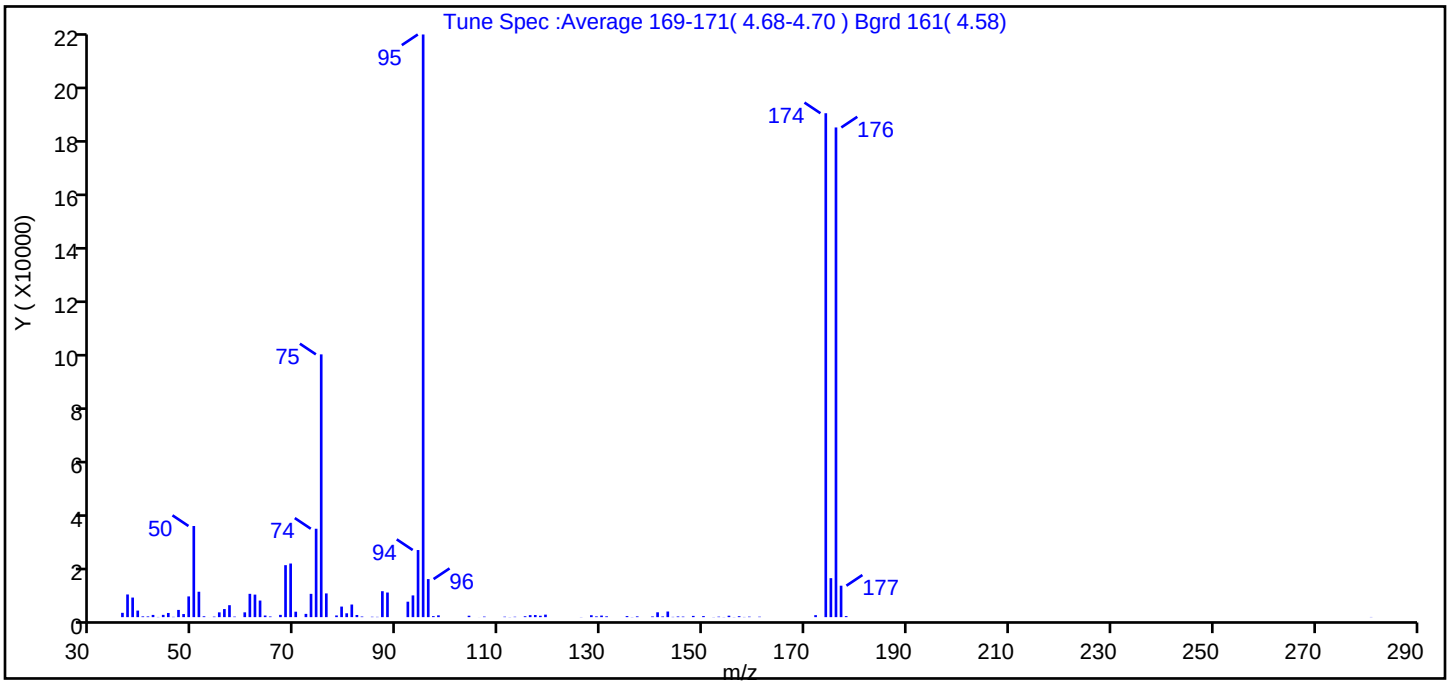
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\bfb254.d
Injection Date: 09-May-2019 16:50:59 Instrument ID: A3UX19
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_19 Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 15.6 |
| 75 | 30 to 60% of m/z 95 | 45.1 |
| 96 | 5 to 9% of m/z 95 | 6.5 |
| 173 | Less than 2% of m/z 174 | 0.0 (0.0) |
| 174 | 50 to 120% of m/z 95 | 86.5 |
| 175 | 5 to 9% of m/z 174 | 6.7 (7.7) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 84.0 (97.2) |
| 177 | 5 to 9% of m/z 176 | 5.4 (6.4) |

Report Date: 09-May-2019 17:08:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\bfb254.d\8260_19.rslt\spectra.d
Injection Date: 09-May-2019 16:50:59
Spectrum: Tune Spec :Average 169-171( 4.68-4.70 ) Bgrd 161( 4.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 99

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1596 | 62.00 | 8315 | 94.00 | 24760 | 141.00 | 1789 |
| 37.00 | 8369 | 63.00 | 6123 | 95.00 | 214976 | 142.00 | 252 |
| 38.00 | 7225 | 64.00 | 598 | 96.00 | 14046 | 143.00 | 2079 |
| 39.00 | 2422 | 65.00 | 239 | 97.00 | 375 | 144.00 | 102 |
| 40.00 | 282 | 67.00 | 836 | 98.00 | 664 | 145.00 | 264 |
| 41.00 | 272 | 68.00 | 19176 | 104.00 | 523 | 146.00 | 202 |
| 42.00 | 819 | 69.00 | 19784 | 106.00 | 17 | 148.00 | 458 |
| 43.00 | 73 | 70.00 | 2011 | 107.00 | 204 | 150.00 | 384 |
| 44.00 | 841 | 72.00 | 1207 | 111.00 | 171 | 152.00 | 53 |
| 45.00 | 1538 | 73.00 | 8595 | 112.00 | 51 | 153.00 | 180 |
| 46.00 | 116 | 74.00 | 32616 | 113.00 | 151 | 154.00 | 55 |
| 47.00 | 2667 | 75.00 | 96952 | 115.00 | 335 | 155.00 | 524 |
| 48.00 | 1142 | 76.00 | 8753 | 116.00 | 740 | 156.00 | 54 |
| 49.00 | 7649 | 78.00 | 623 | 117.00 | 775 | 157.00 | 351 |
| 50.00 | 33624 | 79.00 | 3898 | 118.00 | 513 | 158.00 | 71 |
| 51.00 | 9375 | 80.00 | 1416 | 119.00 | 924 | 159.00 | 189 |
| 52.00 | 316 | 81.00 | 4658 | 126.00 | 54 | 161.00 | 168 |
| 53.00 | 10 | 82.00 | 797 | 128.00 | 707 | 172.00 | 732 |
| 54.00 | 196 | 83.00 | 227 | 129.00 | 283 | 174.00 | 185920 |
| 55.00 | 1765 | 85.00 | 145 | 130.00 | 582 | 175.00 | 14380 |
| 56.00 | 2982 | 86.00 | 109 | 131.00 | 302 | 176.00 | 180672 |
| 57.00 | 4410 | 87.00 | 9568 | 135.00 | 398 | 177.00 | 11601 |
| 58.00 | 199 | 88.00 | 9085 | 136.00 | 54 | 178.00 | 387 |
| 60.00 | 1774 | 92.00 | 5701 | 137.00 | 292 | 281.00 | 64 |
| 61.00 | 8599 | 93.00 | 8018 | 140.00 | 255 | | |

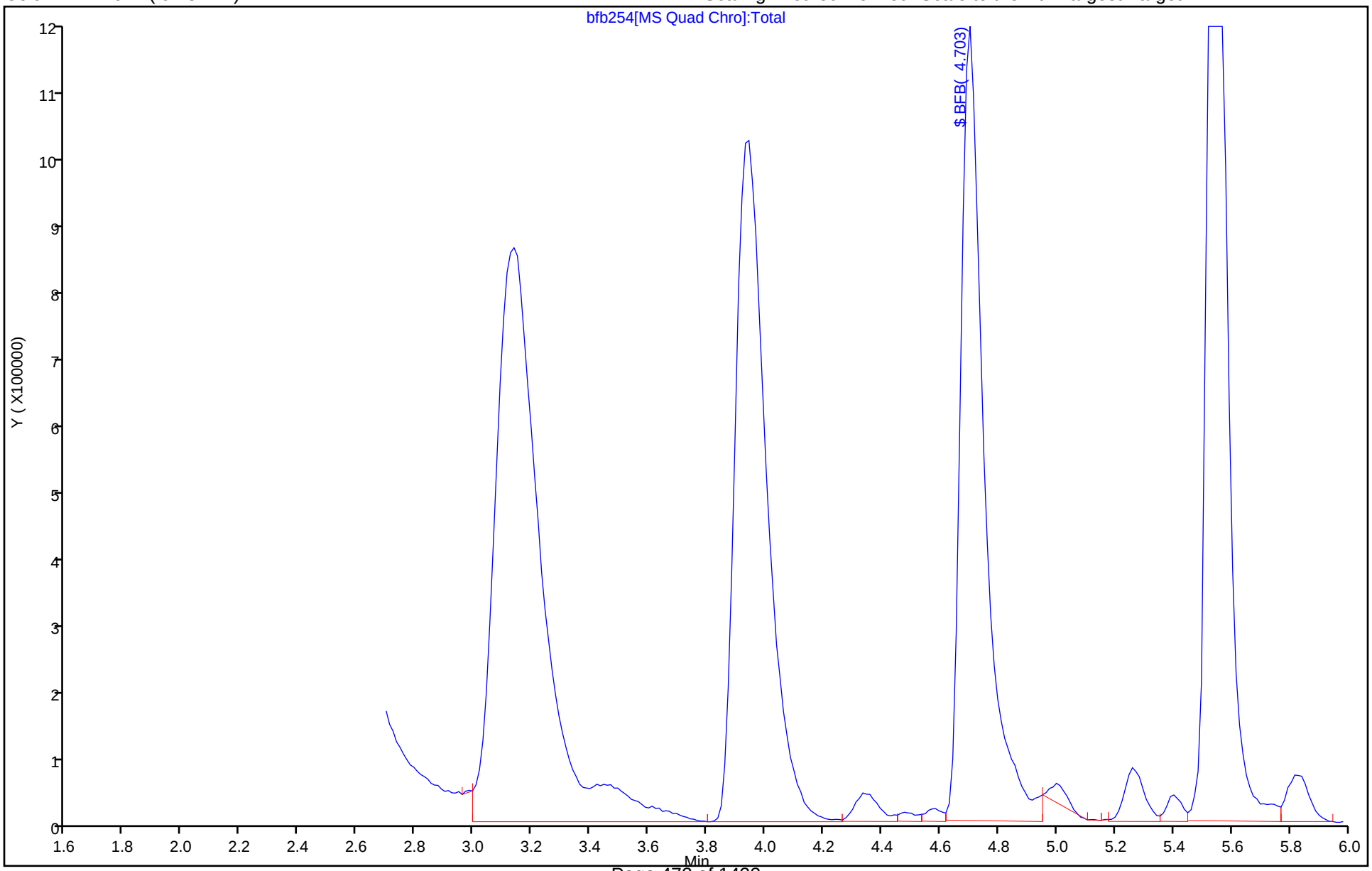
Report Date: 09-May-2019 17:08:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\bfb254.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 16:50:59 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-380285/8

Matrix: Water  Lab File ID: U1907220.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 17:48

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.4 | U | 10 | 5.4 |
| 71-43-2 | Benzene | 0.13 | U | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-380285/8

Matrix: Water  Lab File ID: U1907220.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 17:48

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 0.10 | U | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 0.20 | U | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 95 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 99 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 93 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907220.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-May-2019 17:48:05 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:00:02 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:00:02

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 830126 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 656470 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 94 | 340195 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 220551 | 20.0 | 19.7 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 93 | 232189 | 20.0 | 18.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.101 | 0.000 | 92 | 748705 | 20.0 | 19.0 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.674 | 9.674 | 0.000 | 88 | 275658 | 20.0 | 18.6 | |
| 9 Dichlorodifluoromethane | 85 | | 1.598 | | | | | ND | |
| 10 Chloromethane | 50 | | 1.812 | | | | | ND | |
| 11 Butadiene | 54 | | 1.895 | | | | | ND | |
| 12 Vinyl chloride | 62 | | 1.918 | | | | | ND | |
| 13 Bromomethane | 94 | | 2.215 | | | | | ND | |
| 14 1-Chloro-1-fluoroethane TI | 47 | | 2.227 | | | | | ND | |
| 15 Chloroethane | 64 | | 2.298 | | | | | ND | |
| 16 Dichlorofluoromethane | 67 | | 2.499 | | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.559 | | | | | ND | |
| 18 Ethyl ether | 59 | | 2.808 | | | | | ND | |
| 19 Acrolein | 56 | | 2.926 | | | | | ND | |
| 20 1,1-Dichloroethene | 61 | | 3.033 | | | | | ND | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.045 | | | | | ND | |
| 22 Acetone | 43 | 3.069 | 3.069 | 0.000 | 85 | 13220 | | 4.06 | |
| 23 Methylal | 45 | | 3.092 | | | | | ND | |
| 24 Iodomethane | 142 | | 3.187 | | | | | ND | |
| 25 Carbon disulfide | 76 | 3.270 | 3.258 | 0.012 | 35 | 3266 | | 0.1047 | |
| 26 Acetonitrile | 41 | 3.341 | 3.329 | 0.012 | 55 | 826 | | 3.51 | |
| 27 3-Chloro-1-propene | 41 | | 3.365 | | | | | ND | |
| 28 Methyl acetate | 43 | | 3.377 | | | | | ND | U |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 77 | 11620 | | 0.9835 | |
| 30 2-Methyl-2-propanol | 59 | | 3.579 | | | | | ND | |
| 31 Acrylonitrile | 53 | 3.685 | 3.697 | -0.012 | 33 | 961 | | 0.2302 | |
| 32 trans-1,2-Dichloroethene | 61 | | 3.733 | | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 34 Hexane | 57 | | 3.982 | | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 4.112 | | | | | ND | |
| 36 Vinyl acetate | 43 | | 4.148 | | | | | ND | |
| 37 Isopropyl ether | 87 | | 4.171 | | | | | ND | |
| 38 2-Chloro-1,3-butadiene | 53 | | 4.195 | | | | | ND | |
| 39 Tert-butyl ethyl ether | 59 | | 4.492 | | | | | ND | |
| 41 cis-1,2-Dichloroethene | 96 | | 4.622 | | | | | ND | |
| 42 2,2-Dichloropropane | 77 | | 4.634 | | | | | ND | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 57 | 462 | | 0.2357 | |
| 44 Ethyl acetate | 43 | | 4.681 | | | | | ND | U |
| 43 Propionitrile | 54 | | 4.681 | | | | | ND | |
| 45 Methacrylonitrile | 41 | | 4.824 | | | | | ND | |
| 46 Chlorobromomethane | 49 | | 4.836 | | | | | ND | |
| 47 Tetrahydrofuran | 42 | | 4.883 | | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.085 | | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | | ND | |
| 51 1,1-Dichloropropene | 75 | | 5.227 | | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | | ND | |
| 53 Isobutyl alcohol | 41 | | 5.298 | | | | | ND | |
| 54 Benzene | 78 | | 5.417 | | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.417 | | | | | ND | |
| 56 Tert-amyl methyl ether | 73 | | 5.500 | | | | | ND | |
| 57 n-Heptane | 57 | | 5.642 | | | | | ND | |
| 58 n-Butanol | 56 | | 5.891 | | | | | ND | |
| 59 Trichloroethene | 130 | | 5.986 | | | | | ND | |
| 60 Ethyl acrylate | 55 | | 6.057 | | | | | ND | |
| 61 Methylcyclohexane | 83 | | 6.176 | | | | | ND | |
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | | ND | |
| 63 Methyl methacrylate | 41 | | 6.270 | | | | | ND | |
| 64 Dibromomethane | 174 | | 6.294 | | | | | ND | |
| 65 1,4-Dioxane | 88 | | 6.306 | | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.437 | | | | | ND | |
| 67 2-Nitropropane | 41 | | 6.638 | | | | | ND | |
| 68 2-Chloroethyl vinyl ether | 63 | | 6.697 | | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.840 | | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.362 | | | | | ND | |
| 73 Ethyl methacrylate | 69 | | 7.433 | | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.694 | | | | | ND | |
| 76 1,3-Dichloropropane | 76 | | 7.705 | | | | | ND | |
| 77 2-Hexanone | 43 | | 7.765 | | | | | ND | |
| 78 n-Butyl acetate | 43 | | 7.883 | | | | | ND | |
| 80 Tetrahydrothiophene | 60 | | 7.931 | | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.931 | | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | | ND | |
| 82 1-Chlorohexane | 91 | | 8.488 | | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.524 | | | | | ND | |
| 84 1,1,1,2-Tetrachloroethane | 131 | | 8.607 | | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | | ND | |
| 91 Cyclohexanone | 55 | | 9.614 | | | | | ND | |
| 92 1,4-Dichlorobutane | 55 | | 9.615 | | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | | ND | |
| 94 3-Ethyltoluene | 105 | | 9.824 | | | | | ND | |
| 95 Bromobenzene | 156 | | 9.840 | | | | | ND | |
| 96 1,2,3-Trichloropropane | 110 | | 9.864 | | | | | ND | |
| 97 trans-1,4-Dichloro-2-buten | 53 | | 9.876 | | | | | ND | |
| 98 N-Propylbenzene | 120 | | 9.947 | | | | | ND | |
| 99 2-Ethyltoluene | 105 | | 10.013 | | | | | ND | |
| 100 2-Chlorotoluene | 126 | | 10.042 | | | | | ND | |
| 101 1,3,5-Trimethylbenzene | 105 | | 10.125 | | | | | ND | |
| 102 4-Chlorotoluene | 126 | | 10.148 | | | | | ND | |
| 103 tert-Butylbenzene | 119 | | 10.468 | | | | | ND | |
| 104 Pentachloroethane | 167 | | 10.492 | | | | | ND | |
| 105 1,2,4-Trimethylbenzene | 105 | | 10.516 | | | | | ND | |
| 106 sec-Butylbenzene | 105 | | 10.706 | | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.812 | | | | | ND | |
| 108 4-Isopropyltoluene | 119 | | 10.848 | | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | | ND | |
| 110 1,2,3-Trimethylbenzene | 105 | | 10.966 | | | | | ND | |
| 111 Benzyl chloride | 91 | | 11.049 | | | | | ND | |
| 112 n-Butylbenzene | 91 | | 11.287 | | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.129 | | | | | ND | |
| 115 1,3,5-Trichlorobenzene | 180 | | 12.354 | | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 1 | 1635 | | 0.1124 | |
| 117 Hexachlorobutadiene | 225 | | 13.208 | | | | | ND | |
| 118 Naphthalene | 128 | | 13.279 | | | | | ND | |
| 119 1,2,3-Trichlorobenzene | 180 | | 13.540 | | | | | ND | |
| 120 2-Methylnaphthalene | 142 | | 14.619 | | | | | ND | |
| 122 Ethylene oxide | 1 | | -0.010 | | | | | ND | |
| 123 Propene oxide | 1 | | -0.010 | | | | | ND | |
| 121 Epichlorohydrin | 1 | | -0.010 | | | | | ND | |
| S 125 Trihalomethanes, Total | 1 | | -0.010 | | | | | ND | |
| S 124 Total BTEX | 1 | | -0.010 | | | | | ND | |
| S 126 1,2-Dichloroethene, Total | 96 | | 1.130 | | | | | ND | |
| S 127 1,3-Dichloropropene, Total | 75 | | 6.750 | | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

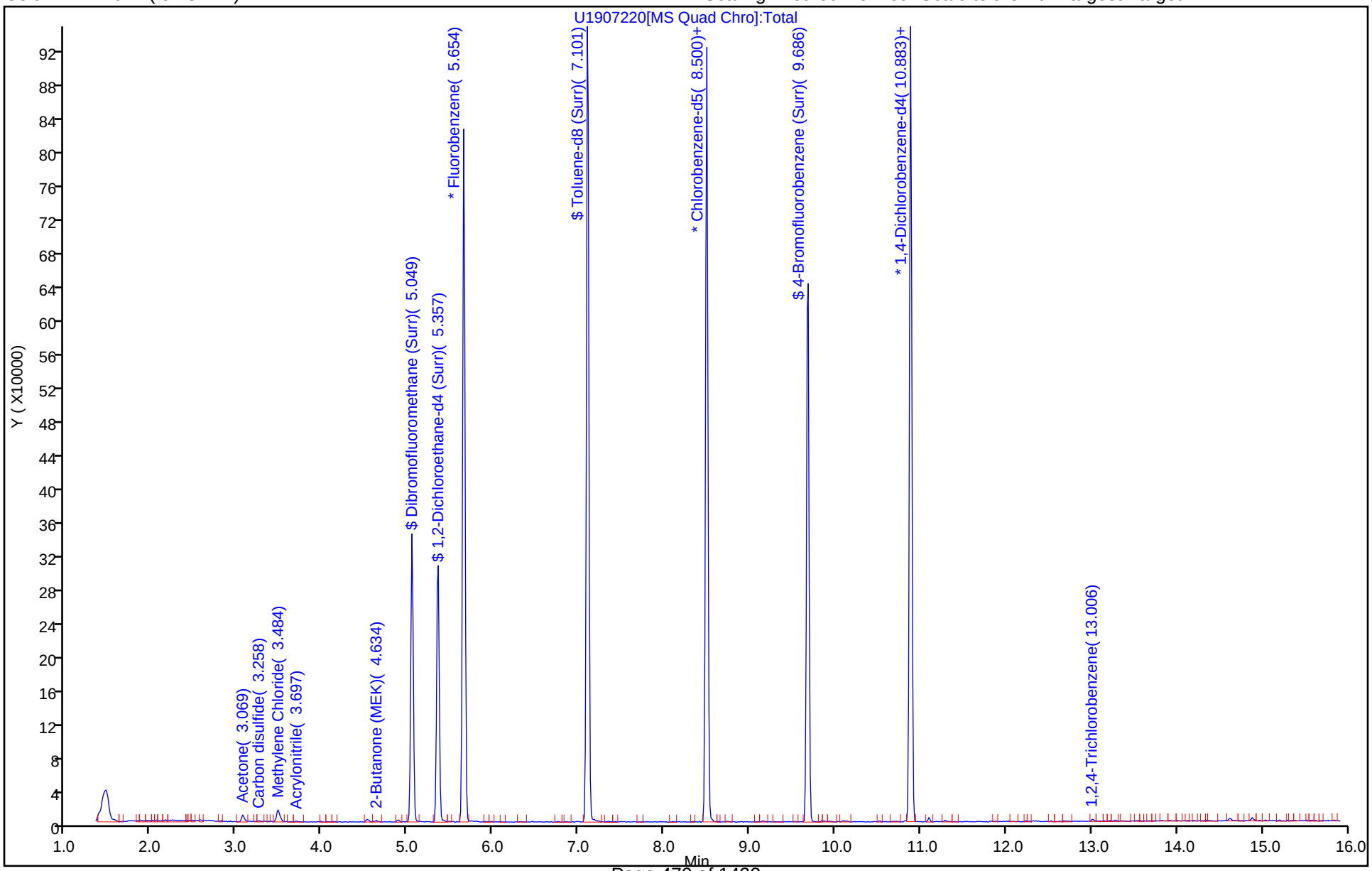
Report Date: 08-May-2019 19:00:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907220.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 17:48:05 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | MB | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907220.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 08-May-2019 17:48:05 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 19:00:02 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 19:00:02

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.7 | 98.69 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.1 | 90.46 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.0 | 95.10 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.6 | 93.05 |

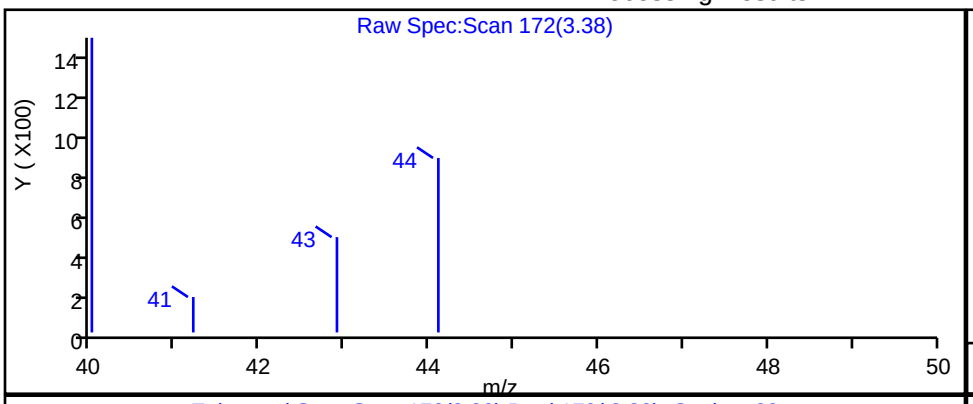
User Disabled Compound Report

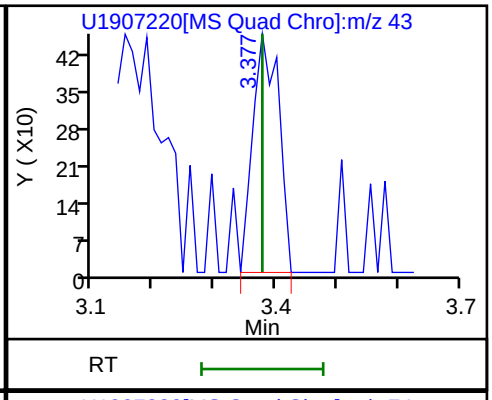
Eurofins TestAmerica, Canton

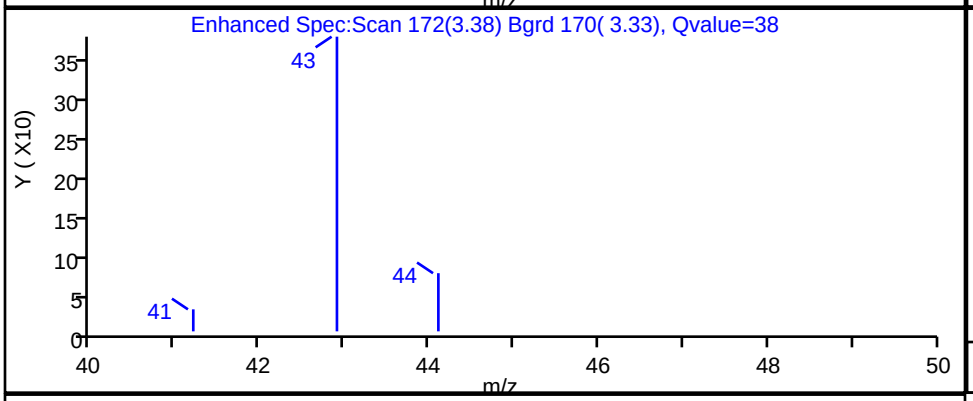
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907220.d | | | | |
| Injection Date: | 08-May-2019 17:48:05 | Instrument ID: | A3UX19 | | |
| Lims ID: | MB | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 8 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

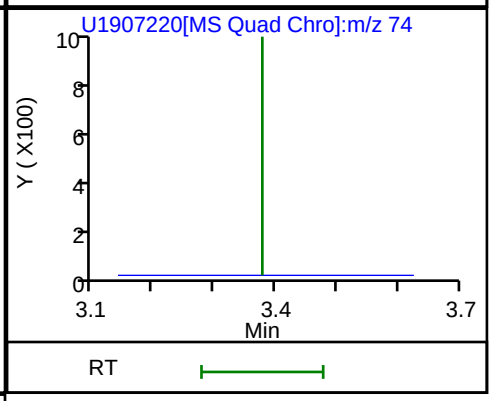
## 28 Methyl acetate, CAS: 79-20-9

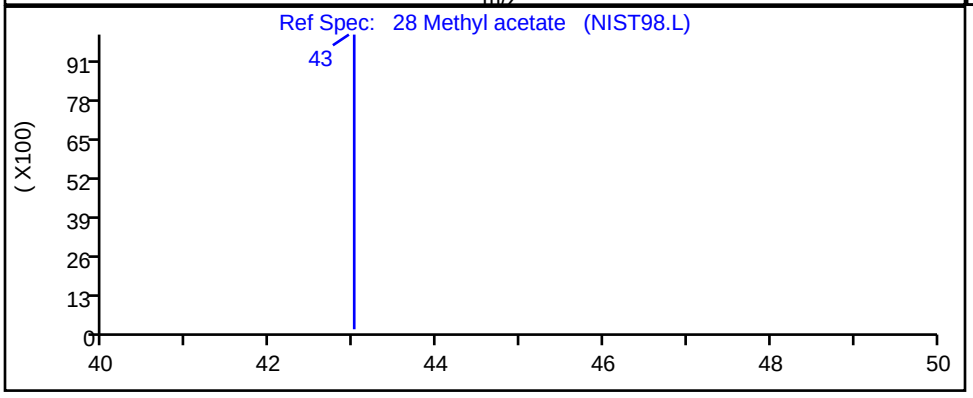
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.38 | 43.00 | 1340 | 0.138691 |
| 3.38 | 74.00 | 0 | |

Reviewer: laveyt, 08-May-2019 18:59:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-380508/8

Matrix: Water  Lab File ID: U1907251.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 19:03

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624 ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.4 | U | 10 | 5.4 |
| 71-43-2 | Benzene | 0.13 | U | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-380508/8

Matrix: Water  Lab File ID: U1907251.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 19:03

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 0.10 | U | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 0.20 | U | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 98 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 93 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 91 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907251.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-May-2019 19:03:45 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086952-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 19:25:00 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 19:25:00

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 99 | 845739 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 81 | 683151 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 93 | 339237 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 58 | 222483 | 20.0 | 19.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 95 | 237505 | 20.0 | 18.2 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 92 | 805299 | 20.0 | 19.7 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 286056 | 20.0 | 18.6 | |
| 9 Dichlorodifluoromethane | 85 | | 1.610 | | | | | ND | |
| 10 Chloromethane | 50 | | 1.823 | | | | | ND | |
| 11 Butadiene | 54 | | 1.906 | | | | | ND | |
| 12 Vinyl chloride | 62 | | 1.930 | | | | | ND | |
| 14 1-Chloro-1-fluoroethane TI | 47 | | 2.226 | | | | | ND | |
| 13 Bromomethane | 94 | | 2.226 | | | | | ND | |
| 15 Chloroethane | 64 | | 2.309 | | | | | ND | |
| 16 Dichlorofluoromethane | 67 | | 2.499 | | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.570 | | | | | ND | |
| 18 Ethyl ether | 59 | | 2.808 | | | | | ND | |
| 19 Acrolein | 56 | | 2.926 | | | | | ND | |
| 20 1,1-Dichloroethene | 61 | | 3.045 | | | | | ND | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | | 3.057 | | | | | ND | |
| 22 Acetone | 43 | 3.068 | 3.068 | 0.000 | 87 | 12405 | | 3.74 | |
| 23 Methylal | 45 | | 3.092 | | | | | ND | |
| 24 Iodomethane | 142 | | 3.199 | | | | | ND | |
| 25 Carbon disulfide | 76 | | 3.270 | | | | | ND | |
| 26 Acetonitrile | 41 | 3.329 | 3.329 | 0.000 | 53 | 722 | | 3.44 | |
| 27 3-Chloro-1-propene | 41 | | 3.365 | | | | | ND | |
| 28 Methyl acetate | 43 | | 3.389 | | | | | ND | U |
| 29 Methylene Chloride | 49 | 3.472 | 3.484 | -0.012 | 69 | 6607 | | 0.5489 | |
| 30 2-Methyl-2-propanol | 59 | | 3.578 | | | | | ND | |
| 31 Acrylonitrile | 53 | | 3.697 | | | | | ND | U |
| 32 trans-1,2-Dichloroethene | 61 | | 3.733 | | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 3.733 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 34 Hexane | 57 | | 3.982 | | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 4.112 | | | | | ND | |
| 36 Vinyl acetate | 43 | | 4.148 | | | | | ND | |
| 37 Isopropyl ether | 87 | | 4.171 | | | | | ND | |
| 38 2-Chloro-1,3-butadiene | 53 | | 4.195 | | | | | ND | |
| 39 Tert-butyl ethyl ether | 59 | | 4.491 | | | | | ND | |
| 41 cis-1,2-Dichloroethene | 96 | | 4.634 | | | | | ND | |
| 40 2-Butanone (MEK) | 72 | | 4.634 | | | | | ND | |
| 42 2,2-Dichloropropane | 77 | | 4.634 | | | | | ND | |
| 43 Propionitrile | 54 | | 4.681 | | | | | ND | |
| 44 Ethyl acetate | 43 | | 4.681 | | | | | ND | U |
| 45 Methacrylonitrile | 41 | | 4.823 | | | | | ND | |
| 46 Chlorobromomethane | 49 | | 4.835 | | | | | ND | |
| 47 Tetrahydrofuran | 42 | | 4.883 | | | | | ND | |
| 48 Chloroform | 83 | | 4.907 | | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 5.084 | | | | | ND | |
| 50 Cyclohexane | 84 | | 5.144 | | | | | ND | |
| 51 1,1-Dichloropropene | 75 | | 5.227 | | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 5.239 | | | | | ND | |
| 53 Isobutyl alcohol | 41 | | 5.298 | | | | | ND | |
| 54 Benzene | 78 | | 5.416 | | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 5.416 | | | | | ND | |
| 56 Tert-amyl methyl ether | 73 | | 5.499 | | | | | ND | |
| 57 n-Heptane | 57 | | 5.642 | | | | | ND | |
| 58 n-Butanol | 56 | | 5.891 | | | | | ND | |
| 59 Trichloroethene | 130 | | 5.986 | | | | | ND | |
| 60 Ethyl acrylate | 55 | | 6.057 | | | | | ND | |
| 61 Methylcyclohexane | 83 | | 6.175 | | | | | ND | |
| 62 1,2-Dichloropropane | 63 | | 6.187 | | | | | ND | |
| 63 Methyl methacrylate | 41 | | 6.270 | | | | | ND | |
| 64 Dibromomethane | 174 | | 6.294 | | | | | ND | |
| 65 1,4-Dioxane | 88 | | 6.306 | | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 6.436 | | | | | ND | |
| 67 2-Nitropropane | 41 | | 6.638 | | | | | ND | |
| 68 2-Chloroethyl vinyl ether | 63 | | 6.697 | | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.851 | | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.982 | | | | | ND | |
| 71 Toluene | 91 | | 7.172 | | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 7.361 | | | | | ND | |
| 73 Ethyl methacrylate | 69 | | 7.432 | | | | | ND | |
| 74 1,1,2-Trichloroethane | 97 | | 7.539 | | | | | ND | |
| 75 Tetrachloroethene | 166 | | 7.693 | | | | | ND | |
| 76 1,3-Dichloropropane | 76 | | 7.705 | | | | | ND | |
| 77 2-Hexanone | 43 | | 7.764 | | | | | ND | |
| 78 n-Butyl acetate | 43 | | 7.883 | | | | | ND | |
| 79 Chlorodibromomethane | 129 | | 7.930 | | | | | ND | |
| 80 Tetrahydrothiophene | 60 | | 7.931 | | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 8.049 | | | | | ND | |
| 82 1-Chlorohexane | 91 | | 8.488 | | | | | ND | |
| 83 Chlorobenzene | 112 | | 8.523 | | | | | ND | |
| 84 1,1,1,2-Tetrachloroethane | 131 | | 8.606 | | | | | ND | |
| 85 Ethylbenzene | 106 | | 8.630 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 86 m-Xylene & p-Xylene | 106 | | 8.749 | | | | | ND | |
| 87 o-Xylene | 106 | | 9.152 | | | | | ND | |
| 88 Styrene | 104 | | 9.164 | | | | | ND | |
| 89 Bromoform | 173 | | 9.354 | | | | | ND | |
| 90 Isopropylbenzene | 105 | | 9.520 | | | | | ND | |
| 91 Cyclohexanone | 55 | | 9.614 | | | | | ND | |
| 92 1,4-Dichlorobutane | 55 | | 9.615 | | | | | ND | |
| 93 1,1,2,2-Tetrachloroethane | 83 | | 9.816 | | | | | ND | |
| 94 3-Ethyltoluene | 105 | | 9.824 | | | | | ND | |
| 95 Bromobenzene | 156 | | 9.840 | | | | | ND | |
| 96 1,2,3-Trichloropropane | 110 | | 9.863 | | | | | ND | |
| 97 trans-1,4-Dichloro-2-buten | 53 | | 9.875 | | | | | ND | |
| 98 N-Propylbenzene | 120 | | 9.946 | | | | | ND | |
| 99 2-Ethyltoluene | 105 | | 10.013 | | | | | ND | |
| 100 2-Chlorotoluene | 126 | | 10.041 | | | | | ND | |
| 101 1,3,5-Trimethylbenzene | 105 | | 10.124 | | | | | ND | |
| 102 4-Chlorotoluene | 126 | | 10.148 | | | | | ND | |
| 103 tert-Butylbenzene | 119 | | 10.468 | | | | | ND | |
| 104 Pentachloroethane | 167 | | 10.492 | | | | | ND | |
| 105 1,2,4-Trimethylbenzene | 105 | | 10.516 | | | | | ND | |
| 106 sec-Butylbenzene | 105 | | 10.705 | | | | | ND | |
| 107 1,3-Dichlorobenzene | 146 | | 10.824 | | | | | ND | |
| 108 4-Isopropyltoluene | 119 | | 10.848 | | | | | ND | |
| 109 1,4-Dichlorobenzene | 146 | | 10.907 | | | | | ND | |
| 110 1,2,3-Trimethylbenzene | 105 | | 10.966 | | | | | ND | |
| 111 Benzyl chloride | 91 | | 11.049 | | | | | ND | |
| 112 n-Butylbenzene | 91 | | 11.286 | | | | | ND | |
| 113 1,2-Dichlorobenzene | 146 | | 11.310 | | | | | ND | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | | 12.128 | | | | | ND | |
| 115 1,3,5-Trichlorobenzene | 180 | | 12.354 | | | | | ND | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 1 | 1546 | | 0.1066 | |
| 117 Hexachlorobutadiene | 225 | | 13.208 | | | | | ND | |
| 118 Naphthalene | 128 | | 13.279 | | | | | ND | |
| 119 1,2,3-Trichlorobenzene | 180 | | 13.540 | | | | | ND | |
| 120 2-Methylnaphthalene | 142 | | 14.630 | | | | | ND | |
| 121 Epichlorohydrin | 1 | | -0.010 | | | | | ND | |
| 122 Ethylene oxide | 1 | | -0.010 | | | | | ND | |
| 123 Propene oxide | 1 | | -0.010 | | | | | ND | |
| S 124 Total BTEX | 1 | | -0.010 | | | | | ND | |
| S 125 Trihalomethanes, Total | 1 | | -0.010 | | | | | ND | |
| S 126 1,2-Dichloroethene, Total | 96 | | 1.130 | | | | | ND | |
| S 127 1,3-Dichloropropene, Total | 75 | | 6.750 | | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.520 | | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

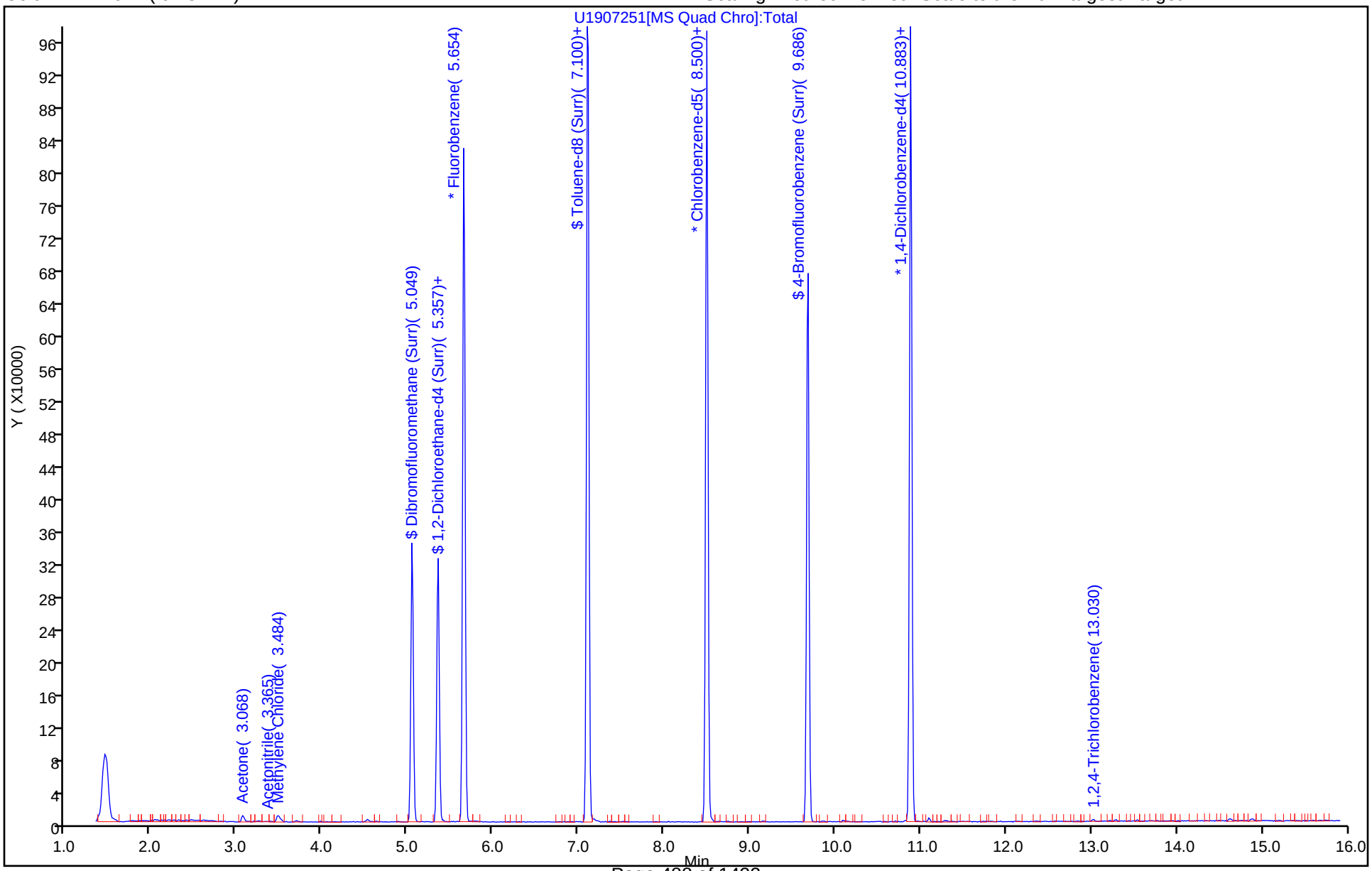
Report Date: 09-May-2019 19:25:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907251.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 19:03:45 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | MB | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907251.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 09-May-2019 19:03:45 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086952-008
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 19:25:00 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 19:25:00

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.5 | 97.72 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.2 | 90.82 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.7 | 98.29 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.6 | 92.79 |

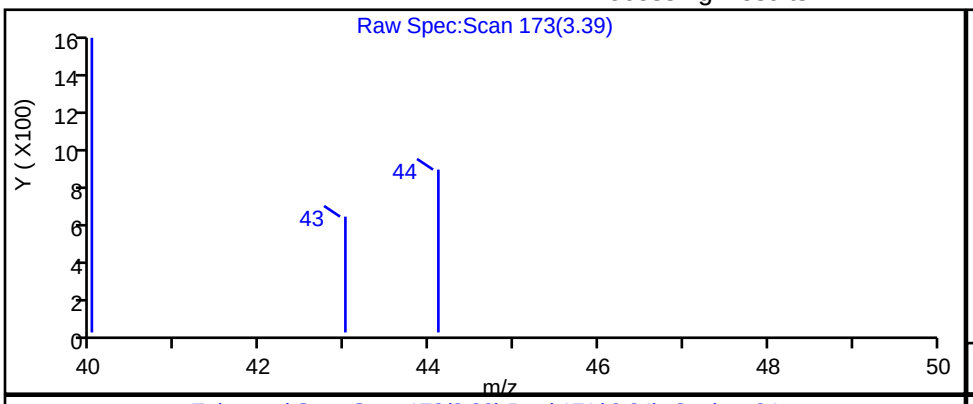
User Disabled Compound Report

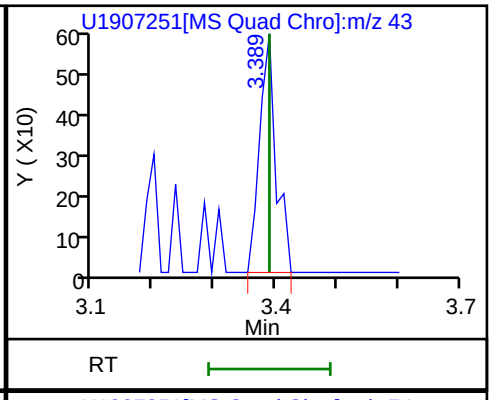
Eurofins TestAmerica, Canton

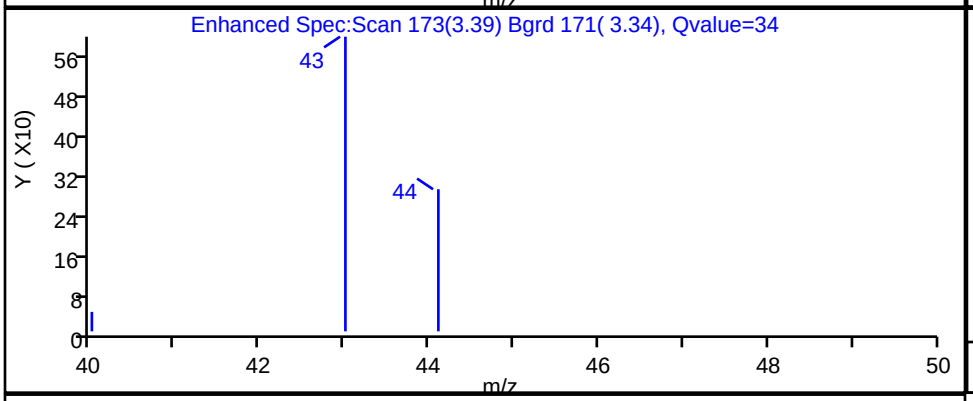
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907251.d | | | | |
| Injection Date: | 09-May-2019 19:03:45 | Instrument ID: | A3UX19 | | |
| Lims ID: | MB | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 0 | Worklist Smp#: | 8 |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

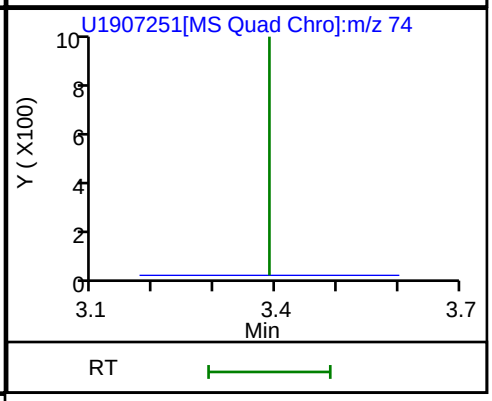
## 28 Methyl acetate, CAS: 79-20-9

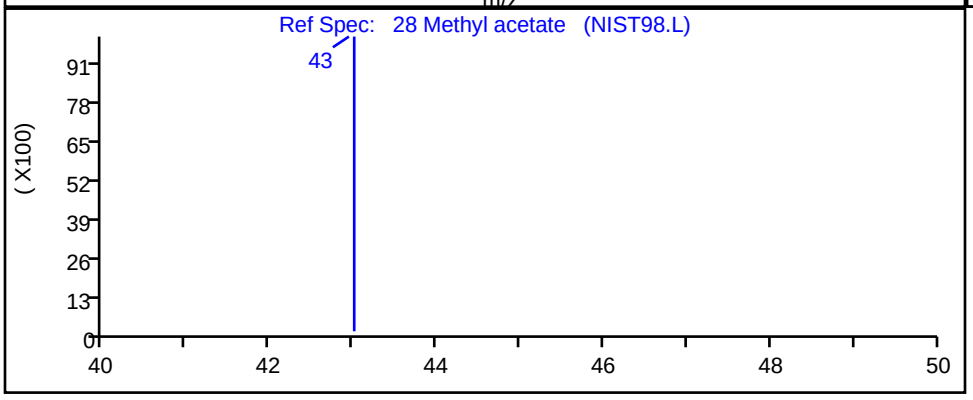
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.39 | 43.00 | 1101 | 0.111851 |
| 3.39 | 74.00 | 0 | |

Reviewer: laveyt, 09-May-2019 19:24:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-380285/5

Matrix: Water  Lab File ID: U1907217.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 16:41

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 18.7 | | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 23.7 | | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 21.3 | | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 21.3 | | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 22.0 | | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 21.3 | | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 16.6 | | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 19.6 | | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 19.2 | | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 20.1 | | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 17.2 | | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 22.2 | | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 19.2 | | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 19.3 | | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 45.5 | | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 40.0 | | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 40.6 | | 10 | 0.42 |
| 67-64-1 | Acetone | 52.8 | | 10 | 5.4 |
| 71-43-2 | Benzene | 22.3 | | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 18.6 | | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 17.4 | | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 21.1 | | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 22.2 | | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 17.4 | | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 19.2 | | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 23.1 | | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 20.2 | | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 23.2 | | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 21.6 | | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20.0 | | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 22.7 | | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 18.5 | | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 17.4 | | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 20.4 | | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 20.7 | | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-380285/5

Matrix: Water  Lab File ID: U1907217.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 16:41

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 44.2 | | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 20.3 | | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 21.2 | | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 21.8 | | 5.0 | 2.6 |
| 100-42-5 | Styrene | 19.9 | | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 18.3 | | 1.0 | 0.15 |
| 108-88-3 | Toluene | 20.6 | | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 21.2 | | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 17.6 | | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 18.8 | | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 18.0 | | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 23.9 | | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 41.4 | | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 103 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 99 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 100 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907217.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-May-2019 16:41:41 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 17:20:39 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 17:20:38

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.666 | 5.654 | 0.012 | 99 | 842096 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 656793 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 344242 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 58 | 223552 | 20.0 | 19.7 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 96 | 234960 | 20.0 | 18.0 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.112 | 7.101 | 0.011 | 91 | 808587 | 20.0 | 20.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 295531 | 20.0 | 19.9 | |
| 9 Dichlorodifluoromethane | 85 | 1.622 | 1.598 | 0.024 | 69 | 281523 | 20.0 | 17.4 | |
| 10 Chloromethane | 50 | 1.823 | 1.812 | 0.011 | 78 | 281686 | 20.0 | 23.2 | |
| 11 Butadiene | 54 | 1.918 | 1.895 | 0.023 | 83 | 268908 | 20.0 | 22.1 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 81 | 299911 | 20.0 | 23.9 | |
| 13 Bromomethane | 94 | 2.238 | 2.215 | 0.023 | 90 | 207715 | 20.0 | 21.1 | |
| 15 Chloroethane | 64 | 2.310 | 2.298 | 0.012 | 90 | 180089 | 20.0 | 23.1 | |
| 16 Dichlorofluoromethane | 67 | 2.511 | 2.499 | 0.012 | 82 | 420501 | 20.0 | 21.8 | |
| 17 Trichlorofluoromethane | 101 | 2.570 | 2.559 | 0.011 | 87 | 376794 | 20.0 | 18.0 | |
| 18 Ethyl ether | 59 | 2.819 | 2.808 | 0.011 | 88 | 183874 | 20.0 | 24.3 | |
| 19 Acrolein | 56 | 2.938 | 2.926 | 0.012 | 93 | 159652 | 100.0 | 85.3 | |
| 20 1,1-Dichloroethene | 61 | 3.057 | 3.033 | 0.024 | 88 | 321454 | 20.0 | 21.3 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.069 | 3.045 | 0.024 | 78 | 230296 | 20.0 | 21.3 | |
| 22 Acetone | 43 | 3.080 | 3.069 | 0.011 | 78 | 174157 | 40.0 | 52.8 | |
| 24 Iodomethane | 142 | 3.211 | 3.187 | 0.024 | 97 | 383448 | 20.0 | 19.6 | |
| 25 Carbon disulfide | 76 | 3.270 | 3.258 | 0.012 | 98 | 703982 | 20.0 | 22.2 | |
| 27 3-Chloro-1-propene | 41 | 3.377 | 3.365 | 0.012 | 85 | 310538 | 20.0 | 20.8 | |
| 28 Methyl acetate | 43 | 3.389 | 3.377 | 0.012 | 96 | 432736 | 40.0 | 44.2 | |
| 29 Methylene Chloride | 49 | 3.495 | 3.484 | 0.011 | 52 | 261791 | 20.0 | 21.8 | |
| 30 2-Methyl-2-propanol | 59 | 3.578 | 3.579 | -0.001 | 13 | 395646 | 200.0 | 347.0 | |
| 31 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 99 | 1166403 | 200.0 | 275.5 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 74 | 302106 | 20.0 | 21.2 | |
| 33 Methyl tert-butyl ether | 73 | 3.744 | 3.733 | 0.011 | 88 | 592313 | 20.0 | 20.3 | |
| 34 Hexane | 57 | 3.993 | 3.982 | 0.011 | 89 | 329641 | 20.0 | 22.2 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 84 | 375710 | 20.0 | 22.0 | |
| 36 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 96 | 419694 | 20.0 | 21.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 79 | 263250 | 20.0 | 21.6 | |
| 42 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 58 | 207215 | 20.0 | 20.2 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 89 | 90469 | 40.0 | 45.5 | |
| 46 Chlorobromomethane | 49 | 4.847 | 4.836 | 0.011 | 76 | 167567 | 20.0 | 20.5 | |
| 47 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 193678 | 40.0 | 44.6 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 377566 | 20.0 | 20.2 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 52 | 328267 | 20.0 | 18.7 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 76 | 364723 | 20.0 | 22.7 | |
| 51 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 85 | 305437 | 20.0 | 20.6 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 74 | 294032 | 20.0 | 17.4 | |
| 53 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 84 | 289831 | 500.0 | 626.8 | |
| 54 Benzene | 78 | 5.417 | 5.417 | 0.000 | 93 | 894035 | 20.0 | 22.3 | |
| 55 1,2-Dichloroethane | 62 | 5.428 | 5.417 | 0.011 | 51 | 260517 | 20.0 | 17.2 | |
| 57 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 84 | 176445 | 20.0 | 19.1 | |
| 59 Trichloroethene | 130 | 5.998 | 5.986 | 0.012 | 90 | 250043 | 20.0 | 18.8 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 88 | 410030 | 20.0 | 21.2 | |
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 80 | 206029 | 20.0 | 22.2 | |
| 64 Dibromomethane | 174 | 6.306 | 6.294 | 0.012 | 84 | 163617 | 20.0 | 17.1 | |
| 65 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 38 | 70618 | 400.0 | 701.9 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.437 | -0.001 | 93 | 272801 | 20.0 | 18.6 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 89 | 158031 | 20.0 | 21.2 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.851 | 6.840 | 0.011 | 92 | 325745 | 20.0 | 20.0 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 94 | 546980 | 40.0 | 40.6 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 95 | 912931 | 20.0 | 20.6 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.362 | -0.001 | 82 | 278703 | 20.0 | 17.6 | |
| 73 Ethyl methacrylate | 69 | 7.444 | 7.433 | 0.011 | 86 | 278335 | 20.0 | 19.5 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 82 | 198678 | 20.0 | 21.3 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.694 | -0.001 | 91 | 258592 | 20.0 | 18.3 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 80 | 322343 | 20.0 | 20.4 | |
| 77 2-Hexanone | 43 | 7.765 | 7.765 | 0.000 | 77 | 413605 | 40.0 | 40.0 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.931 | 0.000 | 85 | 218021 | 20.0 | 18.5 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 210566 | 20.0 | 19.2 | |
| 83 Chlorobenzene | 112 | 8.524 | 8.524 | 0.000 | 92 | 584719 | 20.0 | 19.2 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 8.607 | 8.607 | -0.001 | 90 | 211759 | 20.0 | 19.3 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 323371 | 20.0 | 20.4 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 98 | 393297 | 20.0 | 20.3 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 387155 | 20.0 | 21.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 94 | 626373 | 20.0 | 19.9 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 97 | 167729 | 20.0 | 17.4 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1020141 | 20.0 | 20.7 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 86 | 314924 | 20.0 | 23.7 | |
| 95 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 91 | 253693 | 20.0 | 19.2 | |
| 96 1,2,3-Trichloropropane | 110 | 9.864 | 9.864 | 0.000 | 70 | 107142 | 20.0 | 21.3 | |
| 97 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.876 | -0.001 | 61 | 87738 | 20.0 | 18.6 | |
| 98 N-Propylbenzene | 120 | 9.947 | 9.947 | 0.000 | 95 | 276729 | 20.0 | 20.8 | |
| 100 2-Chlorotoluene | 126 | 10.041 | 10.042 | -0.001 | 97 | 236798 | 20.0 | 21.0 | |
| 101 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.125 | -0.001 | 94 | 805323 | 20.0 | 21.0 | |
| 102 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 246841 | 20.0 | 20.3 | |
| 103 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 75 | 734451 | 20.0 | 20.2 | |
| 105 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 72 | 812599 | 20.0 | 20.9 | |
| 106 sec-Butylbenzene | 105 | 10.705 | 10.706 | -0.001 | 93 | 1062823 | 20.0 | 21.7 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.812 | 0.012 | 82 | 467454 | 20.0 | 19.2 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 108 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 91 | 892237 | 20.0 | 20.8 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 484318 | 20.0 | 19.3 | |
| 112 n-Butylbenzene | 91 | 11.287 | 11.287 | 0.000 | 94 | 723363 | 20.0 | 20.5 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 444148 | 20.0 | 20.1 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.129 | 0.000 | 92 | 82515 | 20.0 | 19.6 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 244539 | 20.0 | 16.6 | |
| 117 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 87 | 118901 | 20.0 | 15.7 | |
| 118 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 755081 | 20.0 | 18.6 | |
| 119 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 94 | 225399 | 20.0 | 17.1 | |
| S 125 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 74.8 | |
| S 124 Total BTEX | 1 | | | | 0 | | 100.0 | 104.6 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 41.4 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

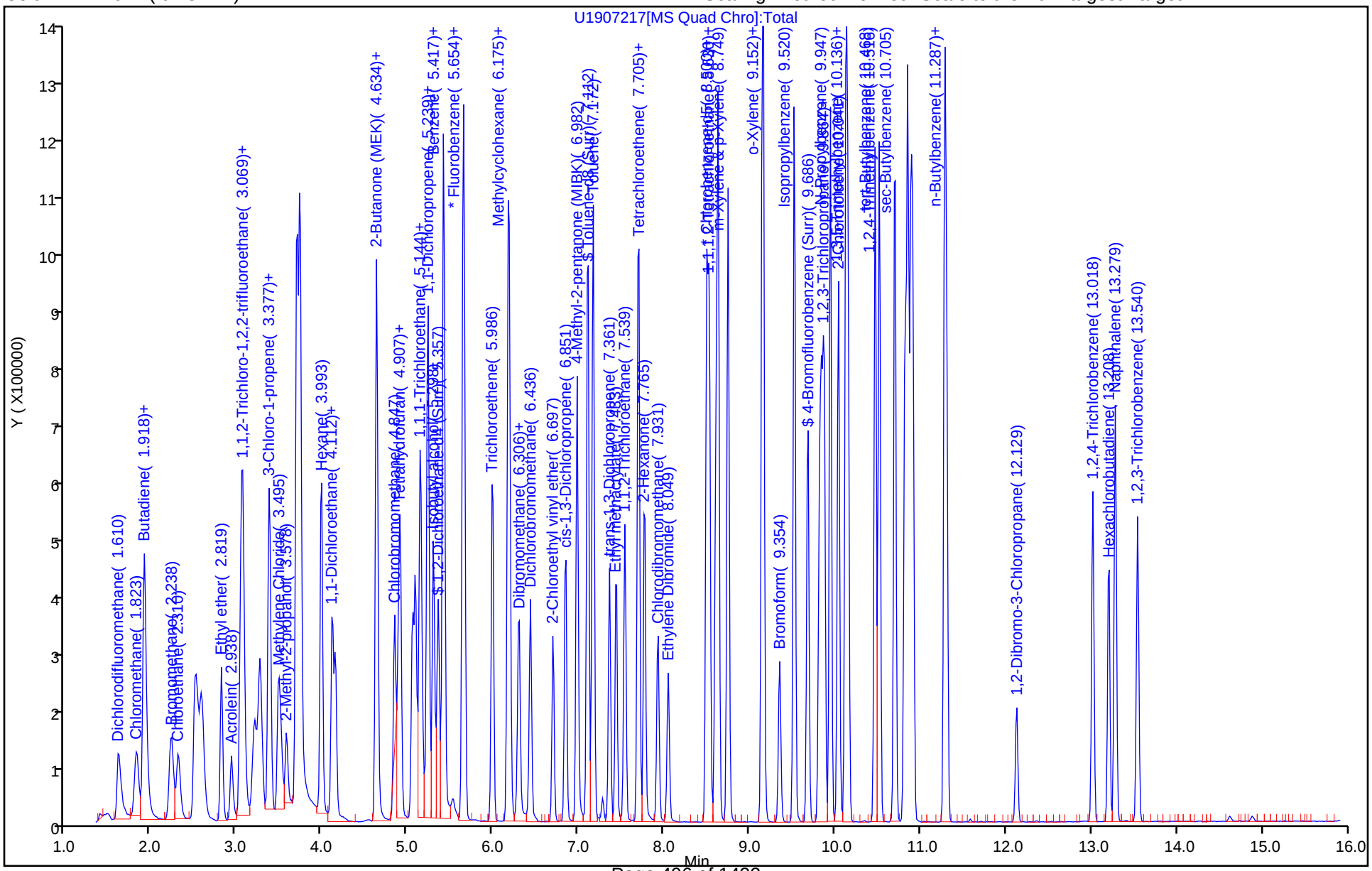
Report Date: 08-May-2019 17:20:41 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907217.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 16:41:41 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907217.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 08-May-2019 16:41:41 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086906-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 08-May-2019 17:20:39 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: laveyt Date: 08-May-2019 17:20:38

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.7 | 98.61 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.0 | 90.24 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.5 | 102.65 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.9 | 99.71 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-380508/5

Matrix: Water  Lab File ID: U1907248.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 17:57

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624 ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 18.0 | | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 23.6 | | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.2 | | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 21.0 | | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 21.0 | | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 19.7 | | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 16.8 | | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 19.2 | | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 18.7 | | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 20.5 | | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 17.1 | | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 22.0 | | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 19.7 | | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 20.0 | | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 46.2 | | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 40.0 | | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 40.7 | | 10 | 0.42 |
| 67-64-1 | Acetone | 56.3 | | 10 | 5.4 |
| 71-43-2 | Benzene | 21.8 | | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 18.6 | | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 16.8 | | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 20.2 | | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 20.4 | | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 17.1 | | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 19.5 | | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 22.6 | | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 19.5 | | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 22.0 | | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 20.8 | | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20.1 | | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 21.4 | | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 18.5 | | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 16.6 | | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 20.3 | | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 20.6 | | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-380508/5

Matrix: Water  Lab File ID: U1907248.d

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/09/2019 17:57

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 44.9 | | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 19.1 | | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 20.8 | | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 20.5 | | 5.0 | 2.6 |
| 100-42-5 | Styrene | 19.9 | | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 17.3 | | 1.0 | 0.15 |
| 108-88-3 | Toluene | 20.4 | | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 20.4 | | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 17.6 | | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 19.0 | | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 17.9 | | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 22.6 | | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 42.1 | | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 101 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 96 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907248.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-May-2019 17:57:22 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086952-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 18:46:10 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 18:46:10

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 868129 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 693935 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 361716 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 58 | 224672 | 20.0 | 19.2 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 97 | 240665 | 20.0 | 17.9 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.100 | 0.000 | 85 | 840721 | 20.0 | 20.2 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 97 | 310061 | 20.0 | 19.8 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 70 | 277583 | 20.0 | 16.6 | |
| 10 Chloromethane | 50 | 1.811 | 1.823 | -0.012 | 89 | 275021 | 20.0 | 22.0 | |
| 11 Butadiene | 54 | 1.906 | 1.906 | 0.000 | 81 | 272974 | 20.0 | 21.8 | |
| 12 Vinyl chloride | 62 | 1.918 | 1.930 | -0.012 | 82 | 291775 | 20.0 | 22.6 | |
| 13 Bromomethane | 94 | 2.226 | 2.226 | 0.000 | 91 | 205220 | 20.0 | 20.2 | |
| 15 Chloroethane | 64 | 2.298 | 2.309 | -0.011 | 90 | 181288 | 20.0 | 22.6 | |
| 16 Dichlorofluoromethane | 67 | 2.499 | 2.499 | 0.000 | 83 | 419212 | 20.0 | 21.1 | |
| 17 Trichlorofluoromethane | 101 | 2.558 | 2.570 | -0.012 | 87 | 386458 | 20.0 | 17.9 | |
| 18 Ethyl ether | 59 | 2.808 | 2.808 | 0.000 | 87 | 179888 | 20.0 | 23.0 | |
| 19 Acrolein | 56 | 2.926 | 2.926 | 0.000 | 90 | 162302 | 100.0 | 84.1 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 88 | 306673 | 20.0 | 19.7 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 82 | 225052 | 20.0 | 20.2 | |
| 22 Acetone | 43 | 3.068 | 3.068 | 0.000 | 88 | 191549 | 40.0 | 56.3 | |
| 24 Iodomethane | 142 | 3.199 | 3.199 | 0.000 | 97 | 366535 | 20.0 | 18.1 | |
| 25 Carbon disulfide | 76 | 3.258 | 3.270 | -0.012 | 98 | 663904 | 20.0 | 20.4 | |
| 27 3-Chloro-1-propene | 41 | 3.365 | 3.365 | 0.000 | 65 | 301656 | 20.0 | 19.6 | |
| 28 Methyl acetate | 43 | 3.377 | 3.389 | -0.012 | 96 | 453541 | 40.0 | 44.9 | |
| 29 Methylene Chloride | 49 | 3.483 | 3.484 | -0.001 | 55 | 253114 | 20.0 | 20.5 | |
| 30 2-Methyl-2-propanol | 59 | 3.578 | 3.578 | 0.000 | 90 | 353361 | 200.0 | 300.6 | |
| 31 Acrylonitrile | 53 | 3.697 | 3.697 | 0.000 | 100 | 1210851 | 200.0 | 277.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.732 | 3.733 | -0.001 | 73 | 300482 | 20.0 | 20.4 | |
| 33 Methyl tert-butyl ether | 73 | 3.732 | 3.733 | -0.001 | 45 | 575652 | 20.0 | 19.1 | |
| 34 Hexane | 57 | 3.982 | 3.982 | 0.000 | 88 | 331279 | 20.0 | 21.7 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 368199 | 20.0 | 21.0 | |
| 36 Vinyl acetate | 43 | 4.148 | 4.148 | 0.000 | 96 | 425513 | 20.0 | 21.1 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 42 2,2-Dichloropropane | 77 | 4.634 | 4.634 | 0.000 | 59 | 213544 | 20.0 | 20.2 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 66 | 261035 | 20.0 | 20.8 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 94 | 94764 | 40.0 | 46.2 | |
| 46 Chlorobromomethane | 49 | 4.835 | 4.835 | 0.000 | 75 | 168651 | 20.0 | 20.0 | |
| 47 Tetrahydrofuran | 42 | 4.883 | 4.883 | 0.000 | 87 | 210500 | 40.0 | 47.2 | |
| 48 Chloroform | 83 | 4.906 | 4.907 | -0.001 | 69 | 375976 | 20.0 | 19.5 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.084 | 0.000 | 88 | 325235 | 20.0 | 18.0 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 84 | 354429 | 20.0 | 21.4 | |
| 51 1,1-Dichloropropene | 75 | 5.227 | 5.227 | 0.000 | 84 | 307808 | 20.0 | 20.2 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 67 | 298073 | 20.0 | 17.1 | |
| 53 Isobutyl alcohol | 41 | 5.298 | 5.298 | 0.000 | 90 | 318526 | 500.0 | 668.2 | |
| 54 Benzene | 78 | 5.416 | 5.416 | 0.000 | 93 | 901628 | 20.0 | 21.8 | |
| 55 1,2-Dichloroethane | 62 | 5.416 | 5.416 | 0.000 | 45 | 267529 | 20.0 | 17.1 | |
| 57 n-Heptane | 57 | 5.642 | 5.642 | 0.000 | 81 | 187730 | 20.0 | 19.8 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 92 | 260512 | 20.0 | 19.0 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.175 | 0.000 | 89 | 413506 | 20.0 | 20.8 | |
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 85 | 210963 | 20.0 | 22.0 | |
| 64 Dibromomethane | 174 | 6.294 | 6.294 | 0.000 | 90 | 163987 | 20.0 | 16.6 | |
| 65 1,4-Dioxane | 88 | 6.306 | 6.306 | 0.000 | 40 | 72793 | 400.0 | 701.8 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 281367 | 20.0 | 18.6 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.697 | 6.697 | 0.000 | 82 | 158459 | 20.0 | 20.6 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.851 | 6.851 | 0.000 | 94 | 337426 | 20.0 | 20.1 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 94 | 566208 | 40.0 | 40.7 | |
| 71 Toluene | 91 | 7.171 | 7.172 | -0.001 | 96 | 957656 | 20.0 | 20.4 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 88 | 293598 | 20.0 | 17.6 | |
| 73 Ethyl methacrylate | 69 | 7.432 | 7.432 | 0.000 | 85 | 296132 | 20.0 | 19.6 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 206685 | 20.0 | 21.0 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 259317 | 20.0 | 17.3 | |
| 76 1,3-Dichloropropane | 76 | 7.705 | 7.705 | 0.000 | 80 | 332098 | 20.0 | 19.9 | |
| 77 2-Hexanone | 43 | 7.764 | 7.764 | 0.000 | 77 | 437323 | 40.0 | 40.0 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.930 | 0.000 | 88 | 230208 | 20.0 | 18.5 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 97 | 217392 | 20.0 | 18.7 | |
| 83 Chlorobenzene | 112 | 8.523 | 8.523 | 0.000 | 94 | 625131 | 20.0 | 19.5 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 8.606 | 8.606 | 0.000 | 86 | 219358 | 20.0 | 19.0 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 97 | 340818 | 20.0 | 20.3 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 98 | 428609 | 20.0 | 21.0 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 410635 | 20.0 | 21.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 661400 | 20.0 | 19.9 | |
| 89 Bromoform | 173 | 9.353 | 9.354 | -0.001 | 97 | 170797 | 20.0 | 16.8 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1073989 | 20.0 | 20.6 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 75 | 329439 | 20.0 | 23.6 | |
| 95 Bromobenzene | 156 | 9.840 | 9.840 | 0.000 | 90 | 268584 | 20.0 | 19.3 | |
| 96 1,2,3-Trichloropropane | 110 | 9.863 | 9.863 | 0.000 | 63 | 112994 | 20.0 | 21.4 | |
| 97 trans-1,4-Dichloro-2-buten | 53 | 9.875 | 9.875 | 0.000 | 61 | 83080 | 20.0 | 16.8 | |
| 98 N-Propylbenzene | 120 | 9.946 | 9.946 | 0.000 | 94 | 302511 | 20.0 | 21.6 | |
| 100 2-Chlorotoluene | 126 | 10.041 | 10.041 | 0.000 | 97 | 257249 | 20.0 | 21.7 | |
| 101 1,3,5-Trimethylbenzene | 105 | 10.124 | 10.124 | 0.000 | 94 | 857454 | 20.0 | 21.3 | |
| 102 4-Chlorotoluene | 126 | 10.148 | 10.148 | 0.000 | 97 | 264097 | 20.0 | 20.6 | |
| 103 tert-Butylbenzene | 119 | 10.468 | 10.468 | 0.000 | 75 | 792768 | 20.0 | 20.7 | |
| 105 1,2,4-Trimethylbenzene | 105 | 10.516 | 10.516 | 0.000 | 71 | 869014 | 20.0 | 21.3 | |
| 106 sec-Butylbenzene | 105 | 10.705 | 10.705 | 0.000 | 93 | 1139333 | 20.0 | 22.1 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.824 | 0.000 | 83 | 504296 | 20.0 | 19.7 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 108 4-Isopropyltoluene | 119 | 10.848 | 10.848 | 0.000 | 91 | 973937 | 20.0 | 21.6 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 92 | 527441 | 20.0 | 20.0 | |
| 112 n-Butylbenzene | 91 | 11.286 | 11.286 | 0.000 | 94 | 803212 | 20.0 | 21.7 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 99 | 476143 | 20.0 | 20.5 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.128 | 0.000 | 89 | 85056 | 20.0 | 19.2 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 91 | 260470 | 20.0 | 16.8 | |
| 117 Hexachlorobutadiene | 225 | 13.208 | 13.208 | 0.000 | 90 | 123867 | 20.0 | 15.6 | |
| 118 Naphthalene | 128 | 13.279 | 13.279 | 0.000 | 96 | 790135 | 20.0 | 18.5 | |
| 119 1,2,3-Trichlorobenzene | 180 | 13.540 | 13.540 | 0.000 | 92 | 233012 | 20.0 | 16.8 | |
| S 124 Total BTEX | 1 | | | | 0 | | 100.0 | 104.7 | |
| S 125 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 73.5 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 42.1 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

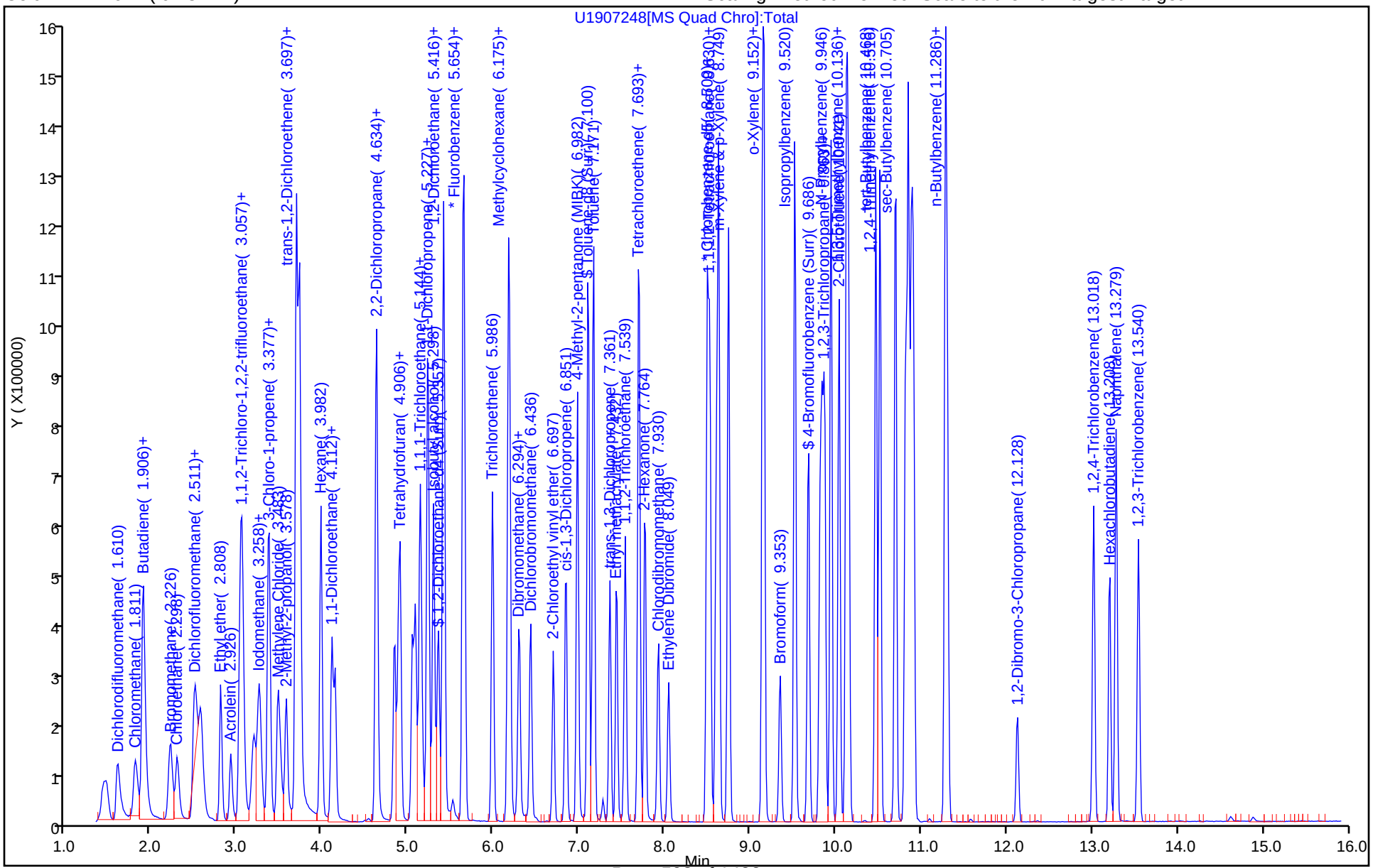
Report Date: 09-May-2019 18:46:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907248.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 09-May-2019 17:57:22 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907248.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 09-May-2019 17:57:22 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086952-005
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 18:46:10 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 18:46:10

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.2 | 96.14 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.9 | 89.66 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.2 | 101.02 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.8 | 99.01 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619 MS  Lab Sample ID: 240-112111-2 MS

Matrix: Water  Lab File ID: U1907272.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/10/2019 02:52

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624 ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 344 | | 20 | 4.8 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 474 | | 20 | 2.6 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 356 | | 20 | 8.2 |
| 79-00-5 | 1,1,2-Trichloroethane | 434 | | 20 | 1.8 |
| 75-34-3 | 1,1-Dichloroethane | 417 | | 20 | 3.4 |
| 75-35-4 | 1,1-Dichloroethene | 393 | | 20 | 3.8 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 289 | | 20 | 5.2 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 371 | | 40 | 18 |
| 106-93-4 | Ethylene Dibromide | 379 | | 20 | 2.4 |
| 95-50-1 | 1,2-Dichlorobenzene | 383 | | 20 | 3.0 |
| 107-06-2 | 1,2-Dichloroethane | 336 | | 20 | 4.2 |
| 78-87-5 | 1,2-Dichloropropane | 428 | | 20 | 3.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 370 | | 20 | 3.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 363 | | 20 | 3.2 |
| 78-93-3 | 2-Butanone (MEK) | 913 | | 200 | 23 |
| 591-78-6 | 2-Hexanone | 809 | | 200 | 11 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 807 | | 200 | 8.4 |
| 67-64-1 | Acetone | 1120 | | 200 | 110 |
| 71-43-2 | Benzene | 426 | | 20 | 2.6 |
| 75-27-4 | Dichlorobromomethane | 364 | | 20 | 3.4 |
| 75-25-2 | Bromoform | 334 | | 20 | 15 |
| 74-83-9 | Bromomethane | 397 | | 20 | 8.4 |
| 75-15-0 | Carbon disulfide | 383 | | 20 | 5.6 |
| 56-23-5 | Carbon tetrachloride | 315 | | 20 | 5.2 |
| 108-90-7 | Chlorobenzene | 373 | | 20 | 2.8 |
| 75-00-3 | Chloroethane | 438 | | 20 | 17 |
| 67-66-3 | Chloroform | 395 | | 20 | 2.6 |
| 74-87-3 | Chloromethane | 440 | | 20 | 4.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 1040 | | 20 | 3.2 |
| 10061-01-5 | cis-1,3-Dichloropropene | 367 | | 20 | 12 |
| 110-82-7 | Cyclohexane | 368 | | 20 | 4.8 |
| 124-48-1 | Chlorodibromomethane | 367 | | 20 | 7.8 |
| 75-71-8 | Dichlorodifluoromethane | 288 | | 20 | 7.0 |
| 100-41-4 | Ethylbenzene | 375 | | 20 | 2.2 |
| 98-82-8 | Isopropylbenzene | 381 | | 20 | 1.8 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619 MS  Lab Sample ID: 240-112111-2 MS

Matrix: Water  Lab File ID: U1907272.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/10/2019 02:52

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 887 | | 200 | 34 |
| 1634-04-4 | Methyl tert-butyl ether | 369 | | 20 | 1.4 |
| 108-87-2 | Methylcyclohexane | 349 | | 20 | 6.6 |
| 75-09-2 | Methylene Chloride | 409 | | 100 | 52 |
| 100-42-5 | Styrene | 378 | | 20 | 2.0 |
| 127-18-4 | Tetrachloroethene | 327 | | 20 | 3.0 |
| 108-88-3 | Toluene | 394 | | 20 | 2.8 |
| 156-60-5 | trans-1,2-Dichloroethene | 399 | | 20 | 3.8 |
| 10061-02-6 | trans-1,3-Dichloropropene | 336 | | 20 | 13 |
| 79-01-6 | Trichloroethene | 460 | | 20 | 2.0 |
| 75-69-4 | Trichlorofluoromethane | 328 | | 20 | 9.0 |
| 75-01-4 | Vinyl chloride | 607 | | 20 | 4.0 |
| 1330-20-7 | Xylenes, Total | 793 | | 40 | 3.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 104 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 97 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 101 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 91 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907272.d
Lims ID: 240-112111-B-2 MS
Client ID:
Sample Type: MS
Inject. Date: 10-May-2019 02:52:14 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-030
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 10-May-2019 14:18:26 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0337

First Level Reviewer: laveyt Date: 10-May-2019 14:18:47

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 838550 | 1.00 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 650631 | 1.00 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 340630 | 1.00 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 56 | 218189 | 1.00 | 19.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 96 | 236631 | 1.00 | 18.3 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.101 | 7.100 | 0.000 | 88 | 813604 | 1.00 | 20.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 295931 | 1.00 | 20.2 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.610 | 0.000 | 70 | 232268 | 1.00 | 14.4 | |
| 10 Chloromethane | 50 | 1.812 | 1.823 | -0.011 | 78 | 265726 | 1.00 | 22.0 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 97 | 379193 | 1.00 | 30.4 | |
| 13 Bromomethane | 94 | 2.227 | 2.226 | 0.001 | 90 | 194148 | 1.00 | 19.8 | |
| 15 Chloroethane | 64 | 2.310 | 2.309 | 0.001 | 99 | 169792 | 1.00 | 21.9 | |
| 17 Trichlorofluoromethane | 101 | 2.571 | 2.570 | 0.000 | 87 | 342654 | 1.00 | 16.4 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 88 | 296034 | 1.00 | 19.7 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.057 | 0.000 | 73 | 191754 | 1.00 | 17.8 | |
| 22 Acetone | 43 | 3.069 | 3.068 | 0.001 | 94 | 184745 | 2.00 | 56.2 | |
| 25 Carbon disulfide | 76 | 3.258 | 3.270 | -0.012 | 98 | 603675 | 1.00 | 19.2 | |
| 28 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 433070 | 2.00 | 44.4 | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 49 | 244054 | 1.00 | 20.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | 0.000 | 77 | 283503 | 1.00 | 20.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | 0.000 | 89 | 537050 | 1.00 | 18.5 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 354225 | 1.00 | 20.9 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 65 | 630146 | 1.00 | 52.0 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 53 | 90423 | 2.00 | 45.7 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | 0.000 | 70 | 367208 | 1.00 | 19.8 | |
| 49 1,1,1-Trichloroethane | 97 | 5.085 | 5.084 | 0.001 | 81 | 300864 | 1.00 | 17.2 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 84 | 294341 | 1.00 | 18.4 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 73 | 265468 | 1.00 | 15.7 | |
| 54 Benzene | 78 | 5.417 | 5.416 | 0.001 | 93 | 850105 | 1.00 | 21.3 | |
| 55 1,2-Dichloroethane | 62 | 5.428 | 5.416 | 0.012 | 54 | 253873 | 1.00 | 16.8 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 94 | 304779 | 1.00 | 23.0 | |
| 61 Methylcyclohexane | 83 | 6.176 | 6.175 | 0.001 | 89 | 335912 | 1.00 | 17.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 86 | 197954 | 1.00 | 21.4 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 94 | 265261 | 1.00 | 18.2 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.851 | 6.851 | 0.000 | 94 | 297691 | 1.00 | 18.4 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 92 | 542180 | 2.00 | 40.4 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 96 | 866589 | 1.00 | 19.7 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 79 | 263063 | 1.00 | 16.8 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 200491 | 1.00 | 21.7 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.693 | 0.000 | 92 | 229221 | 1.00 | 16.3 | |
| 77 2-Hexanone | 43 | 7.765 | 7.764 | 0.001 | 78 | 414300 | 2.00 | 40.4 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.930 | 0.001 | 84 | 213989 | 1.00 | 18.4 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 206237 | 1.00 | 18.9 | |
| 83 Chlorobenzene | 112 | 8.524 | 8.523 | 0.001 | 92 | 561782 | 1.00 | 18.7 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 295036 | 1.00 | 18.8 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 372203 | 1.00 | 19.4 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 368268 | 1.00 | 20.2 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 589498 | 1.00 | 18.9 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 96 | 159220 | 1.00 | 16.7 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 930773 | 1.00 | 19.0 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 86 | 311176 | 1.00 | 23.7 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.824 | 0.000 | 81 | 444488 | 1.00 | 18.5 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 451581 | 1.00 | 18.2 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 418393 | 1.00 | 19.2 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.128 | 0.001 | 90 | 77391 | 1.00 | 18.5 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 210148 | 1.00 | 14.4 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 2.00 | 39.7 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

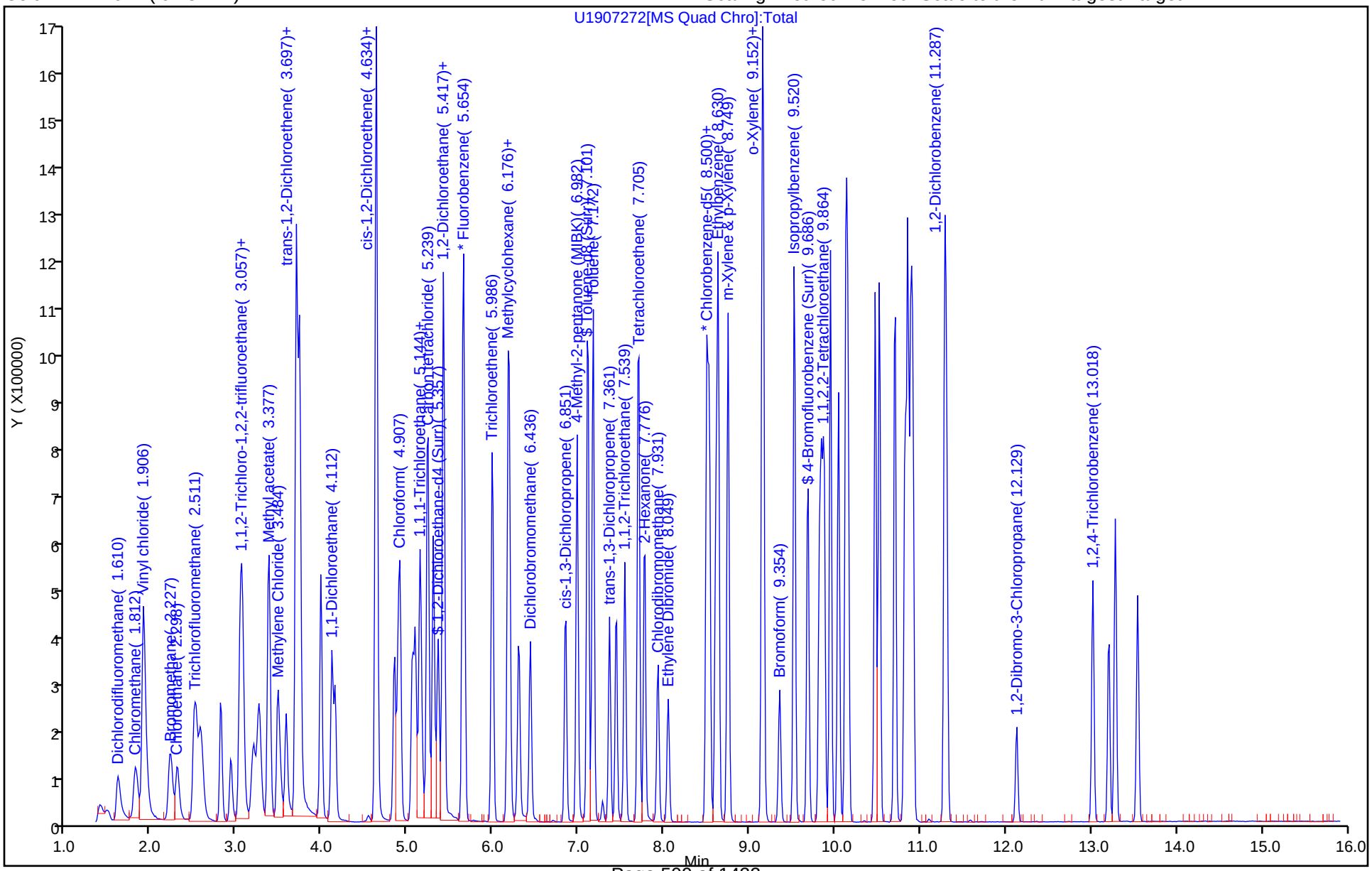
Report Date: 10-May-2019 14:18:48 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907272.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 10-May-2019 02:52:14 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-B-2 MS | | | Worklist Smp#: | 30 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907272.d
Lims ID: 240-112111-B-2 MS
Client ID:
Sample Type: MS
Inject. Date: 10-May-2019 02:52:14 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-030
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 10-May-2019 14:18:26 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0337

First Level Reviewer: laveyt Date: 10-May-2019 14:18:47

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.3 | 1933.11 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.3 | 1825.31 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.9 | 2085.39 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 20.2 | 2015.73 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619 MS  Lab Sample ID: 240-112111-4 MS

Matrix: Water  Lab File ID: U1907235.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 23:21

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 720 | | 40 | 9.6 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 973 | | 40 | 5.2 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 771 | | 40 | 16 |
| 79-00-5 | 1,1,2-Trichloroethane | 840 | | 40 | 3.6 |
| 75-34-3 | 1,1-Dichloroethane | 834 | | 40 | 6.8 |
| 75-35-4 | 1,1-Dichloroethene | 791 | | 40 | 7.6 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 628 | | 40 | 10 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 732 | | 80 | 36 |
| 106-93-4 | Ethylene Dibromide | 754 | | 40 | 4.8 |
| 95-50-1 | 1,2-Dichlorobenzene | 811 | | 40 | 6.0 |
| 107-06-2 | 1,2-Dichloroethane | 683 | | 40 | 8.4 |
| 78-87-5 | 1,2-Dichloropropane | 860 | | 40 | 6.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 797 | | 40 | 6.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 773 | | 40 | 6.4 |
| 78-93-3 | 2-Butanone (MEK) | 1890 | | 400 | 46 |
| 591-78-6 | 2-Hexanone | 1600 | | 400 | 22 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 1600 | | 400 | 17 |
| 67-64-1 | Acetone | 2310 | | 400 | 220 |
| 71-43-2 | Benzene | 859 | | 40 | 5.2 |
| 75-27-4 | Dichlorobromomethane | 718 | | 40 | 6.8 |
| 75-25-2 | Bromoform | 680 | | 40 | 30 |
| 74-83-9 | Bromomethane | 793 | | 40 | 17 |
| 75-15-0 | Carbon disulfide | 824 | | 40 | 11 |
| 56-23-5 | Carbon tetrachloride | 657 | | 40 | 10 |
| 108-90-7 | Chlorobenzene | 770 | | 40 | 5.6 |
| 75-00-3 | Chloroethane | 883 | | 40 | 33 |
| 67-66-3 | Chloroform | 784 | | 40 | 5.2 |
| 74-87-3 | Chloromethane | 885 | | 40 | 8.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 2200 | | 40 | 6.4 |
| 10061-01-5 | cis-1,3-Dichloropropene | 755 | | 40 | 24 |
| 110-82-7 | Cyclohexane | 836 | | 40 | 9.6 |
| 124-48-1 | Chlorodibromomethane | 724 | | 40 | 16 |
| 75-71-8 | Dichlorodifluoromethane | 649 | | 40 | 14 |
| 100-41-4 | Ethylbenzene | 793 | | 40 | 4.4 |
| 98-82-8 | Isopropylbenzene | 809 | | 40 | 3.6 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619 MS  Lab Sample ID: 240-112111-4 MS

Matrix: Water  Lab File ID: U1907235.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 23:21

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1770 | | 400 | 69 |
| 1634-04-4 | Methyl tert-butyl ether | 738 | | 40 | 2.8 |
| 108-87-2 | Methylcyclohexane | 783 | | 40 | 13 |
| 75-09-2 | Methylene Chloride | 811 | | 200 | 100 |
| 100-42-5 | Styrene | 789 | | 40 | 4.0 |
| 127-18-4 | Tetrachloroethene | 699 | | 40 | 6.0 |
| 108-88-3 | Toluene | 817 | | 40 | 5.6 |
| 156-60-5 | trans-1,2-Dichloroethene | 835 | | 40 | 7.6 |
| 10061-02-6 | trans-1,3-Dichloropropene | 694 | | 40 | 27 |
| 79-01-6 | Trichloroethene | 1110 | | 40 | 4.0 |
| 75-69-4 | Trichlorofluoromethane | 692 | | 40 | 18 |
| 75-01-4 | Vinyl chloride | 1170 | | 40 | 8.0 |
| 1330-20-7 | Xylenes, Total | 1670 | | 80 | 6.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 102 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 96 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 89 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907235.d
Lims ID: 240-112111-A-4 MS
Client ID:
Sample Type: MS
Inject. Date: 08-May-2019 23:21:43 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 14:18:55 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 14:20:31

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 856678 | 0.5000 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 667836 | 0.5000 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 87 | 342686 | 0.5000 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 58 | 222296 | 0.5000 | 19.3 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 95 | 234638 | 0.5000 | 17.7 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 88 | 818690 | 0.5000 | 20.4 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 97 | 299766 | 0.5000 | 19.9 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.598 | 0.012 | 69 | 267639 | 0.5000 | 16.2 | |
| 10 Chloromethane | 50 | 1.811 | 1.812 | -0.001 | 78 | 273297 | 0.5000 | 22.1 | |
| 12 Vinyl chloride | 62 | 1.918 | 1.918 | 0.000 | 97 | 374631 | 0.5000 | 29.4 | |
| 13 Bromomethane | 94 | 2.215 | 2.215 | 0.000 | 89 | 198215 | 0.5000 | 19.8 | |
| 15 Chloroethane | 64 | 2.298 | 2.298 | 0.000 | 94 | 174788 | 0.5000 | 22.1 | |
| 17 Trichlorofluoromethane | 101 | 2.570 | 2.559 | 0.011 | 88 | 369148 | 0.5000 | 17.3 | |
| 20 1,1-Dichloroethene | 61 | 3.033 | 3.033 | 0.000 | 89 | 303905 | 0.5000 | 19.8 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.045 | 3.045 | 0.000 | 72 | 211905 | 0.5000 | 19.3 | |
| 22 Acetone | 43 | 3.068 | 3.069 | -0.001 | 99 | 193985 | 1.00 | 57.8 | |
| 25 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 98 | 662730 | 0.5000 | 20.6 | |
| 28 Methyl acetate | 43 | 3.377 | 3.377 | 0.000 | 96 | 442081 | 1.00 | 44.3 | |
| 29 Methylene Chloride | 49 | 3.472 | 3.484 | -0.012 | 84 | 247222 | 0.5000 | 20.3 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | -0.001 | 73 | 302827 | 0.5000 | 20.9 | |
| 33 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | -0.001 | 88 | 548300 | 0.5000 | 18.4 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 84 | 361633 | 0.5000 | 20.9 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 64 | 681215 | 0.5000 | 55.0 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 55 | 95819 | 1.00 | 47.4 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | -0.001 | 70 | 372072 | 0.5000 | 19.6 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 89 | 321947 | 0.5000 | 18.0 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 84 | 342005 | 0.5000 | 20.9 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 69 | 283254 | 0.5000 | 16.4 | |
| 54 Benzene | 78 | 5.416 | 5.417 | -0.001 | 93 | 875032 | 0.5000 | 21.5 | |
| 55 1,2-Dichloroethane | 62 | 5.416 | 5.417 | -0.001 | 45 | 263284 | 0.5000 | 17.1 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 91 | 374171 | 0.5000 | 27.6 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 89 | 385030 | 0.5000 | 19.6 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 88 | 203347 | 0.5000 | 21.5 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.437 | -0.001 | 93 | 267630 | 0.5000 | 18.0 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.839 | 6.840 | -0.001 | 92 | 312589 | 0.5000 | 18.9 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 82 | 549327 | 1.00 | 40.0 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 96 | 921393 | 0.5000 | 20.4 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.362 | -0.001 | 84 | 279142 | 0.5000 | 17.3 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 90 | 199370 | 0.5000 | 21.0 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.694 | -0.001 | 92 | 251497 | 0.5000 | 17.5 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 78 | 419944 | 1.00 | 39.9 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.931 | -0.001 | 89 | 216564 | 0.5000 | 18.1 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 98 | 210768 | 0.5000 | 18.9 | |
| 83 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 93 | 594817 | 0.5000 | 19.3 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 319954 | 0.5000 | 19.8 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 408035 | 0.5000 | 20.7 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 88 | 393658 | 0.5000 | 21.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 631591 | 0.5000 | 19.7 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 96 | 166536 | 0.5000 | 17.0 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 1015094 | 0.5000 | 20.2 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 85 | 321197 | 0.5000 | 24.3 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.812 | 0.012 | 83 | 482171 | 0.5000 | 19.9 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 91 | 483064 | 0.5000 | 19.3 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 445488 | 0.5000 | 20.3 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 86 | 76811 | 0.5000 | 18.3 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 230020 | 0.5000 | 15.7 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 1.00 | 41.8 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

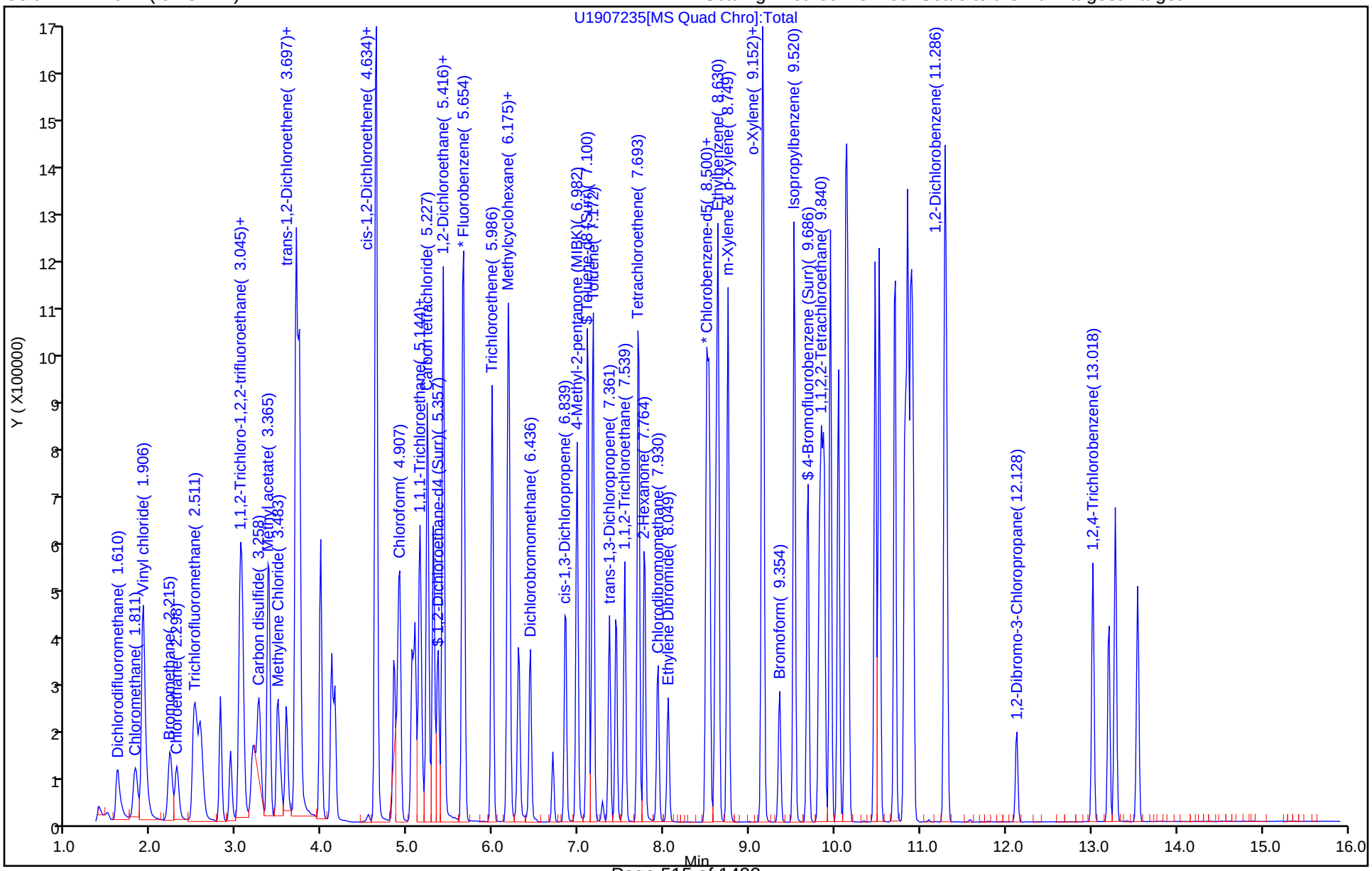
Report Date: 09-May-2019 14:20:31 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907235.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 23:21:43 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-A-4 MS | | | Worklist Smp#: | 24 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907235.d
Lims ID: 240-112111-A-4 MS
Client ID:
Sample Type: MS
Inject. Date: 08-May-2019 23:21:43 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-024
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 14:18:55 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 14:20:31

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 19.3 | 3855.64 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.7 | 3543.28 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.4 | 4088.74 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.9 | 3978.50 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619 MSD  Lab Sample ID: 240-112111-2 MSD

Matrix: Water  Lab File ID: U1907273.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/10/2019 03:14

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624 ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 356 | | 20 | 4.8 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 492 | | 20 | 2.6 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 360 | | 20 | 8.2 |
| 79-00-5 | 1,1,2-Trichloroethane | 414 | | 20 | 1.8 |
| 75-34-3 | 1,1-Dichloroethane | 439 | | 20 | 3.4 |
| 75-35-4 | 1,1-Dichloroethene | 407 | | 20 | 3.8 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 315 | | 20 | 5.2 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 390 | | 40 | 18 |
| 106-93-4 | Ethylene Dibromide | 371 | | 20 | 2.4 |
| 95-50-1 | 1,2-Dichlorobenzene | 401 | | 20 | 3.0 |
| 107-06-2 | 1,2-Dichloroethane | 339 | | 20 | 4.2 |
| 78-87-5 | 1,2-Dichloropropane | 427 | | 20 | 3.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 378 | | 20 | 3.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 376 | | 20 | 3.2 |
| 78-93-3 | 2-Butanone (MEK) | 890 | | 200 | 23 |
| 591-78-6 | 2-Hexanone | 787 | | 200 | 11 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 782 | | 200 | 8.4 |
| 67-64-1 | Acetone | 1140 | | 200 | 110 |
| 71-43-2 | Benzene | 428 | | 20 | 2.6 |
| 75-27-4 | Dichlorobromomethane | 364 | | 20 | 3.4 |
| 75-25-2 | Bromoform | 334 | | 20 | 15 |
| 74-83-9 | Bromomethane | 417 | | 20 | 8.4 |
| 75-15-0 | Carbon disulfide | 404 | | 20 | 5.6 |
| 56-23-5 | Carbon tetrachloride | 323 | | 20 | 5.2 |
| 108-90-7 | Chlorobenzene | 375 | | 20 | 2.8 |
| 75-00-3 | Chloroethane | 463 | | 20 | 17 |
| 67-66-3 | Chloroform | 402 | | 20 | 2.6 |
| 74-87-3 | Chloromethane | 454 | | 20 | 4.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 1100 | | 20 | 3.2 |
| 10061-01-5 | cis-1,3-Dichloropropene | 364 | | 20 | 12 |
| 110-82-7 | Cyclohexane | 387 | | 20 | 4.8 |
| 124-48-1 | Chlorodibromomethane | 367 | | 20 | 7.8 |
| 75-71-8 | Dichlorodifluoromethane | 298 | | 20 | 7.0 |
| 100-41-4 | Ethylbenzene | 377 | | 20 | 2.2 |
| 98-82-8 | Isopropylbenzene | 381 | | 20 | 1.8 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619 MSD  Lab Sample ID: 240-112111-2 MSD

Matrix: Water  Lab File ID: U1907273.d

Analysis Method: 8260C  Date Collected: 05/06/2019 09:29

Sample wt/vol: 5(mL)  Date Analyzed: 05/10/2019 03:14

Soil Aliquot Vol:  Dilution Factor: 20

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380508  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 900 | | 200 | 34 |
| 1634-04-4 | Methyl tert-butyl ether | 399 | | 20 | 1.4 |
| 108-87-2 | Methylcyclohexane | 361 | | 20 | 6.6 |
| 75-09-2 | Methylene Chloride | 417 | | 100 | 52 |
| 100-42-5 | Styrene | 374 | | 20 | 2.0 |
| 127-18-4 | Tetrachloroethene | 331 | | 20 | 3.0 |
| 108-88-3 | Toluene | 395 | | 20 | 2.8 |
| 156-60-5 | trans-1,2-Dichloroethene | 421 | | 20 | 3.8 |
| 10061-02-6 | trans-1,3-Dichloropropene | 333 | | 20 | 13 |
| 79-01-6 | Trichloroethene | 468 | | 20 | 2.0 |
| 75-69-4 | Trichlorofluoromethane | 343 | | 20 | 9.0 |
| 75-01-4 | Vinyl chloride | 643 | | 20 | 4.0 |
| 1330-20-7 | Xylenes, Total | 793 | | 40 | 3.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 100 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 100 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907273.d
Lims ID: 240-112111-B-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 10-May-2019 03:14:29 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-031
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 10-May-2019 14:18:26 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0337

First Level Reviewer: laveyt Date: 10-May-2019 14:19:05

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.666 | 5.654 | 0.012 | 99 | 792249 | 1.00 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 84 | 608238 | 1.00 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 316480 | 1.00 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.061 | 5.049 | 0.012 | 58 | 214065 | 1.00 | 20.1 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 97 | 220828 | 1.00 | 18.0 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.112 | 7.100 | 0.012 | 83 | 727793 | 1.00 | 20.0 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 273260 | 1.00 | 19.9 | |
| 9 Dichlorodifluoromethane | 85 | 1.622 | 1.610 | 0.012 | 64 | 227281 | 1.00 | 14.9 | |
| 10 Chloromethane | 50 | 1.823 | 1.823 | 0.000 | 77 | 259408 | 1.00 | 22.7 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.930 | 0.000 | 97 | 379545 | 1.00 | 32.2 | |
| 13 Bromomethane | 94 | 2.239 | 2.226 | 0.012 | 89 | 192771 | 1.00 | 20.8 | |
| 15 Chloroethane | 64 | 2.322 | 2.309 | 0.013 | 90 | 169572 | 1.00 | 23.2 | |
| 17 Trichlorofluoromethane | 101 | 2.582 | 2.570 | 0.012 | 87 | 338388 | 1.00 | 17.1 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.045 | 0.000 | 89 | 289323 | 1.00 | 20.3 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.069 | 3.057 | 0.012 | 78 | 183104 | 1.00 | 18.0 | |
| 22 Acetone | 43 | 3.080 | 3.068 | 0.012 | 88 | 177520 | 2.00 | 57.2 | |
| 25 Carbon disulfide | 76 | 3.270 | 3.270 | 0.000 | 98 | 600712 | 1.00 | 20.2 | |
| 28 Methyl acetate | 43 | 3.389 | 3.389 | 0.000 | 96 | 415046 | 2.00 | 45.0 | |
| 29 Methylene Chloride | 49 | 3.484 | 3.484 | 0.000 | 83 | 235088 | 1.00 | 20.8 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.745 | 3.733 | 0.012 | 69 | 282247 | 1.00 | 21.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.745 | 3.733 | 0.012 | 88 | 548456 | 1.00 | 20.0 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 352219 | 1.00 | 22.0 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.634 | 0.000 | 66 | 631232 | 1.00 | 55.1 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 50 | 83251 | 2.00 | 44.5 | |
| 48 Chloroform | 83 | 4.919 | 4.907 | 0.012 | 69 | 353233 | 1.00 | 20.1 | |
| 49 1,1,1-Trichloroethane | 97 | 5.096 | 5.084 | 0.012 | 81 | 294070 | 1.00 | 17.8 | |
| 50 Cyclohexane | 84 | 5.156 | 5.144 | 0.012 | 83 | 292406 | 1.00 | 19.3 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 72 | 257470 | 1.00 | 16.2 | |
| 54 Benzene | 78 | 5.417 | 5.416 | 0.001 | 93 | 806131 | 1.00 | 21.4 | |
| 55 1,2-Dichloroethane | 62 | 5.428 | 5.416 | 0.012 | 51 | 241887 | 1.00 | 17.0 | |
| 59 Trichloroethene | 130 | 5.998 | 5.986 | 0.012 | 91 | 292770 | 1.00 | 23.4 | |
| 61 Methylcyclohexane | 83 | 6.176 | 6.175 | 0.001 | 90 | 327769 | 1.00 | 18.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 83 | 186766 | 1.00 | 21.4 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.436 | 0.000 | 93 | 250855 | 1.00 | 18.2 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.852 | 6.851 | 0.001 | 94 | 278259 | 1.00 | 18.2 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 93 | 496431 | 2.00 | 39.1 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 95 | 812046 | 1.00 | 19.8 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.361 | 0.000 | 86 | 244008 | 1.00 | 16.7 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 84 | 178974 | 1.00 | 20.7 | |
| 75 Tetrachloroethene | 166 | 7.705 | 7.693 | 0.012 | 67 | 217101 | 1.00 | 16.6 | |
| 77 2-Hexanone | 43 | 7.765 | 7.764 | 0.001 | 78 | 376955 | 2.00 | 39.4 | |
| 79 Chlorodibromomethane | 129 | 7.931 | 7.930 | 0.001 | 87 | 200148 | 1.00 | 18.4 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 97 | 188913 | 1.00 | 18.6 | |
| 83 Chlorobenzene | 112 | 8.535 | 8.523 | 0.012 | 92 | 528200 | 1.00 | 18.8 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 277457 | 1.00 | 18.9 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 350404 | 1.00 | 19.6 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 89 | 342125 | 1.00 | 20.1 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 545751 | 1.00 | 18.7 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 96 | 149168 | 1.00 | 16.7 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 871644 | 1.00 | 19.1 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 86 | 299991 | 1.00 | 24.6 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.824 | 0.000 | 81 | 422156 | 1.00 | 18.9 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 92 | 433702 | 1.00 | 18.8 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 407038 | 1.00 | 20.1 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.129 | 12.128 | 0.001 | 85 | 75672 | 1.00 | 19.5 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 93 | 213232 | 1.00 | 15.8 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 2.00 | 39.7 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

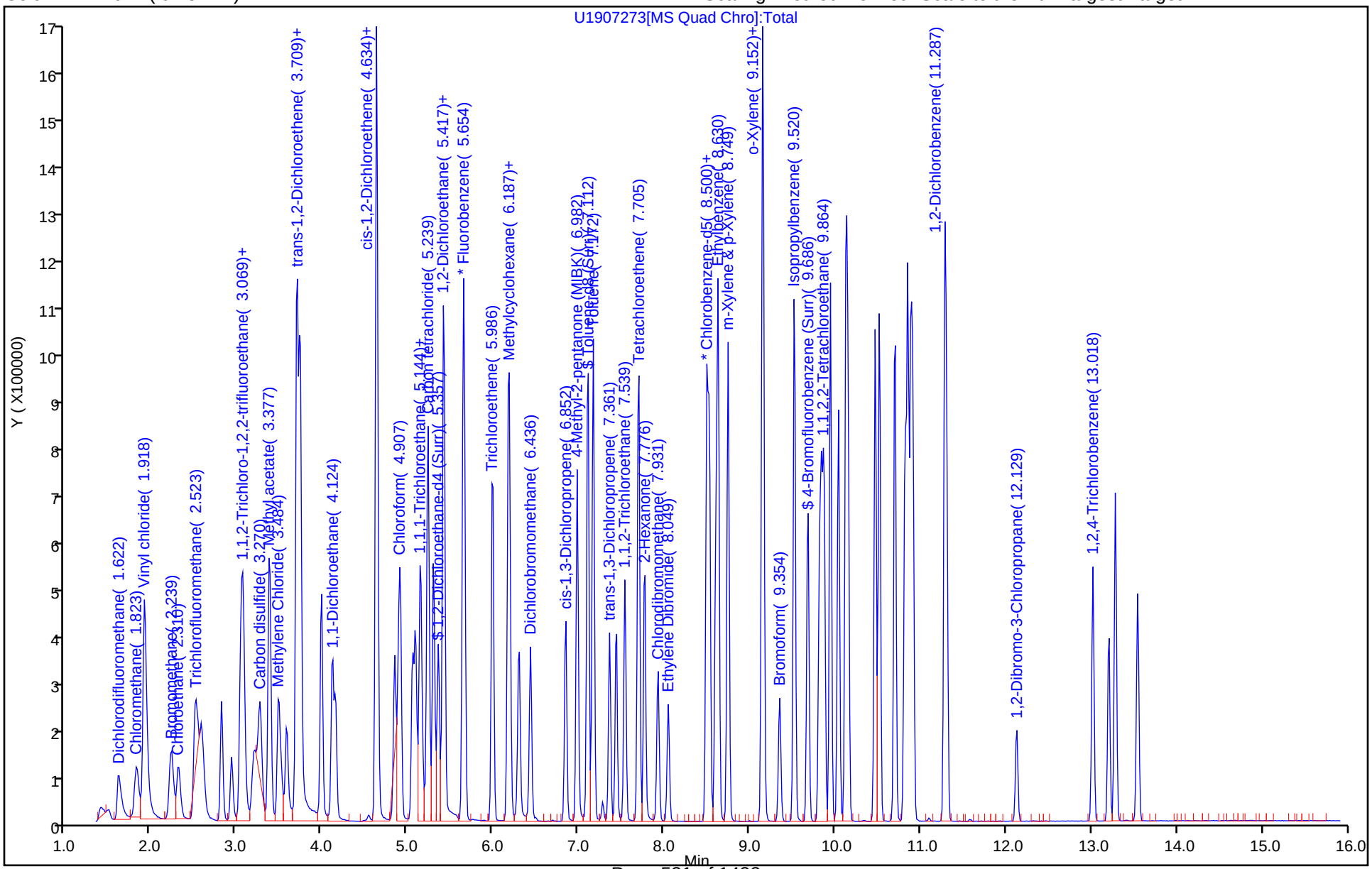
Report Date: 10-May-2019 14:19:06 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907273.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 10-May-2019 03:14:29 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-B-2 MSD | | | Worklist Smp#: | 31 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 20.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\U1907273.d
Lims ID: 240-112111-B-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 10-May-2019 03:14:29 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 mL Dil. Factor: 20.0000
Sample Info: 240-0086952-031
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190509-86952.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 10-May-2019 14:18:26 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0337

First Level Reviewer: laveyt Date: 10-May-2019 14:19:05

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 20.1 | 2007.41 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 18.0 | 1802.96 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 20.0 | 1995.47 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.9 | 1991.04 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619 MSD  Lab Sample ID: 240-112111-4 MSD

Matrix: Water  Lab File ID: U1907236.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 23:44

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 717 | | 40 | 9.6 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 962 | | 40 | 5.2 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 809 | | 40 | 16 |
| 79-00-5 | 1,1,2-Trichloroethane | 839 | | 40 | 3.6 |
| 75-34-3 | 1,1-Dichloroethane | 861 | | 40 | 6.8 |
| 75-35-4 | 1,1-Dichloroethene | 814 | | 40 | 7.6 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 645 | | 40 | 10 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 726 | | 80 | 36 |
| 106-93-4 | Ethylene Dibromide | 753 | | 40 | 4.8 |
| 95-50-1 | 1,2-Dichlorobenzene | 803 | | 40 | 6.0 |
| 107-06-2 | 1,2-Dichloroethane | 687 | | 40 | 8.4 |
| 78-87-5 | 1,2-Dichloropropane | 859 | | 40 | 6.0 |
| 541-73-1 | 1,3-Dichlorobenzene | 788 | | 40 | 6.0 |
| 106-46-7 | 1,4-Dichlorobenzene | 771 | | 40 | 6.4 |
| 78-93-3 | 2-Butanone (MEK) | 1830 | | 400 | 46 |
| 591-78-6 | 2-Hexanone | 1590 | | 400 | 22 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 1570 | | 400 | 17 |
| 67-64-1 | Acetone | 2310 | | 400 | 220 |
| 71-43-2 | Benzene | 863 | | 40 | 5.2 |
| 75-27-4 | Dichlorobromomethane | 718 | | 40 | 6.8 |
| 75-25-2 | Bromoform | 696 | | 40 | 30 |
| 74-83-9 | Bromomethane | 819 | | 40 | 17 |
| 75-15-0 | Carbon disulfide | 845 | | 40 | 11 |
| 56-23-5 | Carbon tetrachloride | 671 | | 40 | 10 |
| 108-90-7 | Chlorobenzene | 773 | | 40 | 5.6 |
| 75-00-3 | Chloroethane | 904 | | 40 | 33 |
| 67-66-3 | Chloroform | 803 | | 40 | 5.2 |
| 74-87-3 | Chloromethane | 885 | | 40 | 8.0 |
| 156-59-2 | cis-1,2-Dichloroethene | 2270 | | 40 | 6.4 |
| 10061-01-5 | cis-1,3-Dichloropropene | 751 | | 40 | 24 |
| 110-82-7 | Cyclohexane | 853 | | 40 | 9.6 |
| 124-48-1 | Chlorodibromomethane | 729 | | 40 | 16 |
| 75-71-8 | Dichlorodifluoromethane | 670 | | 40 | 14 |
| 100-41-4 | Ethylbenzene | 800 | | 40 | 4.4 |
| 98-82-8 | Isopropylbenzene | 814 | | 40 | 3.6 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619 MSD  Lab Sample ID: 240-112111-4 MSD

Matrix: Water  Lab File ID: U1907236.d

Analysis Method: 8260C  Date Collected: 05/06/2019 13:32

Sample wt/vol: 5(mL)  Date Analyzed: 05/08/2019 23:44

Soil Aliquot Vol:  Dilution Factor: 40

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 380285  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1760 | | 400 | 69 |
| 1634-04-4 | Methyl tert-butyl ether | 762 | | 40 | 2.8 |
| 108-87-2 | Methylcyclohexane | 791 | | 40 | 13 |
| 75-09-2 | Methylene Chloride | 844 | | 200 | 100 |
| 100-42-5 | Styrene | 786 | | 40 | 4.0 |
| 127-18-4 | Tetrachloroethene | 693 | | 40 | 6.0 |
| 108-88-3 | Toluene | 822 | | 40 | 5.6 |
| 156-60-5 | trans-1,2-Dichloroethene | 841 | | 40 | 7.6 |
| 10061-02-6 | trans-1,3-Dichloropropene | 692 | | 40 | 27 |
| 79-01-6 | Trichloroethene | 1090 | | 40 | 4.0 |
| 75-69-4 | Trichlorofluoromethane | 702 | | 40 | 18 |
| 75-01-4 | Vinyl chloride | 1190 | | 40 | 8.0 |
| 1330-20-7 | Xylenes, Total | 1680 | | 80 | 6.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 96 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 94 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 95 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 85 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907236.d
Lims ID: 240-112111-A-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 08-May-2019 23:44:08 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 14:18:55 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 14:21:22

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.654 | 5.654 | 0.000 | 97 | 841975 | 0.5000 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 8.500 | 8.500 | 0.000 | 82 | 644509 | 0.5000 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 10.883 | 10.883 | 0.000 | 86 | 340291 | 0.5000 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 5.049 | 5.049 | 0.000 | 59 | 213862 | 0.5000 | 18.9 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 5.357 | 5.357 | 0.000 | 96 | 221327 | 0.5000 | 17.0 | |
| $ 6 Toluene-d8 (Surr) | 98 | 7.100 | 7.101 | -0.001 | 81 | 741026 | 0.5000 | 19.2 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 9.686 | 9.674 | 0.012 | 96 | 276286 | 0.5000 | 19.0 | |
| 9 Dichlorodifluoromethane | 85 | 1.610 | 1.598 | 0.012 | 66 | 271407 | 0.5000 | 16.7 | |
| 10 Chloromethane | 50 | 1.823 | 1.812 | 0.011 | 78 | 268700 | 0.5000 | 22.1 | |
| 12 Vinyl chloride | 62 | 1.930 | 1.918 | 0.012 | 82 | 372465 | 0.5000 | 29.7 | |
| 13 Bromomethane | 94 | 2.226 | 2.215 | 0.011 | 90 | 201315 | 0.5000 | 20.5 | |
| 15 Chloroethane | 64 | 2.309 | 2.298 | 0.011 | 90 | 175802 | 0.5000 | 22.6 | |
| 17 Trichlorofluoromethane | 101 | 2.570 | 2.559 | 0.011 | 87 | 368063 | 0.5000 | 17.5 | |
| 20 1,1-Dichloroethene | 61 | 3.045 | 3.033 | 0.012 | 87 | 307571 | 0.5000 | 20.4 | |
| 21 1,1,2-Trichloro-1,2,2-trif | 101 | 3.057 | 3.045 | 0.012 | 75 | 218566 | 0.5000 | 20.2 | |
| 22 Acetone | 43 | 3.080 | 3.069 | 0.011 | 94 | 190903 | 1.00 | 57.8 | |
| 25 Carbon disulfide | 76 | 3.258 | 3.258 | 0.000 | 98 | 668663 | 0.5000 | 21.1 | |
| 28 Methyl acetate | 43 | 3.389 | 3.377 | 0.012 | 96 | 430847 | 1.00 | 44.0 | |
| 29 Methylene Chloride | 49 | 3.483 | 3.484 | -0.001 | 50 | 252713 | 0.5000 | 21.1 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.733 | 3.733 | -0.001 | 75 | 299651 | 0.5000 | 21.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.733 | 3.733 | -0.001 | 86 | 556201 | 0.5000 | 19.0 | |
| 35 1,1-Dichloroethane | 63 | 4.112 | 4.112 | 0.000 | 85 | 366756 | 0.5000 | 21.5 | |
| 41 cis-1,2-Dichloroethene | 96 | 4.634 | 4.622 | 0.012 | 64 | 689303 | 0.5000 | 56.6 | |
| 40 2-Butanone (MEK) | 72 | 4.634 | 4.634 | 0.000 | 51 | 91038 | 1.00 | 45.8 | |
| 48 Chloroform | 83 | 4.907 | 4.907 | -0.001 | 69 | 374441 | 0.5000 | 20.1 | |
| 49 1,1,1-Trichloroethane | 97 | 5.084 | 5.085 | -0.001 | 52 | 315155 | 0.5000 | 17.9 | |
| 50 Cyclohexane | 84 | 5.144 | 5.144 | 0.000 | 84 | 343060 | 0.5000 | 21.3 | |
| 52 Carbon tetrachloride | 117 | 5.239 | 5.239 | 0.000 | 70 | 284125 | 0.5000 | 16.8 | |
| 54 Benzene | 78 | 5.416 | 5.417 | -0.001 | 93 | 864546 | 0.5000 | 21.6 | |
| 55 1,2-Dichloroethane | 62 | 5.428 | 5.417 | 0.011 | 54 | 260260 | 0.5000 | 17.2 | |
| 59 Trichloroethene | 130 | 5.986 | 5.986 | 0.000 | 94 | 363695 | 0.5000 | 27.3 | |
| 61 Methylcyclohexane | 83 | 6.175 | 6.176 | -0.001 | 88 | 381974 | 0.5000 | 19.8 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | 6.187 | 6.187 | 0.000 | 85 | 199655 | 0.5000 | 21.5 | |
| 66 Dichlorobromomethane | 83 | 6.436 | 6.437 | -0.001 | 93 | 262906 | 0.5000 | 17.9 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.851 | 6.840 | 0.011 | 92 | 305331 | 0.5000 | 18.8 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.982 | 6.982 | 0.000 | 93 | 528433 | 1.00 | 39.2 | |
| 71 Toluene | 91 | 7.172 | 7.172 | 0.000 | 95 | 895170 | 0.5000 | 20.6 | |
| 72 trans-1,3-Dichloropropene | 75 | 7.361 | 7.362 | -0.001 | 85 | 268529 | 0.5000 | 17.3 | |
| 74 1,1,2-Trichloroethane | 97 | 7.539 | 7.539 | 0.000 | 83 | 192091 | 0.5000 | 21.0 | |
| 75 Tetrachloroethene | 166 | 7.693 | 7.694 | -0.001 | 93 | 240721 | 0.5000 | 17.3 | |
| 77 2-Hexanone | 43 | 7.764 | 7.765 | -0.001 | 78 | 402726 | 1.00 | 39.7 | |
| 79 Chlorodibromomethane | 129 | 7.930 | 7.931 | -0.001 | 87 | 210581 | 0.5000 | 18.2 | |
| 81 Ethylene Dibromide | 107 | 8.049 | 8.049 | 0.000 | 99 | 203108 | 0.5000 | 18.8 | |
| 83 Chlorobenzene | 112 | 8.523 | 8.524 | -0.001 | 92 | 576123 | 0.5000 | 19.3 | |
| 85 Ethylbenzene | 106 | 8.630 | 8.630 | 0.000 | 98 | 311638 | 0.5000 | 20.0 | |
| 86 m-Xylene & p-Xylene | 106 | 8.749 | 8.749 | 0.000 | 99 | 393046 | 0.5000 | 20.7 | |
| 87 o-Xylene | 106 | 9.152 | 9.152 | 0.000 | 89 | 382075 | 0.5000 | 21.2 | |
| 88 Styrene | 104 | 9.164 | 9.164 | 0.000 | 93 | 607052 | 0.5000 | 19.6 | |
| 89 Bromoform | 173 | 9.354 | 9.354 | 0.000 | 97 | 164443 | 0.5000 | 17.4 | |
| 90 Isopropylbenzene | 105 | 9.520 | 9.520 | 0.000 | 95 | 985723 | 0.5000 | 20.4 | |
| 93 1,1,2,2-Tetrachloroethane | 83 | 9.816 | 9.816 | 0.000 | 86 | 315226 | 0.5000 | 24.0 | |
| 107 1,3-Dichlorobenzene | 146 | 10.824 | 10.812 | 0.012 | 81 | 473286 | 0.5000 | 19.7 | |
| 109 1,4-Dichlorobenzene | 146 | 10.907 | 10.907 | 0.000 | 93 | 478642 | 0.5000 | 19.3 | |
| 113 1,2-Dichlorobenzene | 146 | 11.310 | 11.310 | 0.000 | 98 | 437860 | 0.5000 | 20.1 | |
| 114 1,2-Dibromo-3-Chloropropan | 157 | 12.128 | 12.129 | -0.001 | 88 | 75679 | 0.5000 | 18.2 | |
| 116 1,2,4-Trichlorobenzene | 180 | 13.018 | 13.018 | 0.000 | 94 | 234705 | 0.5000 | 16.1 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 1.00 | 41.9 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00308 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00278 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00298 | Amount Added: | 16.00 | Units: uL | |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |

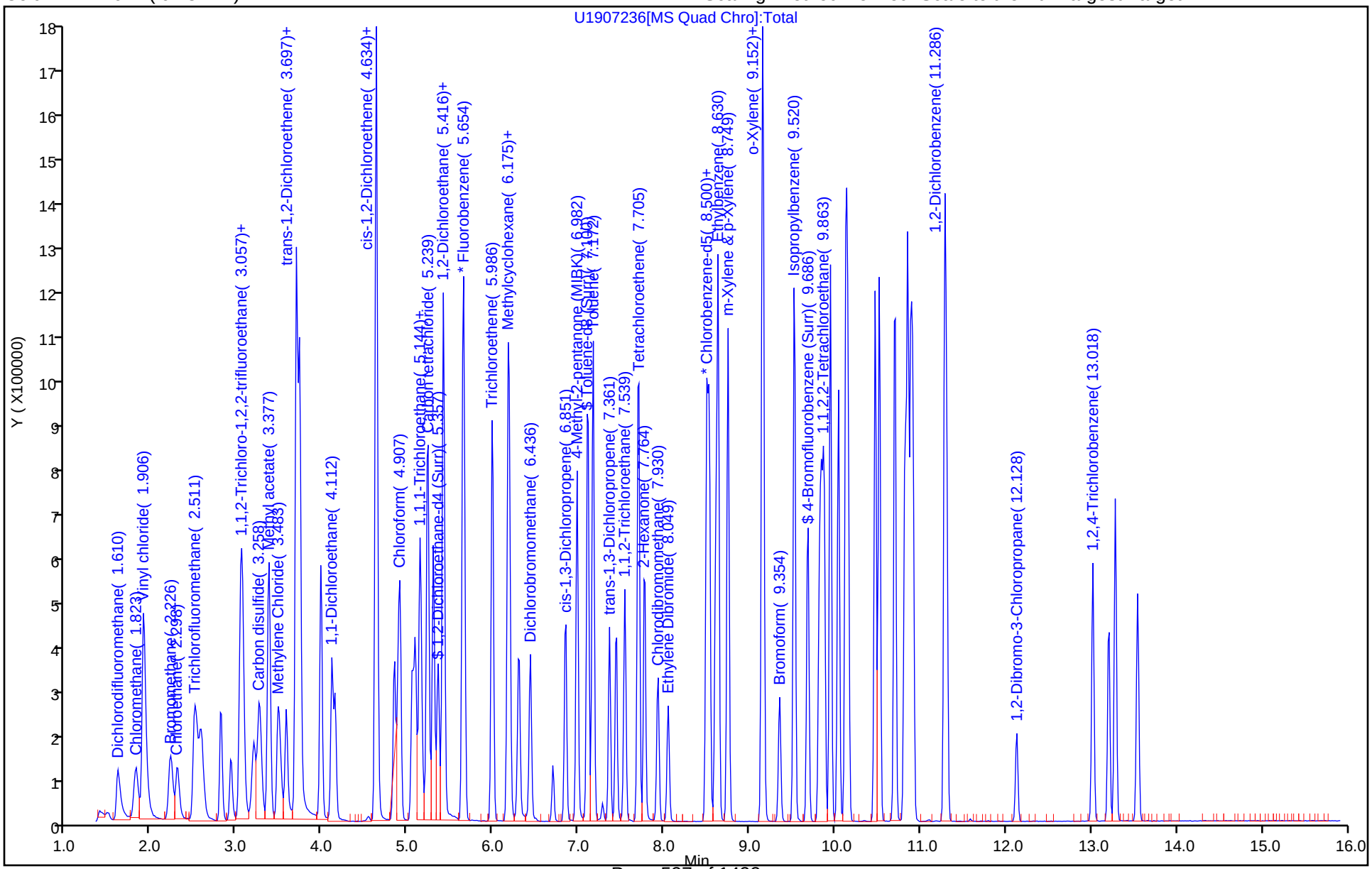
Report Date: 09-May-2019 14:21:22 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907236.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 08-May-2019 23:44:08 | Instrument ID: | A3UX19 | Operator ID: | 001904 |
| Lims ID: | 240-112111-A-4 MSD | | | Worklist Smp#: | 25 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 40.0000 | ALS Bottle#: | 0 |
| Method: | 8260_19 | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\U1907236.d
Lims ID: 240-112111-A-4 MSD
Client ID:
Sample Type: MSD
Inject. Date: 08-May-2019 23:44:08 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 mL Dil. Factor: 40.0000
Sample Info: 240-0086906-025
Operator ID: 001904 Instrument ID: A3UX19

Method: \\chromna\Canton\ChromData\A3UX19\20190508-86906.b\8260_19.m
Limit Group: MSV 8260C ICAL
Last Update: 09-May-2019 14:18:55 Calib Date: 10-Oct-2018 20:18:55
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX19\20181010-80724.b\U1902694.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0302

First Level Reviewer: laveyt Date: 09-May-2019 14:21:22

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 18.9 | 3774.13 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.0 | 3400.63 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 19.2 | 3834.81 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 19.0 | 3799.59 |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Start Date: 07/24/2018 17:22

Analysis Batch Number: 337766  End Date: 07/24/2018 21:10

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-337766/1 | | 07/24/2018 17:22 | 1 | bfb036.d | DB-624 0.18(mm) |
| STD8260 240-337766/2 IC | | 07/24/2018 17:50 | 1 | U1900783.d | DB-624 0.18(mm) |
| STD8260 240-337766/3 IC | | 07/24/2018 18:13 | 1 | U1900784.d | DB-624 0.18(mm) |
| STD8260 240-337766/9 IC | | 07/24/2018 18:35 | 1 | U1900790.d | DB-624 0.18(mm) |
| ICIS 240-337766/10 | | 07/24/2018 18:57 | 1 | U1900791.d | DB-624 0.18(mm) |
| STD8260 240-337766/11 IC | | 07/24/2018 19:20 | 1 | U1900792.d | DB-624 0.18(mm) |
| STD8260 240-337766/12 IC | | 07/24/2018 19:42 | 1 | U1900793.d | DB-624 0.18(mm) |
| STD8260 240-337766/13 IC | | 07/24/2018 20:04 | 1 | U1900794.d | DB-624 0.18(mm) |
| ICV 240-337766/14 | | 07/24/2018 20:26 | 1 | | DB-624 0.18(mm) |
| MRL 240-337766/15 MDLV | | 07/24/2018 20:48 | 1 | | DB-624 0.18(mm) |
| MDLV 240-337766/16 | | 07/24/2018 21:10 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19 Start Date: 07/25/2018 11:28

Analysis Batch Number: 337917 End Date: 07/25/2018 19:42

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-337917/1 | | 07/25/2018 11:28 | 1 | bfb037.d | DB-624 0.18(mm) |
| CCVIS 240-337917/3 | | 07/25/2018 12:17 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 12:39 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/8 IC | | 07/25/2018 13:24 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/9 IC | | 07/25/2018 13:46 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/10 IC | | 07/25/2018 14:08 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/11 IC | | 07/25/2018 14:30 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/12 IC | | 07/25/2018 14:52 | 1 | | DB-624 0.18(mm) |
| STDA9 240-337917/13 IC | | 07/25/2018 15:15 | 1 | | DB-624 0.18(mm) |
| ICV 240-337917/14 | | 07/25/2018 15:37 | 1 | U1900808.d | DB-624 0.18(mm) |
| MRL 240-337917/15 MDLV | | 07/25/2018 15:59 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 16:21 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 16:44 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 17:06 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 17:29 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 17:51 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 18:13 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 18:35 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 18:57 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 19:20 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 07/25/2018 19:42 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Start Date: 08/27/2018 16:23

Analysis Batch Number: 342719  End Date: 08/27/2018 20:52

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-342719/1 | | 08/27/2018 16:23 | 1 | bfb058.d | DB-624 0.18(mm) |
| CCV 240-342719/2 | | 08/27/2018 16:46 | 1 | | DB-624 0.18(mm) |
| STD8260 240-342719/7 IC | | 08/27/2018 17:09 | 1 | U1901323.d | DB-624 0.18(mm) |
| STD8260 240-342719/8 IC | | 08/27/2018 17:31 | 1 | U1901324.d | DB-624 0.18(mm) |
| STD8260 240-342719/9 IC | | 08/27/2018 17:53 | 1 | U1901325.d | DB-624 0.18(mm) |
| ICIS 240-342719/10 | | 08/27/2018 18:16 | 1 | U1901326.d | DB-624 0.18(mm) |
| STD8260 240-342719/11 IC | | 08/27/2018 18:38 | 1 | U1901327.d | DB-624 0.18(mm) |
| STD8260 240-342719/12 IC | | 08/27/2018 19:01 | 1 | U1901328.d | DB-624 0.18(mm) |
| STD8260 240-342719/13 IC | | 08/27/2018 19:23 | 1 | U1901329.d | DB-624 0.18(mm) |
| ICV 240-342719/14 | | 08/27/2018 19:45 | 1 | U1901330.d | DB-624 0.18(mm) |
| MRL 240-342719/15 MDLV | | 08/27/2018 20:07 | 1 | | DB-624 0.18(mm) |
| MDLV 240-342719/16 | | 08/27/2018 20:30 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 08/27/2018 20:52 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Start Date: 05/08/2019 15:32

Analysis Batch Number: 380285  End Date: 05/08/2019 23:44

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-380285/1 | | 05/08/2019 15:32 | 1 | bfb253.d | DB-624 0.18(mm) |
| CCV 240-380285/3 | | 05/08/2019 15:57 | 1 | U1907215.d | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 15:57 | 1 | | DB-624 0.18(mm) |
| CCVIS 240-380285/4 | | 05/08/2019 16:19 | 1 | U1907216.d | DB-624 0.18(mm) |
| LCS 240-380285/5 | | 05/08/2019 16:41 | 1 | U1907217.d | DB-624 0.18(mm) |
| MRL 240-380285/6 MDLV | | 05/08/2019 17:03 | 1 | | DB-624 0.18(mm) |
| MRL 240-380285/7 MDLV | | 05/08/2019 17:25 | 1 | | DB-624 0.18(mm) |
| MB 240-380285/8 | | 05/08/2019 17:48 | 1 | U1907220.d | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 18:10 | 20 | | DB-624 0.18(mm) |
| 240-112111-1 | | 05/08/2019 18:32 | 1 | U1907222.d | DB-624 0.18(mm) |
| 240-112111-3 | | 05/08/2019 19:16 | 10 | U1907224.d | DB-624 0.18(mm) |
| 240-112111-4 | | 05/08/2019 19:39 | 40 | U1907225.d | DB-624 0.18(mm) |
| 240-112111-5 | | 05/08/2019 20:01 | 25 | U1907226.d | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 20:23 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 20:46 | 200 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 21:08 | 8 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 21:30 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 21:52 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/08/2019 22:15 | 1 | | DB-624 0.18(mm) |
| 240-112111-4 MS | | 05/08/2019 23:21 | 40 | U1907235.d | DB-624 0.18(mm) |
| 240-112111-4 MSD | | 05/08/2019 23:44 | 40 | U1907236.d | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: A3UX19  Start Date: 05/09/2019 16:50

Analysis Batch Number: 380508  End Date: 05/10/2019 03:14

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-380508/1 | | 05/09/2019 16:50 | 1 | bfb254.d | DB-624 0.18(mm) |
| CCV 240-380508/3 | | 05/09/2019 17:13 | 1 | U1907246.d | DB-624 0.18(mm) |
| CCVIS 240-380508/4 | | 05/09/2019 17:35 | 1 | U1907247.d | DB-624 0.18(mm) |
| LCS 240-380508/5 | | 05/09/2019 17:57 | 1 | U1907248.d | DB-624 0.18(mm) |
| MRL 240-380508/6 MDLV | | 05/09/2019 18:19 | 1 | | DB-624 0.18(mm) |
| MRL 240-380508/7 MDLV | | 05/09/2019 18:41 | 1 | | DB-624 0.18(mm) |
| MB 240-380508/8 | | 05/09/2019 19:03 | 1 | U1907251.d | DB-624 0.18(mm) |
| 240-112111-2 | | 05/09/2019 19:26 | 20 | U1907252.d | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 19:48 | 20 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 20:10 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 20:32 | 2 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 20:55 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 21:17 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 21:40 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 22:24 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 22:47 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 23:09 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 23:31 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/09/2019 23:54 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 00:16 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 00:38 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 01:01 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 01:23 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 01:45 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 02:07 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/10/2019 02:30 | 1 | | DB-624 0.18(mm) |
| 240-112111-2 MS | | 05/10/2019 02:52 | 20 | U1907272.d | DB-624 0.18(mm) |
| 240-112111-2 MSD | | 05/10/2019 03:14 | 20 | U1907273.d | DB-624 0.18(mm) |

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 337917  Batch Start Date: 07/25/18 11:28  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | vm50is_stk_A 00001 | vm50ss_stk 00077 | vmbfb 00020 | VMFASA9W 00194 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-337917/1 | | 8260C | | 5 mL | 5 mL | | | 1 uL | |
| ICV 240-337917/14 | | 8260C | | 5 mL | 5 mL | 2 uL | 2 uL | | 16 uL |

| Batch Notes | |
|---|---|
| pH Indicator ID | HC746949 |

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 342719  Batch Start Date: 08/27/18 16:23  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | vm50is_stk_A 00001 | vm50ss 00333 | vm50ss_stk 00077 | vmarolistdw 00260 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-342719/1 | | 8260C | | 5 mL | 5 mL | | | | |
| STD8260 240-342719/7 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 64 uL | | 64 uL |
| STD8260 240-342719/8 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 48 uL | | 48 uL |
| STD8260 240-342719/9 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 32 uL | | 32 uL |
| ICIS 240-342719/10 | | 8260C | | 5 mL | 5 mL | 2 uL | 16 uL | | 16 uL |
| STD8260 240-342719/11 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 8 uL | | 8 uL |
| STD8260 240-342719/12 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 0.8 uL | | 0.8 uL |
| STD8260 240-342719/13 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 0.4 uL | | 0.4 uL |
| ICV 240-342719/14 | | 8260C | | 5 mL | 5 mL | 2 uL | | 2 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00020 | vmfasaw 00246 | vmfasgw 00271 | vmfaspw 00264 | vmrgas 00259 | vmrprimw 00297 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-342719/1 | | 8260C | | 1 uL | | | | | |
| STD8260 240-342719/7 IC | | 8260C | | | | | | 64 uL | 64 uL |
| STD8260 240-342719/8 IC | | 8260C | | | | | | 48 uL | 48 uL |
| STD8260 240-342719/9 IC | | 8260C | | | | | | 32 uL | 32 uL |
| ICIS 240-342719/10 | | 8260C | | | | | | 16 uL | 16 uL |
| STD8260 240-342719/11 IC | | 8260C | | | | | | 8 uL | 8 uL |
| STD8260 240-342719/12 IC | | 8260C | | | | | | 0.8 uL | 0.8 uL |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 342719  Batch Start Date: 08/27/18 16:23  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00020 | vmfasaw 00246 | vmfasgw 00271 | vmfaspw 00264 | vmrgas 00259 | vmrprimw 00297 |
|---|---|---|---|---|---|---|---|---|---|
| STD8260 240-342719/13 IC | | 8260C | | | | | | 0.4 uL | 0.4 uL |
| ICV 240-342719/14 | | 8260C | | | 16 uL | 16 uL | 16 uL | | |

| Batch Notes | |
|---|---|
| | |

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380285  Batch Start Date: 05/08/19 15:32  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | vm50is_stk_A 00003 | vm50ss_stk 00080 | vmarolistdw 00295 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-380285/1 | | 8260C | | 5 mL | 5 mL | | | | |
| CCV 240-380285/3 | | 8260C | | 5 mL | 5 mL | | 2 uL | | |
| CCVIS 240-380285/4 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | 16 uL |
| LCS 240-380285/5 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| MB 240-380285/8 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| 240-112111-B-1 | TB-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-A-3 | MRC-NMW-1I-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-A-4 | MRC-NMW-3I-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-A-5 | MRC-NMW-2I-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-A-4 MS | MRC-NMW-3I-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-A-4 MSD | MRC-NMW-3I-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmfasaw 00278 | vmfasgw 00308 | vmfaspw 00298 | vmra9w 00296 | vmrgas 00292 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-380285/1 | | 8260C | | 1 uL | | | | | |
| CCV 240-380285/3 | | 8260C | | | | | | 16 uL | |
| CCVIS 240-380285/4 | | 8260C | | | | | | | 16 uL |
| LCS 240-380285/5 | | 8260C | | | 16 uL | 16 uL | 16 uL | | |
| MB 240-380285/8 | | 8260C | | | | | | | |
| 240-112111-B-1 | TB-050619 | 8260C | T | | | | | | |
| 240-112111-A-3 | MRC-NMW-1I-050619 | 8260C | T | | | | | | |
| 240-112111-A-4 | MRC-NMW-3I-050619 | 8260C | T | | | | | | |
| 240-112111-A-5 | MRC-NMW-2I-050619 | 8260C | T | | | | | | |
| 240-112111-A-4 MS | MRC-NMW-3I-050619 | 8260C | T | | 16 uL | 16 uL | 16 uL | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380285  Batch Start Date: 05/08/19 15:32  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmfasaw 00278 | vmfasgw 00308 | vmfaspw 00298 | vmra9w 00296 | vmrgas 00292 |
|---|---|---|---|---|---|---|---|---|---|
| 240-112111-A-4 MSD | MRC-NMW-3I-050619 | 8260C | T | | 16 uL | 16 uL | 16 uL | | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrprimw 00332 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-380285/1 | | 8260C | | | | | | | |
| CCV 240-380285/3 | | 8260C | | | | | | | |
| CCVIS 240-380285/4 | | 8260C | | 16 uL | | | | | |
| LCS 240-380285/5 | | 8260C | | | | | | | |
| MB 240-380285/8 | | 8260C | | | | | | | |
| 240-112111-B-1 | TB-050619 | 8260C | T | | | | | | |
| 240-112111-A-3 | MRC-NMW-1I-050619 | 8260C | T | | | | | | |
| 240-112111-A-4 | MRC-NMW-3I-050619 | 8260C | T | | | | | | |
| 240-112111-A-5 | MRC-NMW-2I-050619 | 8260C | T | | | | | | |
| 240-112111-A-4 MS | MRC-NMW-3I-050619 | 8260C | T | | | | | | |
| 240-112111-A-4 MSD | MRC-NMW-3I-050619 | 8260C | T | | | | | | |

| Batch Notes | |
|---|---|
| pH Indicator ID | HC861525 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380508  Batch Start Date: 05/09/19 16:50  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | vm50is_stk_A 00003 | vm50ss_stk 00080 | vmarolistdw 00296 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-380508/1 | | 8260C | | 5 mL | 5 mL | | | | |
| CCV 240-380508/3 | | 8260C | | 5 mL | 5 mL | | 2 uL | | |
| CCVIS 240-380508/4 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | 16 uL |
| LCS 240-380508/5 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| MB 240-380508/8 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| 240-112111-B-2 | MRC-MW-81B-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-B-2 MS | MRC-MW-81B-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112111-B-2 MSD | MRC-MW-81B-050619 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmfasaw 00278 | vmfasgw 00308 | vmfaspw 00298 | vmra9w 00297 | vmrgas 00292 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-380508/1 | | 8260C | | 1 uL | | | | | |
| CCV 240-380508/3 | | 8260C | | | | | | 16 uL | |
| CCVIS 240-380508/4 | | 8260C | | | | | | | 16 uL |
| LCS 240-380508/5 | | 8260C | | | 16 uL | 16 uL | 16 uL | | |
| MB 240-380508/8 | | 8260C | | | | | | | |
| 240-112111-B-2 | MRC-MW-81B-050619 | 8260C | T | | | | | | |
| 240-112111-B-2 MS | MRC-MW-81B-050619 | 8260C | T | | 16 uL | 16 uL | 16 uL | | |
| 240-112111-B-2 MSD | MRC-MW-81B-050619 | 8260C | T | | 16 uL | 16 uL | 16 uL | | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrprimw 00333 |
|---|---|---|---|---|
| BFB 240-380508/1 | | 8260C | | |
| CCV 240-380508/3 | | 8260C | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380508  Batch Start Date: 05/09/19 16:50  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrprimw 00333 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CCVIS 240-380508/4 | | 8260C | | 16 uL | | | | | |
| LCS 240-380508/5 | | 8260C | | | | | | | |
| MB 240-380508/8 | | 8260C | | | | | | | |
| 240-112111-B-2 | MRC-MW-81B-050619 | 8260C | T | | | | | | |
| 240-112111-B-2 MS | MRC-MW-81B-050619 | 8260C | T | | | | | | |
| 240-112111-B-2 MSD | MRC-MW-81B-050619 | 8260C | T | | | | | | |

| Batch Notes | |
|---|---|
| pH Indicator ID | HC861525 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method RSK-175

## Dissolved Gases (GC) by Method RSK_175

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): HP-PLOT/Q  ID: 0.53(mm)

| Client Sample ID | Lab Sample ID | TFE1 # |
|---|---|---|
| MRC-MW-81B-050619 | 240-112111-2 | 82 |
| MRC-MW-81B-050619 | 240-112111-2 | 87 |
| MRC-NMW-1I-050619 | 240-112111-3 | 80 |
| MRC-NMW-3I-050619 | 240-112111-4 | 82 |
| MRC-NMW-3I-050619 | 240-112111-4 | 86 |
| MRC-NMW-2I-050619 | 240-112111-5 | 81 |
| MRC-NMW-2I-050619 | 240-112111-5 | 87 |
| | MB 240-381636/4 | 85 |
| | MB 240-381892/4 | 86 |
| | LCS 240-381636/5 | 85 |
| | LCS 240-381892/5 | 87 |
| MRC-NMW-2I-050619 MS | 240-112111-5 MS | 86 |
| | 240-111881-F-3 MS | 84 |
| MRC-NMW-2I-050619 MSD | 240-112111-5 MSD | 87 |
| | 240-111881-F-3 MSD | 84 |

| | QC LIMITS |
|---|---|
| TFE = 1,1,1-Trifluoroethane | 60-140 |

# Column to be used to flag recovery values

FORM II RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0516005.D

Lab ID: LCS 240-381636/5 Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Ethene | 387 | 374 | 97 | 80-120 | |
| Ethane | 475 | 430 | 90 | 80-120 | |
| Methane | 480 | 448 | 93 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0517005.D

Lab ID: LCS 240-381892/5 Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Ethene | 387 | 338 | 87 | 80-120 | |
| Ethane | 475 | 387 | 81 | 80-120 | |
| Methane | 480 | 399 | 83 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0517011.D

Lab ID: 240-112111-5 MS Client ID: MRC-NMW-2I-050619 MS

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Ethene | 5010 | 100 | 4870 | 95 | 50-150 | |
| Ethane | 5360 | 110 | 5140 | 94 | 50-150 | |
| Methane | 2850 | 9500 | 12600 | 106 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: Z0516010.D

Lab ID: 240-111881-F-3 MS  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Ethene | 5010 | 1.1 U | 4480 | 89 | 50-150 | |
| Ethane | 5360 | 1.0 U | 4710 | 88 | 50-150 | |
| Methane | 2850 | 11000 | 14300 | 120 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: Z0517012.D

Lab ID: 240-112111-5 MSD  Client ID: MRC-NMW-2I-050619 MSD

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Ethene | 5010 | 4920 | 96 | 1 | 30 | 50-150 | |
| Ethane | 5360 | 5190 | 95 | 1 | 30 | 50-150 | |
| Methane | 2850 | 12500 | 103 | 1 | 30 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: Z0516011.D

Lab ID: 240-111881-F-3 MSD  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Ethene | 5010 | 4420 | 88 | 1 | 30 | 50-150 | |
| Ethane | 5360 | 4650 | 87 | 1 | 30 | 50-150 | |
| Methane | 2850 | 14100 | 112 | 2 | 30 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: MB 240-381636/4

Matrix: Water  Date Extracted:

Lab File ID:(1) Z0516004.D  Lab File ID:(2)

Date Analyzed:(1) 05/16/2019 14:34  Date Analyzed:(2)

Instrument ID:(1) ZPID  Instrument ID:(2)

GC Column:(1) HP-PLOT/Q  ID: 0.53(mm)  GC Column:(2)  ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-381636/5 | 05/16/2019 14:51 | |
| | 240-111881-F-3 MS | 05/16/2019 16:18 | |
| | 240-111881-F-3 MSD | 05/16/2019 16:36 | |
| MRC-MW-81B-050619 | 240-112111-2 | 05/16/2019 20:03 | |
| MRC-NMW-1I-050619 | 240-112111-3 | 05/16/2019 20:21 | |
| MRC-NMW-3I-050619 | 240-112111-4 | 05/16/2019 20:38 | |
| MRC-NMW-2I-050619 | 240-112111-5 | 05/16/2019 20:55 | |

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: MB 240-381892/4

Matrix: Water  Date Extracted:

Lab File ID:(1) Z0517004.D  Lab File ID:(2)

Date Analyzed:(1) 05/17/2019 15:00  Date Analyzed:(2)

Instrument ID:(1) ZPID  Instrument ID:(2)

GC Column:(1) HP-PLOT/Q  ID: 0.53(mm)  GC Column:(2)  ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-381892/5 | 05/17/2019 15:17 | |
| MRC-MW-81B-050619 | 240-112111-2 | 05/17/2019 16:10 | |
| MRC-NMW-3I-050619 | 240-112111-4 | 05/17/2019 16:27 | |
| MRC-NMW-2I-050619 | 240-112111-5 | 05/17/2019 16:45 | |
| MRC-NMW-2I-050619 MS | 240-112111-5 MS | 05/17/2019 17:02 | |
| MRC-NMW-2I-050619 MSD | 240-112111-5 MSD | 05/17/2019 17:20 | |

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Sample No.: CCVRT 240-381636/3  Date Analyzed: 05/16/2019 14:17

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)

Lab File ID (Standard): Z0516003.D  Heated Purge: (Y/N) N

Calibration ID: 49918

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TFE | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 3.35 | | |
| UPPER LIMIT | | | | 3.40 | | |
| LOWER LIMIT | | | | 3.30 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCVRT 240-381636/3 | | 05/16/2019 14:17 | Z0516003.D | 3.35 | | |
| MB 240-381636/4 | | 05/16/2019 14:34 | Z0516004.D | 3.35 | | |
| LCS 240-381636/5 | | 05/16/2019 14:51 | Z0516005.D | 3.35 | | |
| 240-111881-F-3 MS | | 05/16/2019 16:18 | Z0516010.D | 3.35 | | |
| 240-111881-F-3 MSD | | 05/16/2019 16:36 | Z0516011.D | 3.35 | | |
| CCV 240-381636/19 | | 05/16/2019 18:54 | Z0516019.D | 3.35 | | |
| 240-112111-2 | MRC-MW-81B-050619 | 05/16/2019 20:03 | Z0516023.D | 3.35 | | |
| 240-112111-3 | MRC-NMW-1I-050619 | 05/16/2019 20:21 | Z0516024.D | 3.35 | | |
| 240-112111-4 | MRC-NMW-3I-050619 | 05/16/2019 20:38 | Z0516025.D | 3.35 | | |
| 240-112111-5 | MRC-NMW-2I-050619 | 05/16/2019 20:55 | Z0516026.D | 3.35 | | |
| CCV 240-381636/27 | | 05/16/2019 21:12 | Z0516027.D | 3.35 | | |

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII RSK-175

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Sample No.: CCVRT 240-381892/3  Date Analyzed: 05/17/2019 14:43

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)

Lab File ID (Standard): Z0517003.D  Heated Purge: (Y/N) N

Calibration ID: 49918

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TFE | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 3.35 | | |
| UPPER LIMIT | | | | 3.40 | | |
| LOWER LIMIT | | | | 3.30 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCVRT 240-381892/3 | | 05/17/2019 14:43 | Z0517003.D | 3.35 | | |
| MB 240-381892/4 | | 05/17/2019 15:00 | Z0517004.D | 3.35 | | |
| LCS 240-381892/5 | | 05/17/2019 15:17 | Z0517005.D | 3.35 | | |
| 240-112111-2 | MRC-MW-81B-050619 | 05/17/2019 16:10 | Z0517008.D | 3.35 | | |
| 240-112111-4 | MRC-NMW-3I-050619 | 05/17/2019 16:27 | Z0517009.D | 3.35 | | |
| 240-112111-5 | MRC-NMW-2I-050619 | 05/17/2019 16:45 | Z0517010.D | 3.35 | | |
| 240-112111-5 MS | MRC-NMW-2I-050619 MS | 05/17/2019 17:02 | Z0517011.D | 3.35 | | |
| 240-112111-5 MSD | MRC-NMW-2I-050619 MSD | 05/17/2019 17:20 | Z0517012.D | 3.35 | | |
| CCV 240-381892/19 | | 05/17/2019 19:22 | Z0517019.D | 3.35 | | |

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII RSK-175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619  Lab Sample ID: 240-112111-2

Matrix: Water  Lab File ID: Z0516023.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 09:29

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 20:03

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 50 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 4.8 | | 1.0 | 0.10 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 82 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516023.D | | | | |
| Lims ID: | 240-112111-E-2 | | | | |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 16-May-2019 20:03:49 | ALS Bottle#: | 23 | Worklist Smp#: | 23 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087187-023 | | | | |
| Operator ID: | | Instrument ID: | ZPID | | |
| Method: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m | | | | |
| Limit Group: | GCV RSK 175 ICAL | | | | |
| Last Update: | 17-May-2019 07:20:38 | Calib Date: | 25-Mar-2019 17:40:28 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D | | | | |
| Column 1 : | | | Det: GC FID1A | | |
| Process Host: | CTX0304 | | | | |
| First Level Reviewer: matthewsb | | Date: | 17-May-2019 07:18:58 | | |

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| | 1 Methane | | | | | |
| | 1.184 | 1.186 | -0.002 | 50602954 | 7881.5 | E |
| | 2 Ethylene | | | | | M |
| | 1.884 | 1.886 | -0.002 | 317621 | 49.9 | M |
| | 4 Ethane | | | | | M |
| | 2.205 | 2.206 | -0.001 | 31921 | 4.78 | M |
| $ | 5 1,1,1-Trifluoroethane | | | | | |
| | 3.347 | 3.349 | -0.002 | 24939889 | 7970.5 | |

## QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

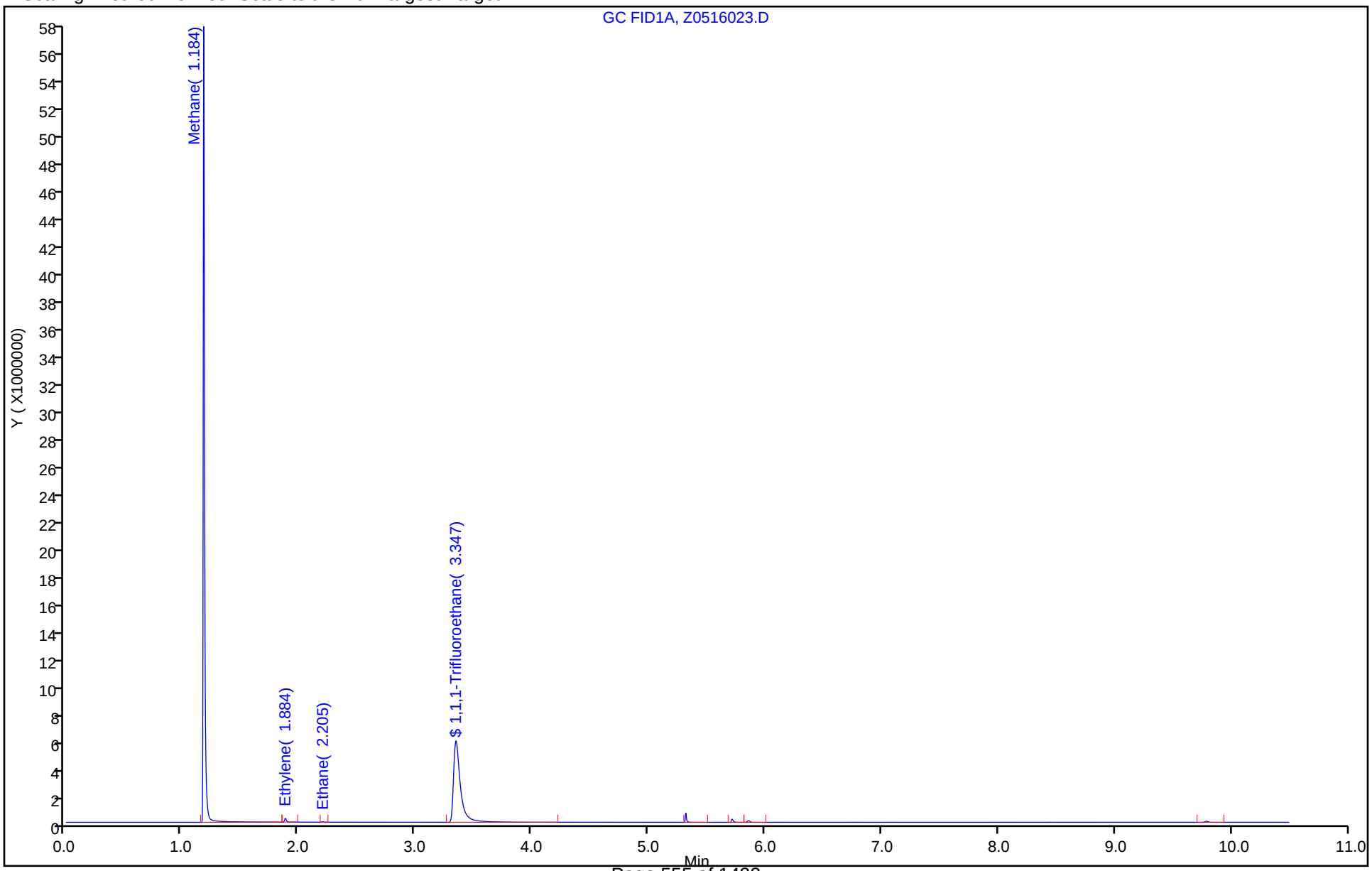
Report Date: 17-May-2019 07:20:41 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516023.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 20:03:49 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-E-2 | Lab Sample ID: | 240-112111-2 | Worklist Smp#: | 23 |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 23 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516023.D
Lims ID: 240-112111-E-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:03:49 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-023
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

First Level Reviewer: matthewsb Date: 17-May-2019 07:18:58

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 7970.5 | 81.91 |

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

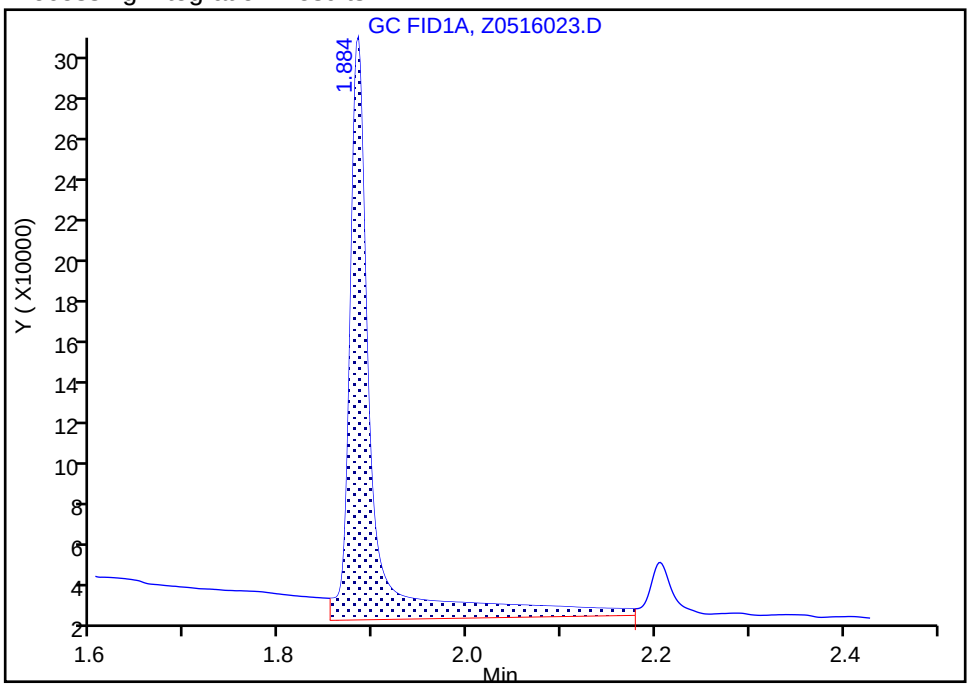
| | | | |
|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516023.D | | |
| Injection Date: | 16-May-2019 20:03:49 | Instrument ID: | ZPID |
| Lims ID: | 240-112111-E-2 | Lab Sample ID: | 240-112111-2 |
| Client ID: | MRC-MW-81B-050619 | | |
| Operator ID: | | ALS Bottle#: | 23 Worklist Smp#: 23 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL |
| Column: | | Detector | GC FID1A |

## 2 Ethylene, CAS: 74-85-1

Signal: 1

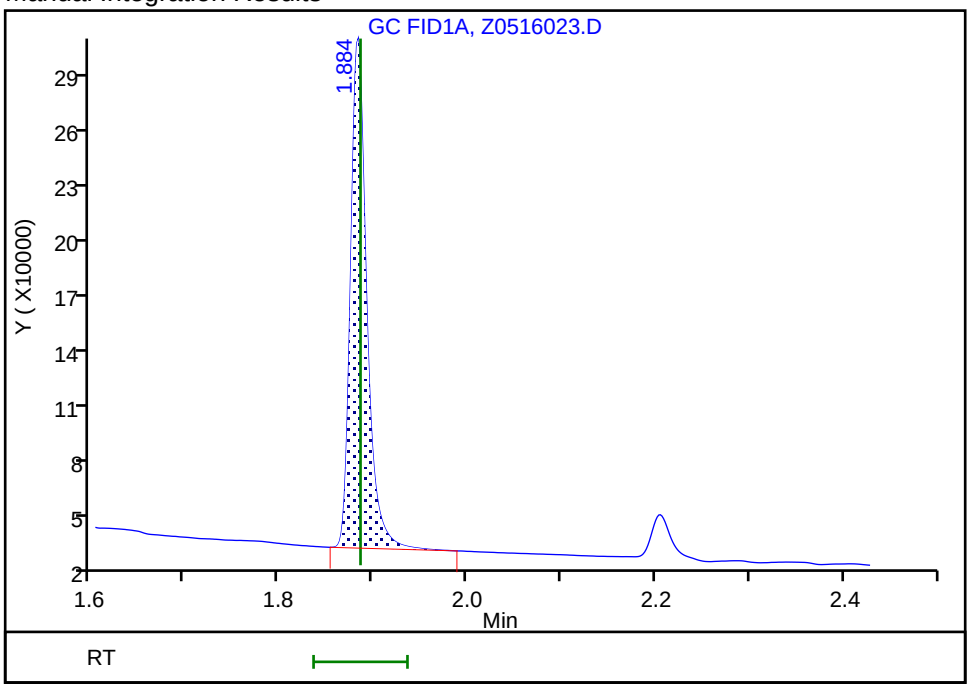
Processing Integration Results

RT: 1.88
Area: 449711
Amount: 70.721271
Amount Units: ug/l




Manual Integration Results

RT: 1.88
Area: 317621
Amount: 49.948880
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:18:54

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

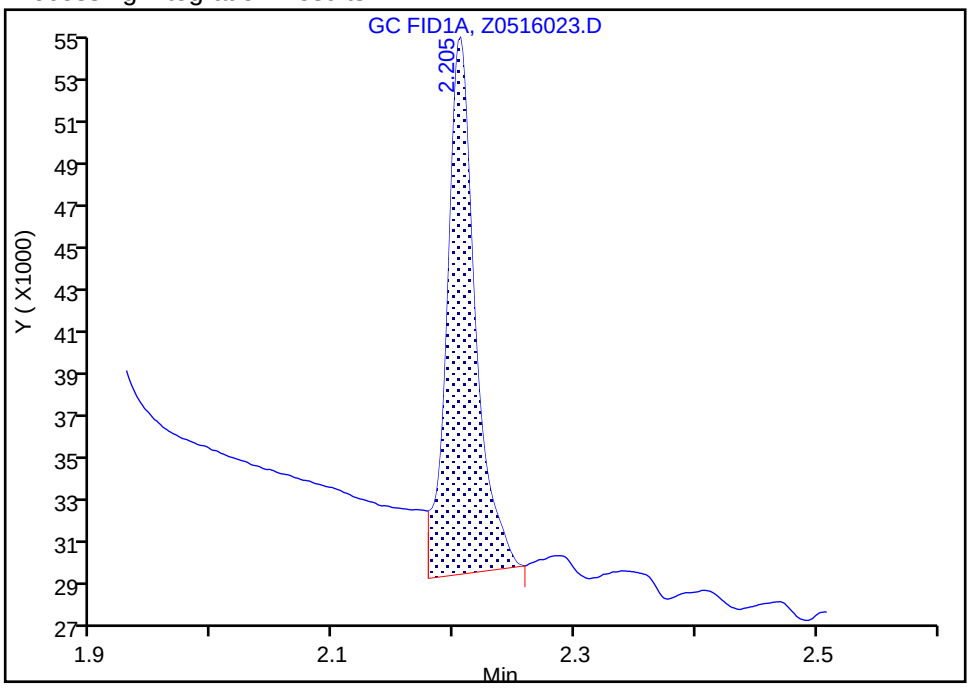
| | | | |
|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516023.D | | |
| Injection Date: | 16-May-2019 20:03:49 | Instrument ID: | ZPID |
| Lims ID: | 240-112111-E-2 | Lab Sample ID: | 240-112111-2 |
| Client ID: | MRC-MW-81B-050619 | | |
| Operator ID: | | ALS Bottle#: | 23 Worklist Smp#: 23 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL |
| Column: | | Detector | GC FID1A |

## 4 Ethane, CAS: 74-84-0

Signal: 1

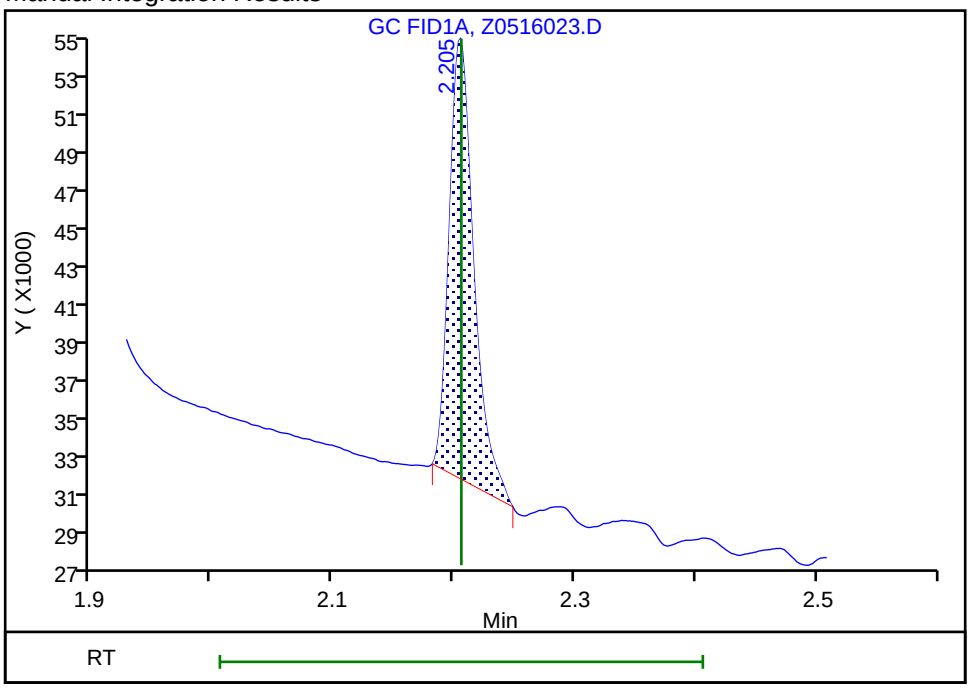
Processing Integration Results

RT: 2.21
Area: 40239
Amount: 6.023932
Amount Units: ug/l




Manual Integration Results

RT: 2.21
Area: 31921
Amount: 4.778696
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:18:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-MW-81B-050619  Lab Sample ID: 240-112111-2

Matrix: Water  Lab File ID: Z0517008.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 09:29

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 16:10

Soil Aliquot Vol:  Dilution Factor: 5

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-82-8 | Methane | 7500 | | 5.0 | 0.87 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517008.D
Lims ID: 240-112111-D-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:10:13 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 1.000 mL Dil. Factor: 5.0000
Sample Info: 240-0087233-008
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.183 | 1.183 | 0.000 | 9663674 | 1505.1 | |
| 2 | Ethylene | | | | | |
| | 1.883 | 1.883 | 0.000 | 75705 | 11.9 | |
| 4 | Ethane | | | | | |
| | | 2.205 | | | ND | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.346 | 3.348 | -0.002 | 26496432 | 8468.0 | |

## Reagents:

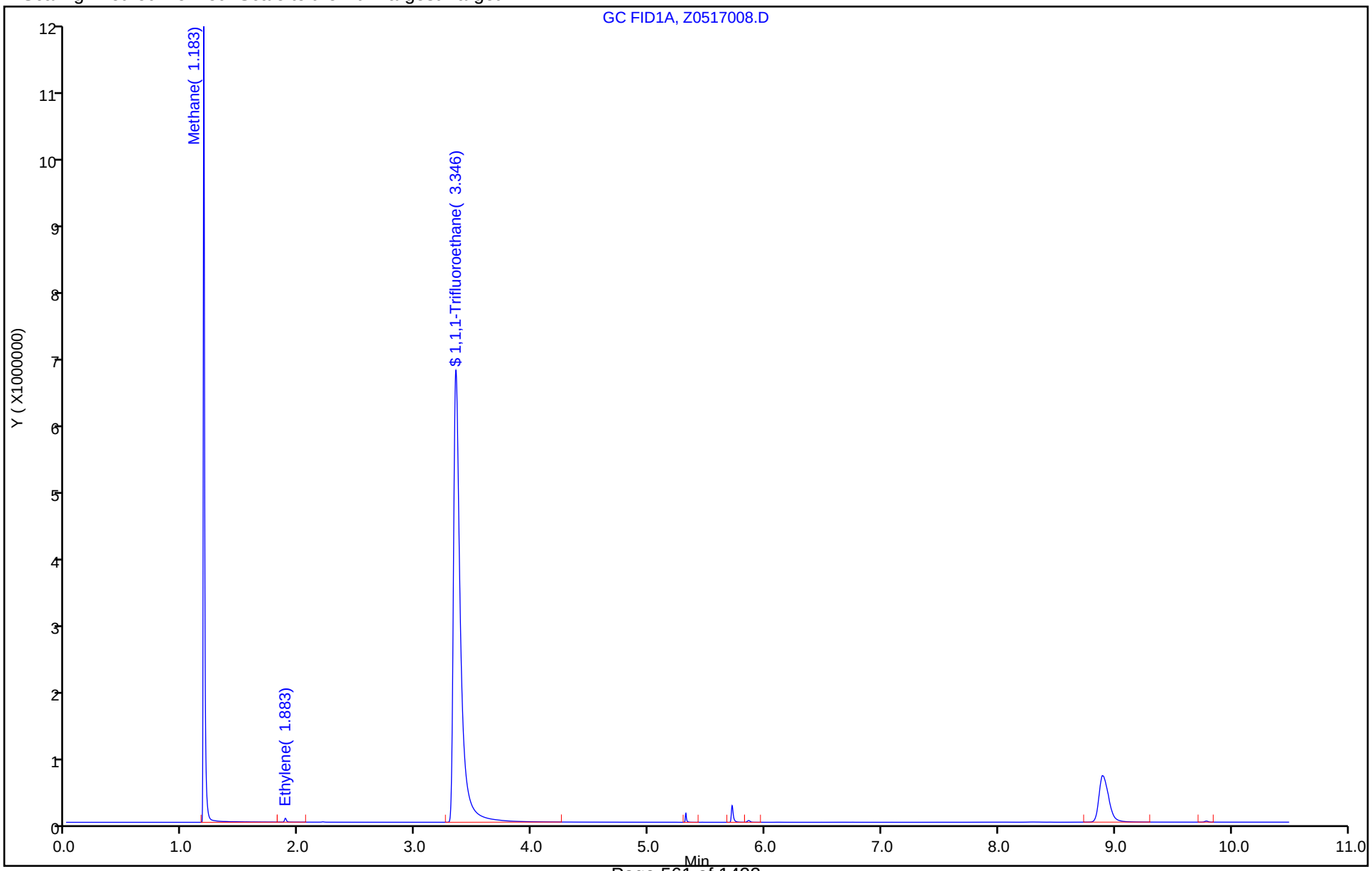
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 20-May-2019 10:18:11 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517008.D | | | | |
| Injection Date: | 17-May-2019 16:10:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-2 | Lab Sample ID: | 240-112111-2 | Worklist Smp#: | 8 |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 5.0000 | ALS Bottle#: | 8 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517008.D
Lims ID: 240-112111-D-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:10:13 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 1.000 mL Dil. Factor: 5.0000
Sample Info: 240-0087233-008
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8468.0 | 87.03 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-1I-050619  Lab Sample ID: 240-112111-3

Matrix: Water  Lab File ID: Z0516024.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 10:53

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 20:21

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 3.2 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 0.10 | U | 1.0 | 0.10 |
| 74-82-8 | Methane | 630 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 80 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516024.D
Lims ID: 240-112111-F-3
Client ID: MRC-NMW-1I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:21:03 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-024
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.184 | 1.186 | -0.002 | 4048128 | 630.5 | |
| 2 | Ethylene | | | | | |
| | 1.882 | 1.886 | -0.004 | 20252 | 3.18 | |
| 4 | Ethane | | | | | |
| | | 2.206 | | | ND | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.347 | 3.349 | -0.002 | 24430817 | 7807.8 | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

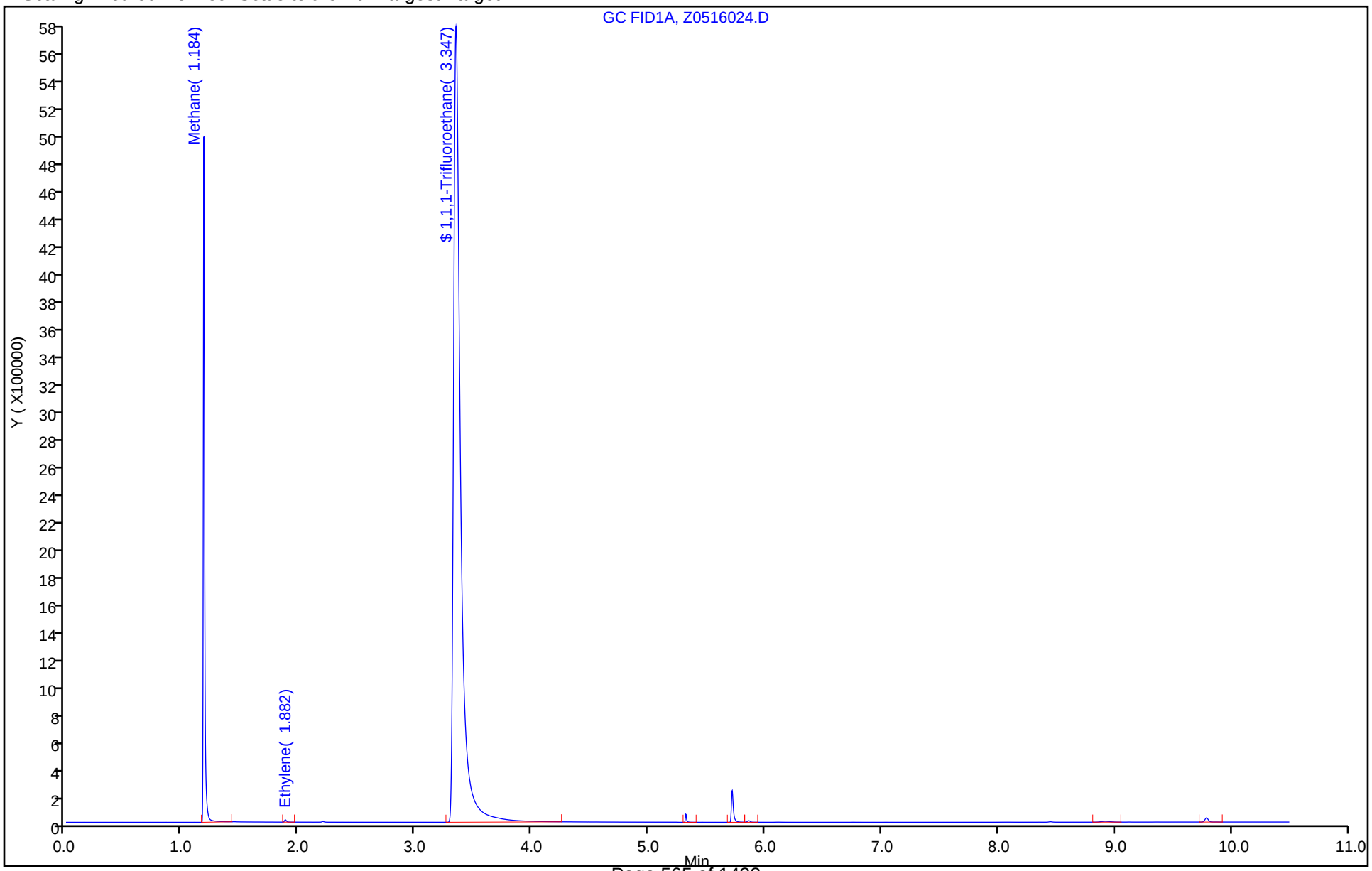
Report Date: 17-May-2019 07:20:42 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516024.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 20:21:03 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-F-3 | Lab Sample ID: | 240-112111-3 | Worklist Smp#: | 24 |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 24 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516024.D
Lims ID: 240-112111-F-3
Client ID: MRC-NMW-1I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:21:03 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-024
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 7807.8 | 80.24 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619  Lab Sample ID: 240-112111-4

Matrix: Water  Lab File ID: Z0516025.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 13:32

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 20:38

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 130 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 63 | | 1.0 | 0.10 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 82 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516025.D
Lims ID: 240-112111-D-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:38:17 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-025
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

First Level Reviewer: matthewsb Date: 17-May-2019 07:19:40

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.183 | 1.186 | -0.003 | 65064024 | 10134 | E |
| 2 | Ethylene | | | | | M |
| | 1.883 | 1.886 | -0.003 | 835533 | 131.4 | M |
| 4 | Ethane | | | | | M |
| | 2.204 | 2.206 | -0.002 | 422603 | 63.3 | M |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.348 | 3.349 | -0.001 | 25019325 | 7995.9 | |

## QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

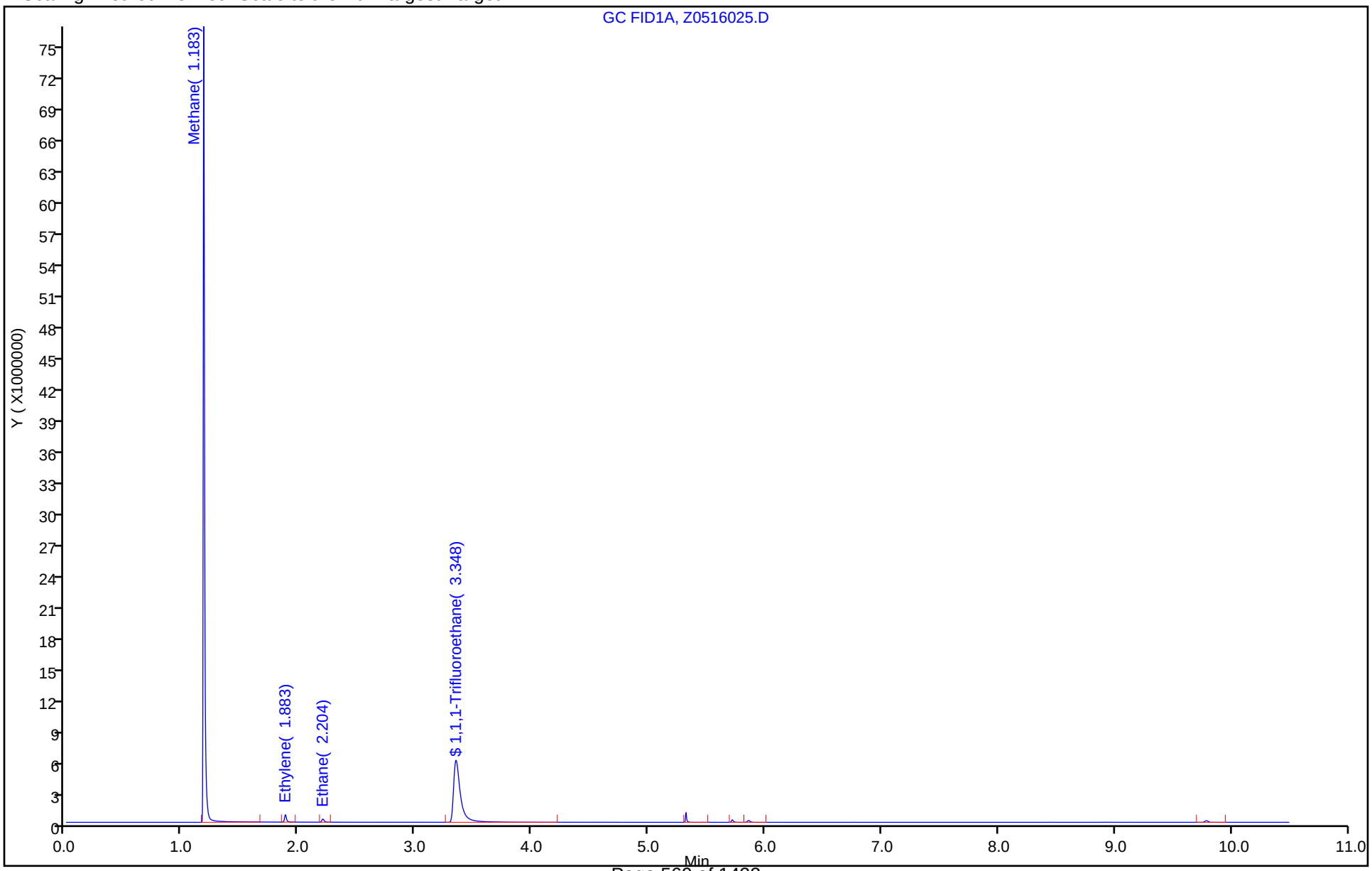
Report Date: 17-May-2019 07:20:42 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516025.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 20:38:17 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-4 | Lab Sample ID: | 240-112111-4 | Worklist Smp#: | 25 |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 25 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516025.D
Lims ID: 240-112111-D-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:38:17 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-025
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

First Level Reviewer: matthewsb Date: 17-May-2019 07:19:40

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 7995.9 | 82.17 |

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

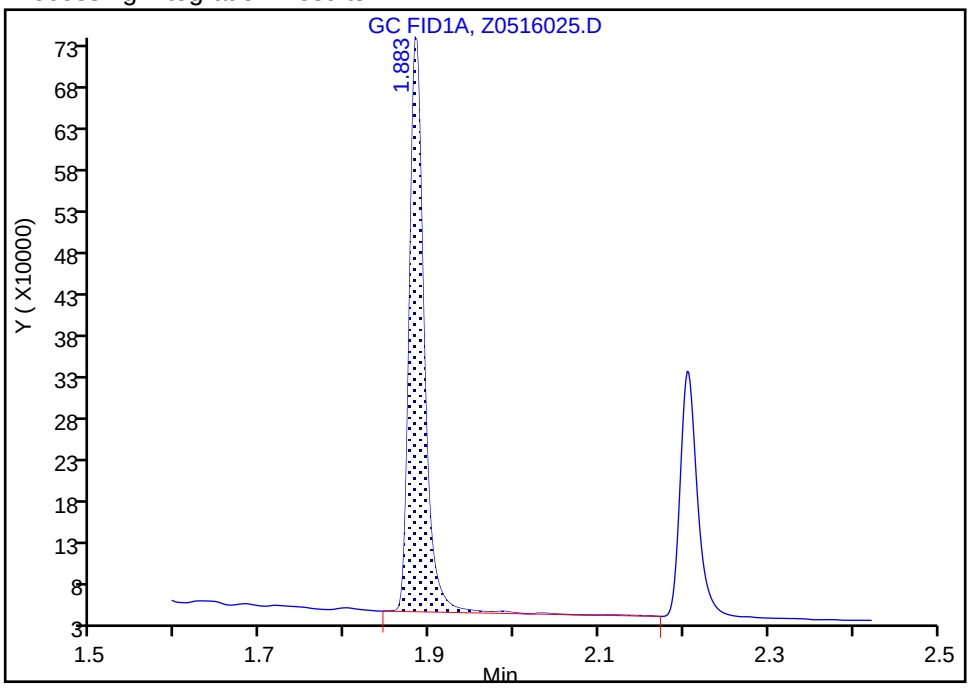
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516025.D | | | | |
| Injection Date: | 16-May-2019 20:38:17 | Instrument ID: | ZPID | | |
| Lims ID: | 240-112111-D-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | | ALS Bottle#: | 25 | Worklist Smp#: | 25 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |
| Column: | | Detector | GC FID1A | | |

## 2 Ethylene, CAS: 74-85-1

Signal: 1

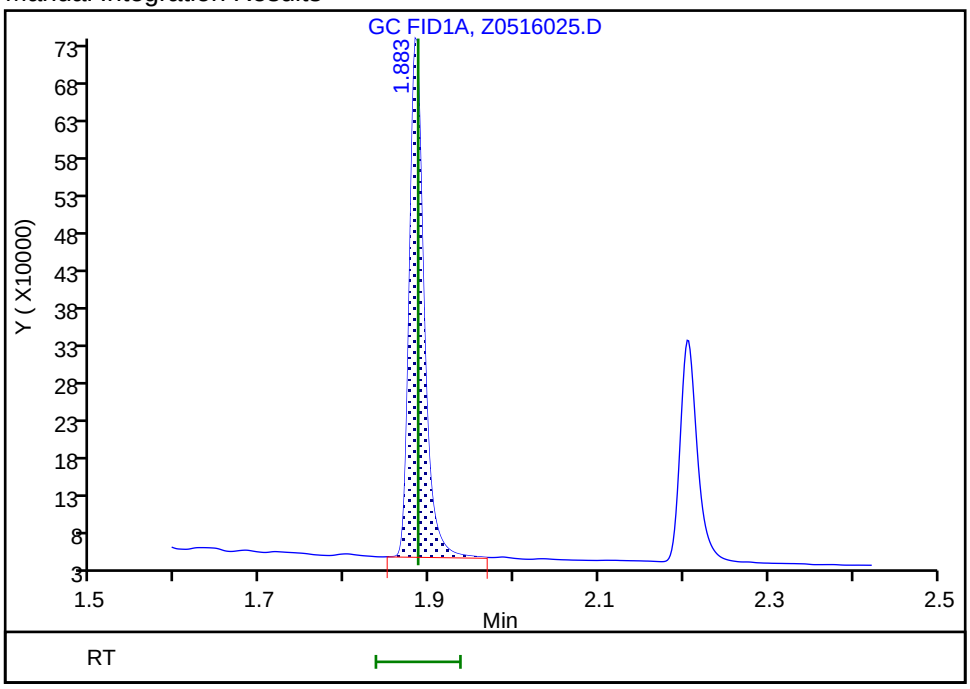
Processing Integration Results

RT: 1.88
Area: 846223
Amount: 133.0765
Amount Units: ug/l




Manual Integration Results

RT: 1.88
Area: 835533
Amount: 131.3954
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:19:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

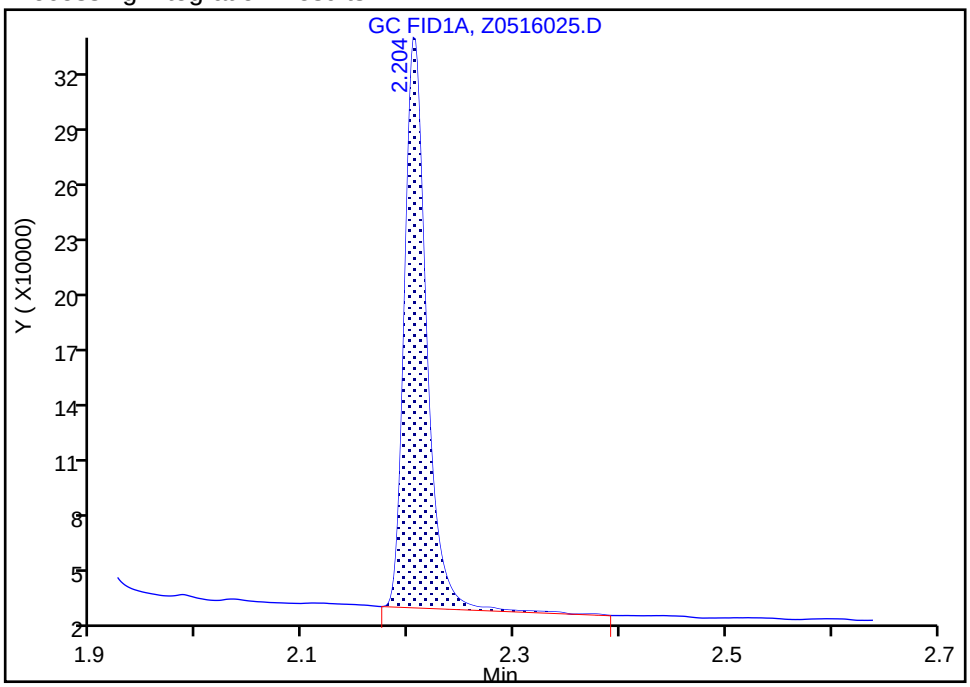
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516025.D | | | | |
| Injection Date: | 16-May-2019 20:38:17 | Instrument ID: | ZPID | | |
| Lims ID: | 240-112111-D-4 | Lab Sample ID: | 240-112111-4 | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Operator ID: | | ALS Bottle#: | 25 | Worklist Smp#: | 25 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |
| Column: | | Detector | GC FID1A | | |

## 4 Ethane, CAS: 74-84-0

Signal: 1

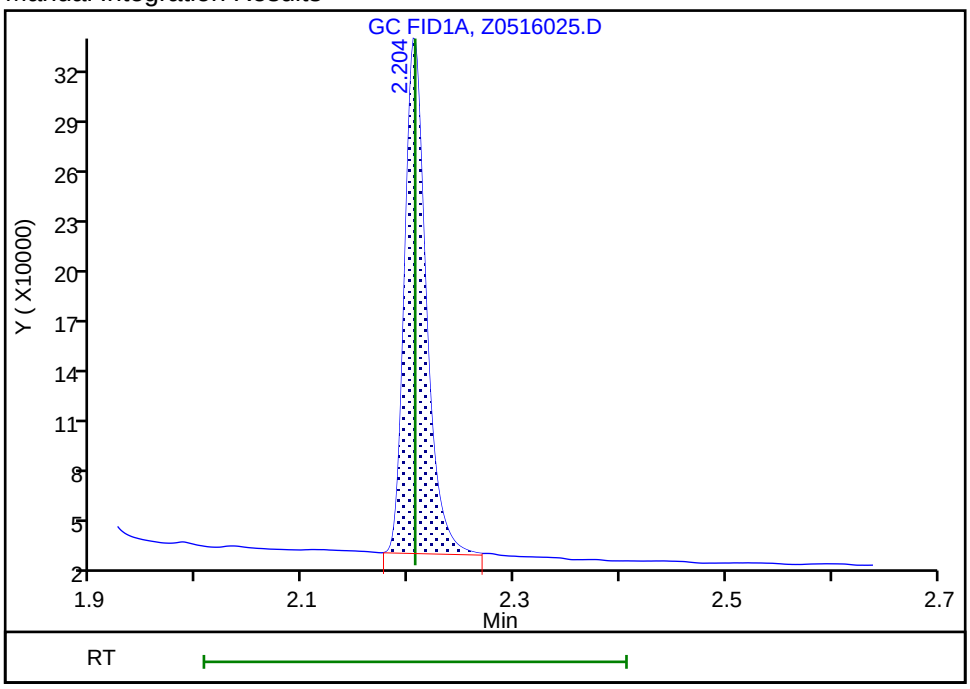
Processing Integration Results

RT: 2.20
Area: 430114
Amount: 64.389707
Amount Units: ug/l




Manual Integration Results

RT: 2.20
Area: 422603
Amount: 63.265282
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:19:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-3I-050619  Lab Sample ID: 240-112111-4

Matrix: Water  Lab File ID: Z0517009.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 13:32

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 16:27

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-82-8 | Methane | 9600 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 86 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517009.D
Lims ID: 240-112111-E-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:27:40 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-009
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.184 | 1.183 | 0.001 | 6138569 | 956.1 | |
| 2 | Ethylene | | | | | |
| | 1.884 | 1.883 | 0.001 | 81020 | 12.7 | |
| 4 | Ethane | | | | | |
| | 2.204 | 2.205 | -0.001 | 41137 | 6.16 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.347 | 3.348 | -0.001 | 26195348 | 8371.8 | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

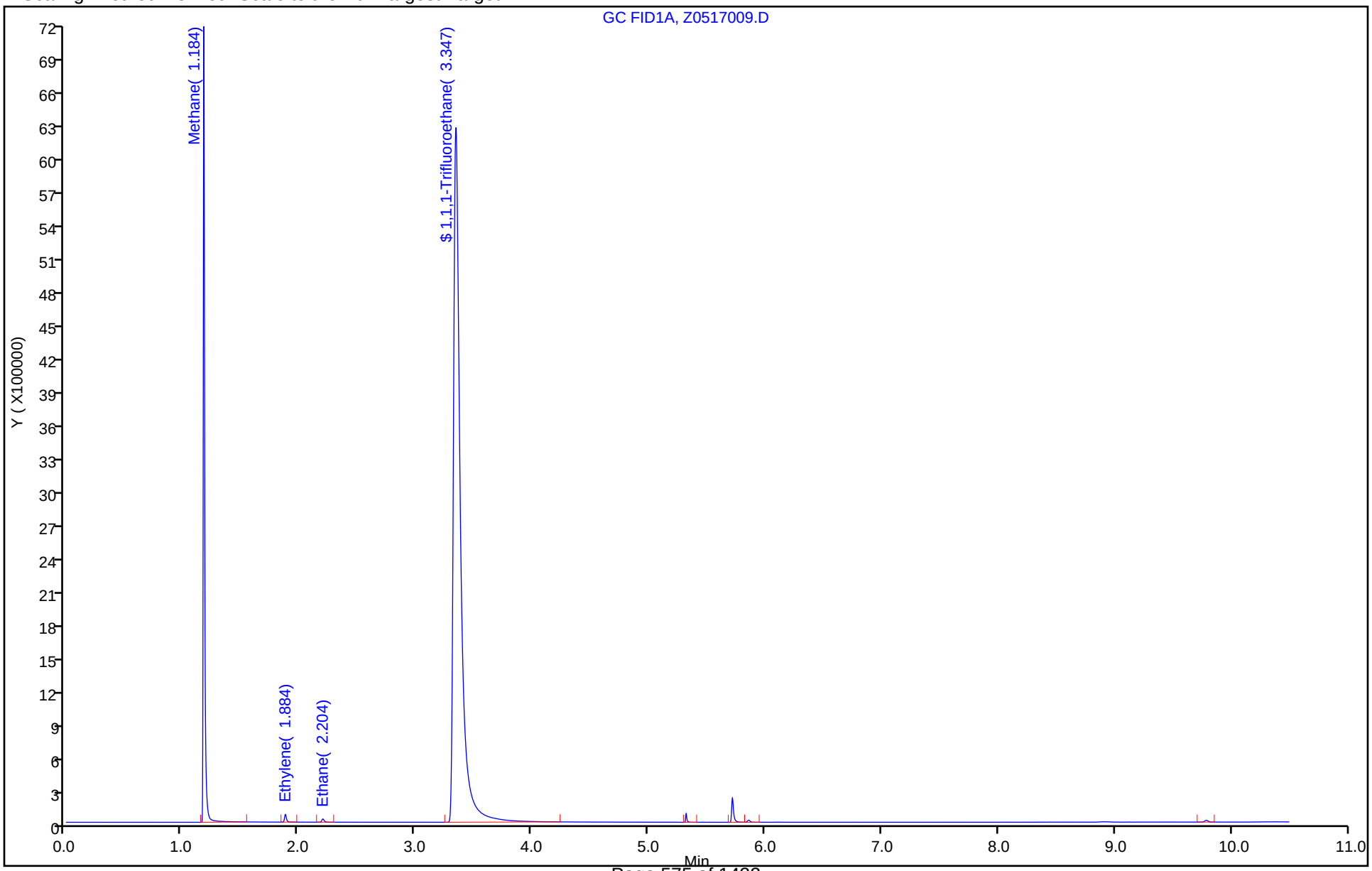
Report Date: 20-May-2019 10:18:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517009.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 16:27:40 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-E-4 | Lab Sample ID: | 240-112111-4 | Worklist Smp#: | 9 |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 9 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517009.D
Lims ID: 240-112111-E-4
Client ID: MRC-NMW-3I-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:27:40 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-009
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8371.8 | 86.04 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619  Lab Sample ID: 240-112111-5

Matrix: Water  Lab File ID: Z0516026.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 20:55

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 110 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 120 | | 1.0 | 0.10 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 81 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516026.D
Lims ID: 240-112111-E-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:55:31 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-026
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

First Level Reviewer: matthewsb Date: 17-May-2019 07:20:01

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.182 | 1.186 | -0.004 | 71487626 | 11134 | E |
| 2 | Ethylene | | | | | M |
| | 1.882 | 1.886 | -0.004 | 697682 | 109.7 | M |
| 4 | Ethane | | | | | M |
| | 2.204 | 2.206 | -0.002 | 823446 | 123.3 | M |
| $ | 5 1,1,1-Trifluoroethane | | | | | |
| | 3.347 | 3.349 | -0.002 | 24631339 | 7871.9 | |

## QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

## Reagents:

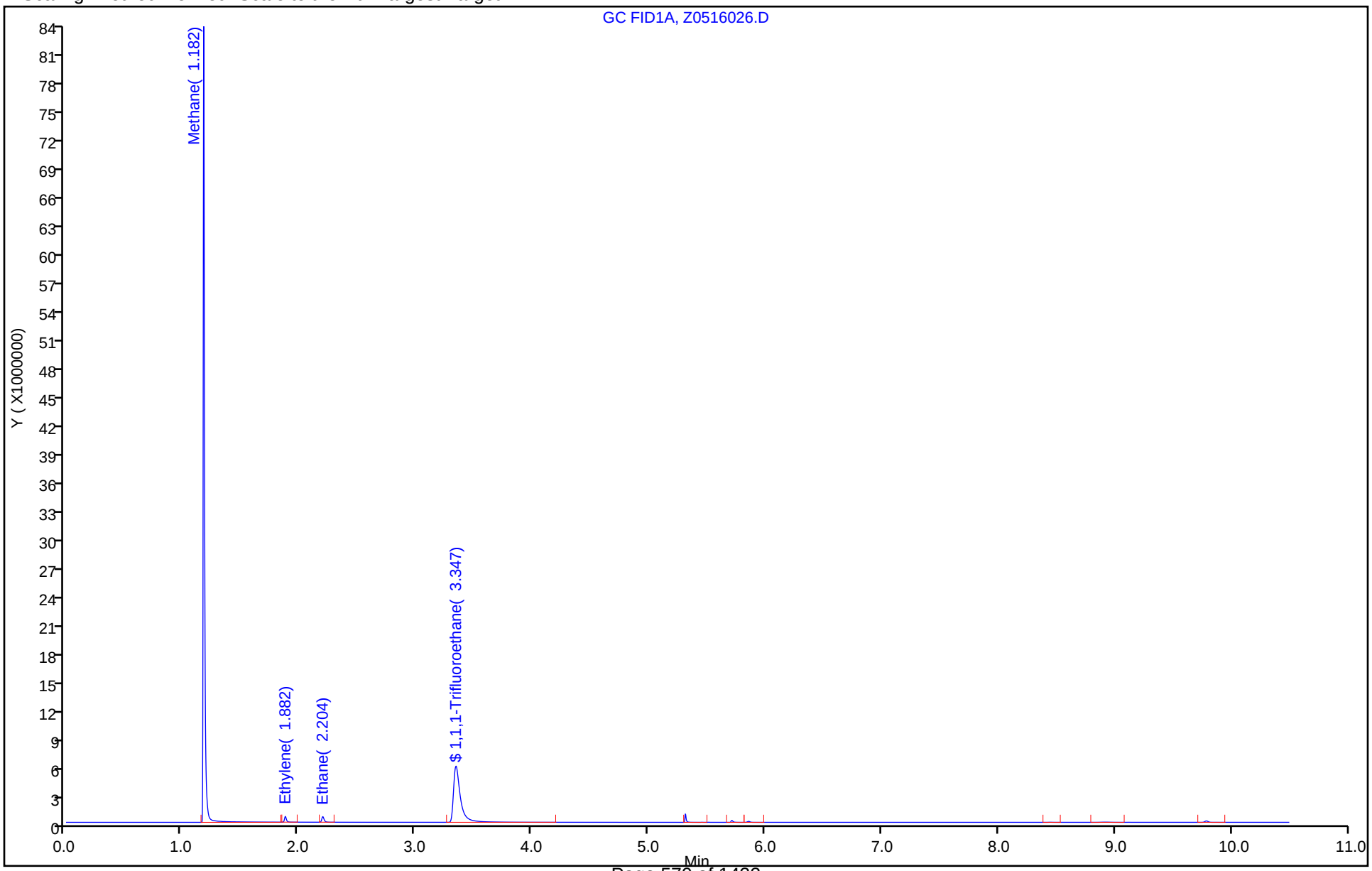
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 17-May-2019 07:20:43 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516026.D | | | | |
| Injection Date: | 16-May-2019 20:55:31 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-E-5 | Lab Sample ID: | 240-112111-5 | Worklist Smp#: | 26 |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 26 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516026.D
Lims ID: 240-112111-E-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 16-May-2019 20:55:31 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-026
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

First Level Reviewer: matthewsb Date: 17-May-2019 07:20:01

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 7871.9 | 80.90 |

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

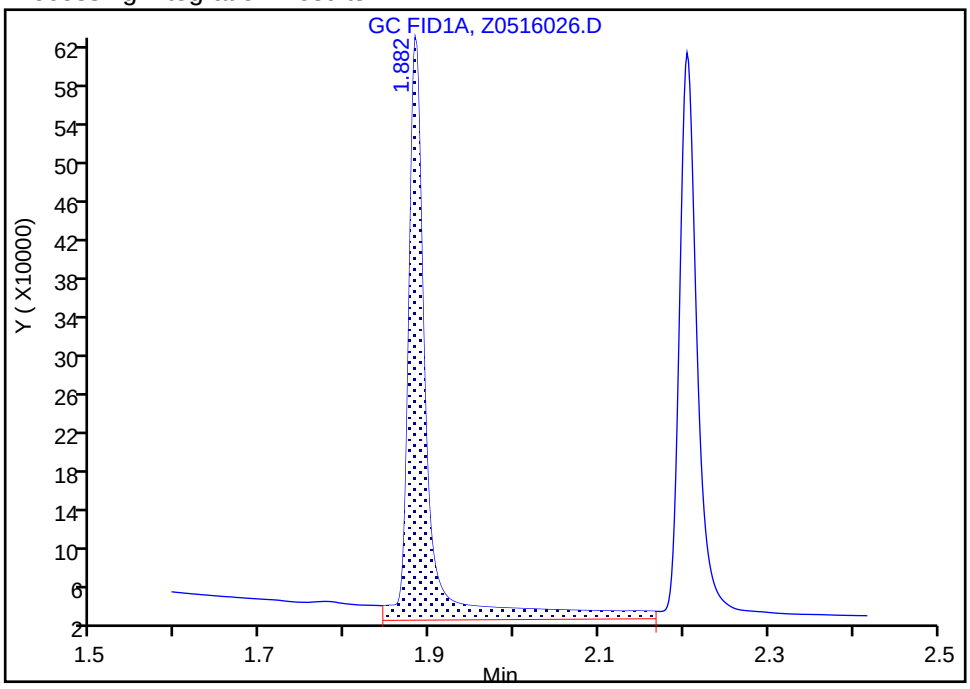
| | | | |
|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516026.D | | |
| Injection Date: | 16-May-2019 20:55:31 | Instrument ID: | ZPID |
| Lims ID: | 240-112111-E-5 | Lab Sample ID: | 240-112111-5 |
| Client ID: | MRC-NMW-2I-050619 | | |
| Operator ID: | | ALS Bottle#: | 26 Worklist Smp#: 26 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL |
| Column: | | Detector | GC FID1A |

## 2 Ethylene, CAS: 74-85-1

Signal: 1

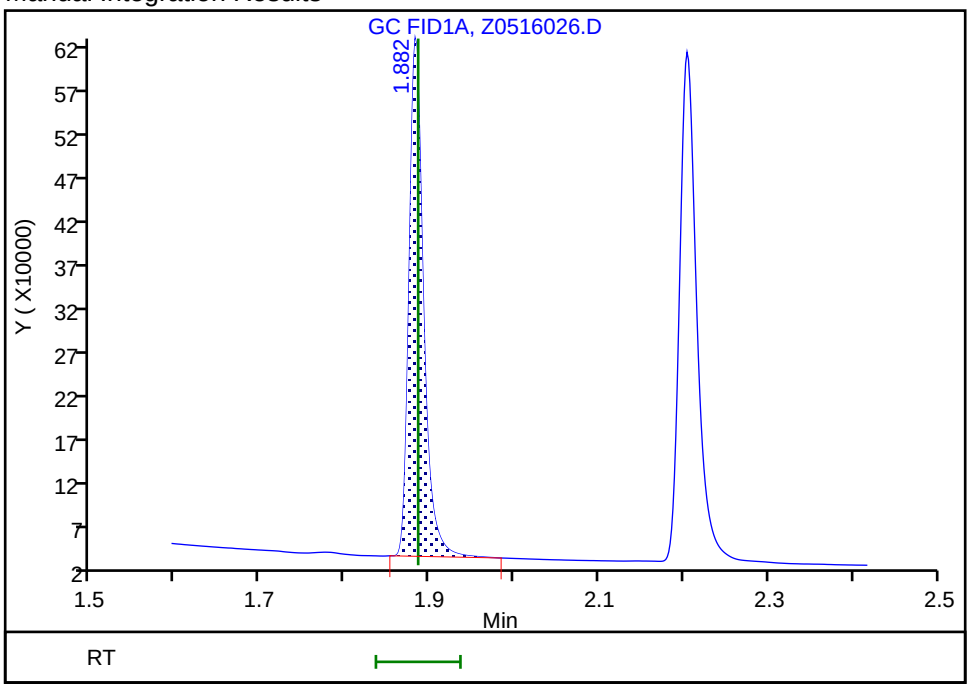
Processing Integration Results

RT: 1.88
Area: 919557
Amount: 144.6090
Amount Units: ug/l




Manual Integration Results

RT: 1.88
Area: 697682
Amount: 109.7170
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:19:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

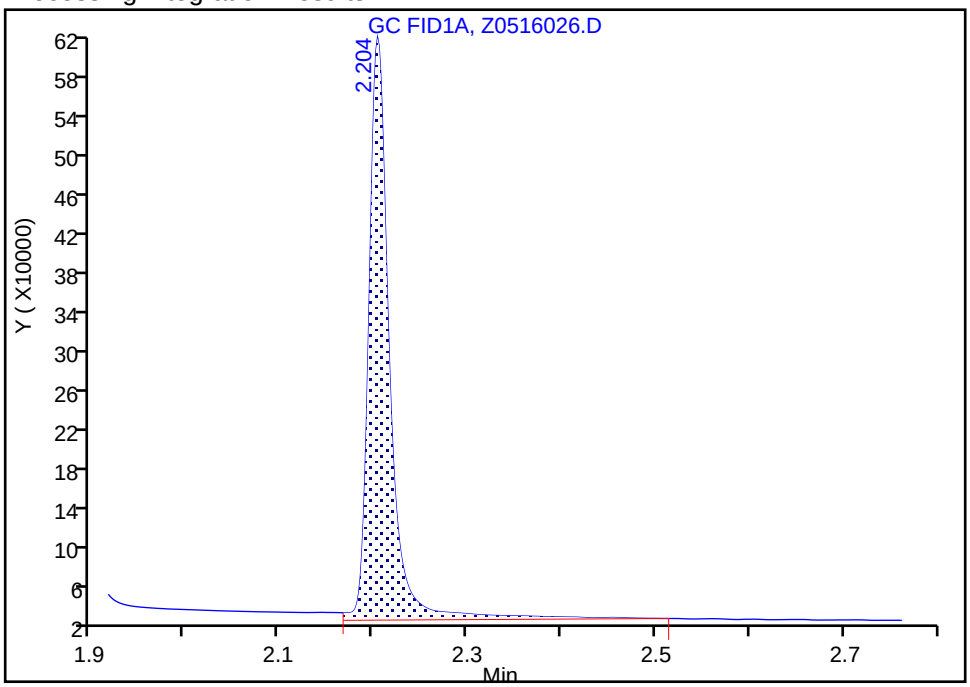
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516026.D | | | | |
| Injection Date: | 16-May-2019 20:55:31 | Instrument ID: | ZPID | | |
| Lims ID: | 240-112111-E-5 | Lab Sample ID: | 240-112111-5 | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Operator ID: | | ALS Bottle#: | 26 | Worklist Smp#: | 26 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |
| Column: | | Detector | GC FID1A | | |

## 4 Ethane, CAS: 74-84-0

Signal: 1

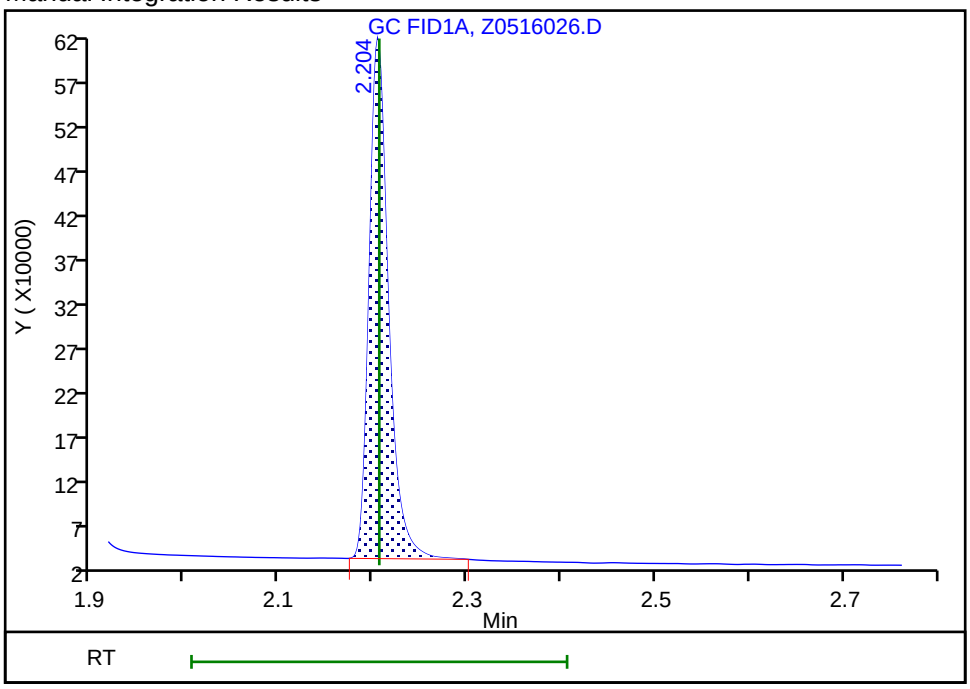
Processing Integration Results

RT: 2.20
Area: 904903
Amount: 135.4674
Amount Units: ug/l




Manual Integration Results

RT: 2.20
Area: 823446
Amount: 123.2730
Amount Units: ug/l




Reviewer: matthewsb, 17-May-2019 07:19:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619  Lab Sample ID: 240-112111-5

Matrix: Water  Lab File ID: Z0517010.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 16:45

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-82-8 | Methane | 9500 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517010.D
Lims ID: 240-112111-D-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:45:04 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-010
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.183 | 1.183 | 0.000 | 6128086 | 954.5 | |
| 2 | Ethylene | | | | | |
| | 1.883 | 1.883 | 0.000 | 64641 | 10.2 | |
| 3 | Acetylene | | | | | |
| | | 1.997 | | | ND | |
| 4 | Ethane | | | | | |
| | 2.205 | 2.205 | 0.000 | 76324 | 11.4 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.346 | 3.348 | -0.002 | 26354166 | 8422.5 | |
| 6 | Propane | | | | | |
| | | 4.552 | | | ND | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

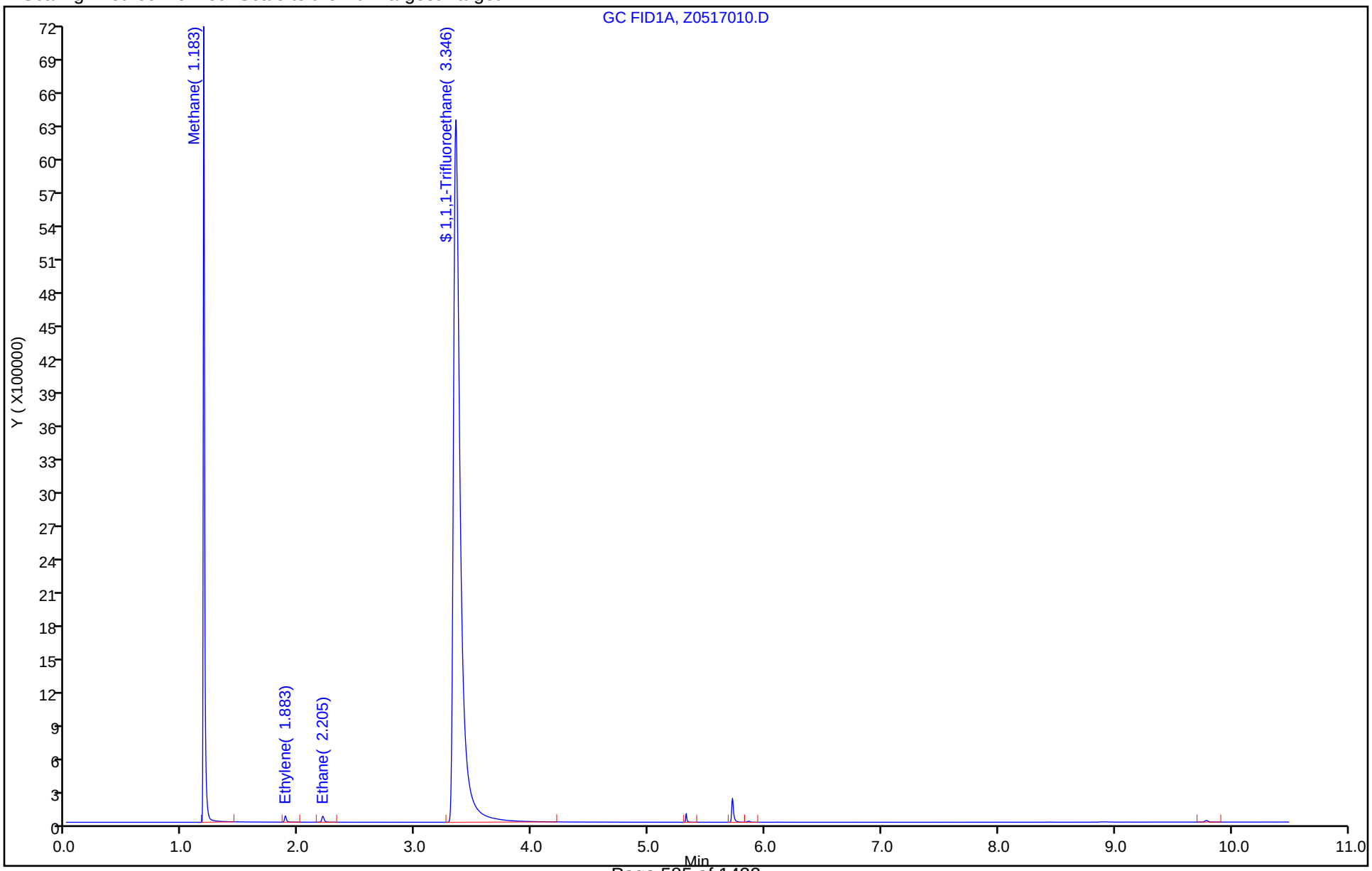
Report Date: 20-May-2019 10:18:14 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517010.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 16:45:04 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-5 | Lab Sample ID: | 240-112111-5 | Worklist Smp#: | 10 |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 10 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517010.D
Lims ID: 240-112111-D-5
Client ID: MRC-NMW-2I-050619
Sample Type: Client
Inject. Date: 17-May-2019 16:45:04 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-010
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8422.5 | 86.56 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32 Calibration End Date: 03/25/2019 15:57 Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methane | 1.182 | 1.182 | 1.182 | 1.181 | 1.181 | 1.179 | | | | | 1.129 - 1.229 | 1.181 |
| Ethene | 1.881 | 1.880 | 1.880 | 1.880 | 1.878 | 1.873 | | | | | 1.823 - 1.923 | 1.879 |
| Acetylene | 1.996 | 1.995 | 1.993 | 1.993 | 1.993 | +++++ | | | | | 1.939 - 2.039 | 1.994 |
| Ethane | 2.202 | 2.202 | 2.200 | 2.200 | 2.199 | 2.191 | | | | | 1.991 - 2.391 | 2.199 |
| Propane | 4.549 | 4.548 | 4.548 | 4.546 | 4.543 | 4.519 | | | | | 4.469 - 4.569 | 4.542 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32  Calibration End Date: 03/25/2019 15:57  Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| Methane | 6779.3<br>5971.4 | 6638.4<br>6357.3 | 6547.8 | 6228.5 | Ave | | 6420.43964 | | | | 4.6 | | 20.0 | | | |
| Ethene | 5472.3<br>6503.0 | 6489.6<br>6851.4 | 6599.4 | 6237.9 | Ave | | 6358.92133 | | | | 7.5 | | 20.0 | | | |
| Acetylene | 2456.6<br>3914.5 | 2993.1<br>+++++ | 3464.1 | 3746.4 | Ave | | 3314.91689 | | | | 17.9 | | 30.0 | | | |
| Ethane | 5599.4<br>7050.0 | 6661.7<br>7426.5 | 6819.1 | 6522.4 | Ave | | 6679.85645 | | | | 9.2 | | 20.0 | | | |
| Propane | 5750.6<br>7980.4 | 7063.7<br>8394.9 | 7233.7 | 6983.7 | Ave | | 7234.51455 | | | | 12.7 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32  Calibration End Date: 03/25/2019 15:57  Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Methane | Ave | 1966<br>27189706 | 13476 | 66460 | 632192 | 2553930 | 0.290<br>4277 | 2.03 | 10.2 | 102 | 428 |
| Ethene | Ave | 2798<br>51465960 | 23227 | 118101 | 1116304 | 4884888 | 0.511<br>7512 | 3.58 | 17.9 | 179 | 751 |
| Acetylene | Ave | 1161<br>+++++ | 9902 | 57300 | 619698 | 2720642 | 0.473<br>+++++ | 3.31 | 16.5 | 165 | 695 |
| Ethane | Ave | 3048<br>59757636 | 25384 | 129919 | 1242663 | 5672810 | 0.544<br>8047 | 3.81 | 19.1 | 191 | 805 |
| Propane | Ave | 4588<br>98970444 | 39449 | 201994 | 1950136 | 9408395 | 0.798<br>11789 | 5.58 | 27.9 | 279 | 1179 |

Curve Type Legend:

Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Lims ID: STD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Mar-2019 14:32:27 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:28 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:00

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | Ma |
| 1.182 | 1.179 | 0.003 | 1966 | 0.2900 | 0.3062 | Ma |
| 2 Ethylene | | | | | | Ma |
| 1.881 | 1.873 | 0.008 | 2798 | 0.5113 | 0.4400 | Ma |
| 3 Acetylene | | | | | | Ma |
| 1.996 | 1.989 | 0.007 | 1161 | 0.4726 | 0.3502 | M |
| 4 Ethane | | | | | | Ma |
| 2.202 | 2.191 | 0.011 | 3048 | 0.5443 | 0.4563 | Ma |
| 6 Propane | | | | | | Ma |
| 4.549 | 4.519 | 0.030 | 4588 | 0.7978 | 0.6342 | Ma |

## QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

## Reagents:

SARSKLOWCAL_00013 Amount Added: 10.00 Units: uL

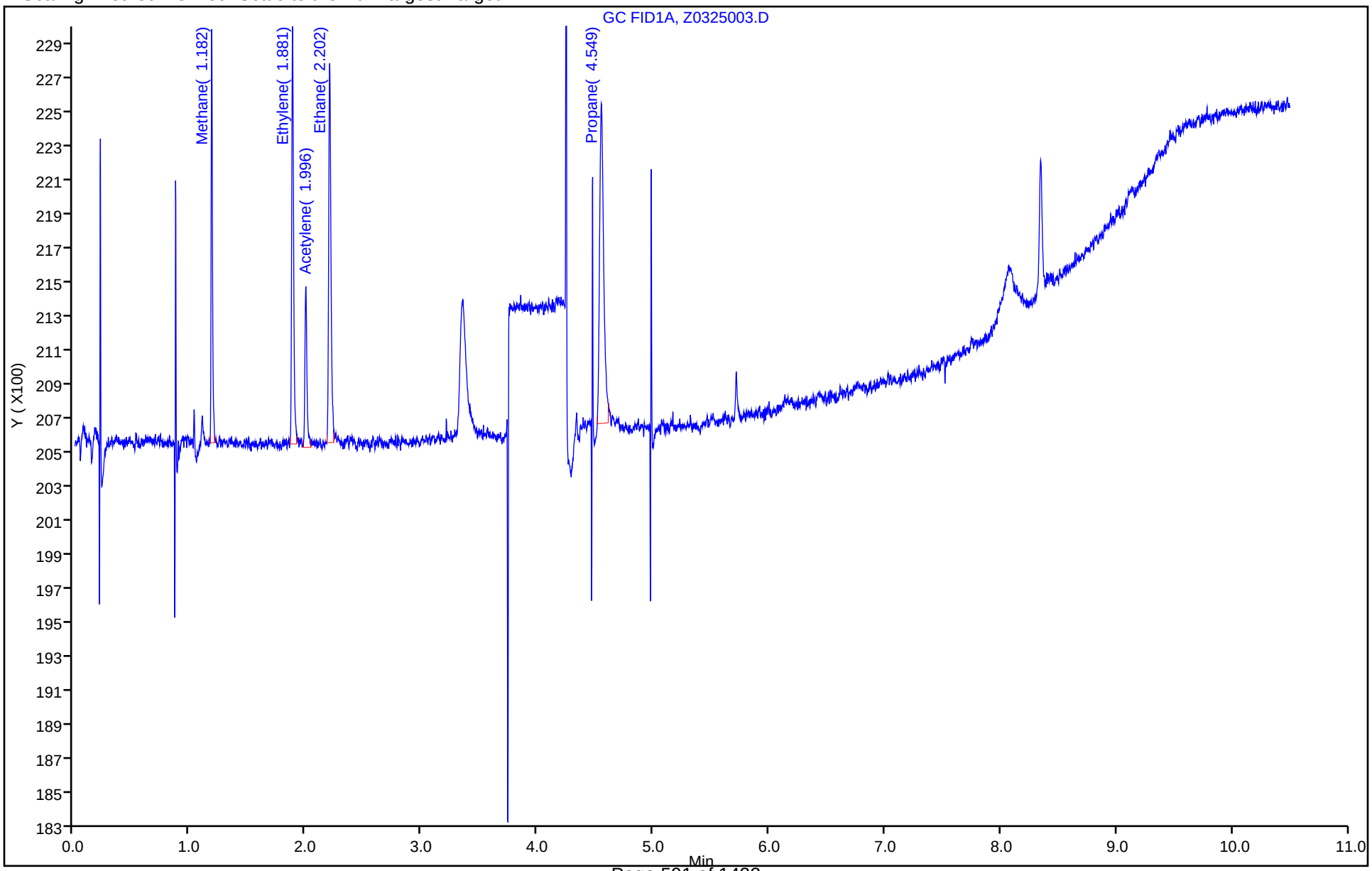
Report Date: 26-Mar-2019 07:54:28 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 14:32:27 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 1 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

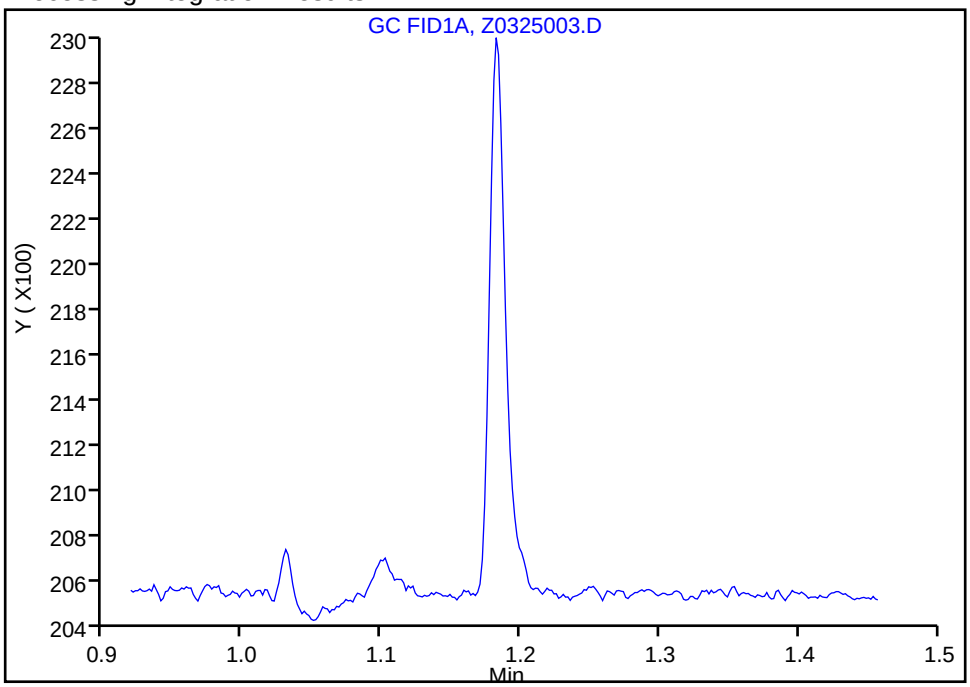
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 1 Methane, CAS: 74-82-8

Signal: 1

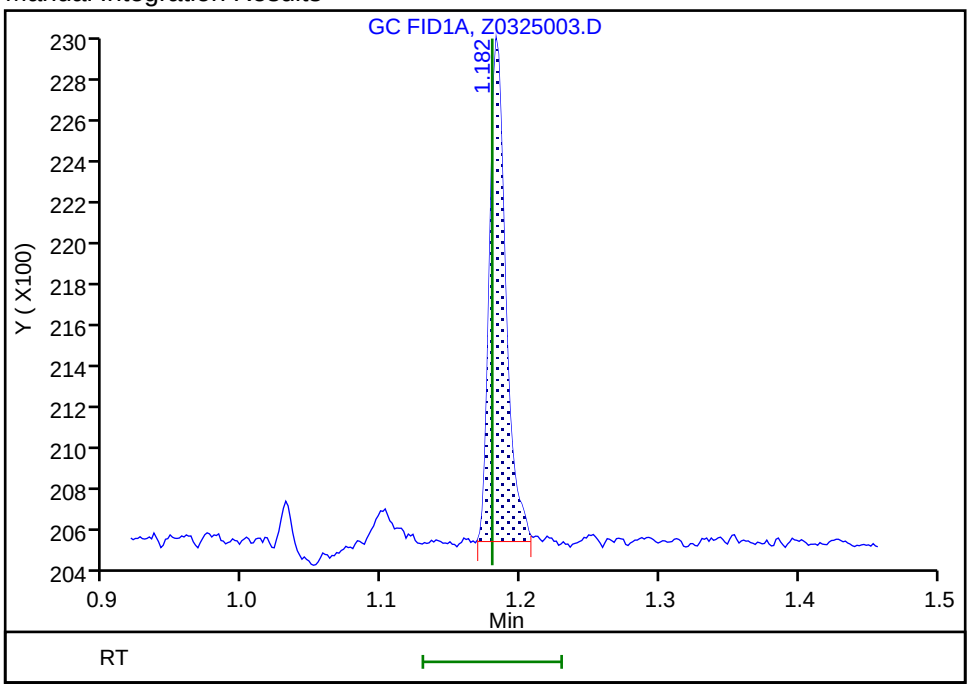
Not Detected
Expected RT: 1.18

Processing Integration Results




Manual Integration Results

RT: 1.18
Area: 1966
Amount: 0.306210
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:24
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

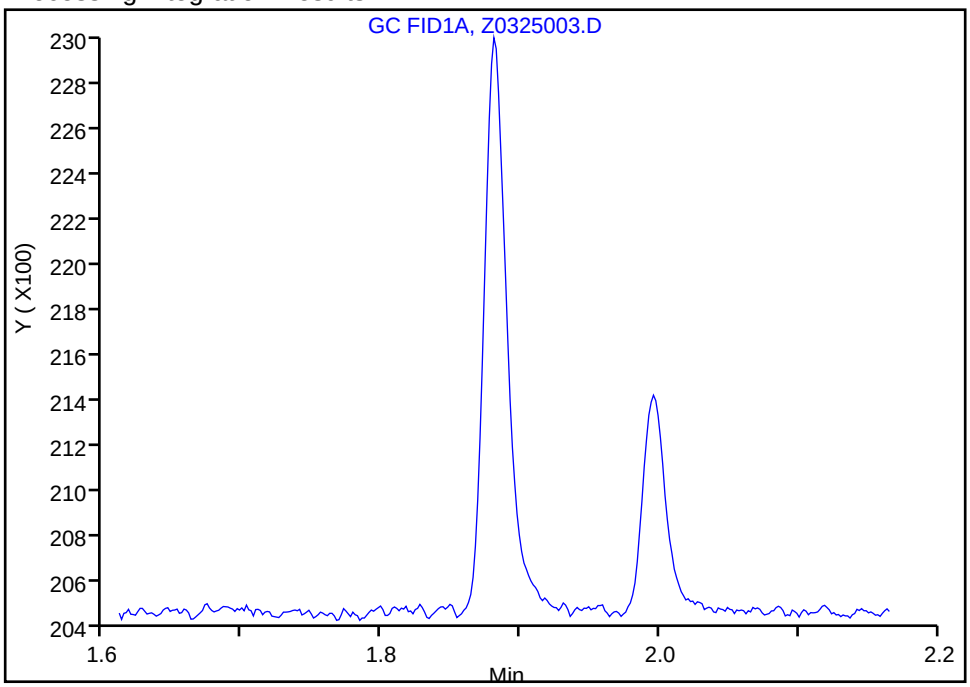
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 2 Ethylene, CAS: 74-85-1

Signal: 1

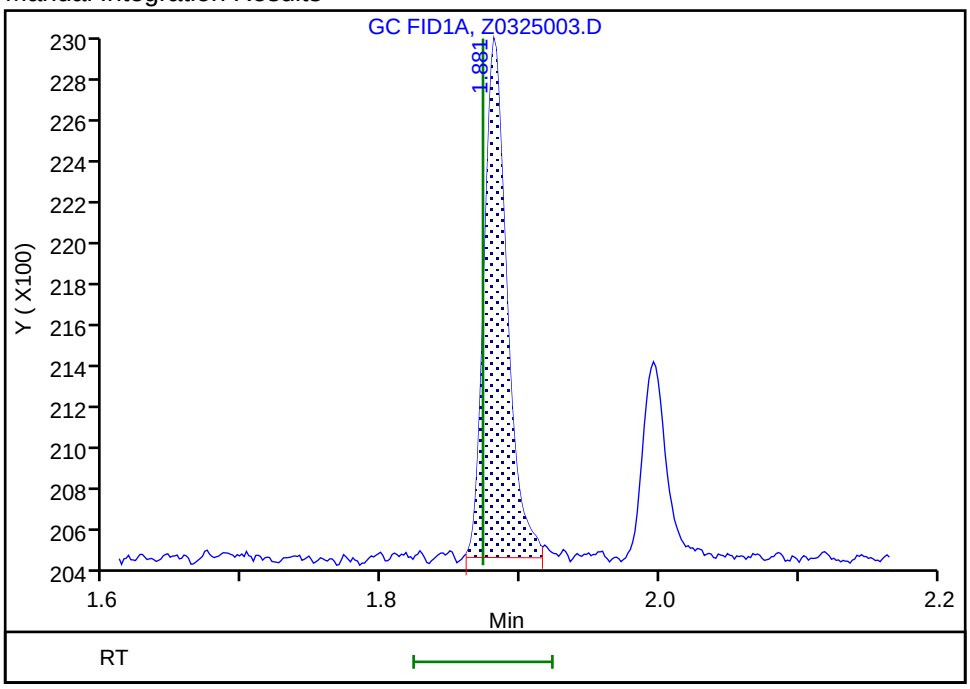
Not Detected
Expected RT: 1.87

Processing Integration Results




Manual Integration Results

RT: 1.88
Area: 2798
Amount: 0.440012
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:32
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

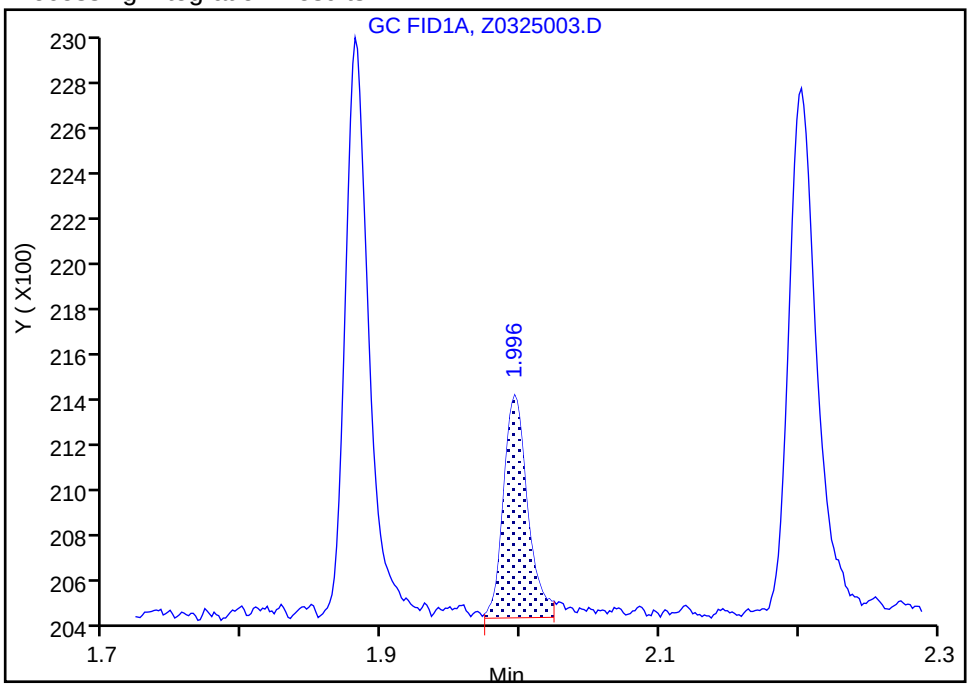
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 3 Acetylene, CAS: 74-86-2

Signal: 1

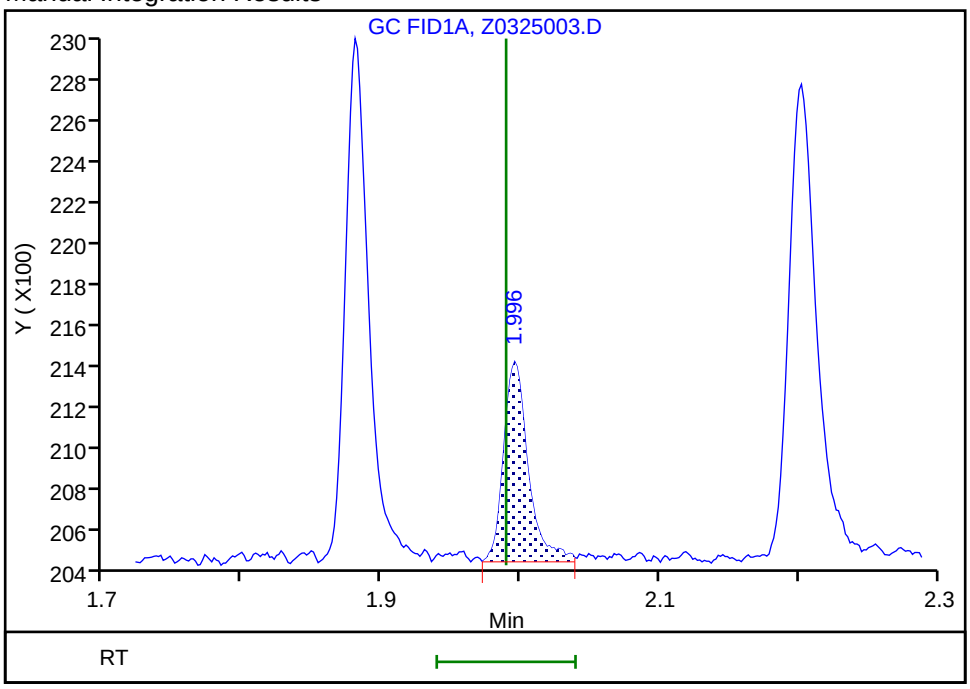
Processing Integration Results

RT: 2.00
Area: 1134
Amount: 0.326116
Amount Units: ug/l




Manual Integration Results

RT: 2.00
Area: 1161
Amount: 0.350235
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:52:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

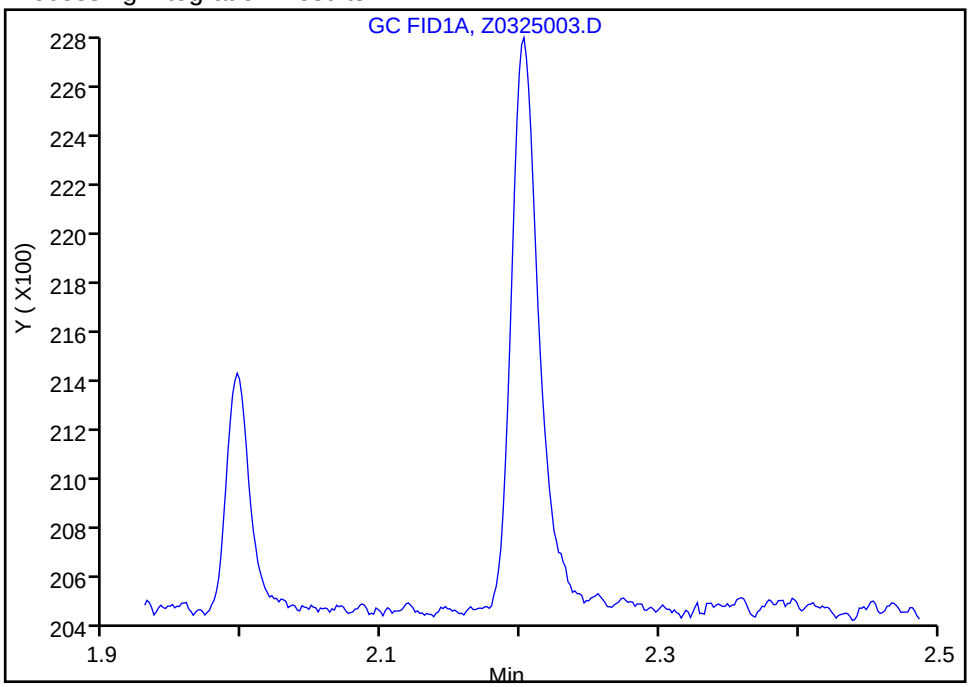
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 4 Ethane, CAS: 74-84-0

Signal: 1

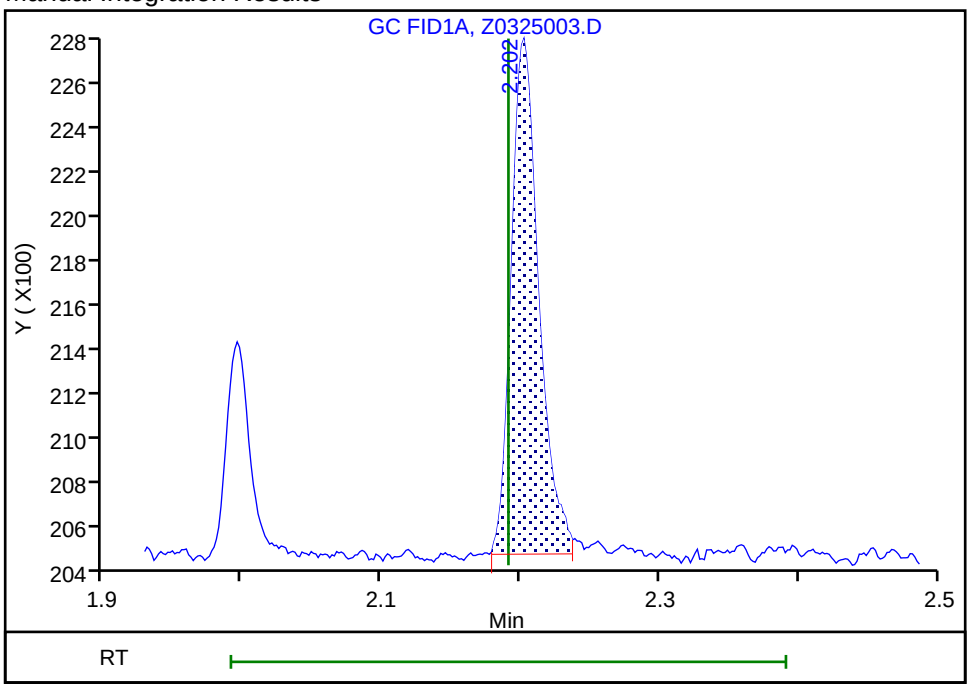
Not Detected
Expected RT: 2.19

Processing Integration Results




Manual Integration Results

RT: 2.20
Area: 3048
Amount: 0.456297
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

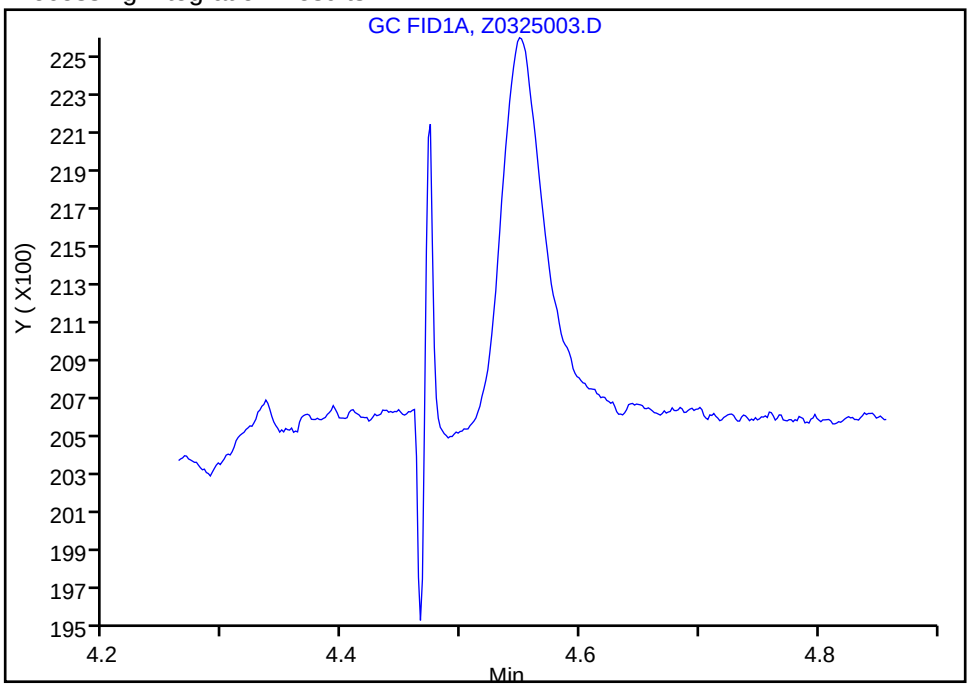
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

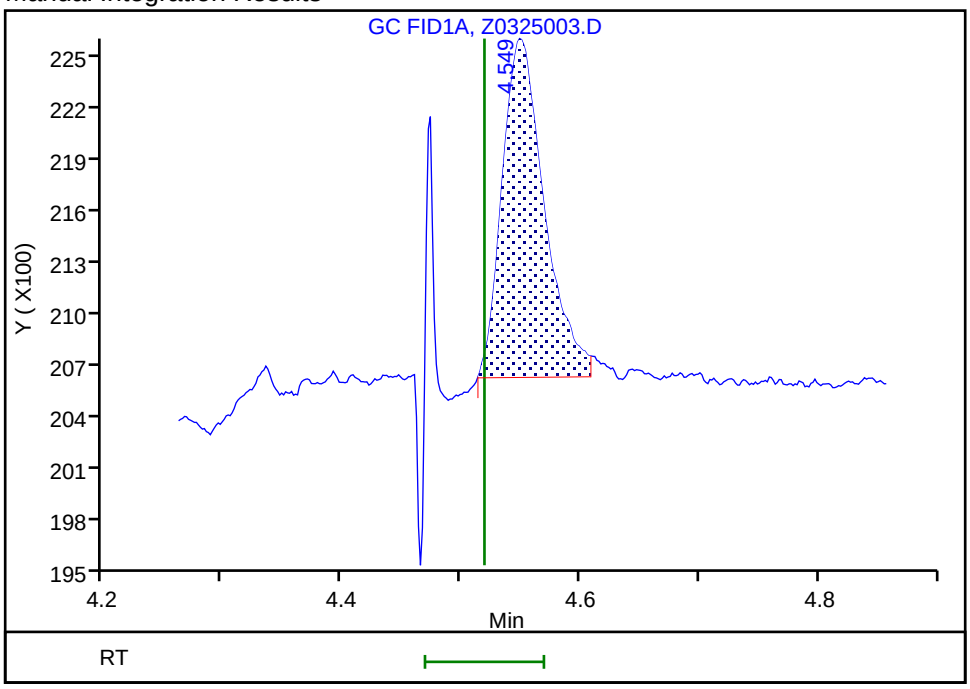
Not Detected
Expected RT: 4.52

Processing Integration Results




Manual Integration Results

RT: 4.55
Area: 4588
Amount: 0.634182
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:58
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Lims ID: STD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Mar-2019 14:49:29 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-004
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:29

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.182 | 1.179 | 0.003 | 13476 | 2.03 | 2.10 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.873 | 0.007 | 23227 | 3.58 | 3.65 | |
| 3 Acetylene | | | | | | Ma |
| 1.995 | 1.989 | 0.006 | 9902 | 3.31 | 2.99 | Ma |
| 4 Ethane | | | | | | |
| 2.202 | 2.191 | 0.011 | 25384 | 3.81 | 3.80 | |
| 6 Propane | | | | | | M |
| 4.548 | 4.519 | 0.029 | 39449 | 5.58 | 5.45 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

## Reagents:

SARSKLOWCAL_00013 Amount Added: 70.00 Units: uL

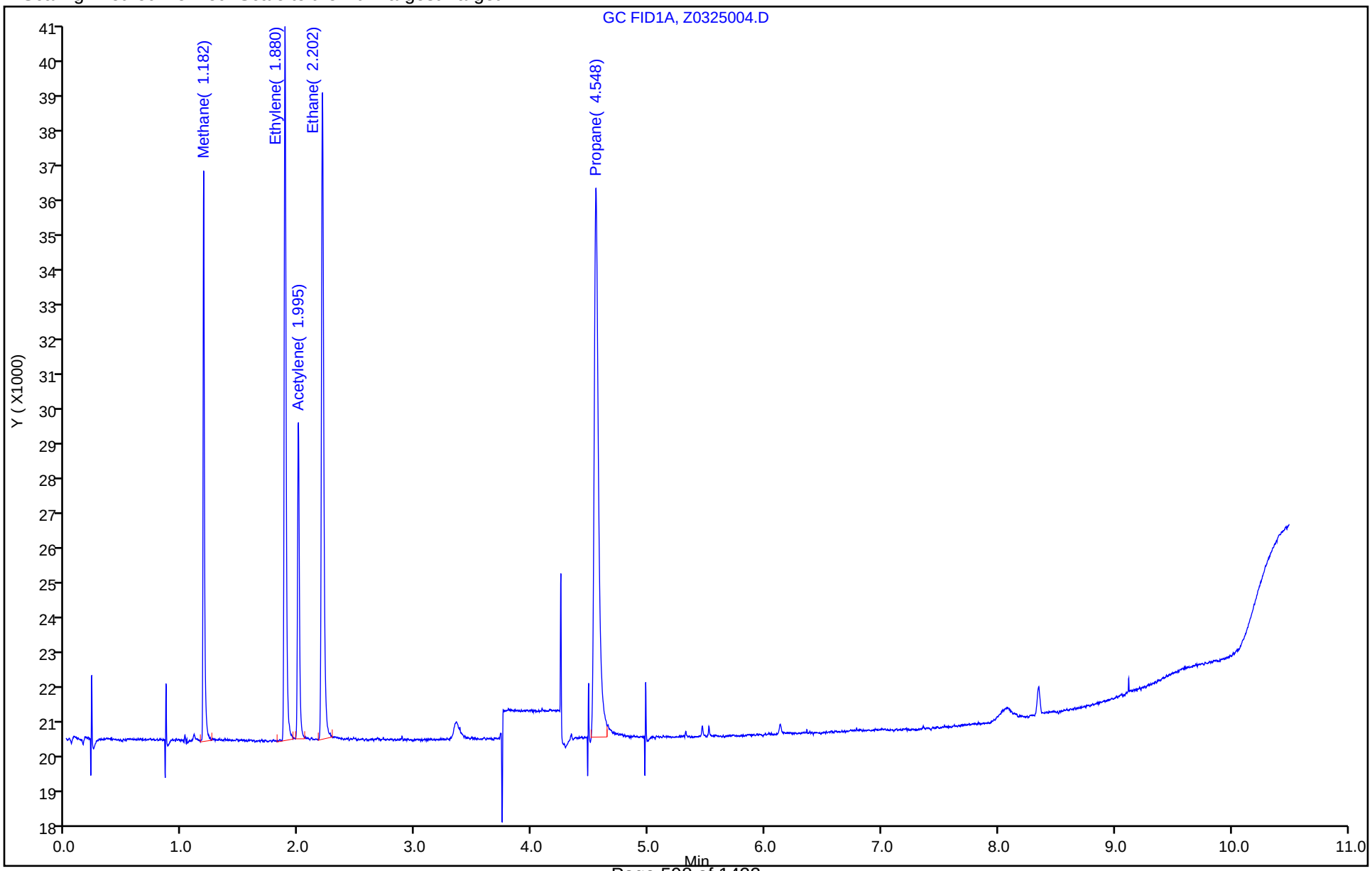
Report Date: 26-Mar-2019 07:54:29 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 14:49:29 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 2 | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

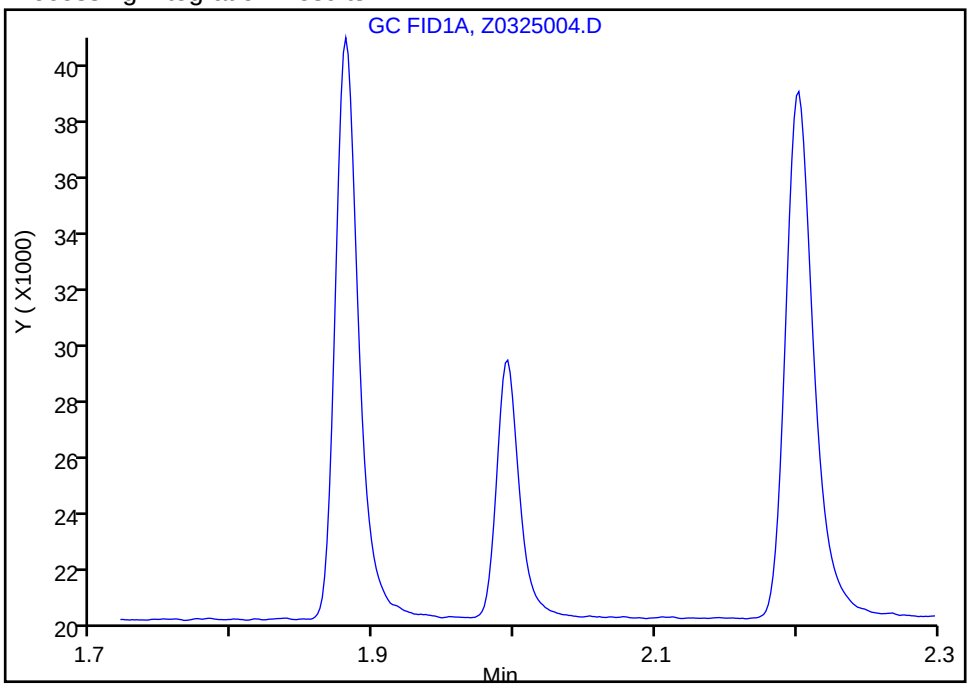
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Injection Date: 25-Mar-2019 14:49:29 Instrument ID: ZPID
Lims ID: STD 2
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 3 Acetylene, CAS: 74-86-2

Signal: 1

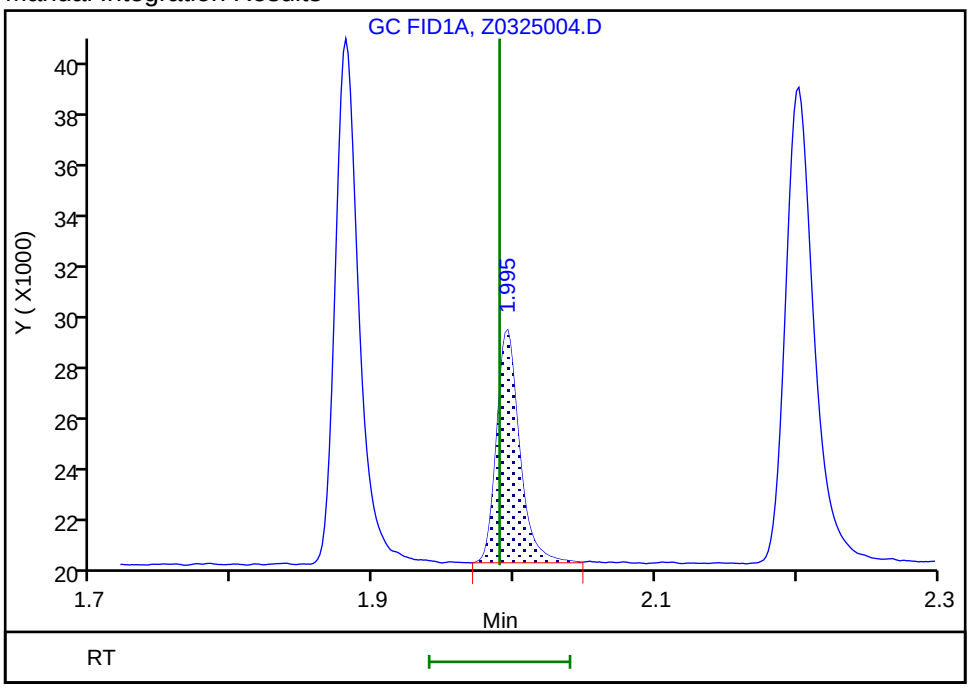
Not Detected
Expected RT: 1.99

Processing Integration Results




Manual Integration Results

RT: 2.00
Area: 9902
Amount: 2.987104
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:27
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

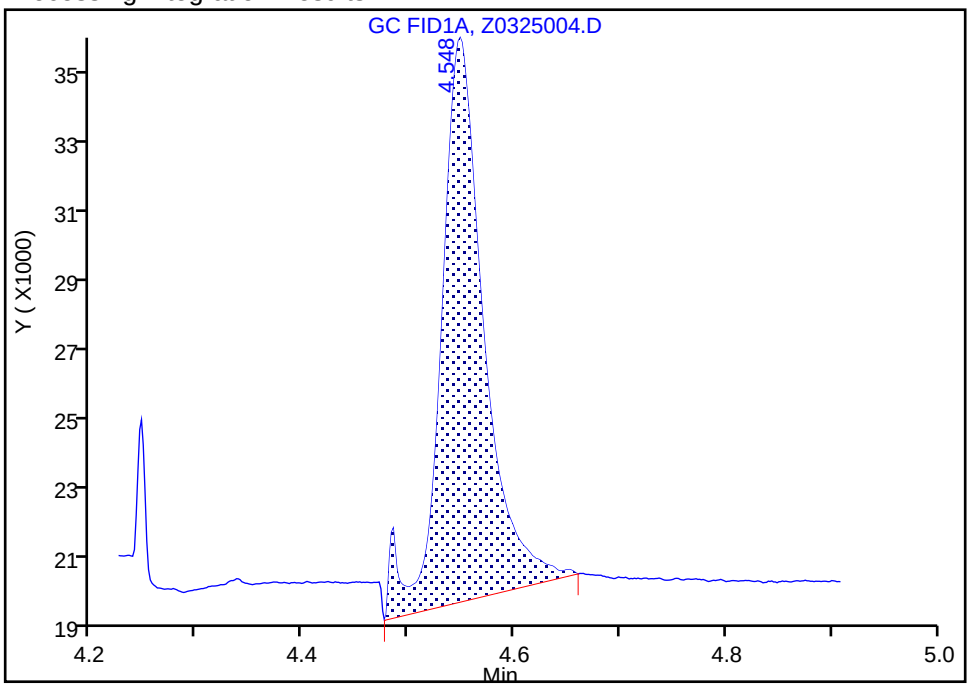
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Injection Date: 25-Mar-2019 14:49:29 Instrument ID: ZPID
Lims ID: STD 2
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

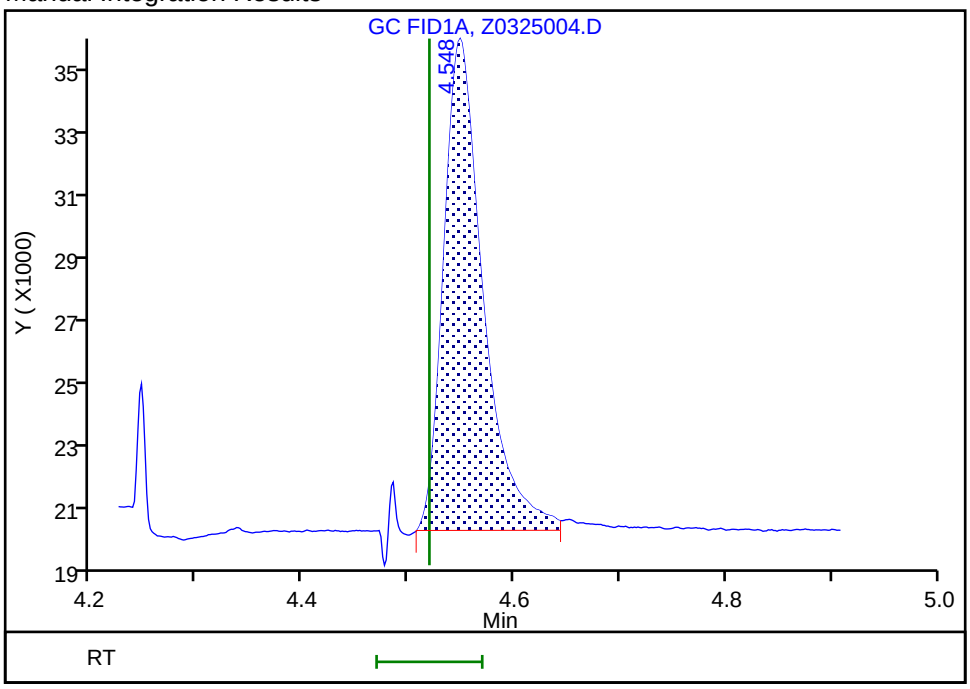
Processing Integration Results

RT: 4.55
Area: 44723
Amount: 6.005193
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 39449
Amount: 5.452888
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D
Lims ID: STD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Mar-2019 15:06:32 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-005
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:30 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:45

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.182 | 1.182 | 0.000 | 66460 | 10.2 | 10.4 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.880 | 0.000 | 118101 | 17.9 | 18.6 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 57300 | 16.5 | 17.3 | |
| 4 Ethane | | | | | | |
| 2.200 | 2.200 | 0.000 | 129919 | 19.1 | 19.4 | |
| 6 Propane | | | | | | M |
| 4.548 | 4.548 | 0.000 | 201994 | 27.9 | 27.9 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKLOWCAL_00013 Amount Added: 350.00 Units: uL

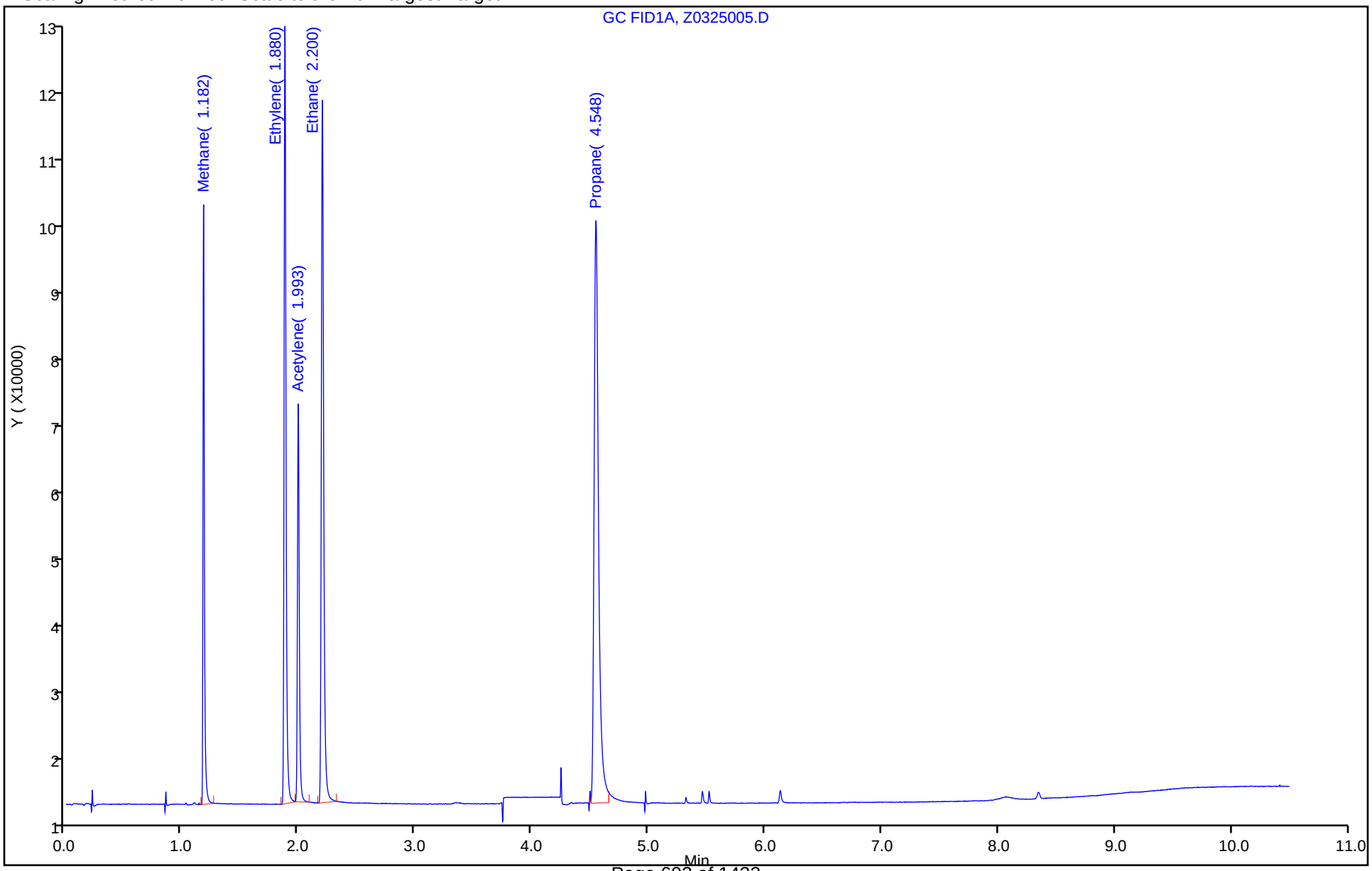
Report Date: 26-Mar-2019 07:54:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:06:32 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 3 | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

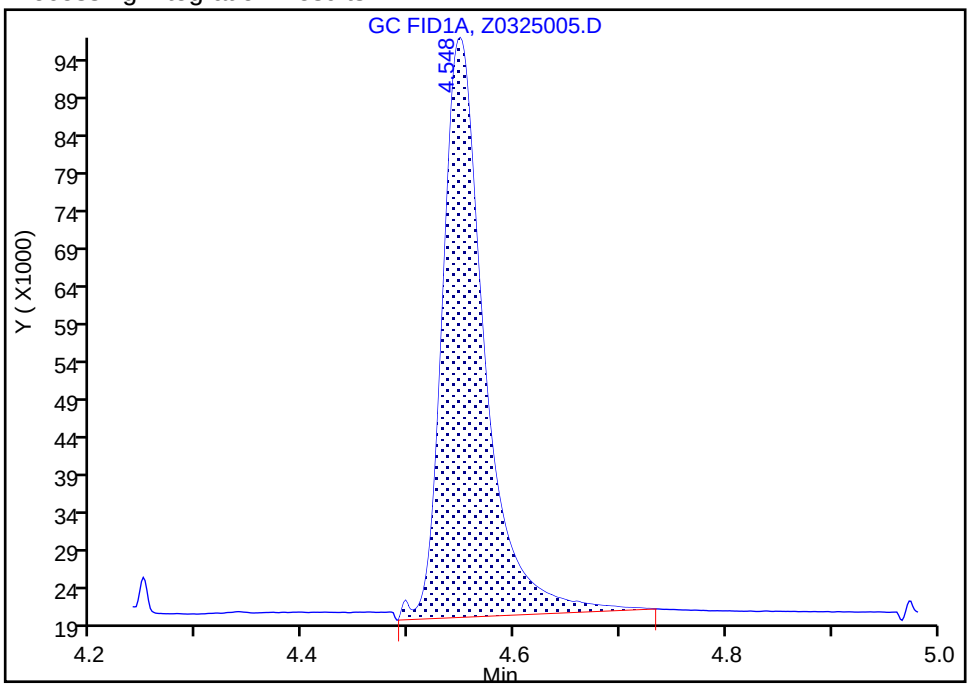
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D
Injection Date: 25-Mar-2019 15:06:32 Instrument ID: ZPID
Lims ID: STD 3
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

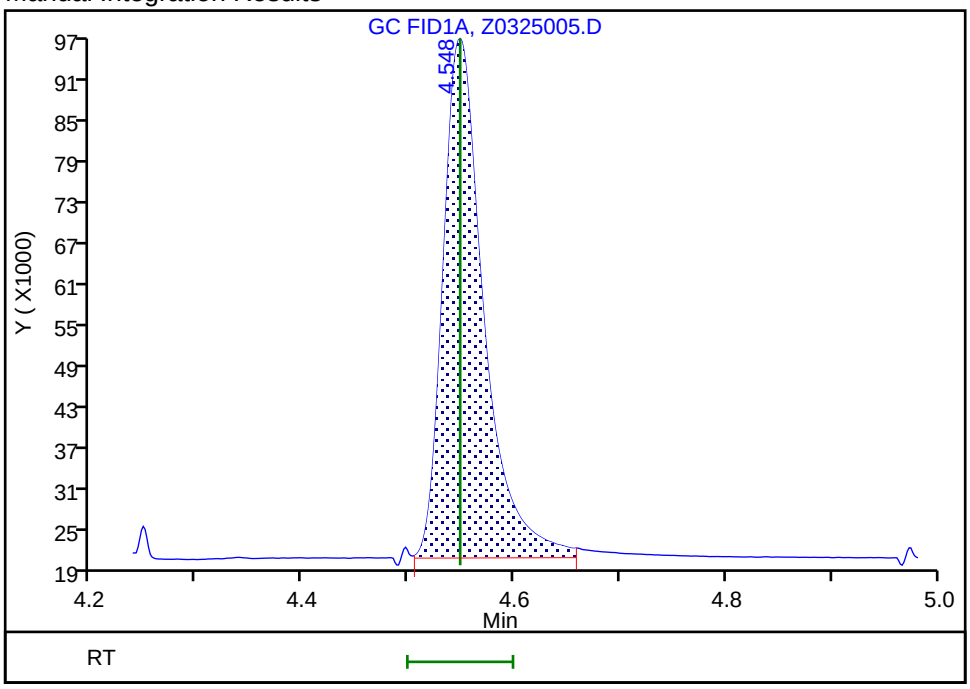
Processing Integration Results

RT: 4.55
Area: 210425
Amount: 28.864903
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 201994
Amount: 27.920878
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D
Lims ID: STD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Mar-2019 15:23:39 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-006
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:30 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:59

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.181 | 1.182 | -0.001 | 632192 | 101.5 | 98.5 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.880 | 0.000 | 1116304 | 179.0 | 175.5 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 619698 | 165.4 | 186.9 | |
| 4 Ethane | | | | | | |
| 2.200 | 2.200 | 0.000 | 1242663 | 190.5 | 186.0 | |
| 6 Propane | | | | | | M |
| 4.546 | 4.548 | -0.002 | 1950136 | 279.2 | 269.6 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKLOWCAL_00013 Amount Added: 3.50 Units: mL

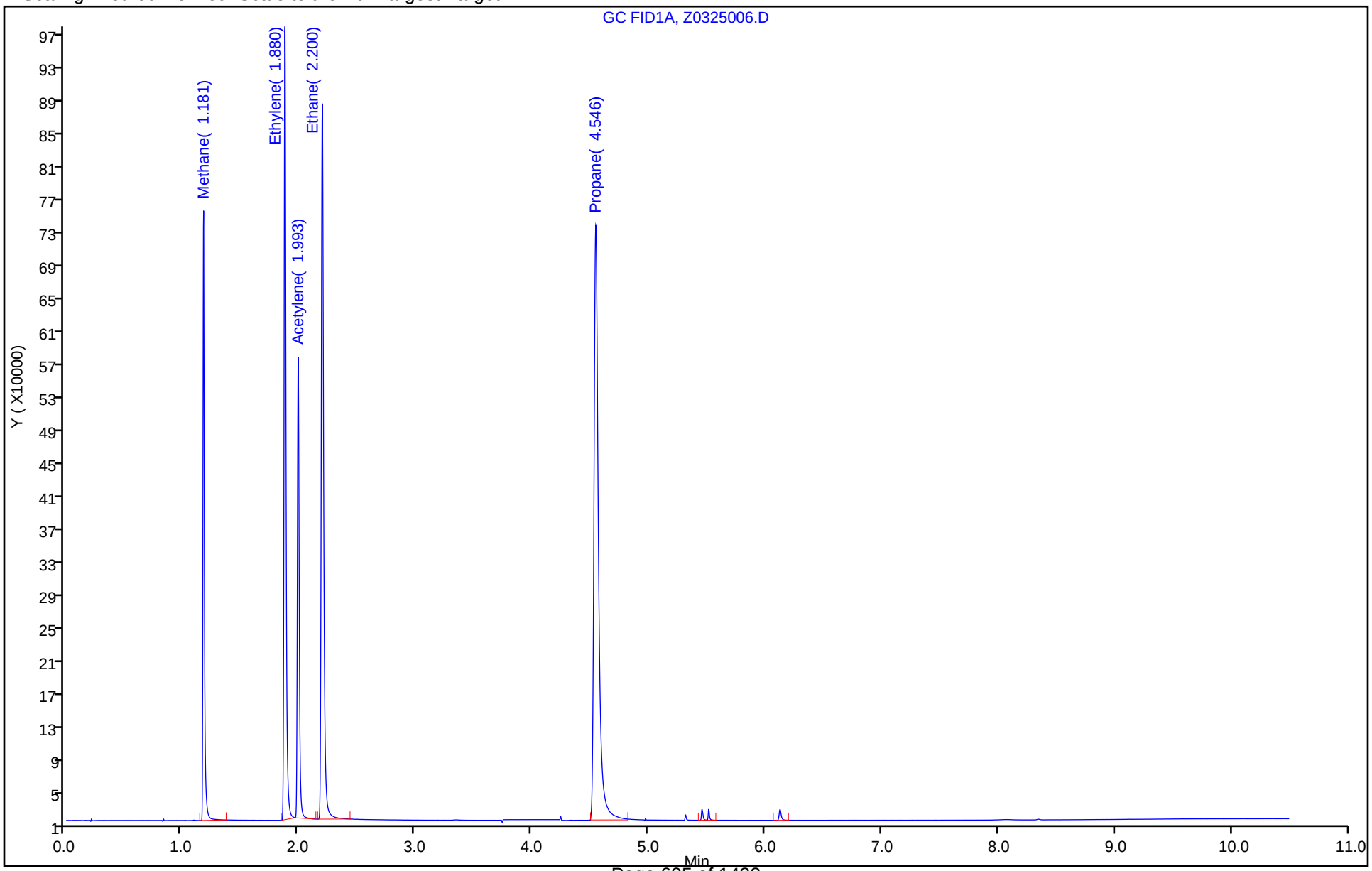
Report Date: 26-Mar-2019 07:54:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:23:39 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 4 | | | Worklist Smp#: | 6 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 6 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

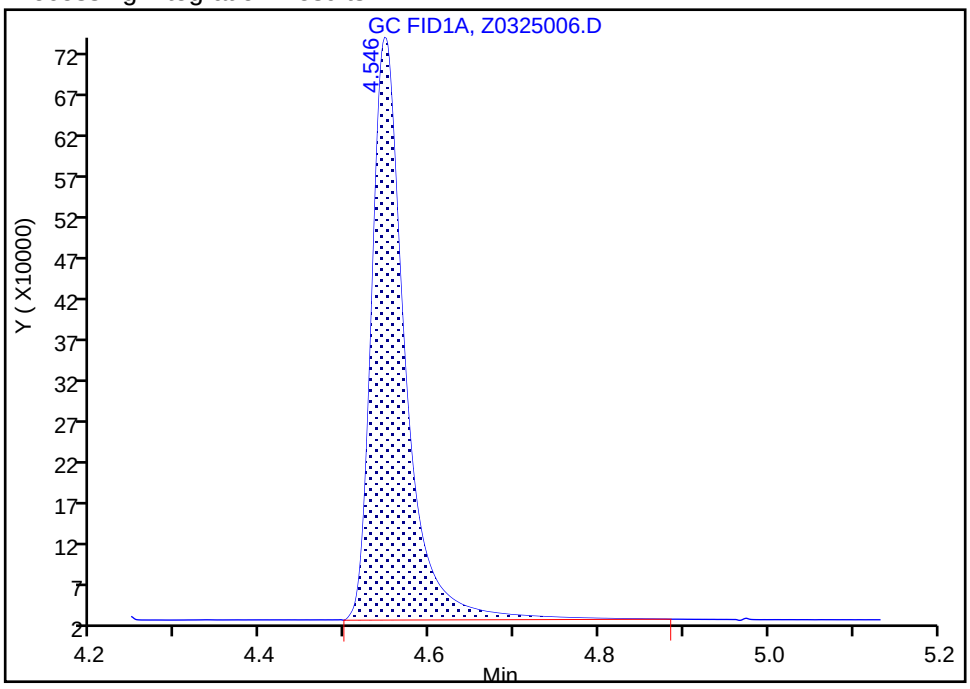
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D
Injection Date: 25-Mar-2019 15:23:39 Instrument ID: ZPID
Lims ID: STD 4
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

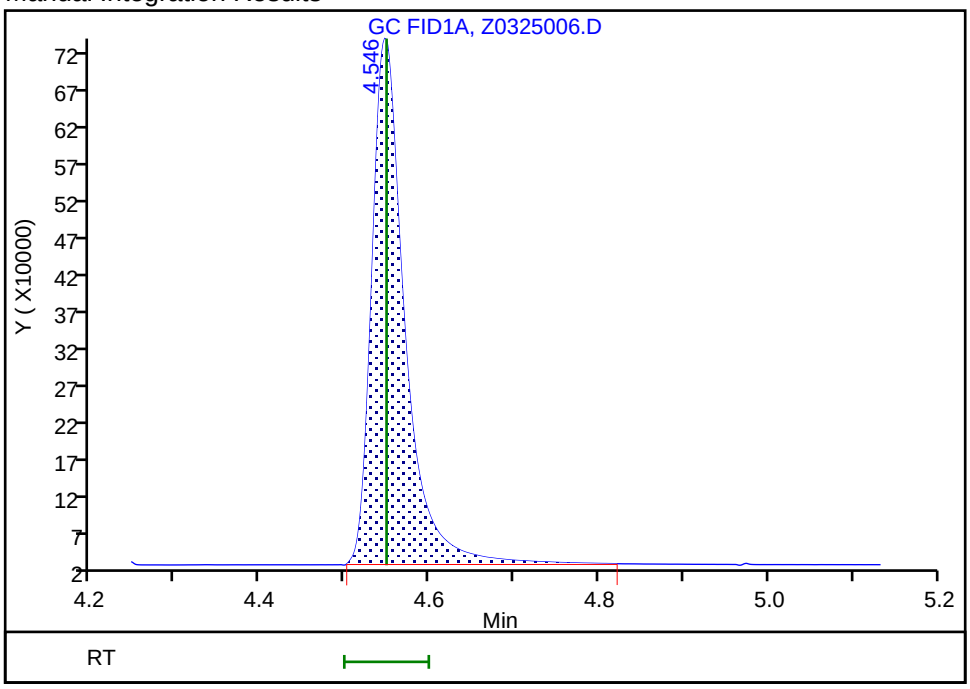
Processing Integration Results

RT: 4.55
Area: 1957668
Amount: 270.4083
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 1950136
Amount: 269.5600
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D
Lims ID: STD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Mar-2019 15:40:45 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-007
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:31 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:49:15

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.181 | 1.182 | -0.001 | 2553930 | 427.7 | 397.8 | |
| 2 Ethylene | | | | | | |
| 1.878 | 1.880 | -0.002 | 4884888 | 751.2 | 768.2 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 2720642 | 695.0 | 820.7 | |
| 4 Ethane | | | | | | |
| 2.199 | 2.200 | -0.001 | 5672810 | 804.7 | 849.2 | |
| 6 Propane | | | | | | M |
| 4.543 | 4.548 | -0.005 | 9408395 | 1178.9 | 1300.5 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKHighCal_00006 Amount Added: 1.50 Units: mL

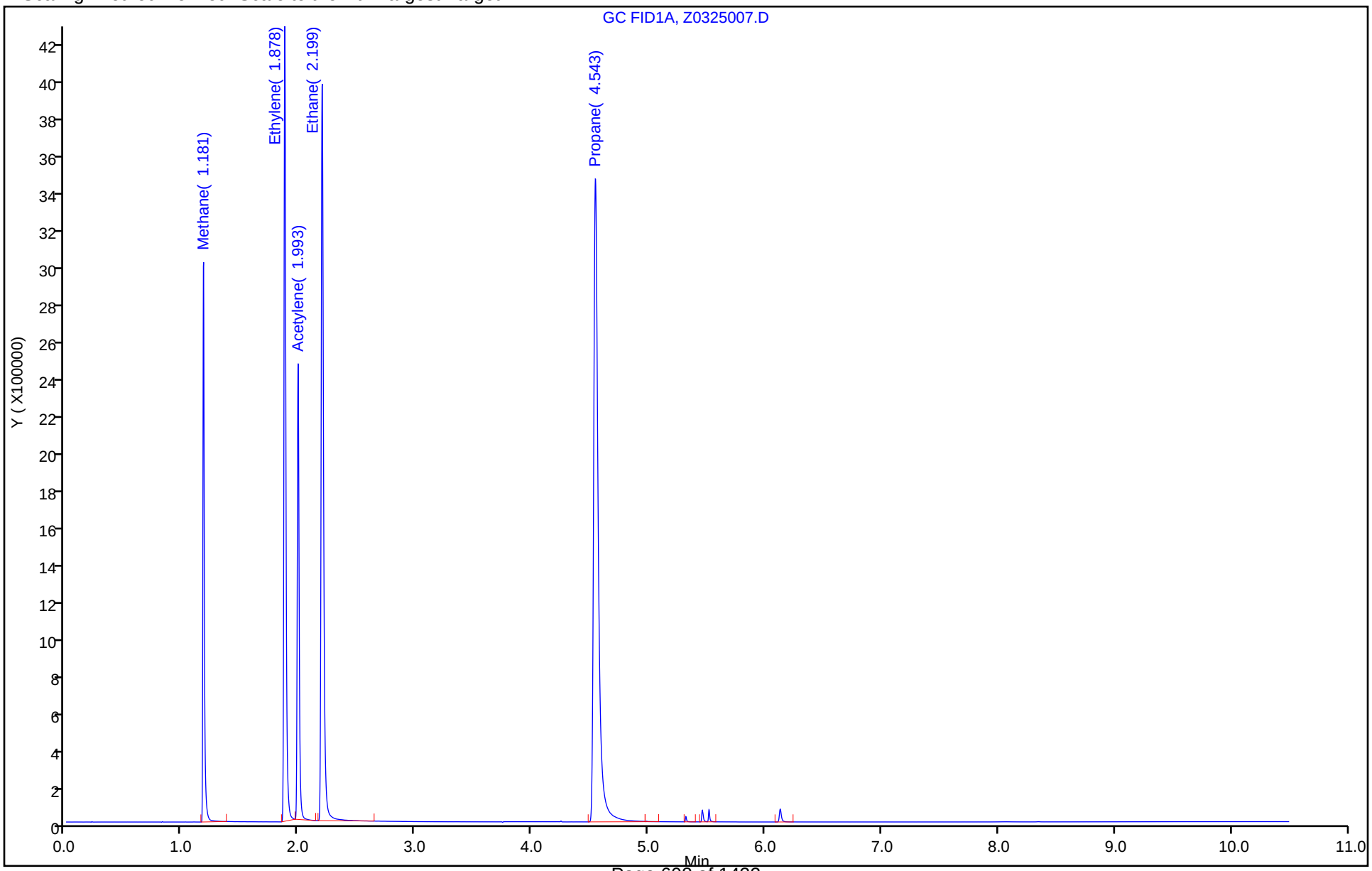
Report Date: 26-Mar-2019 07:54:31 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:40:45 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 5 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

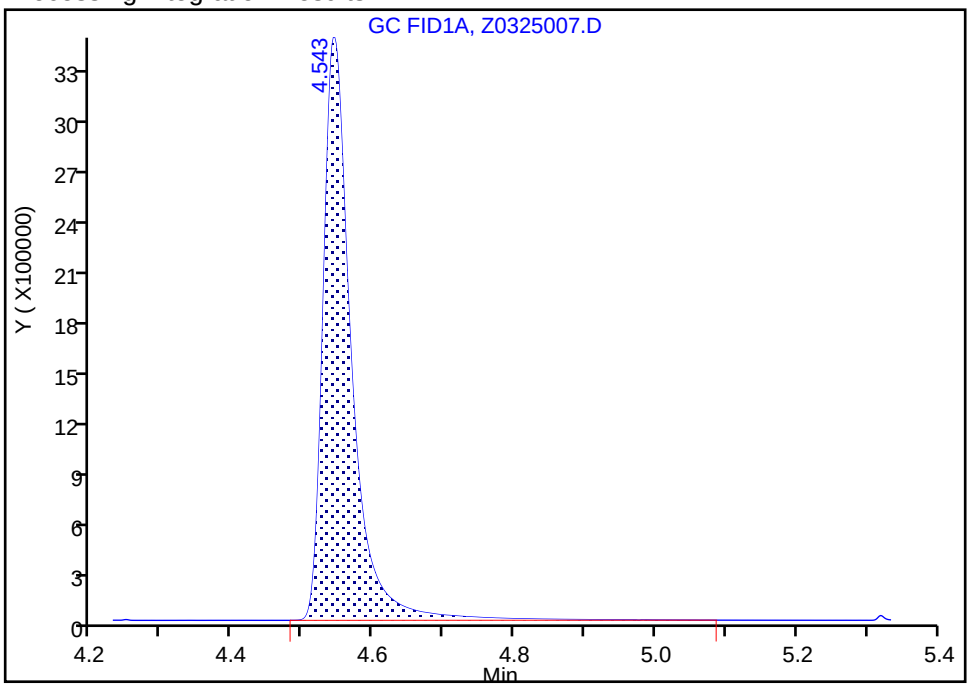
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D
Injection Date: 25-Mar-2019 15:40:45 Instrument ID: ZPID
Lims ID: STD 5
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

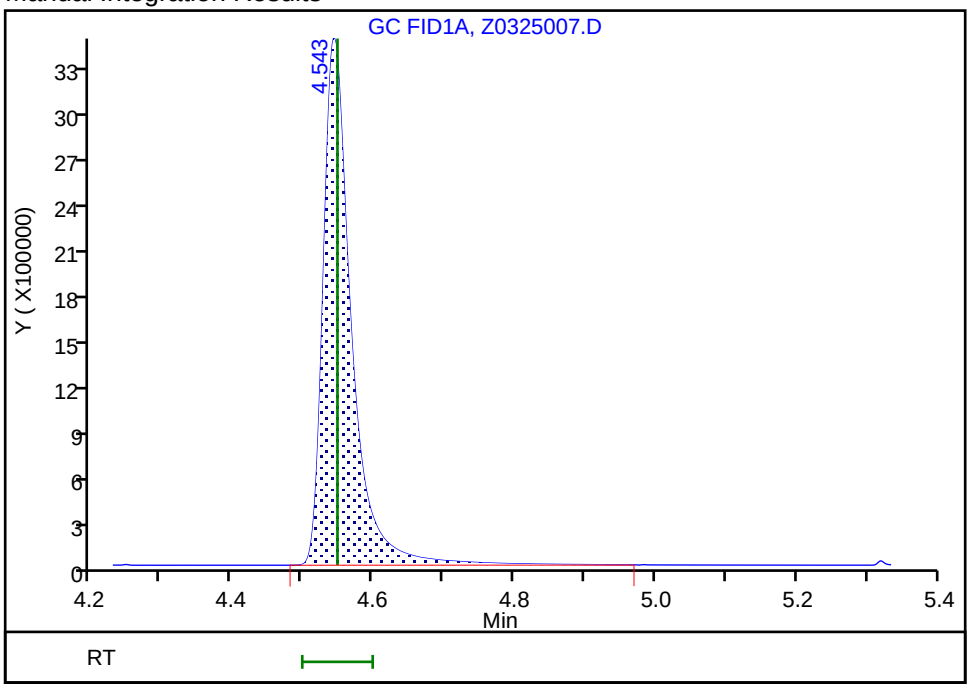
Processing Integration Results

RT: 4.54
Area: 9413090
Amount: 1301.0170
Amount Units: ug/l




Manual Integration Results

RT: 4.54
Area: 9408395
Amount: 1300.4874
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:49:11
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325008.D
Lims ID: STD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Mar-2019 15:57:51 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-008
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:31 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:50:50

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.179 | 1.179 | 0.000 | 27189706 | 4277.0 | 4234.9 | |
| 2 Ethylene | | | | | | |
| 1.873 | 1.873 | 0.000 | 51465960 | 7511.7 | 8093.5 | |
| 3 Acetylene | | | | | | |
| 1.989 | 1.989 | 0.000 | 30207799 | 6950.2 | 9112.7 | |
| 4 Ethane | | | | | | |
| 2.191 | 2.191 | 0.000 | 59757636 | 8046.5 | 8945.9 | |
| 6 Propane | | | | | | |
| 4.519 | 4.519 | 0.000 | 98970444 | 11789 | 13680 | |

## Reagents:

SARSKHighCal_00006 Amount Added: 15.00 Units: mL

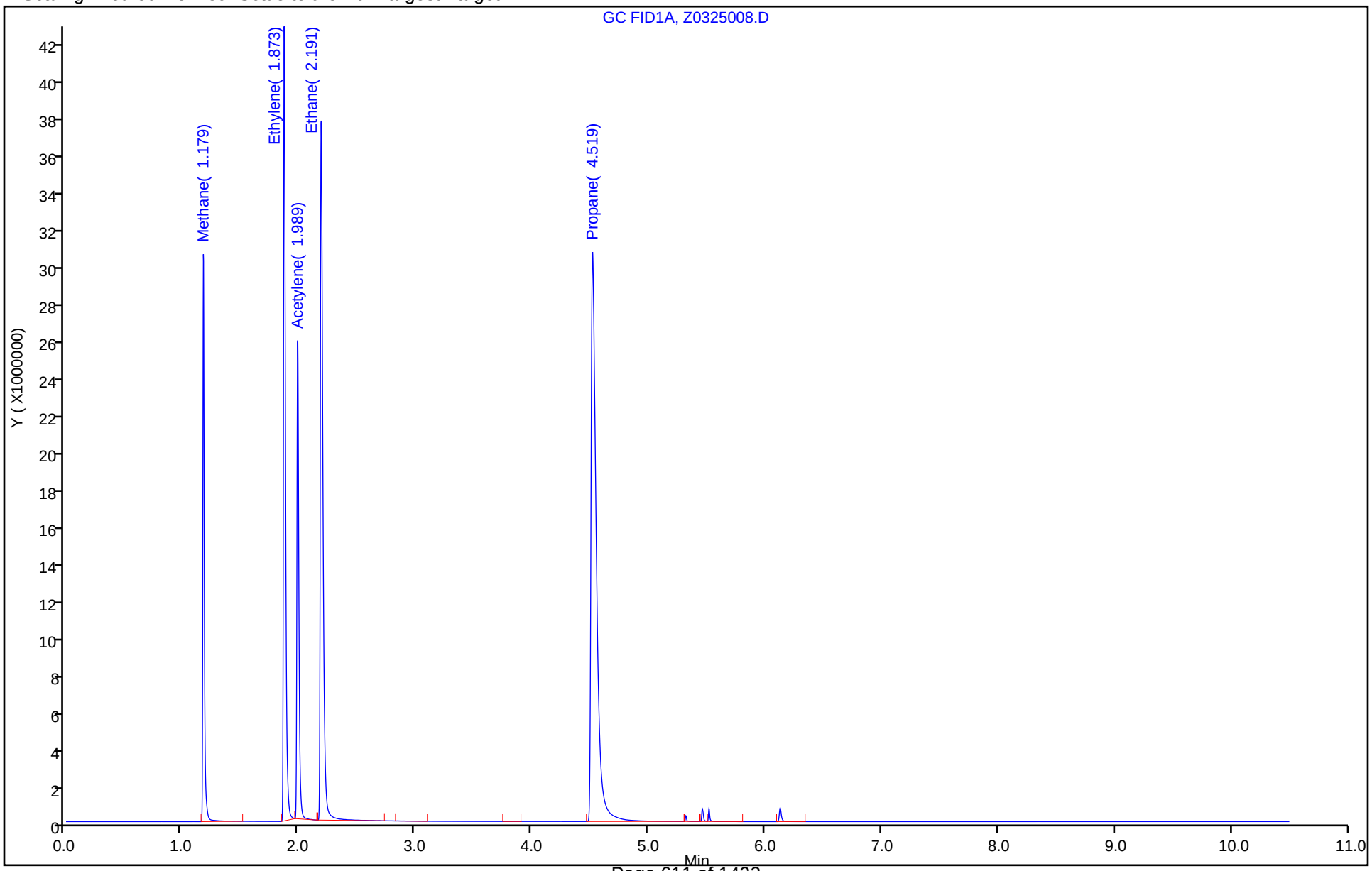
Report Date: 26-Mar-2019 07:54:31 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325008.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:57:51 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 6 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 8 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1  Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14  Calibration End Date: 03/25/2019 17:40  Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | 3.348 | 3.347 | 3.347 | 3.344 | 3.342 | 3.340 | | | | | 3.240 - 3.440 | 3.345 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14 Calibration End Date: 03/25/2019 17:40 Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| 1,1,1-Trifluoroethane | 3316.6<br>3025.3 | 3329.2<br>3015.1 | 2984.2 | 3103.7 | Ave | | 3129.01094 | | | | 5.0 | | 30.0 | | | |

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14 Calibration End Date: 03/25/2019 17:40 Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 1,1,1-Trifluoroethane | Ave | 645431<br>29338129 | 1133825 | 5081580 | 10570180 | 22077771 | 195<br>9730 | 341 | 1703 | 3406 | 7298 |

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325009.D
Lims ID: STD1 Surr
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Mar-2019 16:14:57 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-009
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:32 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:53:09

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.348 | 3.340 | 0.008 | 645431 | 194.6 | 206.3 | |

## Reagents:

SAICALSURR_00015 Amount Added: 400.00 Units: uL

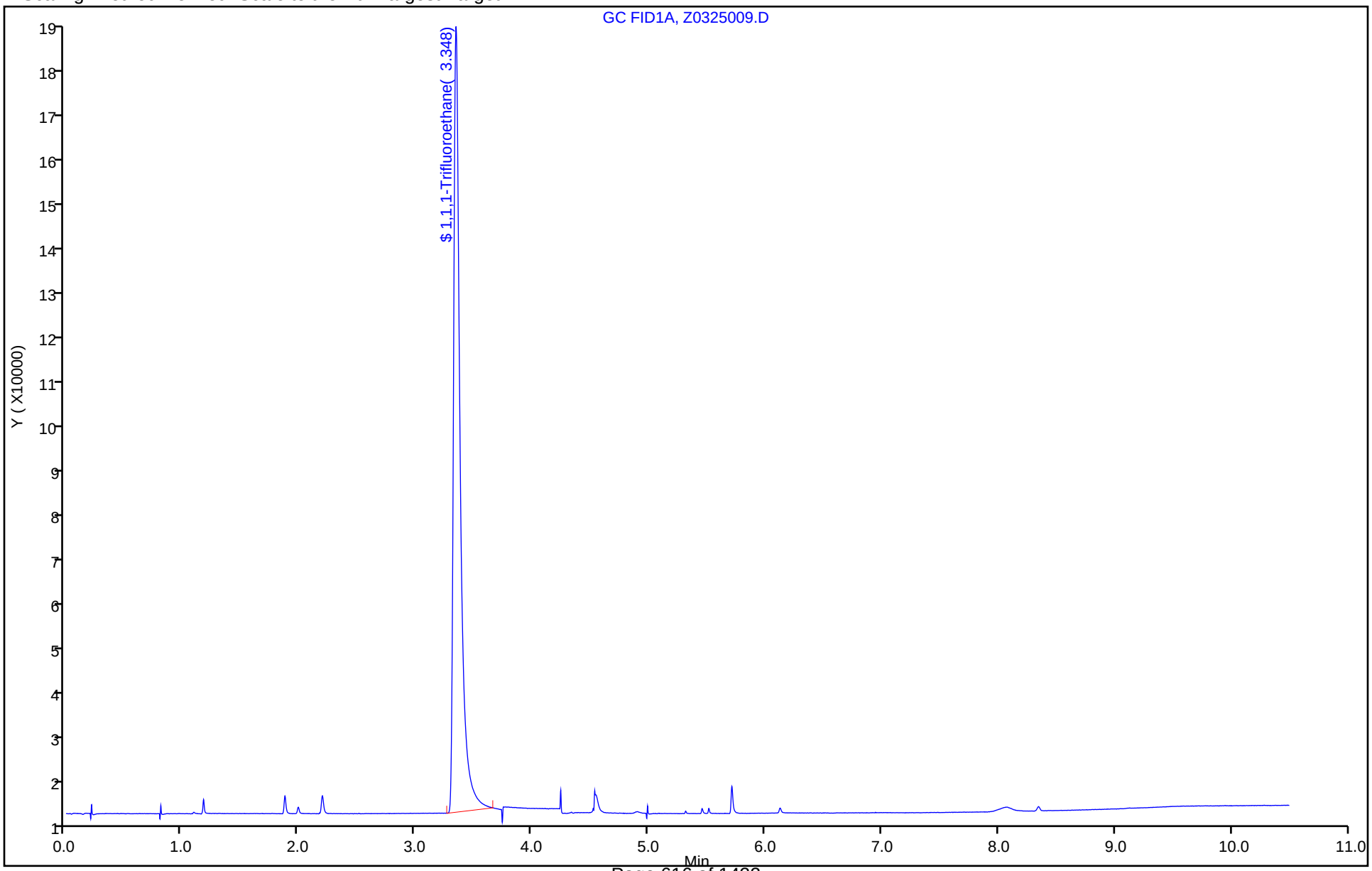
Report Date: 26-Mar-2019 07:54:32 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325009.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:14:57 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD1 Surr | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 9 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325010.D
Lims ID: STD2 Surr
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Mar-2019 16:32:04 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-010
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:32 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.347 | 3.340 | 0.007 | 1133825 | 340.6 | 362.4 | |

## Reagents:

SAICALSURR_00015 Amount Added: 700.00 Units: uL

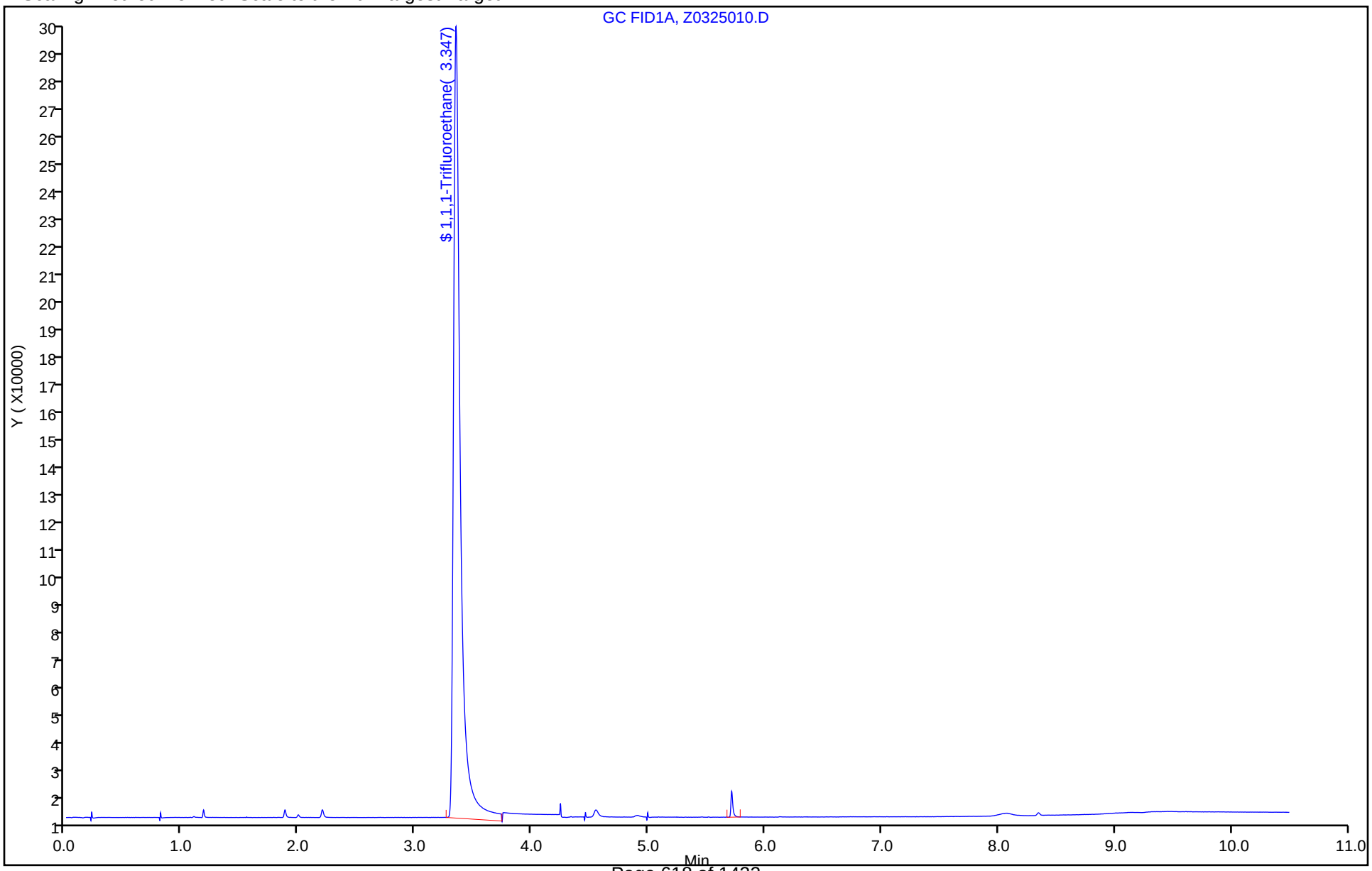
Report Date: 26-Mar-2019 07:54:32 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325010.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:32:04 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD2 Surr | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 10 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325011.D
Lims ID: STD3 Surr
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Mar-2019 16:49:11 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-011
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:33 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.347 | 3.347 | 0.000 | 5081580 | 1702.8 | 1624.0 | |

## Reagents:

SAICALSURR_00015 Amount Added: 3.50 Units: mL

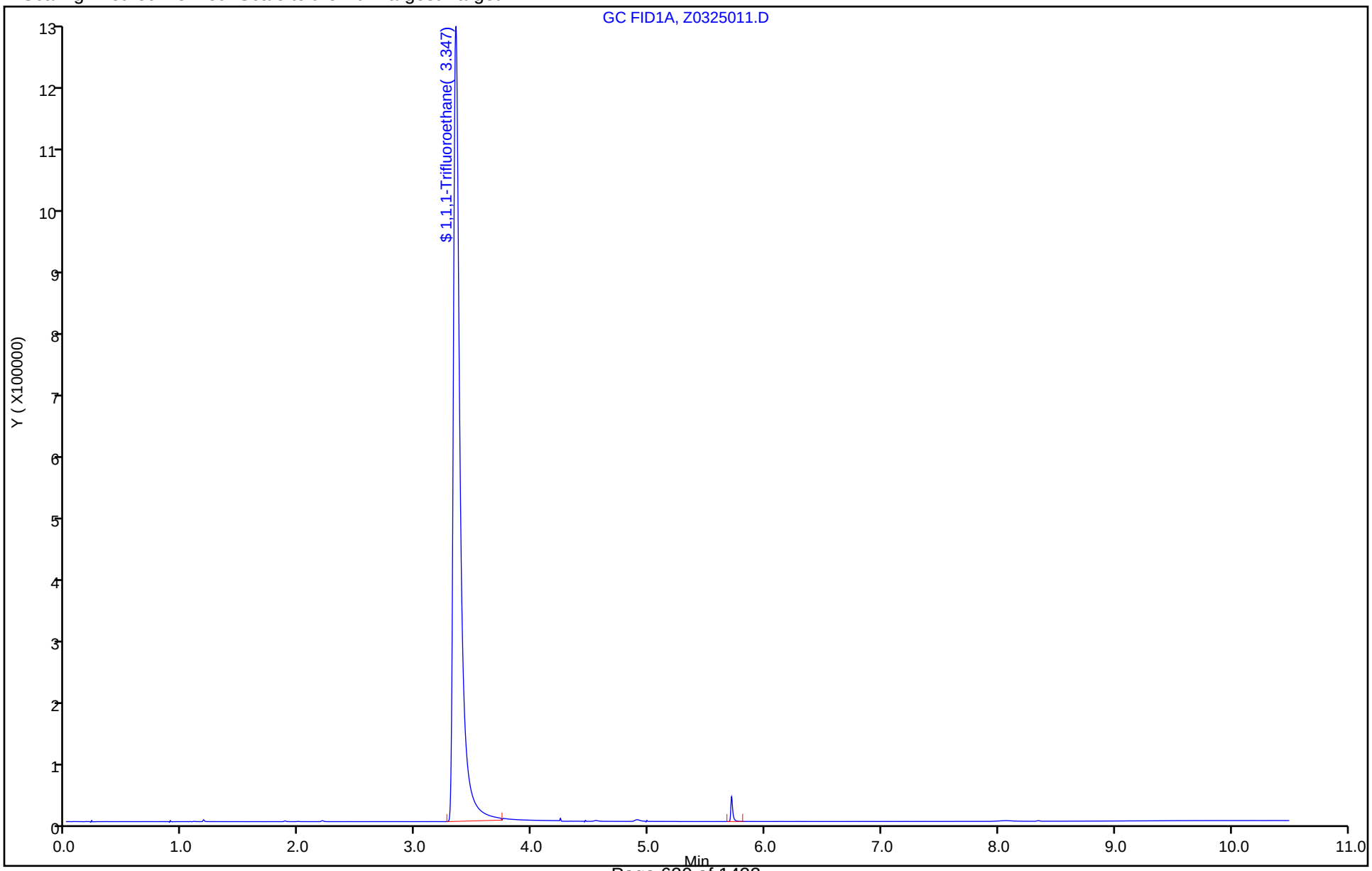
Report Date: 26-Mar-2019 07:54:33 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325011.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:49:11 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD3 Surr | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 11 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325012.D
Lims ID: STD4 Surr
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Mar-2019 17:06:17 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-012
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:33 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.344 | 3.347 | -0.003 | 10570180 | 3405.7 | 3378.1 | |

## Reagents:

SAICALSURR_00015 Amount Added: 7.00 Units: mL

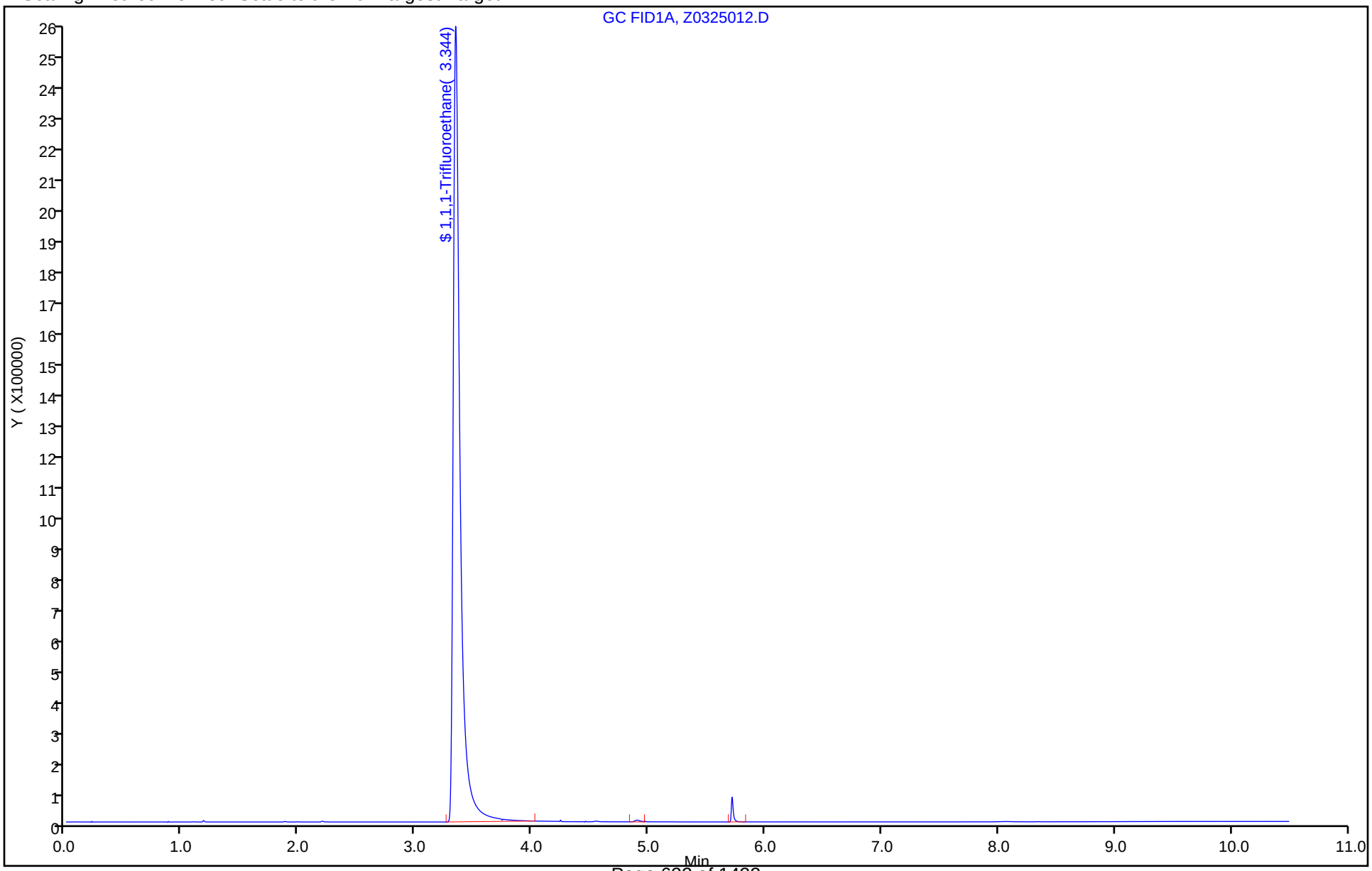
Report Date: 26-Mar-2019 07:54:34 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325012.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:06:17 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD4 Surr | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 12 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325013.D
Lims ID: STD5 Surr
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Mar-2019 17:23:22 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-013
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.342 | 3.347 | -0.005 | 22077771 | 7297.8 | 7055.8 | |

## Reagents:

SAICALSURR_00015 Amount Added: 15.00 Units: mL

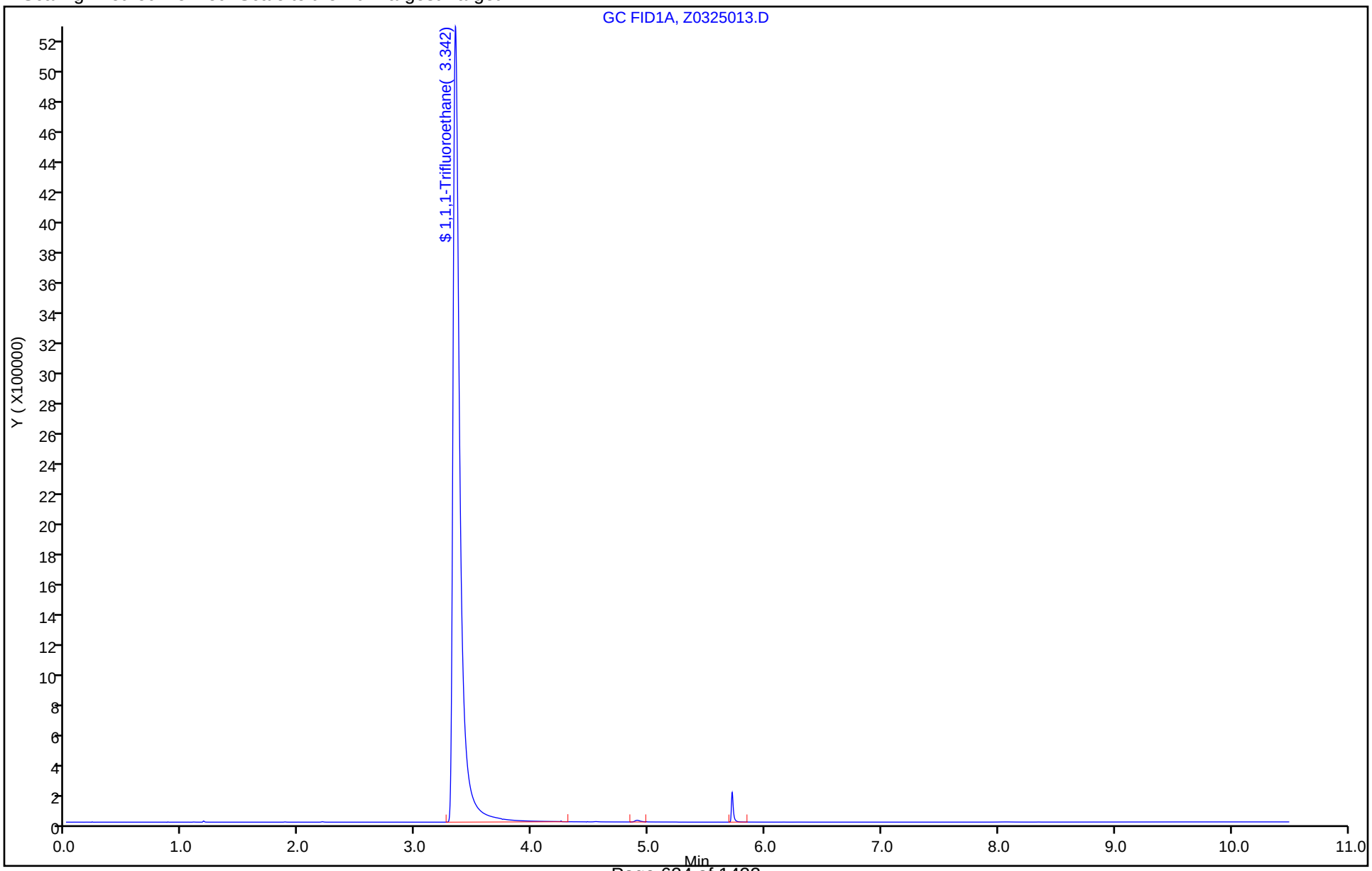
Report Date: 26-Mar-2019 07:54:34 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325013.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:23:22 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD5 Surr | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 13 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D
Lims ID: STD6 Surr
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Mar-2019 17:40:28 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-014
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.340 | 3.340 | 0.000 | 29338129 | 9730.4 | 9376.2 | |

## Reagents:

SAICALSURR_00015 Amount Added: 20.00 Units: mL

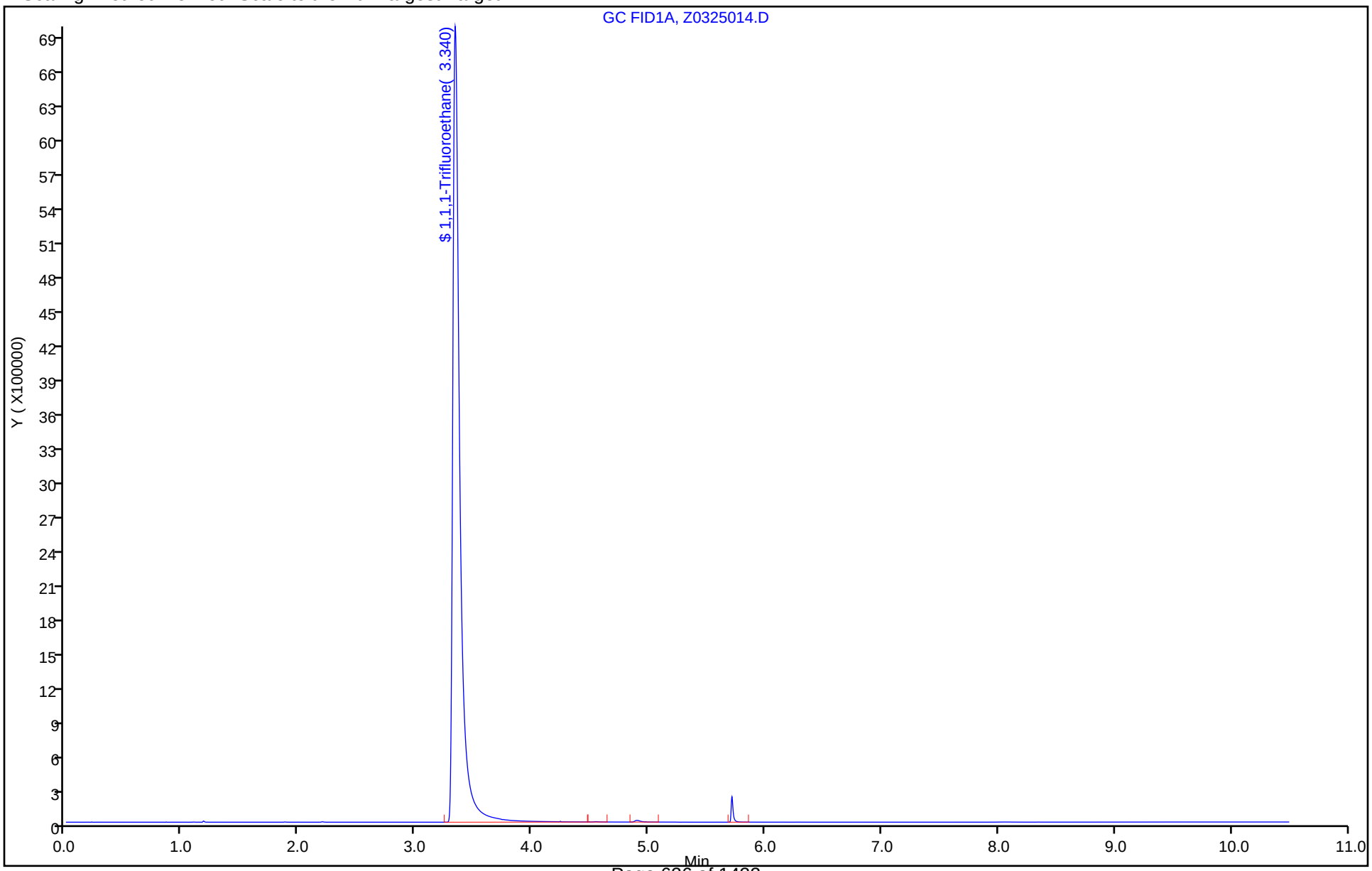
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:40:28 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD6 Surr | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 14 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0325015.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6298 | | 280 | 285 | -1.9 | 20.0 |
| Ethene | Ave | 6359 | 5713 | | 450 | 501 | -10.2 | 20.0 |
| Acetylene | Ave | 3315 | 3660 | | 512 | 463 | 10.4 | 30.0 |
| Ethane | Ave | 6680 | 5886 | | 473 | 536 | -11.9 | 20.0 |
| Propane | Ave | 7235 | 6037 | | 656 | 786 | -16.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-373146/15 Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0325015.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.82 | 1.92 |
| Acetylene | 1.99 | 1.94 | 2.04 |
| Ethane | 2.20 | 1.99 | 2.39 |
| Propane | 4.55 | 4.47 | 4.57 |

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Mar-2019 17:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-015
Operator ID: Instrument ID: ZPID
Sublist:

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.180 | 1.179 | 0.001 | 1795857 | 285.1 | 279.7 | |
| 2 | Ethylene | | | | | | |
| | 1.878 | 1.873 | 0.005 | 2860749 | 500.8 | 449.9 | |
| 3 | Acetylene | | | | | | |
| | 1.993 | 1.989 | 0.004 | 1695677 | 463.3 | 511.5 | |
| 4 | Ethane | | | | | | |
| | 2.200 | 2.191 | 0.009 | 3157388 | 536.4 | 472.7 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.342 | 3.347 | -0.005 | 23382861 | 9243.9 | 7472.9 | |
| 6 | Propane | | | | | | |
| | 4.545 | 4.519 | 0.026 | 4745007 | 786.0 | 655.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSK2ndSourc_00001 Amount Added: 1.00 Units: mL

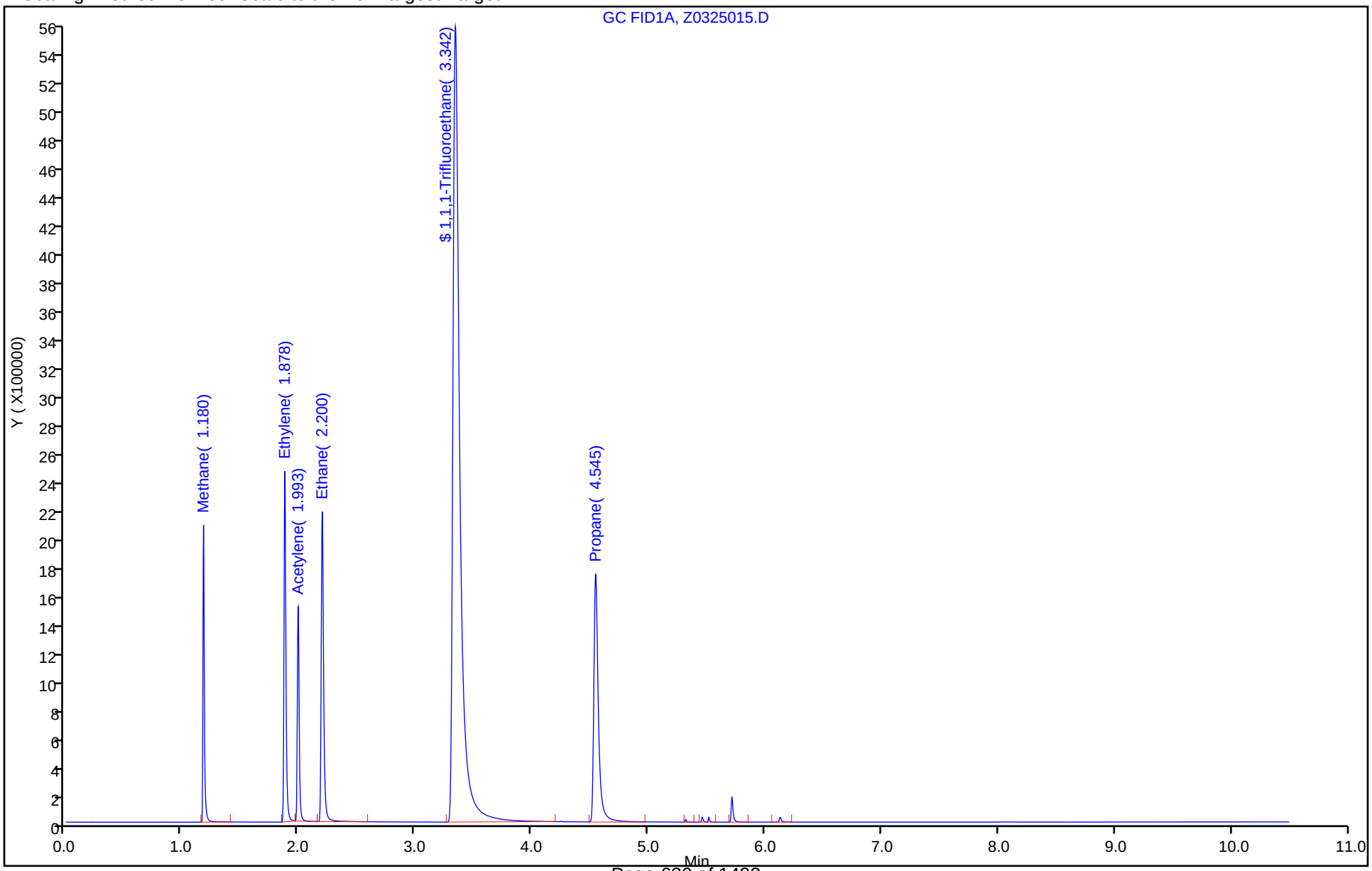
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:57:33 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 15 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0325015.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2530 | | 7470 | 9240 | -19.2 | 30.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0325015.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.34 | 3.25 | 3.45 |

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Mar-2019 17:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-015
Operator ID: Instrument ID: ZPID
Sublist:

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.180 | 1.179 | 0.001 | 1795857 | 285.1 | 279.7 | |
| 2 | Ethylene | | | | | | |
| | 1.878 | 1.873 | 0.005 | 2860749 | 500.8 | 449.9 | |
| 3 | Acetylene | | | | | | |
| | 1.993 | 1.989 | 0.004 | 1695677 | 463.3 | 511.5 | |
| 4 | Ethane | | | | | | |
| | 2.200 | 2.191 | 0.009 | 3157388 | 536.4 | 472.7 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.342 | 3.347 | -0.005 | 23382861 | 9243.9 | 7472.9 | |
| 6 | Propane | | | | | | |
| | 4.545 | 4.519 | 0.026 | 4745007 | 786.0 | 655.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSK2ndSourc_00001 Amount Added: 1.00 Units: mL

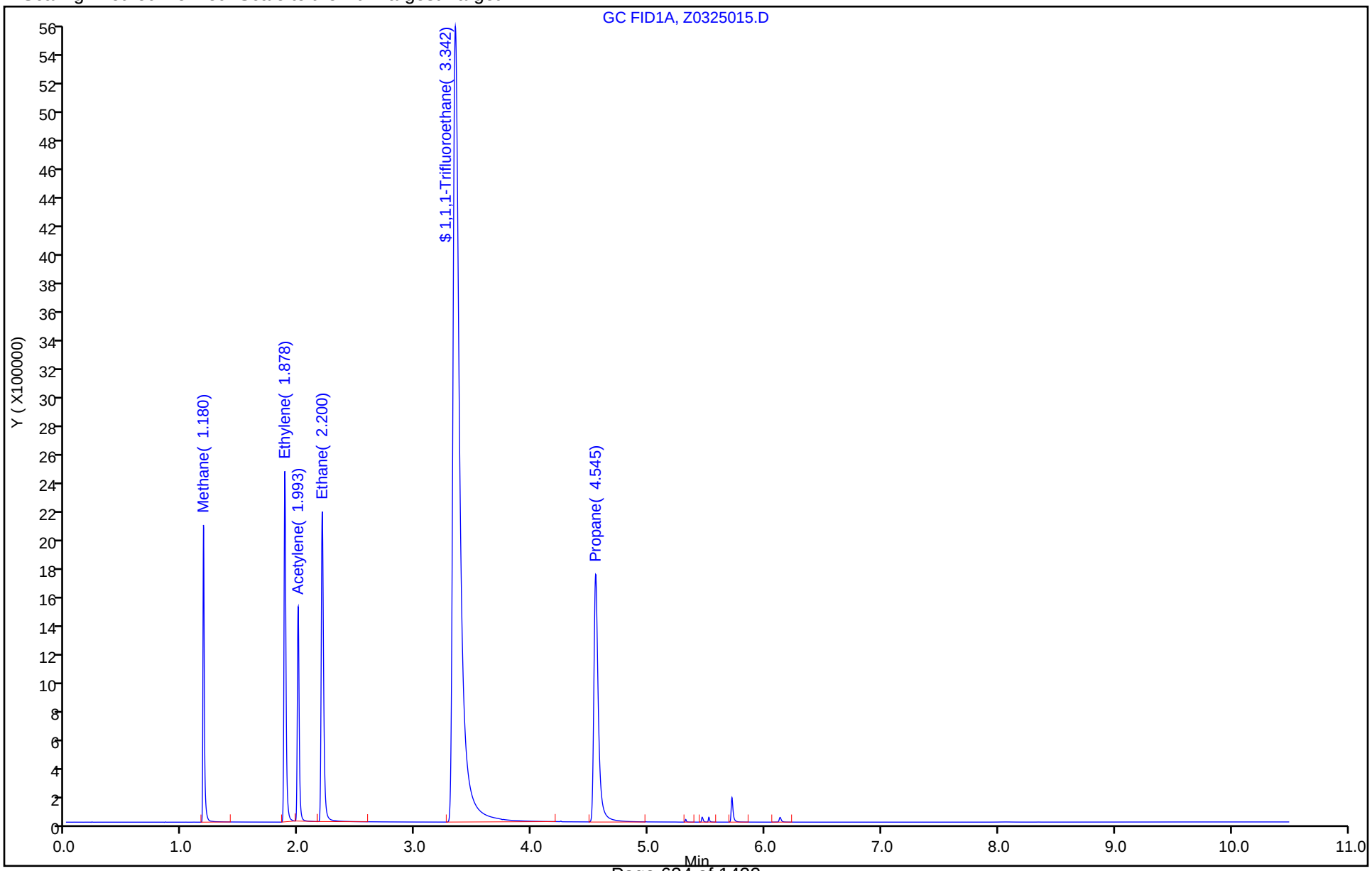
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:57:33 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 15 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381636/3  Calibration Date: 05/16/2019 14:17

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6501 | | 289 | 285 | 1.3 | 20.0 |
| Ethene | Ave | 6359 | 5992 | | 472 | 501 | -5.8 | 20.0 |
| Acetylene | Ave | 3315 | 4040 | | 565 | 463 | 21.9 | 30.0 |
| Ethane | Ave | 6680 | 6174 | | 496 | 536 | -7.6 | 20.0 |
| Propane | Ave | 7235 | 6473 | | 703 | 786 | -10.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381636/3 Calibration Date: 05/16/2019 14:17

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516003.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.19 | 1.14 | 1.24 |
| Ethene | 1.89 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 16-May-2019 14:17:26 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | 1.186 | 0.000 | 1853672 | 285.1 | 288.7 | |
| 2 | Ethylene | | | | | | |
| | 1.886 | 1.886 | 0.000 | 3000757 | 500.8 | 471.9 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 1872021 | 463.3 | 564.7 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.206 | 0.000 | 3311761 | 536.4 | 495.8 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.349 | 0.000 | 25208463 | 9243.9 | 8056.4 | |
| 6 | Propane | | | | | | |
| | 4.554 | 4.554 | 0.000 | 5087565 | 786.0 | 703.2 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

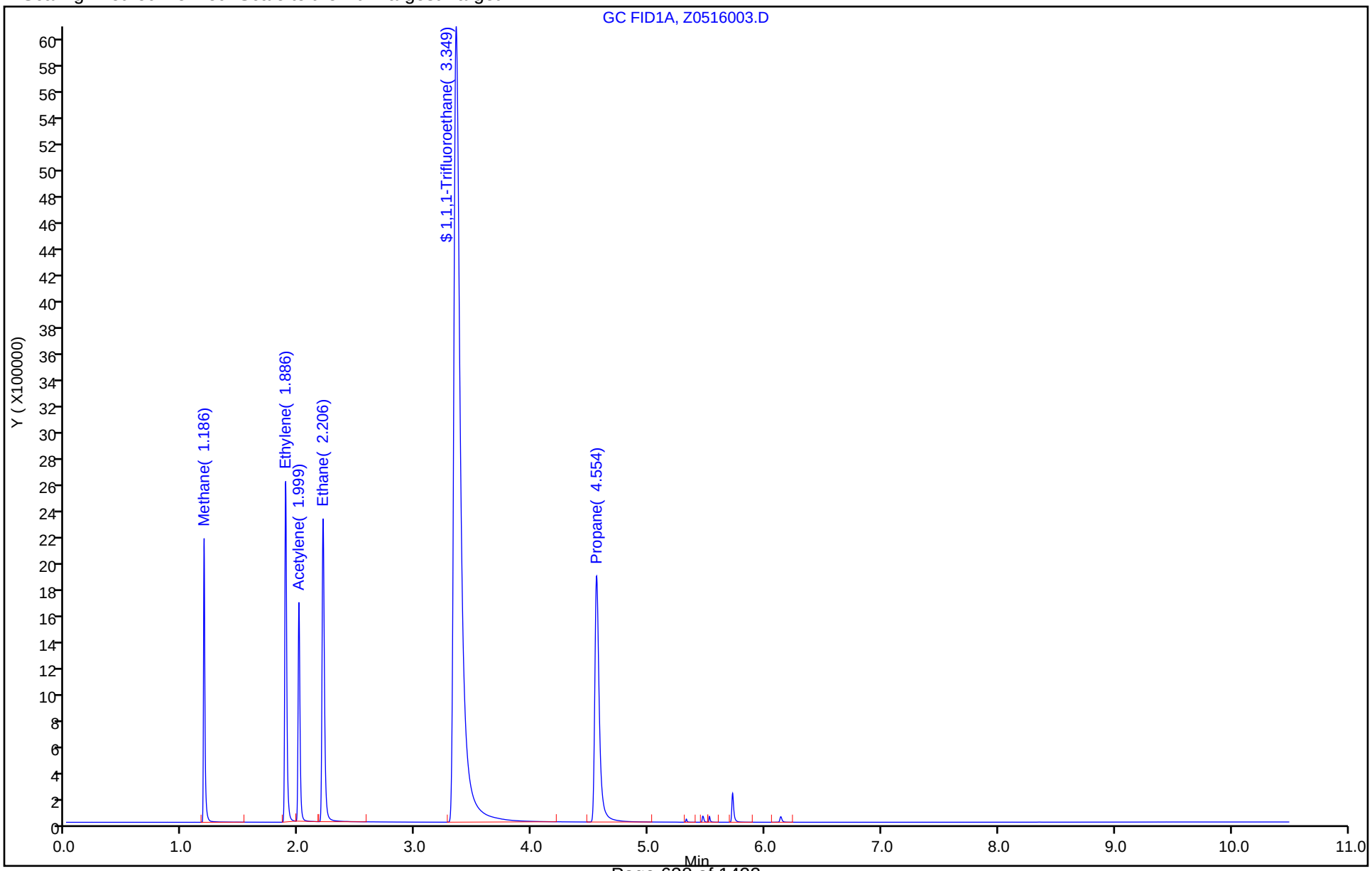
Report Date: 17-May-2019 07:20:29 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 14:17:26 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381636/3  Calibration Date: 05/16/2019 14:17

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2727 | | 8060 | 9240 | -12.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381636/3  Calibration Date: 05/16/2019 14:17

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516003.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 16-May-2019 14:17:26 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | 1.186 | 0.000 | 1853672 | 285.1 | 288.7 | |
| 2 | Ethylene | | | | | | |
| | 1.886 | 1.886 | 0.000 | 3000757 | 500.8 | 471.9 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 1872021 | 463.3 | 564.7 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.206 | 0.000 | 3311761 | 536.4 | 495.8 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.349 | 0.000 | 25208463 | 9243.9 | 8056.4 | |
| 6 | Propane | | | | | | |
| | 4.554 | 4.554 | 0.000 | 5087565 | 786.0 | 703.2 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

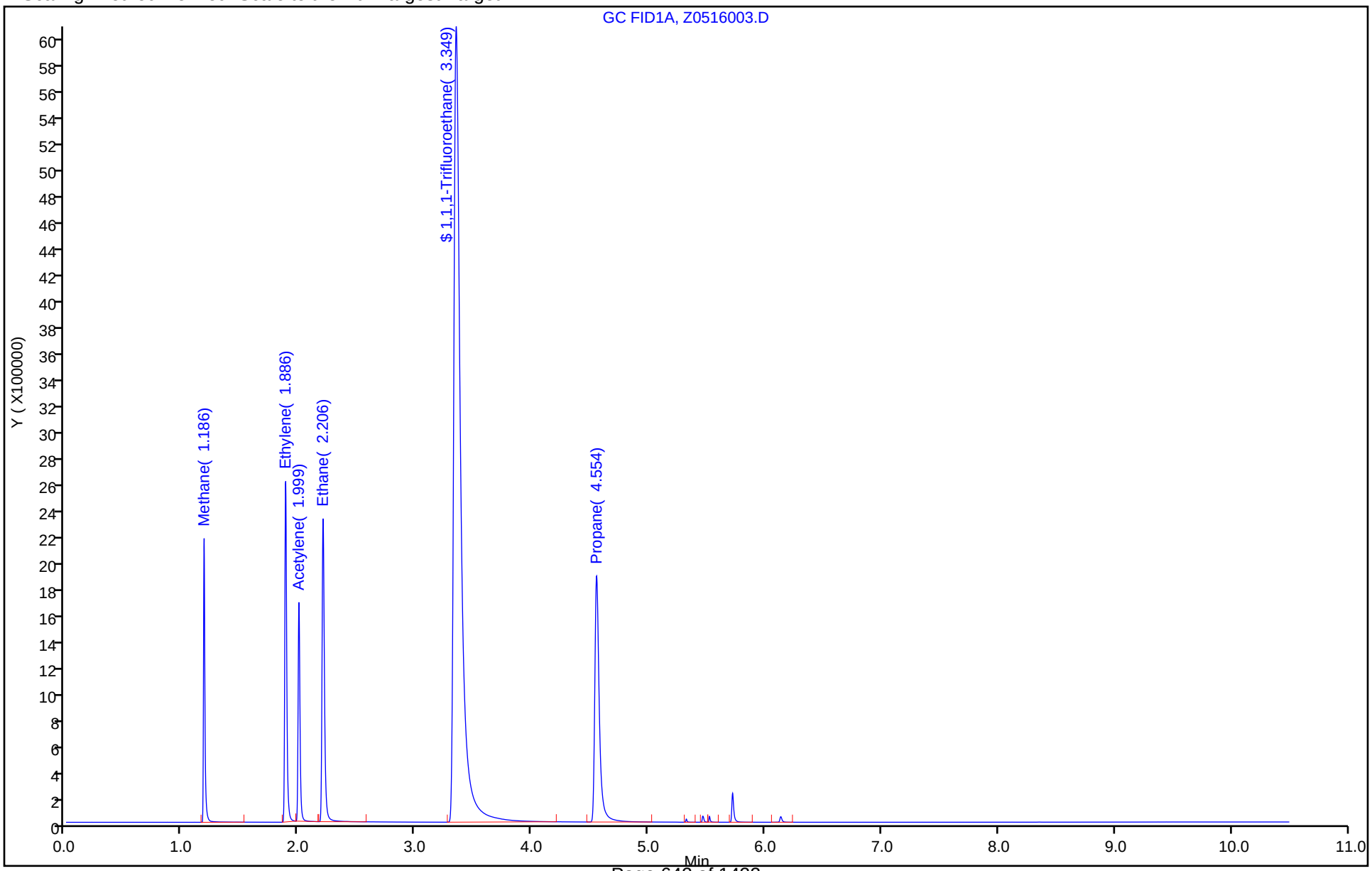
Report Date: 17-May-2019 07:20:29 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 14:17:26 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/19  Calibration Date: 05/16/2019 18:54

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6338 | | 281 | 285 | -1.3 | 20.0 |
| Ethene | Ave | 6359 | 5797 | | 456 | 501 | -8.8 | 20.0 |
| Acetylene | Ave | 3315 | 3973 | | 555 | 463 | 19.9 | 30.0 |
| Ethane | Ave | 6680 | 5947 | | 478 | 536 | -11.0 | 20.0 |
| Propane | Ave | 7235 | 6087 | | 661 | 786 | -15.9 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/19 Calibration Date: 05/16/2019 18:54

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516019.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.14 | 1.24 |
| Ethene | 1.88 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.20 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-May-2019 18:54:28 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 1807015 | 285.1 | 281.4 | |
| 2 | Ethylene | | | | | | |
| | 1.882 | 1.886 | -0.004 | 2902841 | 500.8 | 456.5 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.999 | -0.002 | 1840858 | 463.3 | 555.3 | |
| 4 | Ethane | | | | | | |
| | 2.204 | 2.206 | -0.002 | 3190206 | 536.4 | 477.6 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.346 | 3.349 | -0.003 | 24657372 | 9243.9 | 7880.2 | |
| 6 | Propane | | | | | | |
| | 4.551 | 4.554 | -0.003 | 4783945 | 786.0 | 661.3 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

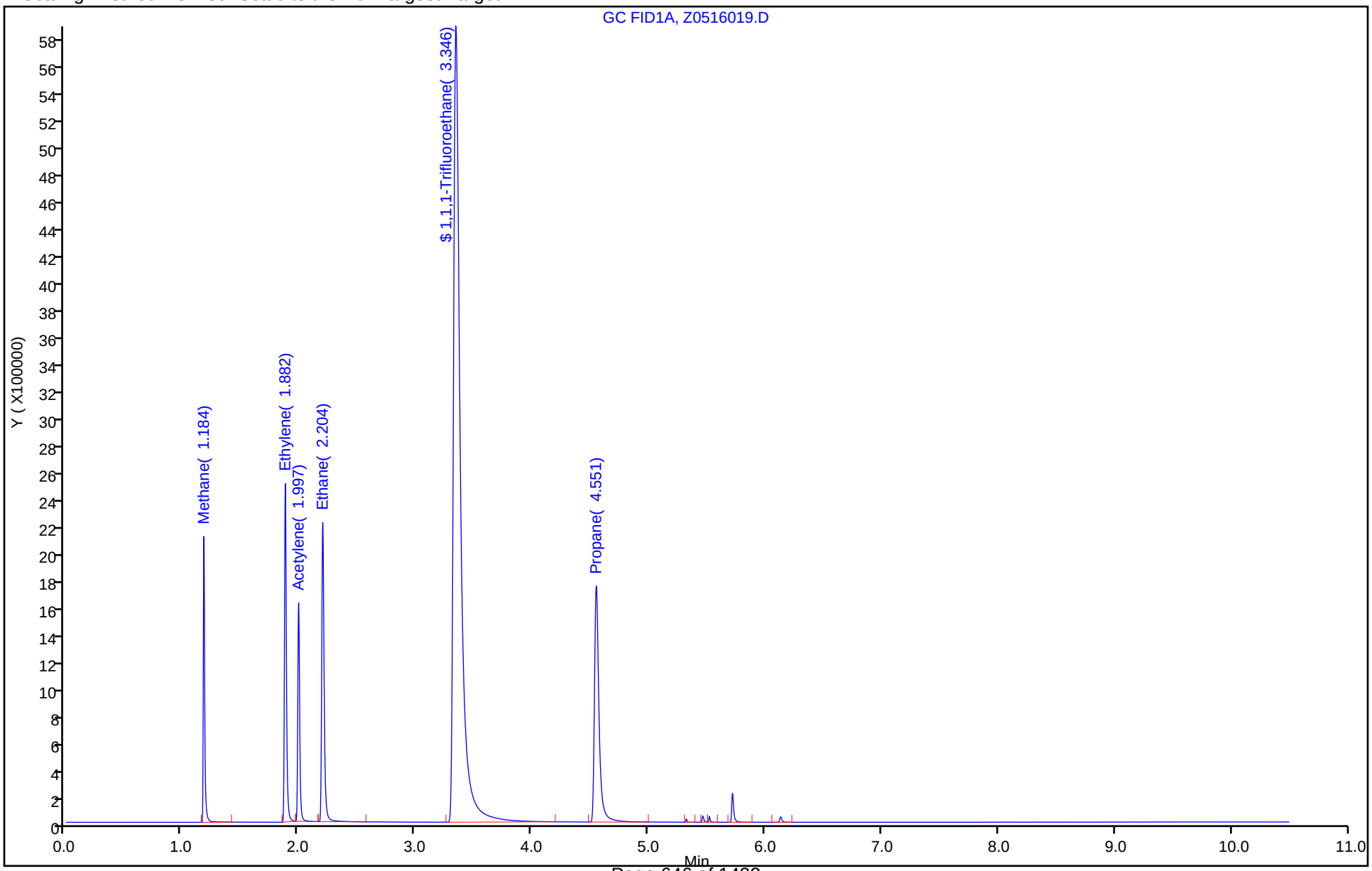
Report Date: 17-May-2019 07:20:39 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 18:54:28 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/19  Calibration Date: 05/16/2019 18:54

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2667 | | 7880 | 9240 | -14.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/19  Calibration Date: 05/16/2019 18:54

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516019.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-May-2019 18:54:28 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:38 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 1807015 | 285.1 | 281.4 | |
| | 2 Ethylene | | | | | | |
| | 1.882 | 1.886 | -0.004 | 2902841 | 500.8 | 456.5 | |
| | 3 Acetylene | | | | | | |
| | 1.997 | 1.999 | -0.002 | 1840858 | 463.3 | 555.3 | |
| | 4 Ethane | | | | | | |
| | 2.204 | 2.206 | -0.002 | 3190206 | 536.4 | 477.6 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.346 | 3.349 | -0.003 | 24657372 | 9243.9 | 7880.2 | |
| | 6 Propane | | | | | | |
| | 4.551 | 4.554 | -0.003 | 4783945 | 786.0 | 661.3 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

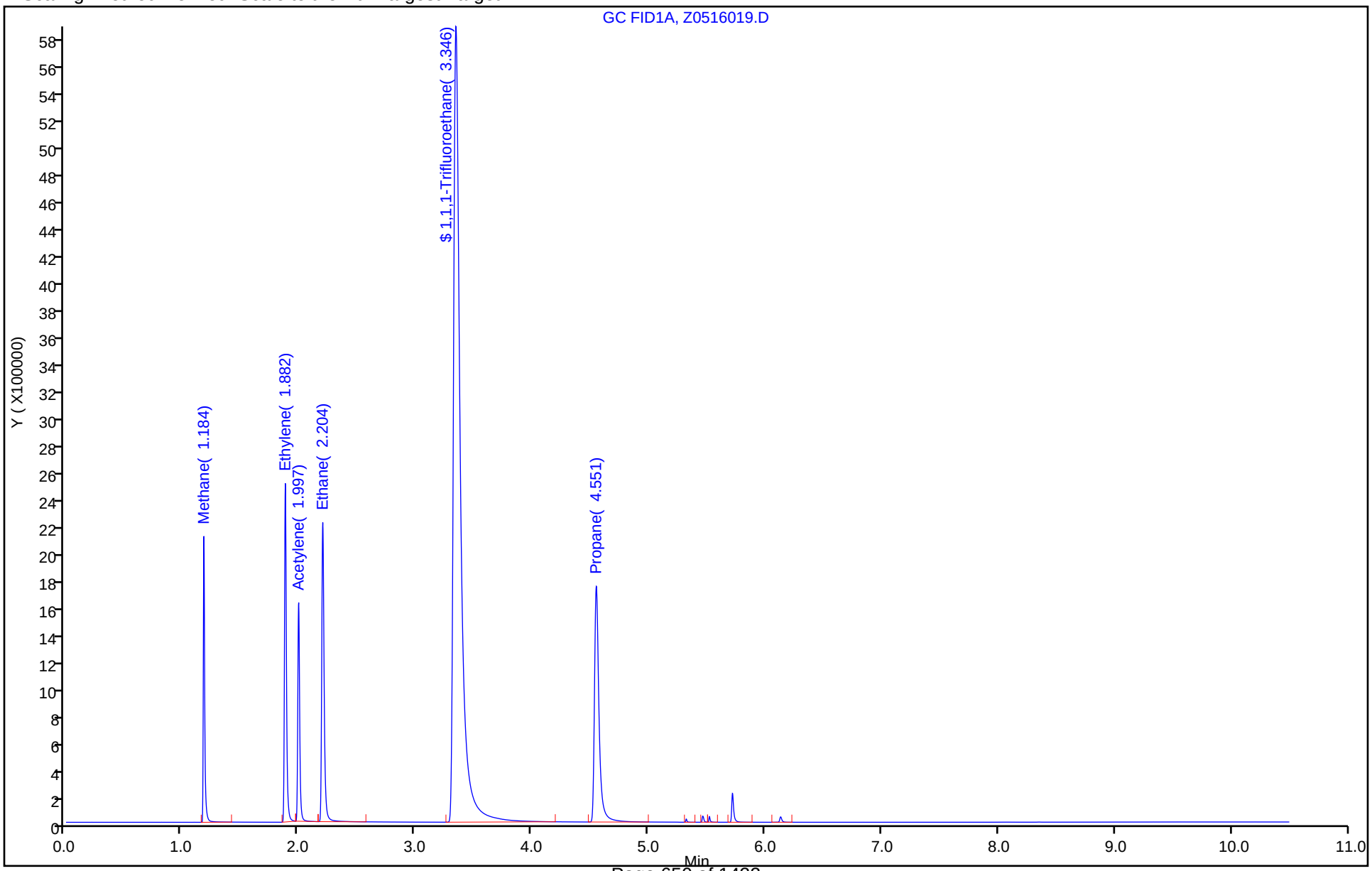
Report Date: 17-May-2019 07:20:39 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 18:54:28 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/27  Calibration Date: 05/16/2019 21:12

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516027.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6489 | | 288 | 285 | 1.1 | 20.0 |
| Ethene | Ave | 6359 | 5824 | | 459 | 501 | -8.4 | 20.0 |
| Acetylene | Ave | 3315 | 3852 | | 538 | 463 | 16.2 | 30.0 |
| Ethane | Ave | 6680 | 6003 | | 482 | 536 | -10.1 | 20.0 |
| Propane | Ave | 7235 | 6074 | | 660 | 786 | -16.0 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/27  Calibration Date: 05/16/2019 21:12

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0516027.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.19 | 1.14 | 1.24 |
| Ethene | 1.88 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516027.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-May-2019 21:12:44 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-027
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:43 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.186 | -0.001 | 1850340 | 285.1 | 288.2 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.886 | -0.003 | 2916562 | 500.8 | 458.7 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 1784916 | 463.3 | 538.4 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.206 | -0.001 | 3220078 | 536.4 | 482.1 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.349 | -0.001 | 23496293 | 9243.9 | 7509.2 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.554 | -0.001 | 4773960 | 786.0 | 659.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

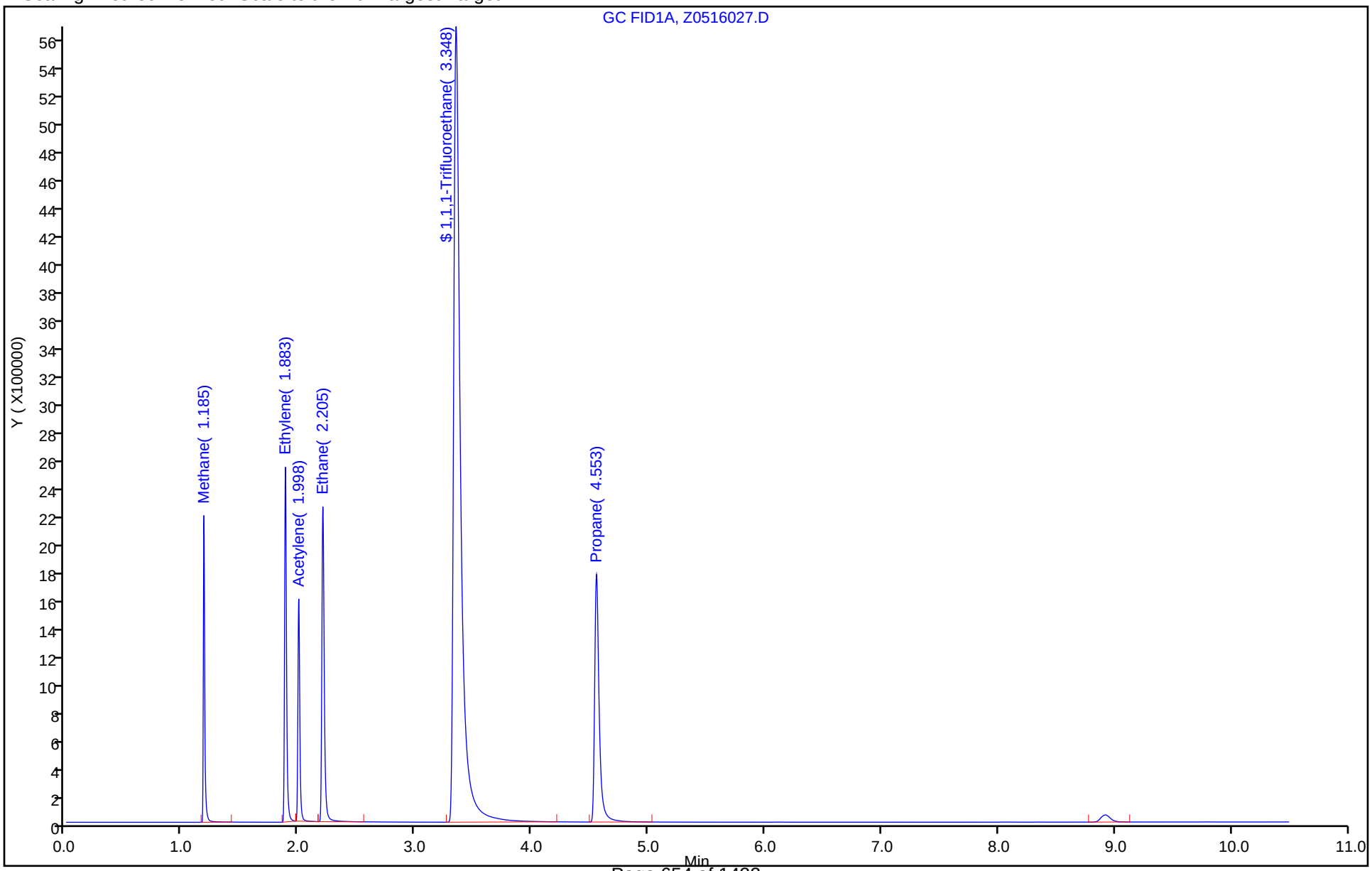
Report Date: 17-May-2019 07:20:43 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516027.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 21:12:44 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 27 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 27 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/27  Calibration Date: 05/16/2019 21:12

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516027.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2542 | | 7510 | 9240 | -18.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381636/27  Calibration Date: 05/16/2019 21:12

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0516027.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516027.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-May-2019 21:12:44 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-027
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:43 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.186 | -0.001 | 1850340 | 285.1 | 288.2 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.886 | -0.003 | 2916562 | 500.8 | 458.7 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 1784916 | 463.3 | 538.4 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.206 | -0.001 | 3220078 | 536.4 | 482.1 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.349 | -0.001 | 23496293 | 9243.9 | 7509.2 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.554 | -0.001 | 4773960 | 786.0 | 659.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

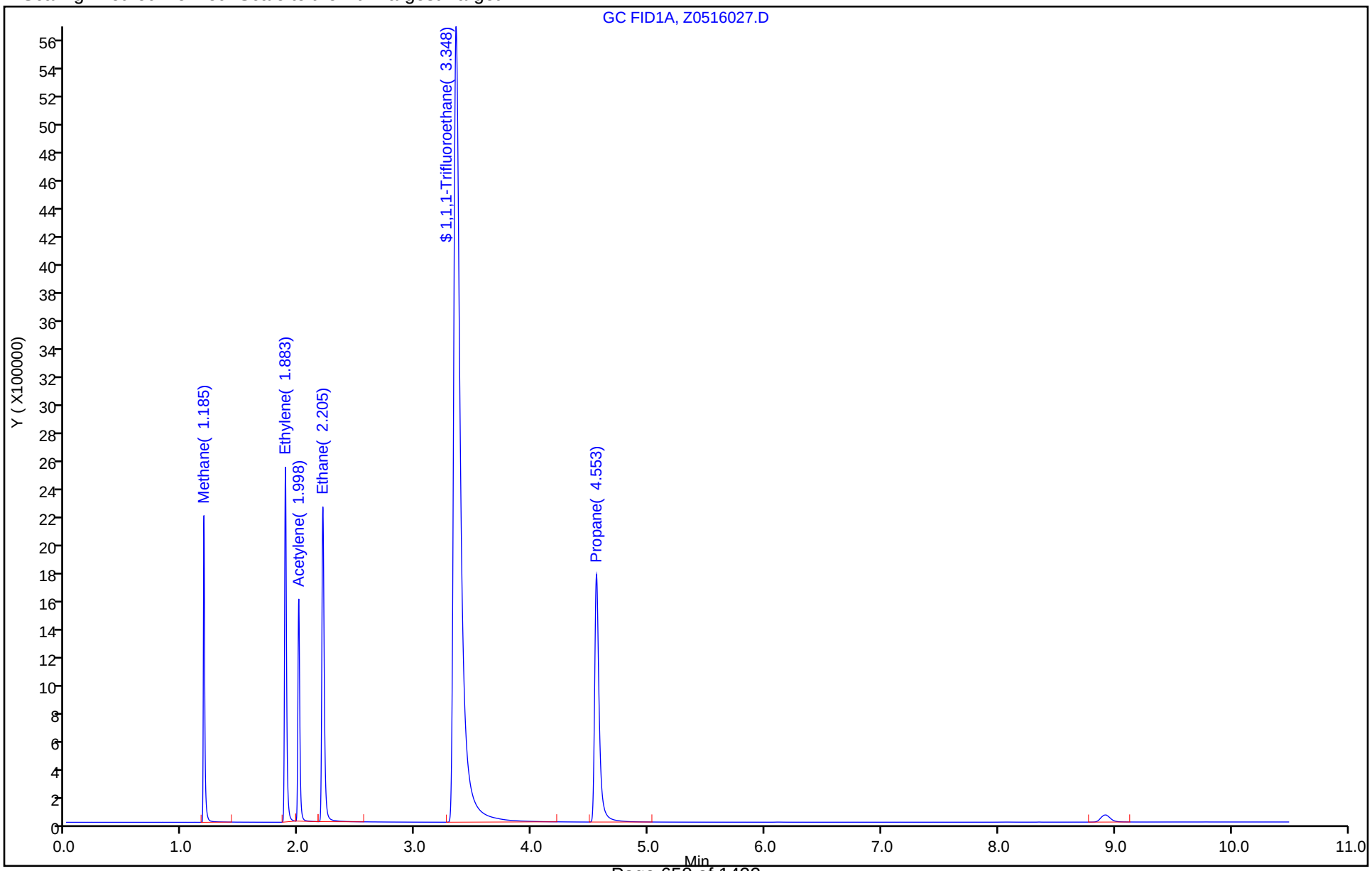
Report Date: 17-May-2019 07:20:43 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516027.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 21:12:44 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 27 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 27 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6674 | | 296 | 285 | 4.0 | 20.0 |
| Ethene | Ave | 6359 | 6250 | | 492 | 501 | -1.7 | 20.0 |
| Acetylene | Ave | 3315 | 4216 | | 589 | 463 | 27.2 | 30.0 |
| Ethane | Ave | 6680 | 6450 | | 518 | 536 | -3.4 | 20.0 |
| Propane | Ave | 7235 | 6743 | | 733 | 786 | -6.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3 Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517003.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.83 | 1.93 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 17-May-2019 14:43:13 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 1903026 | 285.1 | 296.4 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3129670 | 500.8 | 492.2 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.998 | 0.000 | 1953494 | 463.3 | 589.3 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 3459889 | 536.4 | 518.0 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.347 | 0.000 | 25396684 | 9243.9 | 8116.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5299860 | 786.0 | 732.6 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

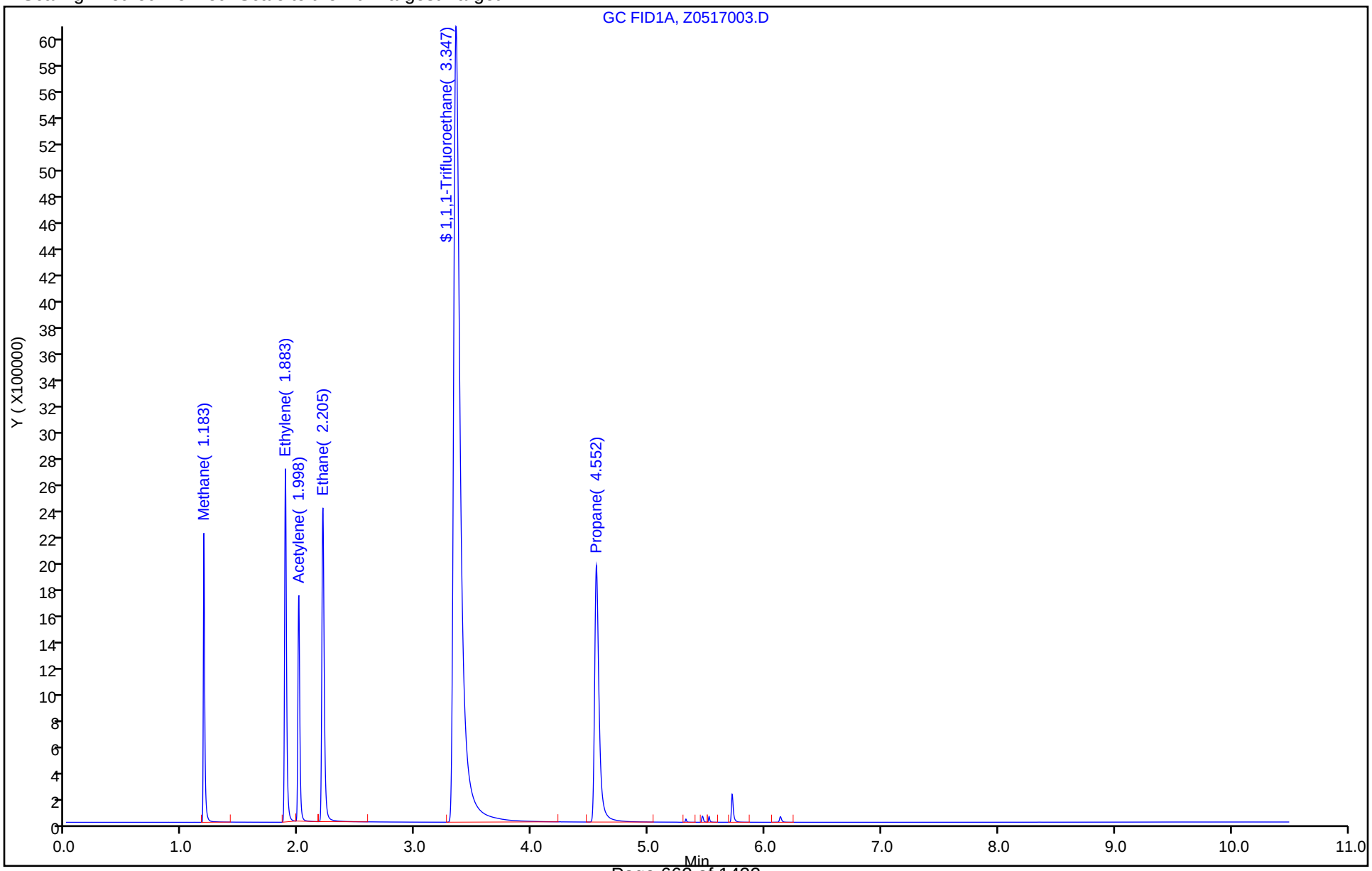
Report Date: 20-May-2019 10:18:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 14:43:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2747 | | 8120 | 9240 | -12.2 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517003.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 17-May-2019 14:43:13 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 1903026 | 285.1 | 296.4 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3129670 | 500.8 | 492.2 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.998 | 0.000 | 1953494 | 463.3 | 589.3 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 3459889 | 536.4 | 518.0 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.347 | 0.000 | 25396684 | 9243.9 | 8116.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5299860 | 786.0 | 732.6 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

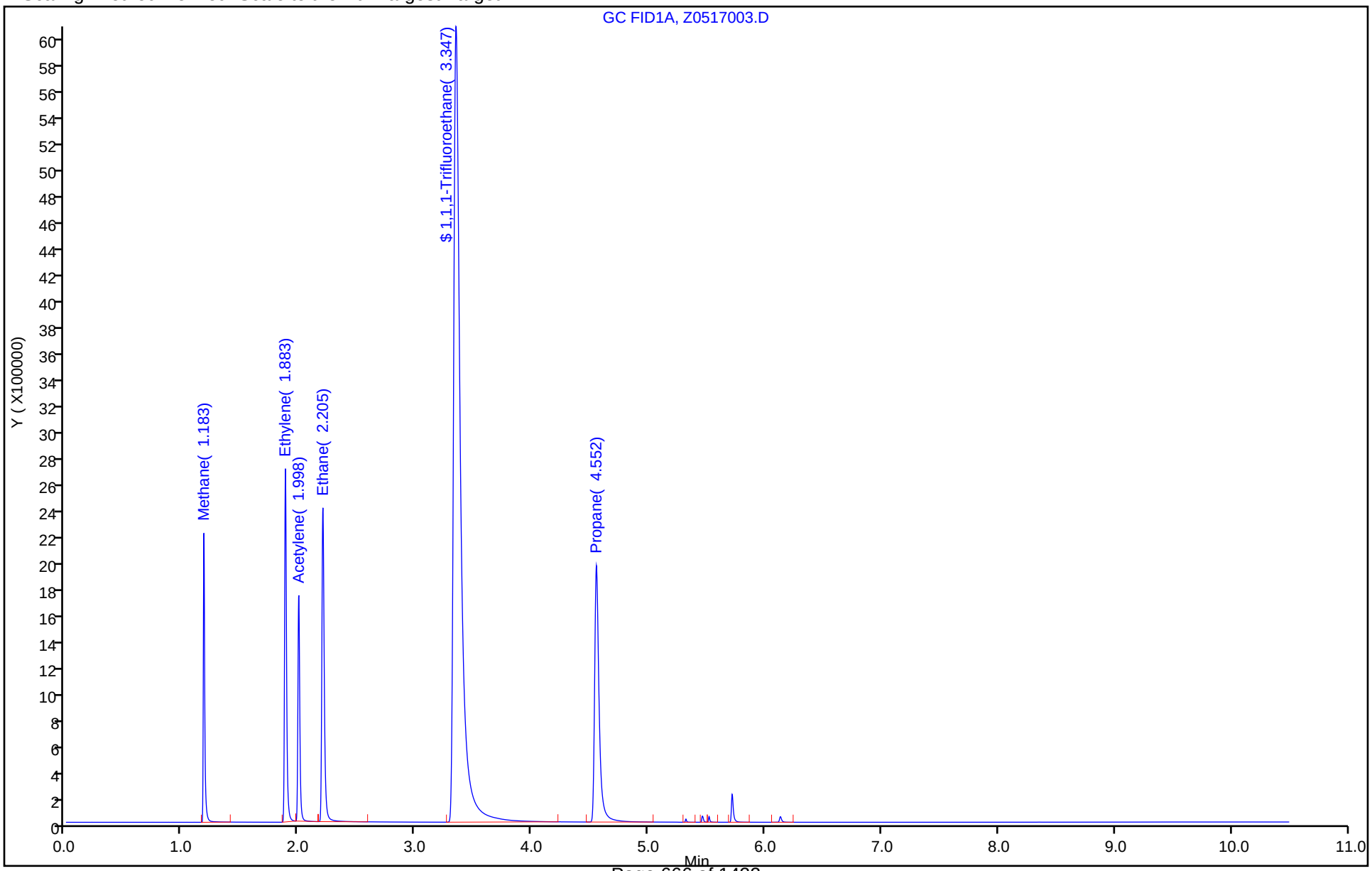
Report Date: 20-May-2019 10:18:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 14:43:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6587 | | 293 | 285 | 2.6 | 20.0 |
| Ethene | Ave | 6359 | 6132 | | 483 | 501 | -3.6 | 20.0 |
| Acetylene | Ave | 3315 | 4248 | | 594 | 463 | 28.1 | 30.0 |
| Ethane | Ave | 6680 | 6303 | | 506 | 536 | -5.6 | 20.0 |
| Propane | Ave | 7235 | 6477 | | 704 | 786 | -10.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381892/19 Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517019.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.83 | 1.93 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 19:22:20 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 1878063 | 285.1 | 292.5 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.883 | 0.001 | 3070686 | 500.8 | 482.9 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1968296 | 463.3 | 593.8 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.205 | 0.001 | 3381334 | 536.4 | 506.2 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.348 | 0.001 | 24802044 | 9243.9 | 7926.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5090921 | 786.0 | 703.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

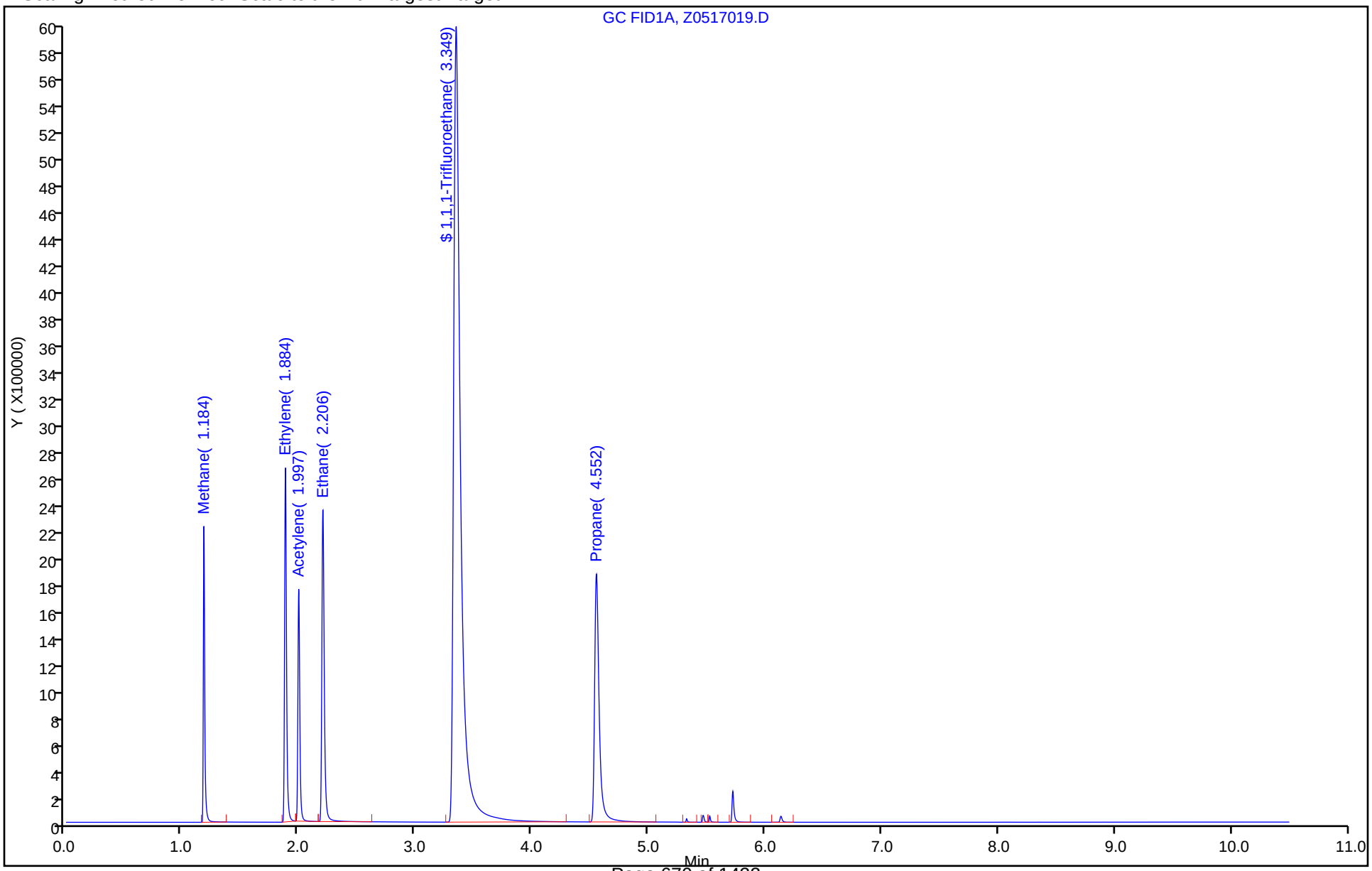
Report Date: 20-May-2019 10:18:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 19:22:20 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2683 | | 7930 | 9240 | -14.3 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517019.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 19:22:20 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 1878063 | 285.1 | 292.5 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.883 | 0.001 | 3070686 | 500.8 | 482.9 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1968296 | 463.3 | 593.8 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.205 | 0.001 | 3381334 | 536.4 | 506.2 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.348 | 0.001 | 24802044 | 9243.9 | 7926.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5090921 | 786.0 | 703.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

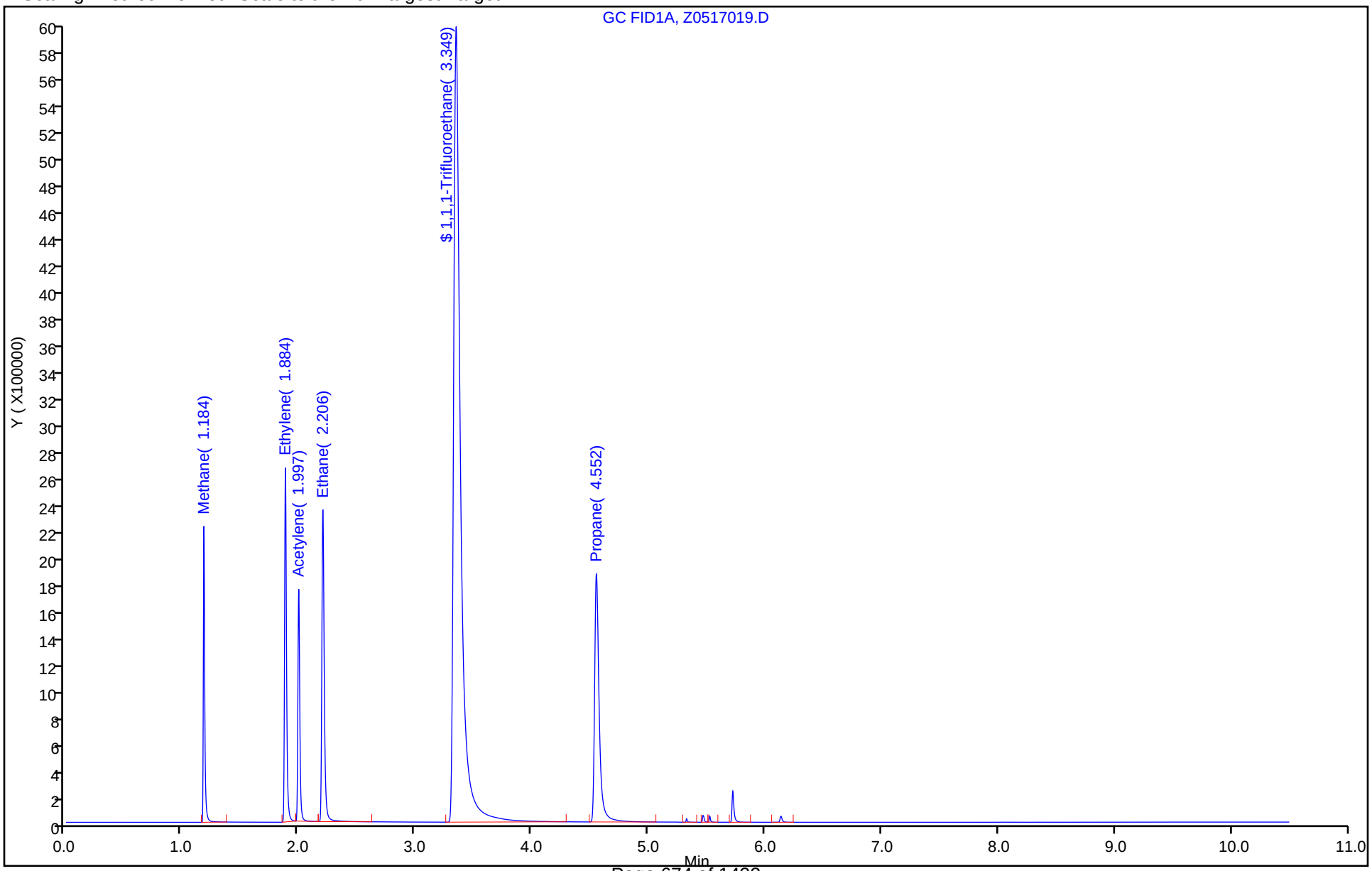
Report Date: 20-May-2019 10:18:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 19:22:20 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-381636/4

Matrix: Water  Lab File ID: Z0516004.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 14:34

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 0.11 | U | 1.0 | 0.11 |
| 74-84-0 | Ethane | 0.10 | U | 1.0 | 0.10 |
| 74-82-8 | Methane | 0.17 | U | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 85 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-May-2019 14:34:42 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | | | | | ND | |
| 2 | Ethylene | | | | | | |
| | 1.886 | | | | | ND | |
| 3 | Acetylene | | | | | | |
| | 1.999 | | | | | ND | |
| 4 | Ethane | | | | | | |
| | 2.206 | | | | | ND | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.349 | 0.000 | 25747950 | 9730.4 | 8228.8 | |
| 6 | Propane | | | | | | |
| | 4.554 | | | | | ND | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

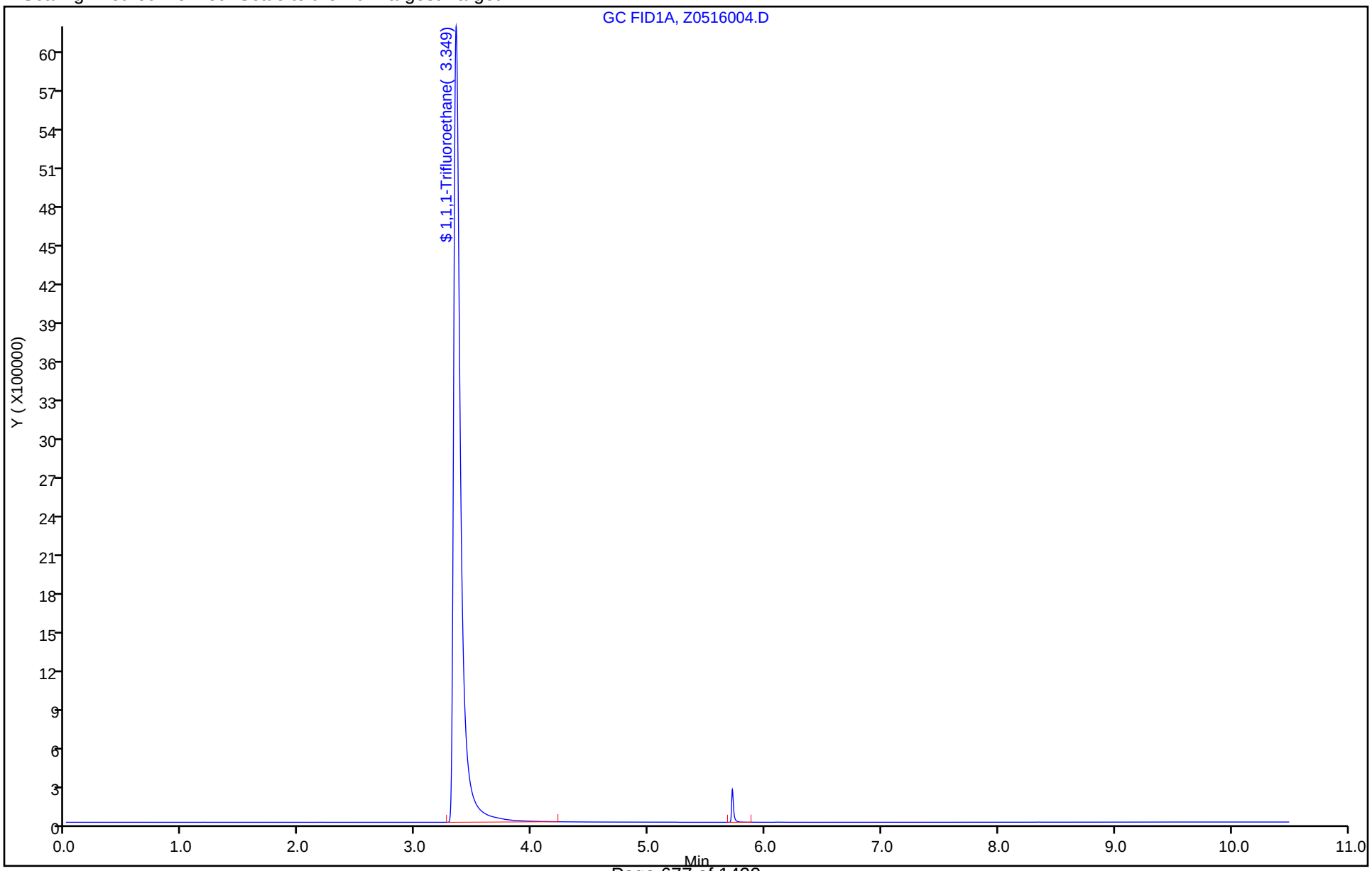
Report Date: 17-May-2019 07:20:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 14:34:42 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-May-2019 14:34:42 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8228.8 | 84.57 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-381892/4

Matrix: Water  Lab File ID: Z0517004.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 15:00

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 0.11 | U | 1.0 | 0.11 |
| 74-84-0 | Ethane | 0.10 | U | 1.0 | 0.10 |
| 74-82-8 | Methane | 0.17 | U | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 86 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-May-2019 15:00:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | | | | | ND | |
| 2 | Ethylene | | | | | | |
| | 1.883 | | | | | ND | |
| 3 | Acetylene | | | | | | |
| | 1.997 | | | | | ND | |
| 4 | Ethane | | | | | | |
| | 2.205 | | | | | ND | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.348 | 0.000 | 26296198 | 9730.4 | 8404.0 | |
| 6 | Propane | | | | | | |
| | 4.552 | | | | | ND | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

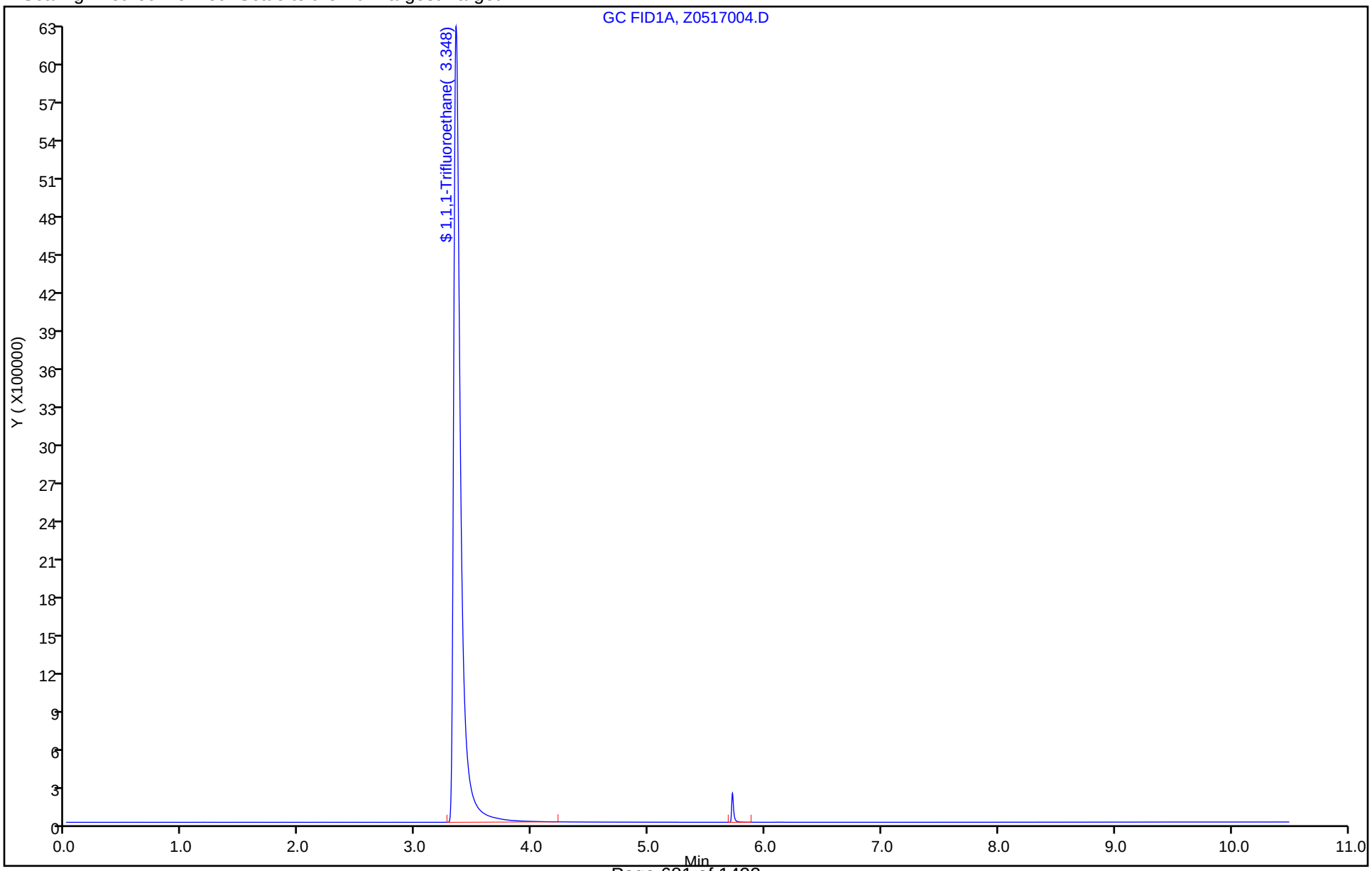
Report Date: 20-May-2019 10:18:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 15:00:30 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-May-2019 15:00:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8404.0 | 86.37 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-381636/5

Matrix: Water  Lab File ID: Z0516005.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 14:51

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 374 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 430 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 448 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 85 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-May-2019 14:51:57 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 2877303 | 480.0 | 448.1 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.886 | -0.002 | 2379127 | 387.0 | 374.1 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.206 | 0.000 | 2869963 | 475.3 | 429.6 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.349 | 0.000 | 25995388 | 9730.4 | 8307.9 | |
| 6 | Propane | | | | | | |
| | 4.554 | 4.554 | 0.000 | 2963734 | 460.5 | 409.7 | |

## Reagents:

MEEP LCS_00026 Amount Added: 23.00 Units: mL
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

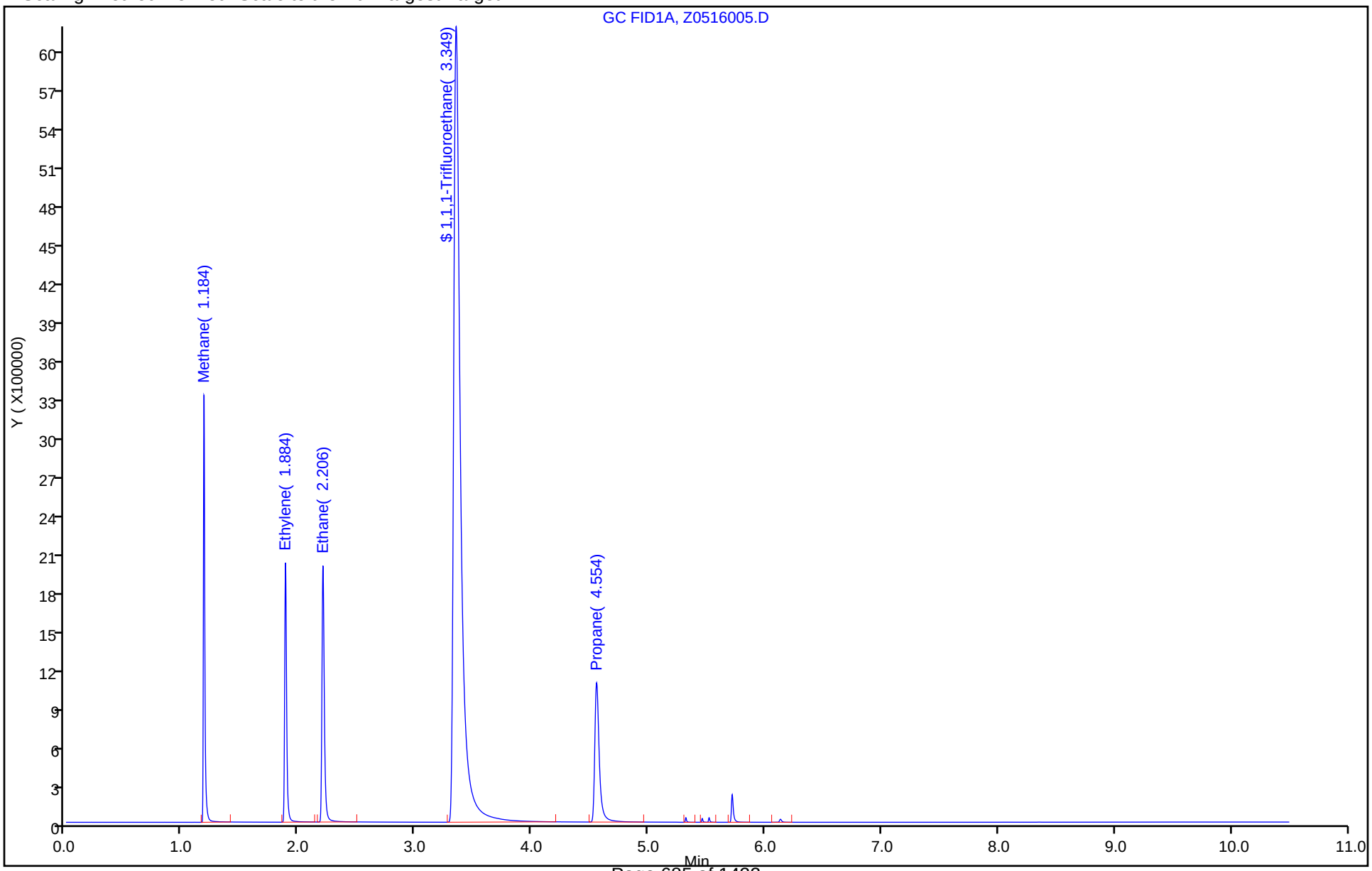
Report Date: 17-May-2019 07:20:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 14:51:57 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-May-2019 14:51:57 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087187-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8307.9 | 85.38 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-381892/5

Matrix: Water  Lab File ID: Z0517005.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 15:17

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 338 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 387 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 399 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2019 15:17:50 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 2564217 | 480.0 | 399.4 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 2151892 | 387.0 | 338.4 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 2581780 | 475.3 | 386.5 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.348 | 0.000 | 26529121 | 9730.4 | 8478.4 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 2680820 | 460.5 | 370.6 | |

## Reagents:

MEEP LCS_00026 Amount Added: 23.00 Units: mL
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

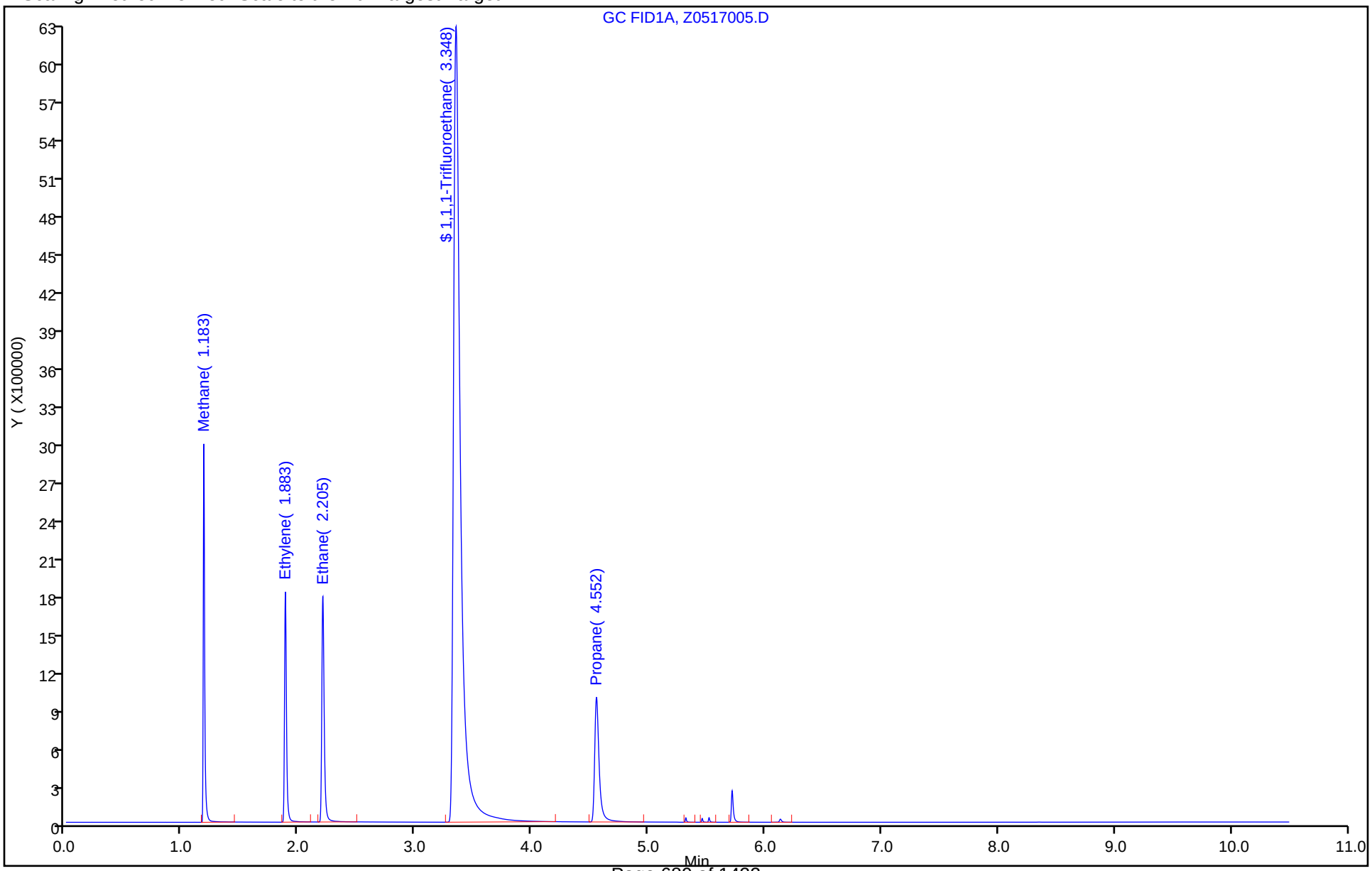
Report Date: 20-May-2019 10:18:05 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 15:17:50 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2019 15:17:50 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8478.4 | 87.13 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619 MS  Lab Sample ID: 240-112111-5 MS

Matrix: Water  Lab File ID: Z0517011.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 17:02

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4870 | | 10 | 1.1 |
| 74-84-0 | Ethane | 5140 | | 10 | 1.0 |
| 74-82-8 | Methane | 12600 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 86 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D
Lims ID: 240-112111-D-5 MS
Client ID:
Sample Type: MS
Inject. Date: 17-May-2019 17:02:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 8068768 | 285.1 | 1256.7 | |
| | 2 Ethylene | | | | | | |
| | 1.882 | 1.883 | -0.001 | 3099473 | 500.8 | 487.4 | |
| | 3 Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1881243 | 463.3 | 567.5 | |
| | 4 Ethane | | | | | | |
| | 2.204 | 2.205 | -0.001 | 3432320 | 536.4 | 513.8 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.348 | -0.001 | 24895941 | 9243.9 | 7956.5 | |
| | 6 Propane | | | | | | |
| | 4.551 | 4.552 | -0.001 | 5102009 | 786.0 | 705.2 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

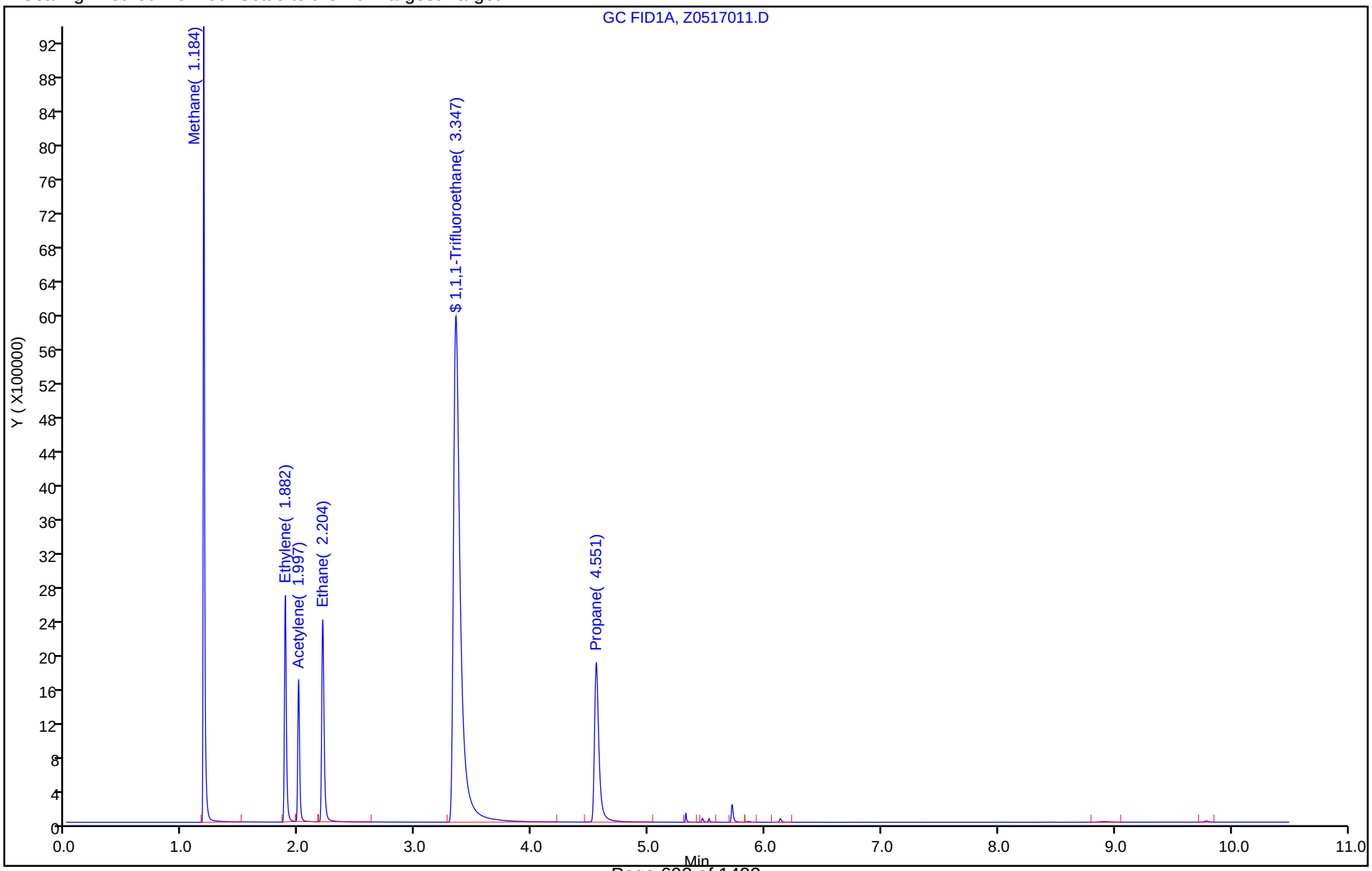
Report Date: 20-May-2019 10:18:15 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 17:02:30 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-5 MS | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 11 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D
Lims ID: 240-112111-D-5 MS
Client ID:
Sample Type: MS
Inject. Date: 17-May-2019 17:02:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7956.5 | 86.07 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-111881-F-3 MS

Matrix: Water  Lab File ID: Z0516010.D

Analysis Method: RSK-175  Date Collected: 05/01/2019 09:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 16:18

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4480 | | 10 | 1.1 |
| 74-84-0 | Ethane | 4710 | | 10 | 1.0 |
| 74-82-8 | Methane | 14300 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 84 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516010.D
Lims ID: 240-111881-F-3 MS
Client ID:
Sample Type: MS
Inject. Date: 16-May-2019 16:18:44 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087187-010
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 9186901 | 285.1 | 1430.9 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.886 | -0.003 | 2848872 | 500.8 | 448.0 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 1757224 | 463.3 | 530.1 | |
| 4 | Ethane | | | | | | |
| | 2.204 | 2.206 | -0.002 | 3146602 | 536.4 | 471.1 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.349 | -0.001 | 24285345 | 9243.9 | 7761.3 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.554 | -0.001 | 4759849 | 786.0 | 657.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

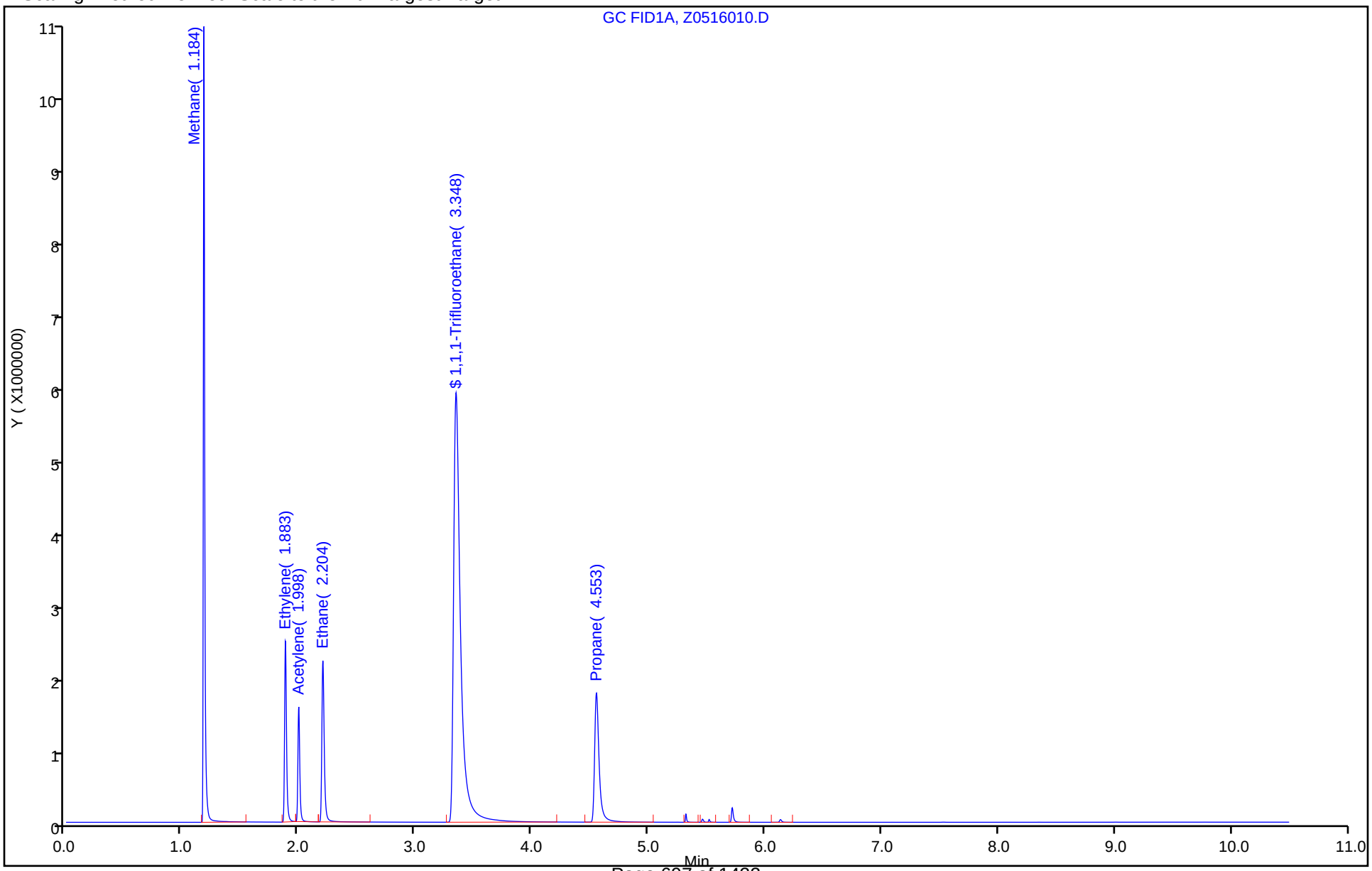
Report Date: 17-May-2019 07:20:33 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516010.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 16:18:44 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-111881-F-3 MS | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 10 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516010.D
Lims ID: 240-111881-F-3 MS
Client ID:
Sample Type: MS
Inject. Date: 16-May-2019 16:18:44 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087187-010
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7761.3 | 83.96 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID: MRC-NMW-2I-050619 MSD  Lab Sample ID: 240-112111-5 MSD

Matrix: Water  Lab File ID: Z0517012.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 17:20

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4920 | | 10 | 1.1 |
| 74-84-0 | Ethane | 5190 | | 10 | 1.0 |
| 74-82-8 | Methane | 12500 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D
Lims ID: 240-112111-D-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-May-2019 17:20:00 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-012
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 8018072 | 285.1 | 1248.8 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3128981 | 500.8 | 492.1 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1920366 | 463.3 | 579.3 | |
| 4 | Ethane | | | | | | |
| | 2.203 | 2.205 | -0.002 | 3463552 | 536.4 | 518.5 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.348 | -0.001 | 25167296 | 9243.9 | 8043.2 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5158786 | 786.0 | 713.1 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

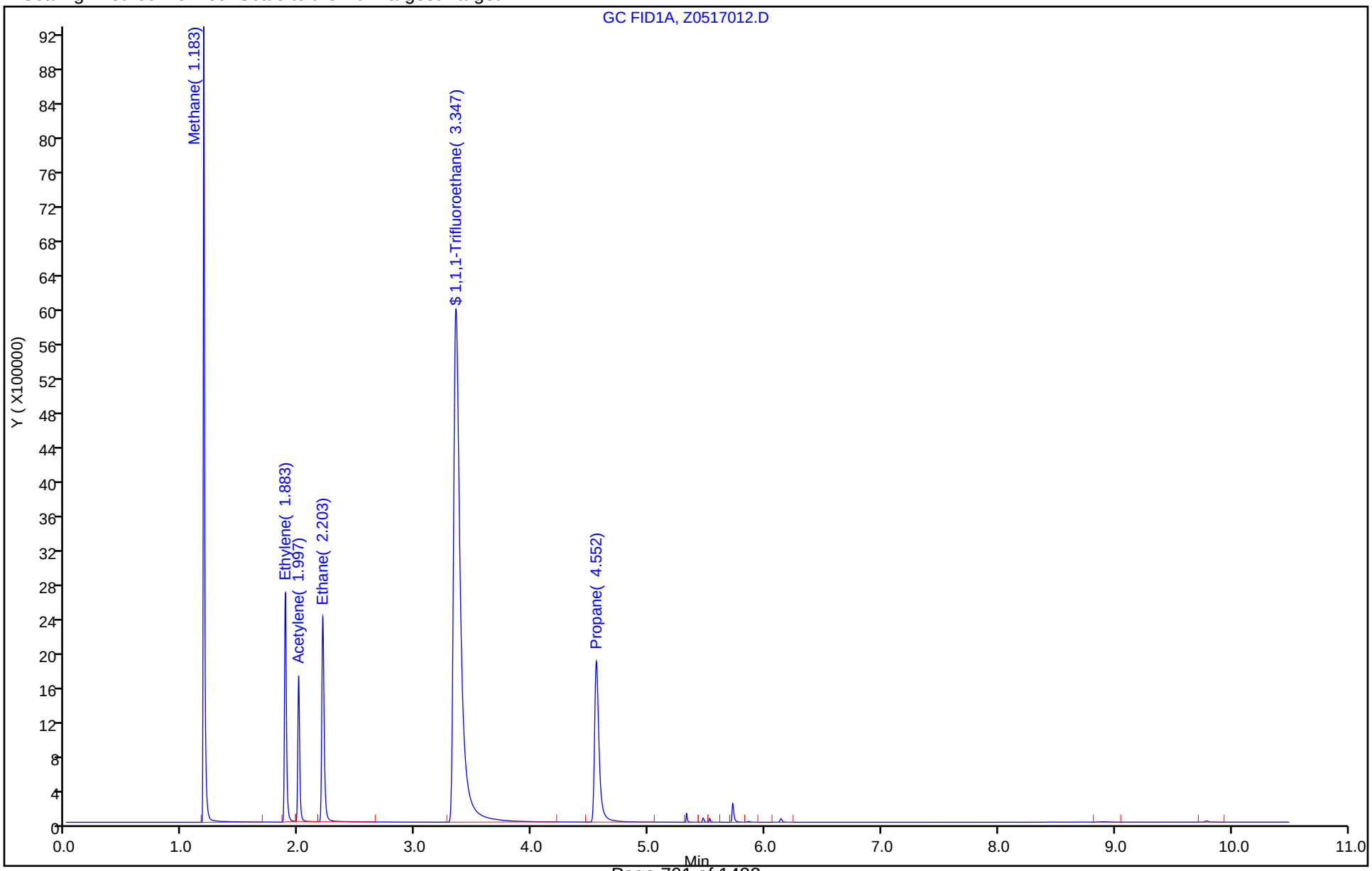
Report Date: 20-May-2019 10:18:17 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 17:20:00 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-5 MSD | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 12 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D
Lims ID: 240-112111-D-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-May-2019 17:20:00 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-012
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 8043.2 | 87.01 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-111881-F-3 MSD

Matrix: Water  Lab File ID: Z0516011.D

Analysis Method: RSK-175  Date Collected: 05/01/2019 09:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/16/2019 16:36

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381636  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4420 | | 10 | 1.1 |
| 74-84-0 | Ethane | 4650 | | 10 | 1.0 |
| 74-82-8 | Methane | 14100 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 84 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516011.D
Lims ID: 240-111881-F-3 MSD
Client ID:
Sample Type: MSD
Inject. Date: 16-May-2019 16:36:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087187-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.183 | 1.186 | -0.003 | 9045980 | 285.1 | 1408.9 | |
| | 2 Ethylene | | | | | | |
| | 1.883 | 1.886 | -0.003 | 2812469 | 500.8 | 442.3 | |
| | 3 Acetylene | | | | | | |
| | 1.996 | 1.999 | -0.003 | 1732053 | 463.3 | 522.5 | |
| | 4 Ethane | | | | | | |
| | 2.203 | 2.206 | -0.003 | 3105490 | 536.4 | 464.9 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.346 | 3.349 | -0.003 | 24272453 | 9243.9 | 7757.2 | |
| | 6 Propane | | | | | | |
| | 4.550 | 4.554 | -0.004 | 4711650 | 786.0 | 651.3 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

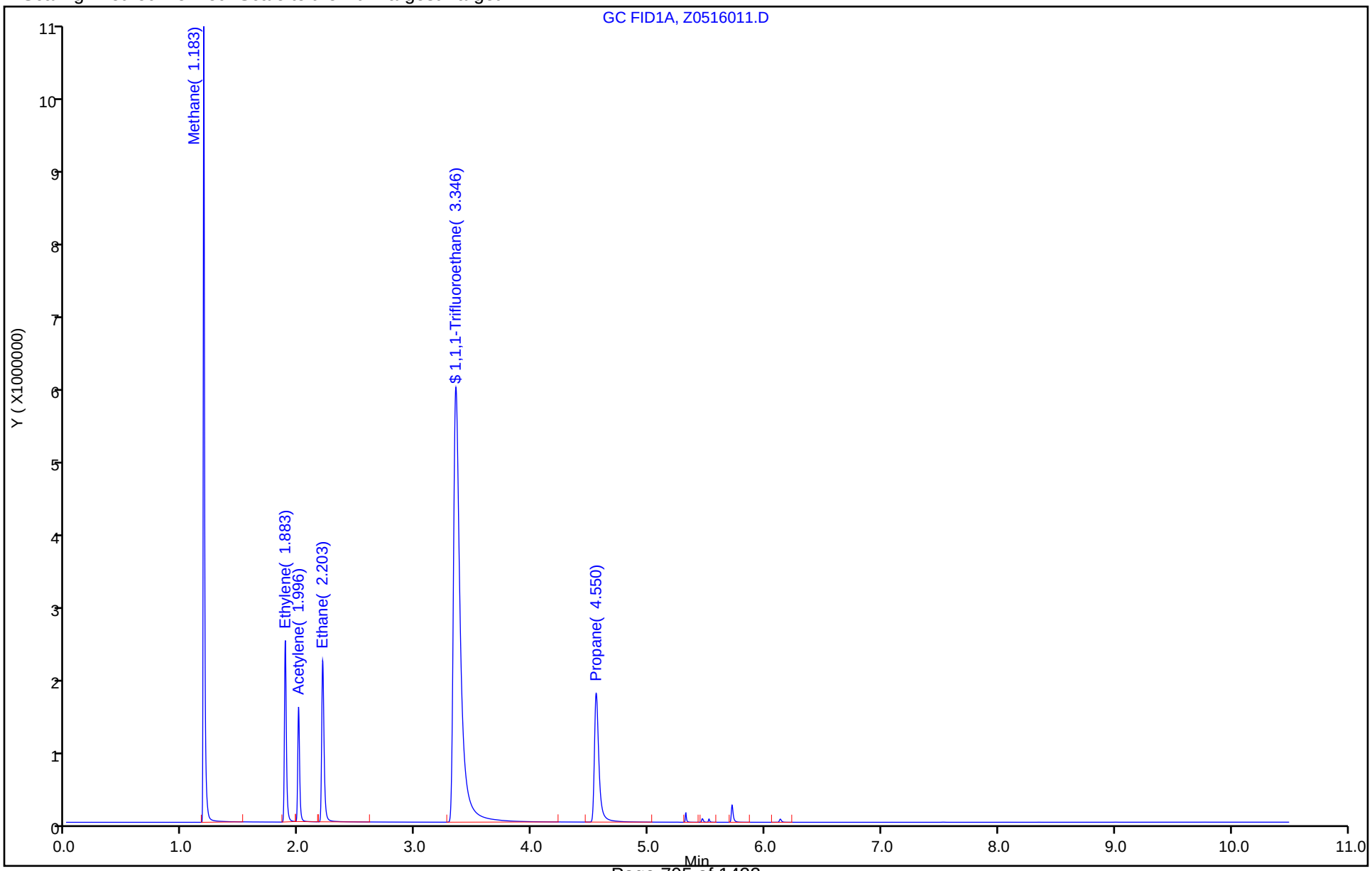
Report Date: 17-May-2019 07:20:34 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516011.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 16-May-2019 16:36:02 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-111881-F-3 MSD | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 11 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\Z0516011.D
Lims ID: 240-111881-F-3 MSD
Client ID:
Sample Type: MSD
Inject. Date: 16-May-2019 16:36:02 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087187-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190516-87187.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 17-May-2019 07:20:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0304

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7757.2 | 83.92 |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID Start Date: 03/25/2019 14:32

Analysis Batch Number: 373146 End Date: 03/25/2019 17:57

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD 240-373146/3 IC | | 03/25/2019 14:32 | 1 | Z0325003.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/4 IC | | 03/25/2019 14:49 | 1 | Z0325004.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/5 IC | | 03/25/2019 15:06 | 1 | Z0325005.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/6 IC | | 03/25/2019 15:23 | 1 | Z0325006.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/7 IC | | 03/25/2019 15:40 | 1 | Z0325007.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/8 IC | | 03/25/2019 15:57 | 1 | Z0325008.D | HP-PLOT/Q 0.53(mm) |
| STD1 240-373146/9 IC | | 03/25/2019 16:14 | 1 | Z0325009.D | HP-PLOT/Q 0.53(mm) |
| STD2 240-373146/10 IC | | 03/25/2019 16:32 | 1 | Z0325010.D | HP-PLOT/Q 0.53(mm) |
| STD3 240-373146/11 IC | | 03/25/2019 16:49 | 1 | Z0325011.D | HP-PLOT/Q 0.53(mm) |
| STD4 240-373146/12 IC | | 03/25/2019 17:06 | 1 | Z0325012.D | HP-PLOT/Q 0.53(mm) |
| STD5 240-373146/13 IC | | 03/25/2019 17:23 | 1 | Z0325013.D | HP-PLOT/Q 0.53(mm) |
| STD6 240-373146/14 IC | | 03/25/2019 17:40 | 1 | Z0325014.D | HP-PLOT/Q 0.53(mm) |
| ICV 240-373146/15 | | 03/25/2019 17:57 | 1 | Z0325015.D | HP-PLOT/Q 0.53(mm) |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID Start Date: 05/16/2019 14:17

Analysis Batch Number: 381636 End Date: 05/16/2019 21:12

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVRT 240-381636/3 | | 05/16/2019 14:17 | 1 | Z0516003.D | HP-PLOT/Q 0.53(mm) |
| MB 240-381636/4 | | 05/16/2019 14:34 | 1 | Z0516004.D | HP-PLOT/Q 0.53(mm) |
| LCS 240-381636/5 | | 05/16/2019 14:51 | 1 | Z0516005.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 15:09 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 15:26 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 15:44 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 16:01 | 10 | | HP-PLOT/Q 0.53(mm) |
| 240-111881-F-3 MS | | 05/16/2019 16:18 | 10 | Z0516010.D | HP-PLOT/Q 0.53(mm) |
| 240-111881-F-3 MSD | | 05/16/2019 16:36 | 10 | Z0516011.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 16:53 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 17:10 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 17:27 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 17:45 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 18:02 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 18:19 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 18:37 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-381636/19 | | 05/16/2019 18:54 | 1 | Z0516019.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 19:11 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 19:29 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/16/2019 19:46 | 1 | | HP-PLOT/Q 0.53(mm) |
| 240-112111-2 | | 05/16/2019 20:03 | 1 | Z0516023.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-3 | | 05/16/2019 20:21 | 1 | Z0516024.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-4 | | 05/16/2019 20:38 | 1 | Z0516025.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-5 | | 05/16/2019 20:55 | 1 | Z0516026.D | HP-PLOT/Q 0.53(mm) |
| CCV 240-381636/27 | | 05/16/2019 21:12 | 1 | Z0516027.D | HP-PLOT/Q 0.53(mm) |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Instrument ID: ZPID Start Date: 05/17/2019 14:43

Analysis Batch Number: 381892 End Date: 05/17/2019 21:23

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVRT 240-381892/3 | | 05/17/2019 14:43 | 1 | Z0517003.D | HP-PLOT/Q 0.53(mm) |
| MB 240-381892/4 | | 05/17/2019 15:00 | 1 | Z0517004.D | HP-PLOT/Q 0.53(mm) |
| LCS 240-381892/5 | | 05/17/2019 15:17 | 1 | Z0517005.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 15:35 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 15:52 | 1 | | HP-PLOT/Q 0.53(mm) |
| 240-112111-2 | | 05/17/2019 16:10 | 5 | Z0517008.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-4 | | 05/17/2019 16:27 | 10 | Z0517009.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-5 | | 05/17/2019 16:45 | 10 | Z0517010.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-5 MS | | 05/17/2019 17:02 | 10 | Z0517011.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-5 MSD | | 05/17/2019 17:20 | 10 | Z0517012.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 17:37 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 17:55 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:12 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:30 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:47 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:05 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-381892/19 | | 05/17/2019 19:22 | 1 | Z0517019.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:39 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:56 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:14 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:31 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:48 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 21:05 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-381892/26 | | 05/17/2019 21:23 | 1 | | HP-PLOT/Q 0.53(mm) |

# GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 381636  Batch Start Date: 05/16/19 14:17  Batch Analyst: Matthews, Brandon

Batch Method: RSK-175  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | MEEP LCS 00026 | SARSKHighCal 00006 | SARSKSURR 00012 |
|---|---|---|---|---|---|---|---|---|---|
| CCVRT 240-381636/3 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| MB 240-381636/4 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | | 20 mL |
| LCS 240-381636/5 | | RSK-175 | | 23 mL | 23 mL | 7 SU | 23 mL | | 20 mL |
| 240-111881-F-3 MS | | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| 240-111881-F-3 MSD | | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| CCV 240-381636/19 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| 240-112111-E-2 | MRC-MW-81B-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-F-3 | MRC-NMW-1I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-D-4 | MRC-NMW-3I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-E-5 | MRC-NMW-2I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| CCV 240-381636/27 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |

| Batch Notes | |
|---|---|
| pH Paper ID | 4042520 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 381892  Batch Start Date: 05/17/19 14:43  Batch Analyst: Matthews, Brandon

Batch Method: RSK-175  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | MEEP LCS 00026 | SARSKHighCal 00006 | SARSKSURR 00012 |
|---|---|---|---|---|---|---|---|---|---|
| CCVRT 240-381892/3 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| MB 240-381892/4 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | | 20 mL |
| LCS 240-381892/5 | | RSK-175 | | 23 mL | 23 mL | 7 SU | 23 mL | | 20 mL |
| 240-112111-D-2 | MRC-MW-81B-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-E-4 | MRC-NMW-3I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-D-5 | MRC-NMW-2I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| 240-112111-D-5 MS | MRC-NMW-2I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| 240-112111-D-5 MSD | MRC-NMW-2I-050619 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| CCV 240-381892/19 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |

| Batch Notes | |
|---|---|
| pH Paper ID | 4042520 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
|---|---|
| MRC-MW-81B-050619 | 240-112111-2 |
| MRC-NMW-1I-050619 | 240-112111-3 |
| MRC-NMW-3I-050619 | 240-112111-4 |
| MRC-NMW-2I-050619 | 240-112111-5 |

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-MW-81B-050619 Lab Sample ID: 240-112111-2

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 09:29

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron | 28000 | 200 | 26 | ug/L | | | 1 | 6010C |
| 7439-96-5 | Manganese | 1700 | 15 | 2.1 | ug/L | | | 1 | 6010C |

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 10:53

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron | 20000 | 200 | 26 | ug/L | | | 1 | 6010C |
| 7439-96-5 | Manganese | 4800 | 15 | 2.1 | ug/L | | | 1 | 6010C |

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 13:32

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron | 130000 | 200 | 26 | ug/L | | | 1 | 6010C |
| 7439-96-5 | Manganese | 5200 | 15 | 2.1 | ug/L | | | 1 | 6010C |

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 14:57

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron | 18000 | 200 | 26 | ug/L | | | 1 | 6010C |
| 7439-96-5 | Manganese | 2200 | 15 | 2.1 | ug/L | | | 1 | 6010C |

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

ICV Source: MT6500ICV_00054  Concentration Units: ug/L

CCV Source: MTICPCCV_00153

| Analyte | ICV 240-380467/4 05/09/2019 09:08 | | | | CCV 240-380467/42 05/09/2019 12:07 | | | | CCV 240-380467/54 05/09/2019 13:02 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 12900 | | 12500 | 103 | 26600 | | 25000 | 106 | 26300 | | 25000 | 105 |
| **Manganese** | 1480 | | 1500 | 98 | 2050 | | 2000 | 103 | 1990 | | 2000 | 100 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

ICV Source: MT6500ICV_00054  Concentration Units: ug/L

CCV Source: MTICPCCV_00153

| Analyte | CCV 240-380467/82 05/09/2019 15:54 | | | | CCV 240-380467/94 05/09/2019 16:50 | | | | CCV 240-380467/106 05/09/2019 17:46 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 26100 | | 25000 | 104 | 25500 | | 25000 | 102 | 25000 | | 25000 | 100 |
| **Manganese** | 1990 | | 2000 | 100 | 1920 | | 2000 | 96 | 1930 | | 2000 | 96 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

ICV Source: MTTRCRIC_00069  Concentration Units: ug/L

CCV Source: MTTRCRIC_00069

| Analyte | ICVL 240-380467/6 05/09/2019 09:18 | | | | CCVL 240-380467/108 05/09/2019 17:55 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 204 | | 200 | 102 | 205 | | 200 | 102 | | | | |
| **Manganese** | 15.6 | | 15.0 | 104 | 15.3 | | 15.0 | 102 | | | | |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | ICB 240-380467/5 05/09/2019 09:13 | | CCB 240-380467/43 05/09/2019 12:11 | | CCB 240-380467/55 05/09/2019 13:06 | | CCB 240-380467/83 05/09/2019 15:58 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Iron** | 200 | 26 | U | 26 | U | 26 | U | 26 | U |
| **Manganese** | 15 | 2.1 | U | 2.1 | U | 2.1 | U | 2.1 | U |

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | CCB 240-380467/95 05/09/2019 16:55 | | CCB 240-380467/107 05/09/2019 17:51 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Iron** | 200 | 26 | U | 26 | U | | | | |
| **Manganese** | 15 | 2.1 | U | 2.1 | U | | | | |

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Concentration Units: ug/L  Lab Sample ID: MB 240-380224/1-A

Instrument Code: I12  Batch No.: 380467

| CAS No. | Analyte | Concentration | C | Q | Method |
|---|---|---|---|---|---|
| 7439-89-6 | Iron | 26 | U | | 6010C |
| 7439-96-5 | Manganese | 2.1 | U | | 6010C |

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICSA 240-380467/8  Instrument ID: I12

Lab File ID: I12050919A.asc  ICS Source: MTTRICSAW_00045

Concentration Units: ug/L

| Analyte | True Solution A | Found Solution A | Percent Recovery |
|---|---|---|---|
| **Iron** | **200000** | **186900** | **93** |
| **Manganese** | | **0.871** | |
| *Aluminum* | *500000* | *488010* | *98* |
| *Antimony* | | *9.29* | |
| *Arsenic* | | *-6.12* | |
| *Barium* | | *-0.0309* | |
| *Beryllium* | | *0.0222* | |
| *Boron* | | *7.67* | |
| *Cadmium* | | *0.940* | |
| *Calcium* | *500000* | *460570* | *92* |
| *Chromium* | | *2.76* | |
| *Cobalt* | | *-3.92* | |
| *Copper* | | *-1.06* | |
| *Lead* | | *-2.27* | |
| *Lithium* | | *6.41* | |
| *Magnesium* | *500000* | *495990* | *99* |
| *Molybdenum* | | *-1.08* | |
| *Nickel* | | *1.02* | |
| *Potassium* | | *27.7* | |
| *Selenium* | | *-7.42* | |
| *Silicon* | | *27.1* | |
| *Silver* | | *-1.33* | |
| *Sodium* | | *107* | |
| *Strontium* | | *12.0* | |
| *Thallium* | | *3.43* | |
| *Tin* | | *1.90* | |
| *Titanium* | | *-1.71* | |
| *Vanadium* | | *-4.70* | |
| *Zinc* | | *-0.955* | |

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Lab Sample ID: ICSAB 240-380467/9  Instrument ID: I12

Lab File ID: I12050919A.asc  ICS Source: MTICPICSABW_00021

Concentration Units: ug/L

| Analyte | True Solution AB | Found Solution AB | Percent Recovery |
|---|---|---|---|
| **Iron** | **200000** | **191340** | **96** |
| **Manganese** | **500** | **466** | **93** |
| *Aluminum* | *500000* | *508520* | *102* |
| *Antimony* | *1000* | *1042* | *104* |
| *Arsenic* | *1000* | *995* | *99* |
| *Barium* | *500* | *502* | *100* |
| *Beryllium* | *500* | *494* | *99* |
| *Boron* | *500* | *510* | *102* |
| *Cadmium* | *1000* | *1020* | *102* |
| *Calcium* | *500000* | *476270* | *95* |
| *Chromium* | *500* | *471* | *94* |
| *Cobalt* | *500* | *498* | *100* |
| *Copper* | *500* | *524* | *105* |
| *Lead* | *1000* | *880* | *88* |
| *Lithium* | *500* | *528* | *106* |
| *Magnesium* | *500000* | *505990* | *101* |
| *Molybdenum* | *1000* | *949* | *95* |
| *Nickel* | *1000* | *977* | *98* |
| *Potassium* | *10000* | *10413* | *104* |
| *Selenium* | *1000* | *979* | *98* |
| *Silicon* | *10000* | *10028* | *100* |
| *Silver* | *1000* | *1041* | *104* |
| *Sodium* | *10000* | *10450* | *105* |
| *Strontium* | *1500* | *1429* | *95* |
| *Thallium* | *1000* | *915* | *91* |
| *Tin* | *500* | *504* | *101* |
| *Titanium* | *500* | *492* | *98* |
| *Vanadium* | *500* | *475* | *95* |
| *Zinc* | *1000* | *963* | *96* |

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-112152-A-2-B MS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

| Analyte | SSR | C | Sample Result (SR) | C | Spike Added (SA) | %R | Control Limit %R | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 2590 | | 2100 | | 1000 | 52 | 75-125 | F1 | 6010C |
| Manganese | 559 | | 150 | | 500 | 82 | 75-125 | | 6010C |

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-112152-A-2-C MSD

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

| Analyte | (SDR) C | | Spike Added (SA) | %R | Control Limit %R | RPD | RPD Limit | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 2980 | | 1000 | 91 | 75-125 | 14 | 20 | | 6010C |
| Manganese | 640 | | 500 | 98 | 75-125 | 13 | 20 | | 6010C |

SDR = Sample Duplicate Result

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

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: Lab ID: 240-112152-A-2-A PDS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Matrix: Water Concentration Units: ug/L

| Analyte | SSR | C | Sample Result (SR) | C | Spike Added (SA) | %R | Control Limit %R | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 2950 | | 2100 | | 1000 | 87 | 80-120 | | 6010C |

SSR = Spiked Sample Result

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

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-380224/2-A

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

Sample Matrix: Water  LCS Source: MTICP1_00084

| Analyte | Water(ug/L) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | True | Found | C | %R | Limits | | Q | Method |
| Iron | 1000 | 1080 | | 108 | 80 | 120 | | 6010C |
| Manganese | 500 | 526 | | 105 | 80 | 120 | | 6010C |

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-112152-A-2-A SD ^5

SDG No:

Lab Name: Eurofins TestAmerica, Canton  Job No: 240-112111-1

Matrix: Water  Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | Method |
|---|---|---|---|---|---|---|---|
| Iron | 2100 | | 2180 | | 5.2 | | 6010C |
| Manganese | 150 | | 159 | | 7.4 | | 6010C |

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: I12

Method: 6010C  MDL Date: 12/15/2017 12:49

Prep Method: 3005A

| Analyte | Wavelength/ Mass | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Iron | 271.441 | 200 | 25.958 |
| Manganese | 257.610 | 15 | 2.119 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: I12

Method: 6010C  XMDL Date: 12/15/2017 12:49

| Analyte | Wavelength/ Mass | XRL (ug/L) | XMDL (ug/L) |
|---|---|---|---|
| Iron | 271.441 | 200 | 25.958 |
| Manganese | 257.610 | 15 | 2.119 |

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-112111-1

SDG No.:

ICP-AES Instrument ID: I12 Date: 12/21/2018

| Analyte | Wave Length | Al | As | Ca | Co | Cr | Cu | Fe | Mn | Mo | Ni | Si | Ti | V | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | | | | | | | | | 0.034040 | | | | 0.056989 | |
| Antimony | | -0.00006 | | | -0.000422 | | | -0.000035 | | | | | | 0.002232 | |
| Arsenic | | 0.000009 | | | -0.000202 | 0.00931 | | | -0.0003555 | 0.00123617 | | | | | |
| Beryllium | | | | | | | | | | | | | | 0.000235 | |
| Cadmium | | | 0.012308 | | | | | 0.000004 | | | | | | | |
| Chromium | | | | | | | | | 0.000415 | | | | | | |
| Cobalt | | | | | | | | | | | | | 0.002128 | | |
| Copper | | | | 0.000018 | 0.000361 | | | -0.000032 | | | | | -0.003157 | | |
| Lead | | -0.000091 | | | | | 0.00057707 | 0.000048 | | | 0.000131 | 0.000025 | | | |
| Lithium | | | | 0.000011 | | | | | | | | | | | |
| Nickel | | | | | 0.000518 | | | 0.000059 | | | | | | | |
| Selenium | | -0.000032 | | | | | | | 0.000338 | | | | | | |
| Thallium | | 0.000034 | | | 0.003802 | | | -0.000025 | -0.00062023 | | | | | 0.001371 | |
| Vanadium | | | | | | | | 0.000064 | | | | | | | |
| Zinc | | | | | | -0.001092 | | | | | | | | | |

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Canton Job No: 240-112111-1

SDG No.:

Instrument ID: I12 Date: 01/28/2019 12:19

| Analyte | Integ. Time (Sec.) | Concentration (ug/L) | Method |
|---|---|---|---|
| Iron | | 500000 | 6010C |
| Manganese | | 15000 | 6010C |

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Prep Method: 3005A

| Lab Sample ID | Preparation Date | Prep Batch | Initial Weight | Initial Volume (mL) | Final Volume (mL) |
|---|---|---|---|---|---|
| MB 240-380224/1-A | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| LCS 240-380224/2-A | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112152-A-2-B MS | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112152-A-2-C MSD | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112111-2 | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112111-3 | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112111-4 | 05/08/2019 14:00 | 380224 | | 50 | 50 |
| 240-112111-5 | 05/08/2019 14:00 | 380224 | | 50 | 50 |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | | |
| ICIS 240-380467/1 | 1 | | 08:54 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-380467/2 IC | | | 08:59 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-380467/3 IC | | | 09:04 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV 240-380467/4 | 1 | | 09:08 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICB 240-380467/5 | 1 | | 09:13 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICVL 240-380467/6 | 1 | | 09:18 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICSA 240-380467/8 | 1 | | 09:27 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICSAB 240-380467/9 | 1 | | 09:32 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/10 | | | 09:36 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/11 | | | 09:41 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:45 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:50 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:55 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:04 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:09 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/18 | | | 10:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/19 | | | 10:18 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:23 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:27 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:37 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:41 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:52 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:57 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:01 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/30 | | | 11:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/31 | | | 11:15 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:20 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:29 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:34 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:39 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:44 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:53 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:02 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/42 | 1 | | 12:07 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/43 | 1 | | 12:11 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-380224/1-A | 1 | R | 12:16 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-380224/2-A | 1 | R | 12:21 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112152-A-2-A SD ^5 | 5 | R | 12:30 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112152-A-2-A PDS | 1 | R | 12:35 | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112152-A-2-B MS | 1 | R | 12:39 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112152-A-2-C MSD | 1 | R | 12:43 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:48 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:52 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:57 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/54 | 1 | | 13:02 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/55 | 1 | | 13:06 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/57 | | | 13:16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/58 | | | 13:20 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380467/59 | | | 13:25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:05 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:15 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:24 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:29 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:34 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:39 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:44 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/70 | | | 14:58 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/71 | | | 15:03 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:07 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:12 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:21 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:26 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:31 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:35 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:40 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:45 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:49 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/82 | 1 | | 15:54 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/83 | 1 | | 15:58 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:03 | | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:13 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:27 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:31 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:36 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:41 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 | 1 | R | 16:46 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/94 | 1 | | 16:50 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/95 | 1 | | 16:55 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-3 | 1 | R | 16:59 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-4 | 1 | R | 17:04 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-5 | 1 | R | 17:09 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:18 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:37 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:42 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/106 | 1 | | 17:46 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/107 | 1 | | 17:51 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380467/108 | 1 | | 17:55 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:05 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:09 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:19 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:24 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:33 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/118 | | | 18:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/119 | | | 18:47 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:52 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:56 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:05 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:10 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:18 | | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/130 | | | 19:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/131 | | | 19:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/142 | | | 20:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/143 | | | 20:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:40 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:44 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/154 | | | 21:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/155 | | | 21:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/166 | | | 22:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/167 | | | 22:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:32 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/178 | | | 23:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/179 | | | 23:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380467/180 | | | 23:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/190 | | | 00:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/191 | | | 00:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:05 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/202 | | | 01:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/203 | | | 01:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:33 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:47 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
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| ZZZZZZ | | | 01:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/214 | | | 02:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/215 | | | 02:10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:33 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/226 | | | 03:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/227 | | | 03:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/238 | | | 03:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/239 | | | 04:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:44 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/250 | | | 04:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/251 | | | 04:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:02 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: I12  Analysis Method: 6010C

Start Date: 05/09/2019 08:54  End Date: 05/10/2019 06:43

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/262 | | | 05:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/263 | | | 05:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380467/273 | | | 06:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380467/274 | | | 06:43 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
R = Total Recoverable

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

ICP Instrument ID: I12 Start Date: 05/09/2019 End Date: 05/09/2019

| Lab Sample ID | Time | Internal Standards %RI For: | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Element In 230.606 | Q | Element Y 224.306 | Q | Element Y 360.073 | Q | Element Y 371.030 | Q | Element | Q |
| ICIS 240-380467/1 | 08:54 | | | | | | | | | | |
| ICV 240-380467/4 | 09:08 | 96 | | 101 | | 101 | | 103 | | | |
| ICB 240-380467/5 | 09:13 | 102 | | 102 | | 103 | | 102 | | | |
| ICVL 240-380467/6 | 09:18 | 101 | | 101 | | 102 | | 101 | | | |
| ICSA 240-380467/8 | 09:27 | 83 | | 94 | | 96 | | 107 | | | |
| ICSAB 240-380467/9 | 09:32 | 83 | | 95 | | 97 | | 103 | | | |
| CCV 240-380467/42 | 12:07 | 92 | | 99 | | 100 | | 105 | | | |
| CCB 240-380467/43 | 12:11 | 103 | | 102 | | 104 | | 108 | | | |
| MB 240-380224/1-A | 12:16 | 105 | | 104 | | 105 | | 108 | | | |
| LCS 240-380224/2-A | 12:21 | 95 | | 99 | | 101 | | 107 | | | |
| 240-112152-A-2-A SD ^5 | 12:30 | 97 | | 99 | | 100 | | 105 | | | |
| 240-112152-A-2-A PDS | 12:35 | 85 | | 92 | | 97 | | 105 | | | |
| 240-112152-A-2-B MS | 12:39 | 89 | | 95 | | 99 | | 109 | | | |
| 240-112152-A-2-C MSD | 12:43 | 87 | | 95 | | 99 | | 108 | | | |
| CCV 240-380467/54 | 13:02 | 97 | | 103 | | 107 | | 115 | | | |
| CCB 240-380467/55 | 13:06 | 107 | | 105 | | 109 | | 116 | | | |
| CCV 240-380467/82 | 15:54 | 96 | | 102 | | 106 | | 114 | | | |
| CCB 240-380467/83 | 15:58 | 108 | | 105 | | 110 | | 115 | | | |
| 240-112111-2 | 16:46 | 103 | | 105 | | 109 | | 116 | | | |
| CCV 240-380467/94 | 16:50 | 97 | | 104 | | 109 | | 115 | | | |
| CCB 240-380467/95 | 16:55 | 112 | | 109 | | 113 | | 119 | | | |
| 240-112111-3 | 16:59 | 103 | | 108 | | 112 | | 122 | | | |
| 240-112111-4 | 17:04 | 102 | | 104 | | 109 | | 117 | | | |
| 240-112111-5 | 17:09 | 109 | | 109 | | 113 | | 121 | | | |
| CCV 240-380467/106 | 17:46 | 98 | | 104 | | 107 | | 115 | | | |
| CCB 240-380467/107 | 17:51 | 110 | | 107 | | 111 | | 115 | | | |
| CCVL 240-380467/108 | 17:55 | 107 | | 106 | | 109 | | 111 | | | |

# METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380224  Batch Start Date: 05/08/19 14:00  Batch Analyst: Butke, Michael

Batch Method: 3005A  Batch End Date: 05/08/19 22:00

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | MTAGSPIKEW 00091 | MTICP1 00084 | MTICP2A 00092 | MTTMHCL 00246 |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-380224/1 | | 3005A, 6010C | | 50 mL | 50 mL | | | | 2.5 mL |
| LCS 240-380224/2 | | 3005A, 6010C | | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112152-A-2 MS | | 3005A, 6010C | R | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112152-A-2 MSD | | 3005A, 6010C | R | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112111-K-2 | MRC-MW-81B-050619 | 3005A, 6010C | R | 50 mL | 50 mL | | | | 2.5 mL |
| 240-112111-K-3 | MRC-NMW-1I-050619 | 3005A, 6010C | R | 50 mL | 50 mL | | | | 2.5 mL |
| 240-112111-K-4 | MRC-NMW-3I-050619 | 3005A, 6010C | R | 50 mL | 50 mL | | | | 2.5 mL |
| 240-112111-K-5 | MRC-NMW-2I-050619 | 3005A, 6010C | R | 50 mL | 50 mL | | | | 2.5 mL |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | MTTMHNO3 00189 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-380224/1 | | 3005A, 6010C | | 1 mL | | | | | |
| LCS 240-380224/2 | | 3005A, 6010C | | 1 mL | | | | | |
| 240-112152-A-2 MS | | 3005A, 6010C | R | 1 mL | | | | | |
| 240-112152-A-2 MSD | | 3005A, 6010C | R | 1 mL | | | | | |
| 240-112111-K-2 | MRC-MW-81B-050619 | 3005A, 6010C | R | 1 mL | | | | | |
| 240-112111-K-3 | MRC-NMW-1I-050619 | 3005A, 6010C | R | 1 mL | | | | | |
| 240-112111-K-4 | MRC-NMW-3I-050619 | 3005A, 6010C | R | 1 mL | | | | | |
| 240-112111-K-5 | MRC-NMW-2I-050619 | 3005A, 6010C | R | 1 mL | | | | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 380224  Batch Start Date: 05/08/19 14:00  Batch Analyst: Butke, Michael

Batch Method: 3005A  Batch End Date: 05/08/19 22:00

| Batch Notes | |
|---|---|
| Batch Comment | filter paper: 81029102 |
| Temperature - Corrected - End | temp log Degrees C |
| Temperature - Corrected - Start | temp log Degrees C |
| Digestion Unit ID | hb2, c4 |
| Pipette/Syringe/Dispenser ID | mp1 |
| Thermometer ID | temp log |
| Digestion Tube/Cup ID | 1812114 |
| Temperature - Uncorrected - End | temp log Degrees C |
| Temperature - Uncorrected - Start | temp log Degrees C |

| Basis | Basis Description |
|---|---|
| R | Total Recoverable |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

MT6500BLKH20 318

## Test America Canton ICP Data Review Checklist

**Analysis Date:** 5-9-19 **Analyst:** WKD **Instrument:** I12

**Review Items**

| |
|---|
| **A. Calibration/Instrument Run QC** |
| 1. Instrument calibrated per method. |
| 2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria. *(ICV (2nd source):200.7=95 – 105%, 6010B 90-110%) (CCV: 90 – 110%)* |
| 3. ICB/CCB analyzed at appropriate frequency and within acceptance criteria. |
| 4. CRI analyzed at SOP or project-specific frequency and within acceptance criteria. (project specific limits may vary) |
| 5. ICSA/ICSAB analyzed at required frequency and within acceptance criteria. |
| **B. Sample Results** |
| 1. Samples with concentrations > the linear range for any parameter diluted and reanalyzed. |
| 2. Internal standard(s) within acceptance criteria. |
| 3. Sample analyses done within holding time. |
| **C. Preparation/Matrix QC** |
| 1. LCS performed per prep batch and within acceptance criteria. |
| 2. Method blank performed per prep batch and within acceptance criteria. |
| 3. MS performed at required frequency and evaluated. |
| 4. MSD or DU performed at required frequency and evaluated. |
| 5. Serial dilution performed per prep batch. |
| 6. Post digest spike performed at required frequency and evaluated. |
| **D. Other** |
| 1. Are all nonconformances documented appropriately in lims system. |
| 2. Calculations checked for error. |
| 3. All client/project specific requirements met. |
| 4. Date/time of analysis verified as correct. |

**Level I Analyst:** [signature] **Date:** 5-9-19 **Time:** 8:54 - 13:25

**Level I Analyst:** [signature] **Date:** 5-10-19 **Time:** 8:54 - 6:43

**Level I Analyst:** _____ **Date:** _____ **Time:** _____

**Level II Reviewer:** Karen Plunt **Date:** 5-9-19 **Time:** 8:54-13:25

**Level II Reviewer:** No again Karen Plunt **Date:** 5-13-19 **Time:** 8:54 - 6:43

**Level II Reviewer:** _____ **Date:** _____ **Time:** _____

**Comments:** _____

Sample Name: Blank Acquired: 5/9/2019 8:54:44 Type: Cal
Method: ICP I12 6010 200.7 Methods(v831) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00057 | .00133 | .00025 | .00224 | .02183 | .00159 | .00979 |
| Stddev | .00018 | .00037 | .00019 | .00006 | .00134 | .00021 | .00047 |
| %RSD | 31.419 | 27.808 | 74.591 | 2.7175 | 6.1381 | 13.534 | 4.8068 |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0012 | -.00358 | .00012 | .00131 | .00087 | -.00058 | .00508 |
| Stddev | .0005 | .00020 | .00009 | .00011 | .00009 | .00372 | .00613 |
| %RSD | 44.71 | 5.6202 | 74.830 | 8.6607 | 10.293 | 645.15 | 120.80 |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00020 | .00079 | .00041 | .05058 | .00310 | .00023 | -.0000 |
| Stddev | .00049 | .00004 | .00013 | .00142 | .00005 | .00042 | .0002 |
| %RSD | 245.92 | 5.5484 | 32.192 | 2.8003 | 1.7217 | 184.51 | 2228. |

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00032 | -.00017 | .00032 | .00008 | .00010 | .00051 | .00043 |
| Stddev | .00034 | .00008 | .00026 | .00003 | .00077 | .00014 | .00060 |
| %RSD | 106.78 | 48.434 | 81.780 | 40.129 | 780.64 | 28.029 | 138.00 |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | Cts/S |
| Avg | -.00183 |
| Stddev | .00133 |
| %RSD | 72.793 |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4125.8 | 2354.7 | 23327. | 2547.6 |
| Stddev | 9.3 | 5.0 | 61. | 18.9 |
| %RSD | .22452 | .21393 | .26281 | .74216 |

Sample Name: SCAL-4100704 Acquired: 5/9/2019 8:59:40 Type: Cal
Method: ICP I12 6010 200.7 Methods(v831) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | As1890 | B_1826 | Ba4554 | Be3130 | Cd2288 | Co2286 | Cr2677 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .87097 | .08782 | 1.8911 | 39.245 | 15.706 | 3.355 | 3.7044 | 1.3247 |
| Stddev | .00146 | .00035 | .0117 | .043 | .053 | .002 | .0071 | .0029 |
| %RSD | .16766 | .40043 | .61596 | .10944 | .33931 | .0659 | .19160 | .22284 |

| Elem | Cu3273 | Li6707 | Mn2576 | Mo2020 | Ni2316 | Pb2203 | Sb2175 | Se1960 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_3600) | (Y_2243) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.1444 | 23.678 | 8.4100 | 2.9441 | 1.4000 | .30259 | .1266 | .07194 |
| Stddev | .0020 | .045 | .0168 | .0009 | .0038 | .00079 | .0008 | .00009 |
| %RSD | .17657 | .19128 | .20027 | .03169 | .27444 | .26152 | .6096 | .13179 |

| Elem | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Sr3464 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.7936 | 10.143 | .08866 | .41554 | 2.9788 | 1.8754 |
| Stddev | .0029 | .057 | .00085 | .00081 | .0045 | .0027 |
| %RSD | .16435 | .56408 | .96072 | .19527 | .15169 | .14672 |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3917.1 | 2325.7 | 23040. | 2511.7 |
| Stddev | 13.4 | 5.7 | 48. | 1.5 |
| %RSD | .34192 | .24722 | .20786 | .06125 |

Sample Name: SCAL2-4050066 Acquired: 5/9/2019 9:04:17 Type: Cal
Method: ICP I12 6010 200.7 Methods(v831) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Al3082 | Ca3179 | Fe2599 | K_7664 | Mg2790 | Na5895 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.3184 | 14.300 | 5.1643 | 8.3196 | 1.0951 | 42.352 | .38006 |
| Stddev | .0173 | .113 | .0413 | .1083 | .0049 | .488 | .00045 |
| %RSD | 1.3148 | .79238 | .79927 | 1.3013 | .44674 | 1.1525 | .11857 |

| Int. Std. | Y_3710 |
|---|---|
| Units | Cts/S |
| Avg | 2594.1 |
| Stddev | 54.0 |
| %RSD | 2.0823 |

Sample Name: ICV-4141134 Acquired: 5/9/2019 9:08:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 749.89 | 12394. | 381.08 | 1536.5 | 1470.5 | 1464.3 | 25262. | 379.2 |
| Stddev | 2.56 | 69. | 3.01 | 8.7 | 5.7 | 1.9 | 87. | 1.6 |
| %RSD | .34093 | .55979 | .78903 | .56417 | .39065 | .13277 | .34265 | .4140 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1469.0 | 1473.4 | 1470.8 | 12892. | 24294. | 1009.3 | 25215. | 1476.6 |
| Stddev | 1.4 | 3.7 | 5.3 | 53. | 57. | 1.3 | 70. | 6.4 |
| %RSD | .09305 | .25044 | .36279 | .41209 | .23304 | .12731 | .27756 | .43176 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1469.4 | 24528. | 1468.8 | 366.42 | 382.1 | 383.83 | 1494.4 | 1490.9 |
| Stddev | 2.0 | 84. | 5.3 | .66 | 1.0 | 2.27 | 1.7 | 4.4 |
| %RSD | .13828 | .34262 | .35786 | .18061 | .2648 | .59209 | .11493 | .29789 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: ICV-4141134 Acquired: 5/9/2019 9:08:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 744.42 | 1485.5 | 1479.7 | 5066.5 | 4485.8 |
| Stddev | 8.52 | 6.2 | 3.8 | 77.0 | 18.0 |
| %RSD | 1.1446 | .41717 | .25732 | 1.5196 | .40027 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3964.6 | 2384.4 | 23564. | 2618.3 |
| Stddev | 15.7 | 11.2 | 144. | 5.3 |
| %RSD | .39571 | .46852 | .60902 | .20324 |

Sample Name: ICB Acquired: 5/9/2019 9:13:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32563 | 13.050 | -1.5846 | 5.5914 | -.04855 | -.12384 | 5.2716 | .0529 |
| Stddev | .28380 | 6.046 | 2.8913 | .8015 | .21666 | .25981 | 1.7540 | .1458 |
| %RSD | 87.154 | 46.331 | 182.46 | 14.335 | 446.29 | 209.80 | 33.272 | 275.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .42958 | .21828 | -.48897 | -.30730 | 52.495 | .21909 | 6.2428 | .11351 |
| Stddev | .43999 | .38228 | .99724 | 4.3910 | 39.377 | 1.9198 | 15.251 | .06952 |
| %RSD | 102.42 | 175.13 | 203.95 | 1428.9 | 75.012 | 876.25 | 244.30 | 61.246 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .60007 | 14.063 | .08850 | -.70761 | .6410 | 3.7307 | .45631 | -.08236 |
| Stddev | .04683 | 12.352 | .53276 | 1.5301 | 2.890 | 2.2156 | .20574 | .11189 |
| %RSD | 7.8038 | 87.834 | 601.98 | 216.23 | 450.9 | 59.388 | 45.087 | 135.86 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: ICB Acquired: 5/9/2019 9:13:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.3023 | .94387 | .12050 | 4.1684 | 9.1571 |
| Stddev | 1.3115 | 6.7978 | .13595 | 7.3981 | 1.2264 |
| %RSD | 56.965 | 720.20 | 112.82 | 177.48 | 13.393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4224.5 | 2401.5 | 24055. | 2604.2 |
| Stddev | 8.7 | 7.8 | 79. | 20.9 |
| %RSD | .20690 | .32393 | .32653 | .80165 |

Sample Name: ICVL-4100714 Acquired: 5/9/2019 9:18:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.7229 | 208.26 | 15.419 | 105.17 | 200.18 | 5.0059 | 5113.9 | 5.227 |
| Stddev | .6096 | 14.91 | 1.387 | .13 | 1.25 | .1586 | 32.5 | .056 |
| %RSD | 6.2700 | 7.1594 | 8.9956 | .12147 | .62238 | 3.1687 | .63502 | 1.079 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.7411 | 10.352 | 24.138 | 204.25 | 4986.5 | 50.835 | 5164.0 | 15.564 |
| Stddev | .1718 | .319 | .571 | 6.35 | 73.4 | 1.132 | 26.4 | .049 |
| %RSD | 1.7632 | 3.0769 | 2.3652 | 3.1068 | 1.4710 | 2.2274 | .51106 | .31356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 40.238 | 4969.5 | 39.233 | 9.4741 | 18.11 | 23.444 | 97.415 | 50.182 |
| Stddev | .131 | 31.9 | .448 | 1.6559 | 2.06 | 5.390 | .737 | .243 |
| %RSD | .32543 | .64105 | 1.1418 | 17.478 | 11.37 | 22.992 | .75665 | .48379 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: ICVL-4100714 Acquired: 5/9/2019 9:18:07 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 17.217 | 47.900 | 48.066 | 518.71 | 58.890 |
| Stddev | 2.658 | 2.586 | .496 | 7.17 | 4.686 |
| %RSD | 15.436 | 5.3987 | 1.0319 | 1.3820 | 7.9573 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4156.7 | 2384.7 | 23719. | 2563.8 |
| Stddev | 13.3 | 2.5 | 107. | 21.3 |
| %RSD | .32037 | .10457 | .45297 | .82979 |

Sample Name: CRILL-4054130 Acquired: 5/9/2019 9:22:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.4229 | 205.99 | 12.489 | 212.19 | 203.01 | 5.1431 | 5323.2 |
| Stddev | .0608 | 39.07 | 1.623 | 1.03 | .86 | .1385 | 27.8 |
| %RSD | 1.1207 | 18.969 | 12.995 | .48360 | .42361 | 2.6937 | .52178 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.318 | 7.0995 | 5.7602 | 25.222 | 109.49 | 5034.9 | 50.745 |
| Stddev | .076 | .1145 | .1522 | .572 | 1.71 | 46.2 | 1.278 |
| %RSD | 3.264 | 1.6121 | 2.6417 | 2.2691 | 1.5662 | .91740 | 2.5179 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5392.4 | 16.026 | 10.371 | 5089.6 | 40.243 | 2.6345 | 9.693 |
| Stddev | 22.6 | .048 | .388 | 28.8 | .570 | 1.3655 | 1.167 |
| %RSD | .41981 | .29705 | 3.7371 | .56636 | 1.4170 | 51.832 | 12.04 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: CRILL-4054130 Acquired: 5/9/2019 9:22:48 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 7.7435 | 100.90 | 52.234 | 6.2657 | 5.4579 | 20.655 | 537.24 |
| Stddev | 3.5683 | .99 | .277 | 3.3306 | 4.7174 | .060 | 22.63 |
| %RSD | 46.082 | .98537 | .53017 | 53.155 | 86.434 | .28942 | 4.2132 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 5.0000 | | | | | | |
| Range | 50.500% | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 56.857 |
| Stddev | 1.578 |
| %RSD | 2.7757 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4097.7 | 2349.1 | 23496. | 2590.2 |
| Stddev | 11.1 | 2.1 | 52. | 17.1 |
| %RSD | .27091 | .08897 | .21954 | .65829 |

Sample Name: ICSA-4032305 Acquired: 5/9/2019 9:27:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3302 | 488010. | -6.1162 | 7.6669 | -.03090 | .02216 | 460570. |
| Stddev | .2268 | 4684. | 4.5961 | .5341 | .12493 | .09305 | 6564. |
| %RSD | 17.051 | .95984 | 75.147 | 6.9663 | 404.26 | 419.79 | 1.4252 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .9397 | -3.9171 | 2.7558 | -1.0639 | 186900. | 27.737 | 6.4073 |
| Stddev | .1947 | .3744 | .3293 | .6559 | 1861. | 16.824 | .7152 |
| %RSD | 20.72 | 9.5572 | 11.949 | 61.652 | .99574 | 60.653 | 11.163 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 495990. | .87146 | -1.0833 | 106.82 | 1.0239 | -2.2679 | 9.289 |
| Stddev | 5752. | .09559 | .3920 | .37 | .5208 | 2.4971 | 4.739 |
| %RSD | 1.1597 | 10.969 | 36.185 | .35066 | 50.863 | 110.11 | 51.02 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: ICSA-4032305 Acquired: 5/9/2019 9:27:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -7.4182 | 1.9008 | -1.7063 | 3.4254 | -4.7008 | -.95464 | 27.052 |
| Stddev | 2.0479 | 1.6068 | .0672 | 4.4962 | 4.4390 | .42571 | 22.055 |
| %RSD | 27.606 | 84.531 | 3.9406 | 131.26 | 94.430 | 44.593 | 81.528 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 12.020 |
| Stddev | 4.918 |
| %RSD | 40.912 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3416.7 | 2213.2 | 22497. | 2721.2 |
| Stddev | 19.9 | 11.1 | 157. | 64.6 |
| %RSD | .58241 | .50135 | .70001 | 2.3732 |

Sample Name: ICSAB-4100708 Acquired: 5/9/2019 9:32:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1040.5 | 508520. | 994.92 | 510.08 | 502.30 | 494.14 | 476270. |
| Stddev | 2.4 | 569. | 2.65 | 2.95 | .26 | .89 | 3916. |
| %RSD | .22712 | .11194 | .26662 | .57789 | .05270 | .18083 | .82230 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1020. | 498.09 | 471.01 | 524.25 | 191340. | 10413. | 528.22 |
| Stddev | 2. | .50 | 1.56 | 2.27 | 712. | 10. | 2.35 |
| %RSD | .1471 | .10107 | .33213 | .43240 | .37202 | .09229 | .44566 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 505990. | 466.39 | 948.61 | 10450. | 976.63 | 879.92 | 1042. |
| Stddev | 2470. | 2.01 | 2.76 | 13. | 1.22 | 3.21 | 13. |
| %RSD | .48812 | .43059 | .29128 | .12214 | .12516 | .36424 | 1.222 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: ICSAB-4100708 Acquired: 5/9/2019 9:32:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 978.73 | 504.02 | 491.77 | 914.59 | 474.90 | 962.72 | 10028. |
| Stddev | 8.71 | 1.53 | 1.36 | 17.51 | .76 | 4.66 | 93. |
| %RSD | .89020 | .30362 | .27583 | 1.9140 | .16012 | .48444 | .92692 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1428.6 |
| Stddev | 7.6 |
| %RSD | .53227 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3424.4 | 2231.5 | 22627. | 2636.3 |
| Stddev | 24.0 | 10.0 | 159. | 27.7 |
| %RSD | .70018 | .44941 | .70077 | 1.0514 |

Sample Name: CCV-4140446 Acquired: 5/9/2019 9:36:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 997.00 | 25339. | 501.27 | 5143.1 | 2008.6 | 2031.7 | 50923. | 506.3 |
| Stddev | 4.10 | 140. | 3.16 | 30.9 | 4.3 | 6.1 | 220. | 1.0 |
| %RSD | .41091 | .55290 | .63115 | .60079 | .21462 | .30196 | .43279 | .2022 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2011.6 | 1978.3 | 2002.6 | 26024. | 49954. | 5102.4 | 50986. | 1967.6 |
| Stddev | 3.5 | 5.6 | 5.5 | 53. | 69. | 19.4 | 238. | 8.3 |
| %RSD | .17542 | .28308 | .27561 | .20222 | .13828 | .37939 | .46707 | .42224 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1979.6 | 50353. | 1996.2 | 476.11 | 512.2 | 502.68 | 5051.3 | 5020.5 |
| Stddev | 4.9 | 112. | 6.7 | 2.91 | 8.7 | 7.02 | 13.8 | 17.8 |
| %RSD | .24929 | .22328 | .33752 | .61122 | 1.704 | 1.3969 | .27305 | .35382 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 9:36:49 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 992.34 | 2005.9 | 2001.0 | 5139.2 | 4971.3 |
| Stddev | 10.42 | 4.8 | 3.9 | 19.0 | 10.3 |
| %RSD | 1.0499 | .23982 | .19268 | .37054 | .20659 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3849.1 | 2367.0 | 23884. | 2664.2 |
| Stddev | 17.6 | 7.3 | 134. | 18.9 |
| %RSD | .45738 | .31007 | .56119 | .71043 |

Sample Name: CCB Acquired: 5/9/2019 9:41:11 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15777 | 30.337 | 1.5567 | 7.2082 | .33115 | -.02237 | 48.287 | .1929 |
| Stddev | .20222 | 10.575 | 1.2434 | .8915 | .23492 | .23688 | 1.100 | .1390 |
| %RSD | 128.18 | 34.859 | 79.877 | 12.369 | 70.941 | 1058.9 | 2.2788 | 72.05 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27148 | -.19328 | .18325 | 2.9493 | 28.488 | -1.1455 | -10.504 | 1.0486 |
| Stddev | .13958 | .47997 | .33735 | 1.3632 | 42.232 | 1.6923 | 35.392 | .0567 |
| %RSD | 51.413 | 248.33 | 184.10 | 46.220 | 148.25 | 147.74 | 336.93 | 5.4107 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59759 | 42.002 | -.04407 | -.72569 | -.6386 | 4.0209 | .49813 | .18818 |
| Stddev | .36884 | 1.567 | .23248 | 1.5554 | 3.877 | 1.0107 | .49838 | .03465 |
| %RSD | 61.722 | 3.7304 | 527.50 | 214.33 | 607.2 | 25.135 | 100.05 | 18.411 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 9:41:11 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .32790 | .03040 | 6.1422 | -.30759 | 5.1504 |
| Stddev | .46775 | 2.1730 | .1567 | 1.6913 | 2.0681 |
| %RSD | 142.65 | 7147.2 | 2.5513 | 549.85 | 40.154 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4117.7 | 2342.8 | 23313. | 2528.9 |
| Stddev | 12.1 | 5.5 | 23. | 21.8 |
| %RSD | .29475 | .23376 | .10077 | .86342 |

Sample Name: IEC Check As  Acquired: 5/9/2019 9:45:55  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .44852 | 17.615 | 5233.5 | 3.6480 | .38035 | .06402 | 7.3464 | -.1062 |
| Stddev | .07314 | 7.212 | 9.4 | 1.0666 | .27049 | .10721 | 2.2290 | .2649 |
| %RSD | 16.308 | 40.940 | .17868 | 29.239 | 71.116 | 167.45 | 30.342 | 249.4 |
| Check ? | None | None | None | None | None | None | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .41364 | .02728 | .20837 | 3.0650 | 21.210 | -1.3458 | 15.421 | -.11174 |
| Stddev | .11510 | .24782 | .63000 | 5.4235 | 4.270 | .9574 | 36.988 | .05640 |
| %RSD | 27.825 | 908.58 | 302.34 | 176.95 | 20.132 | 71.134 | 239.86 | 50.476 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .25576 | 3.9615 | -.54861 | -.52298 | 1.426 | 1.7691 | .14520 | -.07179 |
| Stddev | .16966 | 5.2372 | .39040 | 1.3530 | 1.848 | 4.2855 | .18922 | .20410 |
| %RSD | 66.334 | 132.20 | 71.161 | 258.71 | 129.5 | 242.24 | 130.31 | 284.31 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check As  Acquired: 5/9/2019 9:45:55  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9373 | 4.4211 | -.11529 | 4.6367 | .89515 |
| Stddev | 1.7983 | 5.5058 | .11260 | 8.7161 | 7.5183 |
| %RSD | 92.828 | 124.54 | 97.662 | 187.98 | 839.88 |
| Check ? | None | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4309.1 | 2427.3 | 24088. | 2567.2 |
| Stddev | 12.0 | 6.3 | 49. | 16.5 |
| %RSD | .27895 | .25898 | .20136 | .64148 |

Sample Name: IEC Check Ti  Acquired: 5/9/2019 9:50:35  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0855 | 12.275 | 1.3889 | 67.973 | .26548 | -.40463 | 3.2614 | .4358 |
| Stddev | .5731 | 30.582 | .8710 | 15.419 | .08161 | .13274 | 1.9815 | .1168 |
| %RSD | 52.798 | 249.14 | 62.715 | 22.684 | 30.739 | 32.806 | 60.757 | 26.81 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5216 | 1.3706 | 8.5279 | 1.3334 | -31.863 | -1.3635 | -16.015 | .27776 |
| Stddev | .5008 | .1495 | .7044 | 3.8233 | 36.431 | .6225 | 20.042 | .04505 |
| %RSD | 32.915 | 10.904 | 8.2596 | 286.72 | 114.34 | 45.652 | 125.15 | 16.217 |
| Check ? | Chk Pass | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.5539 | -4.2004 | -1.3177 | -.57374 | -2.872 | 4.8055 | 2.7305 | 29381. |
| Stddev | .2346 | 1.1914 | .4920 | .70676 | .854 | 5.8590 | .7006 | 41. |
| %RSD | 5.1515 | 28.363 | 37.339 | 123.18 | 29.75 | 121.92 | 25.659 | .13814 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check Ti  Acquired: 5/9/2019 9:50:35  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.9473 | 5.8763 | -.44047 | 26684. | 7.5993 |
| Stddev | 3.7921 | 8.9632 | .09270 | 1971. | 3.6113 |
| %RSD | 63.762 | 152.53 | 21.045 | 7.3881 | 47.522 |
| Check ? | None | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4284.8 | 2440.1 | 24143. | 2604.8 |
| Stddev | 7.8 | 1.0 | 53. | 8.5 |
| %RSD | .18157 | .04248 | .21938 | .32558 |

Sample Name: IEC Check Co  Acquired: 5/9/2019 9:55:25  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .52151 | 19.128 | -.98814 | 37.036 | .18193 | .08044 | 11.576 | .4890 |
| Stddev | .20756 | 1.370 | 2.7102 | 4.155 | .12684 | .09491 | 5.580 | .0989 |
| %RSD | 39.800 | 7.1629 | 274.28 | 11.220 | 69.720 | 117.99 | 48.203 | 20.23 |
| Check ? | None | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9985.8 | -.55585 | -3.0219 | 5.6646 | -8.5339 | -.62308 | -17.675 | .14572 |
| Stddev | 19.6 | .30354 | .8035 | .2443 | 12.045 | 2.1097 | 31.738 | .04279 |
| %RSD | .19633 | 54.608 | 26.591 | 4.3129 | 141.14 | 338.59 | 179.57 | 29.365 |
| Check ? | None | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15988 | -17.875 | .29400 | 1.3084 | .3756 | 4.5596 | .66143 | 1.6730 |
| Stddev | .20050 | 3.830 | .44071 | .9694 | 1.829 | 5.9541 | .47482 | .4753 |
| %RSD | 125.41 | 21.427 | 149.90 | 74.089 | 487.0 | 130.58 | 71.786 | 28.411 |
| Check ? | None | None | Chk Pass | None | Chk Pass | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check Co  Acquired: 5/9/2019 9:55:25  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9188 | 5.0500 | -.08819 | 1325.6 | -1.3895 |
| Stddev | .1575 | 3.2365 | .12174 | 237.7 | 7.7787 |
| %RSD | 8.2075 | 64.089 | 138.04 | 17.930 | 559.81 |
| Check ? | Chk Pass | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4302.7 | 2427.9 | 24128. | 2662.8 |
| Stddev | 5.1 | .7 | 57. | 12.6 |
| %RSD | .11874 | .02891 | .23646 | .47430 |

Sample Name: IEC Check Al  Acquired: 5/9/2019 10:00:06  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23592 | 502320. | -.00365 | 26.156 | .61323 | .14357 | 28.114 |
| Stddev | .53512 | 4334. | 2.6030 | 1.100 | .12312 | .03289 | 3.131 |
| %RSD | 226.83 | .86289 | 71358. | 4.2035 | 20.078 | 22.912 | 11.137 |
| Check ? | None | None | Chk Pass | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0317 | -.09346 | 3.9924 | -1.0404 | 79.601 | -11.877 | -1.5086 |
| Stddev | .0952 | .20146 | .8970 | .6976 | 2.157 | 23.060 | 1.4488 |
| %RSD | 300.4 | 215.56 | 22.467 | 67.053 | 2.7101 | 194.16 | 96.042 |
| Check ? | None | None | None | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -8.7226 | .78787 | .15521 | 171.23 | 1.3572 | -2.0200 | 3.771 |
| Stddev | 42.549 | .03279 | .23144 | 9.96 | .2740 | .4942 | 4.698 |
| %RSD | 487.80 | 4.1621 | 149.12 | 5.8172 | 20.185 | 24.467 | 124.6 |
| Check ? | None | None | None | None | None | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: IEC Check Al  Acquired: 5/9/2019 10:00:06  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.00027 | -.13820 | 1.8465 | .00153 | 1.1240 | -.82638 | 131.35 |
| Stddev | 2.0779 | 1.4975 | .4911 | .96511 | 4.1257 | .29369 | 21.15 |
| %RSD | 777740. | 1083.6 | 26.597 | 63061. | 367.04 | 35.539 | 16.099 |
| Check ? | Chk Pass | None | None | Chk Pass | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 5.1111 |
| Stddev | 1.7167 |
| %RSD | 33.587 |
| Check ? | None |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3897.9 | 2412.7 | 22883. | 2685.4 |
| Stddev | 11.7 | 4.1 | 81. | 29.1 |
| %RSD | .29890 | .17194 | .35553 | 1.0829 |

Sample Name: IEC Check Fe  Acquired: 5/9/2019 10:04:49  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.90009 | 46.864 | .68100 | 13.685 | 1.5344 | -.08207 | -3.1889 |
| Stddev | .87402 | 29.952 | 2.6196 | .174 | .0989 | .16254 | 5.3856 |
| %RSD | 97.104 | 63.912 | 384.67 | 1.2687 | 6.4438 | 198.06 | 168.89 |
| Check ? | None | None | None | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2459 | -2.5590 | 1.7268 | -1.3772 | 511490. | -103.72 | -.55628 |
| Stddev | .0231 | .2257 | .2845 | 1.0695 | 3951. | 32.72 | 1.5646 |
| %RSD | 9.403 | 8.8212 | 16.474 | 77.653 | .77245 | 31.546 | 281.26 |
| Check ? | Chk Pass | None | None | Chk Pass | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -49.318 | .77085 | -1.5801 | -27.282 | -6.5209 | -1.2689 | 3.992 |
| Stddev | 20.671 | .04327 | .4273 | 4.014 | .4286 | 1.7251 | 3.273 |
| %RSD | 41.914 | 5.6130 | 27.043 | 14.714 | 6.5723 | 135.95 | 81.98 |
| Check ? | None | None | None | None | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: IEC Check Fe  Acquired: 5/9/2019 10:04:49  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04978 | 3.2155 | .14970 | 3.1517 | -4.1796 | 1.2289 | 25.777 |
| Stddev | 1.6536 | .4221 | .23370 | 1.4824 | 3.6624 | .1573 | 11.261 |
| %RSD | 3322.1 | 13.126 | 156.11 | 47.035 | 87.626 | 12.802 | 43.688 |
| Check ? | None | None | None | Chk Pass | Chk Pass | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 8.6828 |
| Stddev | 4.2618 |
| %RSD | 49.084 |
| Check ? | None |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4143.0 | 2362.5 | 23532. | 2623.2 |
| Stddev | 4.7 | 3.1 | 27. | 24.1 |
| %RSD | .11336 | .13244 | .11383 | .91839 |

Sample Name: IEC Check V  Acquired: 5/9/2019 10:09:32  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .20975 | -70.223 | 5.0965 | 9.5888 | -.00875 | 1.4322 | 2.0154 | .4705 |
| Stddev | .68066 | 13.872 | 2.7717 | .4888 | .25399 | .1380 | 5.9033 | .0593 |
| %RSD | 324.52 | 19.754 | 54.384 | 5.0980 | 2904.2 | 9.6331 | 292.90 | 12.60 |
| Check ? | None | Chk Pass | None | None | None | Chk Pass | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .51629 | -.54239 | -.82494 | 62.613 | -13.630 | -1.3001 | 9.8918 | 1.6033 |
| Stddev | .42797 | .11677 | .80478 | 11.585 | 11.814 | 1.4740 | 34.156 | .1114 |
| %RSD | 82.893 | 21.529 | 97.555 | 18.503 | 86.680 | 113.38 | 345.29 | 6.9451 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5636 | -45.865 | -.57277 | -.24118 | 2.317 | 3.5911 | 1.2004 | .03180 |
| Stddev | .4957 | .821 | .62610 | 1.5893 | 2.769 | 1.7825 | .7202 | .18681 |
| %RSD | 31.699 | 1.7906 | 109.31 | 658.99 | 119.5 | 49.636 | 59.997 | 587.39 |
| Check ? | None | None | None | None | Chk Pass | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check V  Acquired: 5/9/2019 10:09:32  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .15331 | 5142.6 | .05628 | 18.686 | 1.3180 |
| Stddev | .39862 | 25.2 | .09603 | 12.039 | 6.8193 |
| %RSD | 260.01 | .49049 | 170.62 | 64.427 | 517.39 |
| Check ? | Chk Pass | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4312.4 | 2433.4 | 24118. | 2652.8 |
| Stddev | 6.0 | 1.1 | 72. | 27.1 |
| %RSD | .13830 | .04483 | .29766 | 1.0208 |

Sample Name: CCV-4140446 Acquired: 5/9/2019 10:14:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1014.1 | 25389. | 507.32 | 5154.7 | 1997.0 | 2039.7 | 51231. | 514.6 |
| Stddev | 1.4 | 60. | 2.60 | 20.1 | 8.3 | 7.1 | 366. | .9 |
| %RSD | .13370 | .23792 | .51315 | .39022 | .41400 | .34825 | .71388 | .1680 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2029.2 | 2030.1 | 2039.3 | 26230. | 49789. | 5113.7 | 51211. | 2014.5 |
| Stddev | 1.8 | 4.3 | 4.7 | 198. | 181. | 28.4 | 331. | 3.0 |
| %RSD | .08926 | .21333 | .22823 | .75606 | .36398 | .55585 | .64637 | .14938 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1994.6 | 50298. | 2016.8 | 483.49 | 523.4 | 508.00 | 5118.0 | 5090.4 |
| Stddev | 4.3 | 214. | 2.1 | 4.12 | 6.3 | 6.29 | 1.4 | 4.4 |
| %RSD | .21427 | .42532 | .10517 | .85300 | 1.196 | 1.2391 | .02758 | .08614 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 10:14:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 973.73 | 2013.0 | 2032.1 | 5221.2 | 5018.3 |
| Stddev | .73 | 8.2 | 1.1 | 25.7 | 44.3 |
| %RSD | .07540 | .40602 | .05283 | .49235 | .88192 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3743.4 | 2296.7 | 22894. | 2580.6 |
| Stddev | 3.5 | 4.7 | 44. | 8.3 |
| %RSD | .09417 | .20630 | .19213 | .32195 |

Sample Name: CCB Acquired: 5/9/2019 10:18:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03353 | 13.824 | -1.6863 | 16.156 | .04238 | -.02223 | 42.541 | .1351 |
| Stddev | .41688 | 13.345 | 1.1538 | 1.123 | .23297 | .05908 | .696 | .0848 |
| %RSD | 1243.4 | 96.536 | 68.419 | 6.9482 | 549.76 | 265.77 | 1.6354 | 62.76 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .26347 | -.35897 | .12474 | 5.6909 | 21.973 | -.29304 | 13.249 | 1.1085 |
| Stddev | .26082 | .44528 | .35150 | 1.6620 | 49.214 | .90043 | 31.503 | .0274 |
| %RSD | 98.991 | 124.05 | 281.79 | 29.205 | 223.98 | 307.27 | 237.78 | 2.4760 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .63524 | -4.0615 | -.56173 | -.34908 | .6313 | 1.5830 | .83595 | .12873 |
| Stddev | .04668 | 7.7020 | .15672 | .74593 | 3.014 | 4.1516 | .36547 | .22900 |
| %RSD | 7.3488 | 189.63 | 27.899 | 213.68 | 477.4 | 262.26 | 43.719 | 177.89 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 10:18:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.5196 | .02891 | 5.8439 | 9.2714 | 6.6844 |
| Stddev | 3.6518 | 3.6562 | .1623 | 13.463 | 5.9279 |
| %RSD | 144.94 | 12645. | 2.7776 | 145.21 | 88.683 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4195.1 | 2373.0 | 23479. | 2615.9 |
| Stddev | 2.9 | 1.0 | 11. | 22.9 |
| %RSD | .06929 | .04045 | .04688 | .87666 |

Sample Name: LCS 240-379741/2-A Acquired: 5/9/2019 10:23:37 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.937 | 1908.4 | 2016.2 | 1029.8 | 1862.0 | 48.553 | 49222. | 50.59 |
| Stddev | .468 | 33.9 | 7.2 | 3.5 | 7.1 | .491 | 231. | .24 |
| %RSD | .91869 | 1.7778 | .35675 | .33746 | .38383 | 1.0104 | .46847 | .4826 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 486.23 | 198.35 | 251.66 | 1023.6 | 47579. | 972.04 | 50248. | 496.39 |
| Stddev | .95 | 1.27 | .73 | 8.2 | 233. | 4.43 | 533. | .52 |
| %RSD | .19523 | .64118 | .29044 | .80075 | .49017 | .45550 | 1.0607 | .10529 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 948.72 | 48280. | 486.84 | 477.78 | 524.3 | 2123.6 | 1964.8 | 974.23 |
| Stddev | 1.67 | 233. | .60 | .46 | 6.1 | 9.4 | 1.4 | 1.01 |
| %RSD | .17634 | .48286 | .12253 | .09719 | 1.161 | .44416 | .07087 | .10354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: LCS 240-379741/2-A Acquired: 5/9/2019 10:23:37 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1867.4 | 483.58 | 499.83 | 1068.1 | 962.16 |
| Stddev | 18.0 | 4.80 | 1.06 | 11.4 | 5.68 |
| %RSD | .96293 | .99327 | .21168 | 1.0636 | .59011 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3861.6 | 2314.3 | 23035. | 2628.3 |
| Stddev | 10.1 | 4.1 | 54. | 16.4 |
| %RSD | .26191 | .17512 | .23299 | .62567 |

Sample Name: lb 240-380089/1-b Acquired: 5/9/2019 10:27:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.24271 | 134.52 | 5.5816 | F 810.86 | 2.9763 | .04927 | 3309.6 |
| Stddev | .09384 | 17.85 | 1.6318 | 1.30 | .3742 | .16248 | 19.1 |
| %RSD | 38.662 | 13.268 | 29.235 | .16014 | 12.573 | 329.75 | .57833 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | None |
| High Limit | | | | 200.00 | | | |
| Low Limit | | | | -1000.0 | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1950 | .26315 | 3.1862 | -.23999 | 6.1307 | 408.52 | -.83459 |
| Stddev | .1256 | .29298 | .3434 | .07313 | 3.0150 | 19.88 | .93311 |
| %RSD | 64.39 | 111.34 | 10.777 | 30.471 | 49.179 | 4.8651 | 111.81 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 798.31 | 1.0683 | .47369 | 17587. | -.08161 | .25579 | .4994 |
| Stddev | 50.75 | .2192 | .41215 | 42. | .35718 | .81567 | 3.847 |
| %RSD | 6.3569 | 20.517 | 87.010 | .23805 | 437.66 | 318.88 | 770.4 |
| Check ? | None | Chk Pass | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: lb 240-380089/1-b Acquired: 5/9/2019 10:27:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.9841 | 2.5373 | .93158 | -7.8478 | 4.2499 | 17.393 | 497.85 |
| Stddev | 2.1945 | .8099 | .43264 | 1.6476 | 5.3345 | .107 | 9.34 |
| %RSD | 21.980 | 31.919 | 46.442 | 20.995 | 125.52 | .61490 | 1.8769 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 7.9479 |
| Stddev | .8758 |
| %RSD | 11.020 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4146.6 | 2347.5 | 23534. | 2670.8 |
| Stddev | 4.1 | 4.3 | 97. | 9.0 |
| %RSD | .09863 | .18322 | .41157 | .33612 |

Sample Name: mb 240-380268/2-a Acquired: 5/9/2019 10:32:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.17029 | -2.8036 | -.67453 | 8.5512 | .06777 | -.00261 | 56.266 | .3096 |
| Stddev | .46498 | 20.900 | 3.8370 | .7398 | .14842 | .05272 | 1.876 | .1830 |
| %RSD | 273.06 | 745.49 | 568.84 | 8.6519 | 219.00 | 2018.7 | 3.3348 | 59.12 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .26634 | .05396 | .70762 | 4.3783 | 33.237 | -.82633 | 9.5738 | .38795 |
| Stddev | .26317 | .44868 | .39717 | 3.5636 | 23.037 | 1.3638 | 25.970 | .03464 |
| %RSD | 98.809 | 831.56 | 56.128 | 81.393 | 69.313 | 165.04 | 271.26 | 8.9288 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .03623 | 91.086 | -.83182 | .48528 | -1.461 | 3.7909 | .77078 | -.11365 |
| Stddev | .31016 | 5.317 | .69905 | .67934 | 2.163 | 1.2515 | .47454 | .19910 |
| %RSD | 855.98 | 5.8379 | 84.038 | 139.99 | 148.1 | 33.013 | 61.566 | 175.19 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380268/2-a Acquired: 5/9/2019 10:32:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8061 | -.87025 | 2.5722 | 22.903 | 6.1935 |
| Stddev | 3.7948 | 9.2409 | .0388 | 8.588 | .5847 |
| %RSD | 210.11 | 1061.9 | 1.5080 | 37.497 | 9.4406 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4171.3 | 2360.8 | 23658. | 2601.7 |
| Stddev | 5.7 | 1.5 | 92. | 10.2 |
| %RSD | .13573 | .06190 | .38806 | .39102 |

Sample Name: Xlcs 240-380268/3-a Acquired: 5/9/2019 10:37:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32.045 | 1395.2 | 1356.3 | 1214.7 | 1263.9 | 32.843 | 34517. | 34.00 |
| Stddev | .915 | 47.7 | 7.4 | 1.6 | 4.3 | .372 | 79. | .04 |
| %RSD | 2.8544 | 3.4201 | .54591 | .12841 | .34255 | 1.1337 | .22922 | .1320 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 318.22 | 133.20 | 165.54 | 698.49 | 32057. | 656.89 | 33520. | 332.10 |
| Stddev | 1.68 | .39 | .52 | 3.87 | 77. | 3.21 | 175. | .75 |
| %RSD | .52885 | .28932 | .31438 | .55448 | .24161 | .48796 | .52160 | .22508 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 642.32 | 44115. | 317.94 | 325.81 | 349.7 | 1420.2 | 1293.2 | 650.14 |
| Stddev | 2.87 | 150. | 1.01 | .44 | 2.2 | 7.5 | 1.0 | .93 |
| %RSD | .44667 | .33915 | .31836 | .13632 | .6346 | .52705 | .07418 | .14367 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: Xlcs 240-380268/3-a Acquired: 5/9/2019 10:37:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1265.1 | 327.67 | 340.96 | 1128.4 | 653.96 |
| Stddev | 10.6 | 7.88 | .54 | 17.4 | .42 |
| %RSD | .83886 | 2.4039 | .15828 | 1.5392 | .06485 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3955.4 | 2332.3 | 23332. | 2636.8 |
| Stddev | 4.9 | 4.7 | 25. | 9.8 |
| %RSD | .12320 | .20130 | .10698 | .37017 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.871% | 99.050% | 100.02% | 103.50% |
| Range | | | | |

Sample Name: 240-111998-a-1-b Acquired: 5/9/2019 10:41:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.0142 | -12.768 | 7.8031 | 94.257 | 370.83 | 1.0157 |
| Stddev | .6034 | 7.885 | 4.4216 | 1.417 | .95 | .0905 |
| %RSD | 10.033 | 61.760 | 56.665 | 1.5031 | .25679 | 8.9133 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 2851600. | .0397 | -2.6150 | 444.36 | 38.444 | 6.9228 |
| Stddev | 30031. | .1456 | .3915 | .75 | 1.279 | 1.2195 |
| %RSD | 1.0531 | 366.9 | 14.973 | .16919 | 3.3273 | 17.615 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 666190. | 182.71 | 79.035 | 13.964 | 254.20 | F 791300. |
| Stddev | 717. | 3.06 | 8.248 | .177 | 1.60 | 8819. |
| %RSD | .10760 | 1.6728 | 10.436 | 1.2684 | .62945 | 1.1145 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | 500000. | | | | | 500000. |
| Low Limit | -500000. | | | | | -500000. |

Sample Name: 240-111998-a-1-b Acquired: 5/9/2019 10:41:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0419 | 1414.4 | 3.935 | 108.02 | 1.5464 | -5.1449 |
| Stddev | .4366 | 5.8 | 6.491 | 5.06 | 1.1037 | .1671 |
| %RSD | 8.6600 | .41013 | 165.0 | 4.6884 | 71.374 | 3.2477 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.6845 | .47786 | 2155.6 | 338.19 | 9876.1 |
| Stddev | 2.6189 | 4.2896 | 5.5 | 10.57 | 54.0 |
| %RSD | 55.906 | 897.66 | .25705 | 3.1256 | .54670 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2874.6 | 1899.5 | 19464. | 2405.2 |
| Stddev | 2.1 | 3.6 | 30. | 9.0 |
| %RSD | .07295 | .19154 | .15531 | .37367 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 69.674% | 80.667% | 83.441% | 94.411% |
| Range | | | | |

Sample Name: lcs 240-380268/3-a Acquired: 5/9/2019 10:48:05 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 44.521 | 2069.3 | 1987.0 | F 1778.9 | 1867.1 | 48.219 | 51184. |
| Stddev | .872 | 24.0 | 8.5 | 7.1 | 11.7 | .812 | 278. |
| %RSD | 1.9578 | 1.1600 | .42813 | .39682 | .62659 | 1.6841 | .54286 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | None |
| Value | | | | 1000.0 | | | |
| Range | | | | 20.500% | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.37 | 475.59 | 197.87 | 247.51 | 1019.8 | 47516. | 976.28 |
| Stddev | .05 | .60 | 1.14 | 1.35 | 7.5 | 334. | 3.35 |
| %RSD | .0971 | .12705 | .57489 | .54709 | .73959 | .70226 | .34351 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49571. | 490.15 | 946.97 | 64727. | 474.88 | 462.69 | 510.7 |
| Stddev | 395. | 1.95 | .83 | 424. | .91 | 1.25 | 3.2 |
| %RSD | .79680 | .39710 | .08739 | .65514 | .19144 | .26953 | .6295 |
| Check ? | None | Chk Pass | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: lcs 240-380268/3-a  Acquired: 5/9/2019 10:48:05  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2055.2 | 1897.9 | 969.49 | 1809.4 | 477.72 | 499.76 | F 1626.9 |
| Stddev | 10.0 | 6.6 | 2.22 | 16.9 | 3.91 | 1.42 | 6.7 |
| %RSD | .48587 | .34751 | .22908 | .93557 | .81876 | .28331 | .41234 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| Value | | | | | | | 1000.0 |
| Range | | | | | | | 20.500% |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 952.28 |
| Stddev | 12.35 |
| %RSD | 1.2973 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3757.1 | 2234.3 | 22584. | 2576.3 |
| Stddev | 3.2 | 1.0 | 69. | 19.3 |
| %RSD | .08407 | .04607 | .30456 | .74994 |

Sample Name: SD 240-111998-a1b@5 Acquired: 5/9/2019 10:52:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8502 | -18.367 | 2.7390 | 22.352 | 74.522 | .29028 | 615110. |
| Stddev | .7458 | 18.030 | .5799 | .716 | .735 | .11525 | 8341. |
| %RSD | 40.309 | 98.163 | 21.172 | 3.2056 | .98604 | 39.703 | 1.3559 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2677 | -1.1336 | 93.901 | 7.3891 | .21985 | 129540. | 32.272 |
| Stddev | .0523 | .0443 | .271 | 1.4569 | 4.2326 | 823. | 2.211 |
| %RSD | 19.54 | 3.9111 | .28809 | 19.716 | 1925.2 | .63512 | 6.8514 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15.661 | 3.1084 | 52.090 | 158600. | 1.0921 | 304.87 | 1.959 |
| Stddev | 36.718 | .0761 | .213 | 862. | .3478 | 1.88 | 3.022 |
| %RSD | 234.46 | 2.4473 | .40982 | .54325 | 31.842 | .61630 | 154.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-111998-a1b@5 Acquired: 5/9/2019 10:52:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 24.224 | 1.4249 | -1.3775 | -3.6104 | -3.7618 | 437.25 | 81.017 |
| Stddev | 4.409 | .5835 | .2534 | 2.5057 | 6.1426 | 2.00 | 13.281 |
| %RSD | 18.199 | 40.950 | 18.392 | 69.401 | 163.29 | .45825 | 16.393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2075.1 |
| Stddev | 2.7 |
| %RSD | .13097 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3399.4 | 2103.9 | 21196. | 2504.0 |
| Stddev | 4.2 | 1.8 | 149. | 9.8 |
| %RSD | .12312 | .08400 | .70197 | .39316 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.393% | 89.347% | 90.864% | 98.289% |
| Range | | | | |

Sample Name: PDS 240-111998-a-1-b  Acquired: 5/9/2019 10:57:16  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 35.874 | 2167.8 | 2316.6 | 1195.4 | 2414.7 | 50.771 |
| Stddev | .972 | 6.6 | 4.3 | 7.5 | 10.2 | .311 |
| %RSD | 2.7082 | .30586 | .18648 | .62648 | .42104 | .61231 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 2703400. | 58.30 | 527.96 | 617.10 | 323.12 | 1046.6 |
| Stddev | 20655. | .35 | 1.94 | 1.72 | 1.51 | 4.0 |
| %RSD | .76405 | .5960 | .36828 | .27892 | .46698 | .38103 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 685940. | 1326.1 | 50747. | 512.66 | 1242.0 | F 799250. |
| Stddev | 3266. | 4.1 | 242. | .18 | 6.9 | 8174. |
| %RSD | .47614 | .30912 | .47734 | .03592 | .55317 | 1.0227 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | 500000. | | | | | 500000. |
| Low Limit | -500000. | | | | | -500000. |

Sample Name: PDS 240-111998-a-1-b  Acquired: 5/9/2019 10:57:16  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 525.70 | 1763.8 | 608.3 | 2489.4 | 2166.2 | 1053.0 |
| Stddev | 1.19 | 4.5 | 1.6 | 8.4 | 4.1 | 1.2 |
| %RSD | .22584 | .25786 | .2620 | .33715 | .19149 | .10937 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1818.7 | 506.39 | 2528.5 | 1421.7 | 10254. |
| Stddev | 25.0 | 5.50 | 9.8 | 6.0 | 39. |
| %RSD | 1.3753 | 1.0857 | .38681 | .42530 | .37642 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2861.4 | 1892.2 | 19430. | 2424.4 |
| Stddev | 5.4 | 3.3 | 77. | 10.4 |
| %RSD | .18762 | .17634 | .39415 | .42731 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 69.355% | 80.359% | 83.294% | 95.165% |
| Range | | | | |

Sample Name: 240-111998-a-1c ms@5 Acquired: 5/9/2019 11:01:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 214.36 | 411.30 | 1090.8 | 237.02 | 6271.6 | 10.173 | 531160. |
| Stddev | .94 | 24.62 | .9 | 1.27 | 7.6 | .280 | 4486. |
| %RSD | .43691 | 5.9863 | .08622 | .53509 | .12052 | 2.7534 | .84459 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 220.6 | 101.92 | 1097.4 | 59.021 | 207.40 | 119100. | 238.42 |
| Stddev | .4 | .20 | 2.4 | 1.137 | 4.97 | 252. | .57 |
| %RSD | .1633 | .19331 | .22252 | 1.9270 | 2.3950 | .21168 | .23810 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10070. | 106.55 | 241.30 | 142950. | 103.13 | 1159.4 | 111.5 |
| Stddev | 26. | .07 | .96 | 292. | .45 | 3.3 | 3.9 |
| %RSD | .25962 | .06691 | .39826 | .20395 | .43866 | .28183 | 3.478 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111998-a-1c ms@5 Acquired: 5/9/2019 11:01:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 238.82 | 414.70 | 205.37 | 374.01 | 97.131 | 471.31 | 288.16 |
| Stddev | 1.43 | 1.54 | .51 | 3.73 | .940 | 1.45 | 8.37 |
| %RSD | .59695 | .37118 | .24606 | .99720 | .96759 | .30668 | 2.9055 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1922.3 |
| Stddev | 9.9 |
| %RSD | .51689 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3419.1 | 2111.1 | 21309. | 2502.4 |
| Stddev | 2.2 | 3.3 | 30. | 5.4 |
| %RSD | .06463 | .15838 | .14200 | .21583 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.871% | 89.653% | 91.352% | 98.225% |
| Range | | | | |

Sample Name: 240-111998-a1d msd@5 Acquired: 5/9/2019 11:06:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 234.16 | 429.91 | 1205.3 | 259.12 | 5277.2 | 11.263 | 577370. |
| Stddev | .92 | 24.60 | 3.7 | .91 | 16.5 | .023 | 4023. |
| %RSD | .39280 | 5.7212 | .30295 | .35071 | .31323 | .20361 | .69674 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 243.3 | 113.46 | 1218.5 | 66.549 | 238.77 | 129760. | 265.40 |
| Stddev | .8 | .92 | 1.8 | .377 | 5.57 | 380. | .84 |
| %RSD | .3428 | .81148 | .14661 | .56700 | 2.3332 | .29270 | .31790 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11432. | 116.88 | 266.19 | 155980. | 114.64 | 1235.1 | 126.4 |
| Stddev | 98. | .16 | 1.23 | 453. | .60 | 2.1 | 3.2 |
| %RSD | .85854 | .13443 | .46255 | .29039 | .52593 | .17091 | 2.518 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111998-a1d msd@5 Acquired: 5/9/2019 11:06:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 262.82 | 459.79 | 228.82 | 408.57 | 115.60 | 511.53 | 327.67 |
| Stddev | 4.40 | 1.86 | .49 | 4.75 | 7.87 | .97 | 6.00 |
| %RSD | 1.6741 | .40379 | .21612 | 1.1621 | 6.8054 | .18912 | 1.8296 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2069.6 |
| Stddev | 20.1 |
| %RSD | .97121 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3391.0 | 2100.4 | 21172. | 2501.7 |
| Stddev | 5.3 | 3.5 | 23. | 5.1 |
| %RSD | .15652 | .16875 | .10952 | .20359 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.191% | 89.200% | 90.763% | 98.201% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 11:11:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1025.1 | 25325. | 504.46 | 5195.0 | 1949.1 | 2024.6 | 50844. | 518.6 |
| Stddev | 3.6 | 228. | 1.26 | 51.5 | 17.4 | 19.7 | 396. | .4 |
| %RSD | .34903 | .89874 | .25033 | .99039 | .89268 | .97277 | .77901 | .0702 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2023.2 | 2055.9 | 2059.0 | 26376. | 49189. | 5144.6 | 51265. | 2042.6 |
| Stddev | 1.9 | 4.2 | 9.5 | 190. | 507. | 42.3 | 311. | 6.2 |
| %RSD | .09510 | .20578 | .46234 | .71973 | 1.0303 | .82268 | .60590 | .30583 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1973.3 | 49772. | 2005.1 | 475.32 | 526.9 | 506.14 | 5105.8 | 5112.4 |
| Stddev | 2.1 | 465. | 3.2 | 3.62 | 4.6 | 3.61 | 8.9 | 14.2 |
| %RSD | .10846 | .93458 | .15891 | .76060 | .8663 | .71231 | .17416 | .27781 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 11:11:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 968.63 | 2013.2 | 2023.1 | 5272.0 | 4965.8 |
| Stddev | 14.66 | 4.8 | 3.7 | 41.9 | 37.7 |
| %RSD | 1.5137 | .23909 | .18348 | .79519 | .75972 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3685.6 | 2257.6 | 22419. | 2553.5 |
| Stddev | 10.8 | 6.0 | 24. | 21.3 |
| %RSD | .29395 | .26358 | .10544 | .83612 |

Sample Name: CCB Acquired: 5/9/2019 11:15:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.05984 | -13.356 | -.02633 | 9.9191 | .14357 | -.01402 | 68.322 | .1094 |
| Stddev | .24566 | 15.713 | .83082 | .7822 | .14625 | .02047 | 2.425 | .1029 |
| %RSD | 410.55 | 117.65 | 3155.1 | 7.8856 | 101.86 | 145.93 | 3.5492 | 94.08 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .09580 | -.09801 | .27997 | -.48216 | 119.12 | -.21743 | 10.170 | 1.1085 |
| Stddev | .20558 | .16410 | .84083 | 2.9025 | 18.21 | 2.0166 | 50.715 | .1202 |
| %RSD | 214.59 | 167.43 | 300.32 | 601.98 | 15.287 | 927.47 | 498.65 | 10.841 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .46619 | 174.43 | -.36946 | .07076 | -.7185 | 4.0910 | 1.0476 | .26346 |
| Stddev | .26419 | 16.05 | .15084 | 1.2728 | 3.203 | 1.4665 | .4652 | .12358 |
| %RSD | 56.670 | 9.2025 | 40.828 | 1798.8 | 445.8 | 35.848 | 44.407 | 46.908 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 11:15:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.65978 | 5.0260 | 5.9305 | 11.418 | 3.4461 |
| Stddev | .33005 | 1.5316 | .1125 | 10.280 | .6317 |
| %RSD | 50.023 | 30.473 | 1.8973 | 90.034 | 18.331 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4138.2 | 2338.0 | 23314. | 2595.8 |
| Stddev | 3.2 | 2.6 | 18. | 7.7 |
| %RSD | .07638 | .11315 | .07874 | .29662 |

Sample Name: 240-112010-b-1-c Acquired: 5/9/2019 11:20:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.63664 | 113400. | 3.8946 | 7486.8 | 13.916 | .50996 |
| Stddev | .60930 | 472. | 2.6686 | 38.2 | .293 | .06763 |
| %RSD | 95.706 | .41602 | 68.521 | .51021 | 2.1075 | 13.262 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 375400. | .3518 | -1.6944 | 1063.0 | -1.0656 | .13657 |
| Stddev | 2130. | .0960 | .2109 | 2.3 | .5591 | 3.8880 |
| %RSD | .56731 | 27.28 | 12.450 | .21253 | 52.470 | 2846.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 484350. | 10.862 | 175.58 | .67669 | 6773.5 | F 1800000. |
| Stddev | 2102. | 2.216 | 15.37 | .01413 | 29.7 | 18512. |
| %RSD | .43388 | 20.405 | 8.7520 | 2.0888 | .43802 | 1.0285 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | 450000. | | | | | 500000. |
| Low Limit | -500000. | | | | | -500000. |

Sample Name: 240-112010-b-1-c Acquired: 5/9/2019 11:20:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.4069 | -5.6246 | 31.48 | 248.03 | 3.3329 | -.15177 |
| Stddev | 1.3809 | .5409 | 4.25 | 8.36 | 1.1370 | .50591 |
| %RSD | 98.152 | 9.6168 | 13.51 | 3.3691 | 34.115 | 333.33 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 11.859 | 979.84 | 6.7175 | 343.39 | 545.72 |
| Stddev | 4.660 | 4.53 | .4192 | 12.15 | 9.82 |
| %RSD | 39.299 | .46187 | 6.2402 | 3.5374 | 1.7991 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3010.2 | 2092.9 | 20777. | 2550.3 |
| Stddev | 2.9 | 4.0 | 37. | 17.9 |
| %RSD | .09602 | .18977 | .17721 | .70029 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 72.960% | 88.883% | 89.068% | 100.11% |
| Range | | | | |

Sample Name: lb 240-380087/1-b Acquired: 5/9/2019 11:25:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .74679 | 1.0960 | 4.0956 | F 703.46 | 3.5238 | .02956 |
| Stddev | .39257 | 7.8157 | 2.0074 | 6.84 | .1609 | .07803 |
| %RSD | 52.568 | 713.09 | 49.015 | .97189 | 4.5672 | 263.93 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 200.00 | | |
| Low Limit | | | | -1000.0 | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3103.0 | .1686 | -.04548 | 2.3617 | .31755 | 4.2246 |
| Stddev | 35.5 | .1402 | .19382 | .6002 | .89110 | .9547 |
| %RSD | 1.1433 | 83.17 | 426.19 | 25.415 | 280.61 | 22.599 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1946.8 | 4.5809 | 764.97 | .28139 | 2.5083 | 1318900. |
| Stddev | 57.3 | 2.4265 | 23.67 | .07326 | .1428 | 26634. |
| %RSD | 2.9448 | 52.969 | 3.0947 | 26.035 | 5.6914 | 2.0194 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: lb 240-380087/1-b Acquired: 5/9/2019 11:25:08 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.8305 | .66103 | -3.174 | 12.279 | 2.6396 | -.10495 |
| Stddev | .6625 | .82598 | 2.844 | 1.458 | .7135 | .25953 |
| %RSD | 23.406 | 124.95 | 89.59 | 11.875 | 27.030 | 247.29 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -10.413 | 1.7772 | 5.3286 | 490.07 | 4.0519 |
| Stddev | 3.529 | 4.2000 | .1008 | 17.99 | 10.291 |
| %RSD | 33.885 | 236.33 | 1.8907 | 3.6709 | 253.99 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3454.3 | 2186.9 | 21598. | 2621.3 |
| Stddev | 9.5 | 6.1 | 134. | 33.5 |
| %RSD | .27441 | .27885 | .61934 | 1.2780 |

Sample Name: mb 240-380255/2-a Acquired: 5/9/2019 11:29:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .21110 | -6.4655 | -1.3670 | 9.1314 | -.09554 | -.06658 | 76.359 | .1074 |
| Stddev | .05115 | 3.9048 | 1.1789 | 1.0383 | .19570 | .02170 | 3.229 | .0844 |
| %RSD | 24.231 | 60.395 | 86.244 | 11.371 | 204.83 | 32.596 | 4.2280 | 78.58 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .24219 | -.03150 | -1.3819 | 1.3621 | 356.47 | 1.6514 | 6.6535 | .45588 |
| Stddev | .11653 | .38203 | .2577 | 1.4385 | 42.70 | .7027 | 32.350 | .06518 |
| %RSD | 48.117 | 1212.8 | 18.648 | 105.61 | 11.979 | 42.549 | 486.21 | 14.297 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .36348 | 801.55 | -1.0531 | .74325 | -1.163 | 3.5690 | 1.4404 | .01844 |
| Stddev | .09590 | 41.06 | .2817 | 1.0522 | 1.571 | 1.5366 | .4869 | .16843 |
| %RSD | 26.384 | 5.1228 | 26.749 | 141.57 | 135.0 | 43.054 | 33.806 | 913.21 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380255/2-a Acquired: 5/9/2019 11:29:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.1538 | 1.9895 | 3.3923 | 21.190 | 3.0860 |
| Stddev | 2.8366 | 5.0915 | .1302 | 10.542 | 5.4069 |
| %RSD | 89.941 | 255.92 | 3.8391 | 49.751 | 175.21 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4253.5 | 2393.1 | 24432. | 2787.1 |
| Stddev | 6.2 | 2.7 | 44. | 11.5 |
| %RSD | .14689 | .11348 | .18112 | .41195 |

Sample Name: lcs 240-380255/3-a Acquired: 5/9/2019 11:34:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.968 | 1993.3 | 2131.8 | F 1744.9 | 1885.8 | 49.392 |
| Stddev | .228 | 32.8 | 11.9 | 11.7 | 15.0 | .451 |
| %RSD | .47492 | 1.6454 | .55614 | .66900 | .79441 | .91345 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | | 1000.0 | | |
| Range | | | | 20.500% | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51008. | 51.72 | 510.86 | 205.15 | 263.55 | 1043.7 |
| Stddev | 450. | .26 | .87 | .74 | 1.52 | 15.4 |
| %RSD | .88253 | .5119 | .17024 | .36140 | .57786 | 1.4781 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51664. | 1037.0 | 49411. | 501.58 | 952.08 | 1410000. |
| Stddev | 520. | 9.2 | 539. | 1.85 | 3.18 | 15641. |
| %RSD | 1.0057 | .89007 | 1.0913 | .36957 | .33441 | 1.1093 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| Value | | | | | | |
| Range | | | | | | |

Sample Name: lcs 240-380255/3-a Acquired: 5/9/2019 11:34:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 508.38 | 446.46 | 543.9 | 2200.6 | 2047.2 | 999.50 |
| Stddev | 1.11 | 2.85 | 2.9 | .9 | 11.6 | 1.61 |
| %RSD | .21816 | .63851 | .5359 | .03983 | .56712 | .16141 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1763.5 | 488.24 | 543.57 | F 1632.5 | 953.57 |
| Stddev | 22.8 | 4.01 | 2.27 | 21.6 | 9.14 |
| %RSD | 1.2902 | .82109 | .41798 | 1.3225 | .95830 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| Value | | | | 1000.0 | |
| Range | | | | 20.500% | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3348.0 | 2165.5 | 21634. | 2671.8 |
| Stddev | 9.8 | 4.7 | 74. | 28.2 |
| %RSD | .29300 | .21566 | .33989 | 1.0543 |

Sample Name: 240-111948-a-1-d Acquired: 5/9/2019 11:39:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.3366 | 27.002 | 5.7830 | 2413.6 | 158.16 | .33049 |
| Stddev | .1578 | 25.425 | 2.3162 | 5.8 | .67 | .17746 |
| %RSD | 6.7517 | 94.158 | 40.052 | .24221 | .42288 | 53.697 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 897870. | .3395 | -1.6200 | 41.351 | -.43252 | -2.4123 |
| Stddev | 6055. | .2111 | .1124 | .356 | 1.5463 | 1.3339 |
| %RSD | .67435 | 62.17 | 6.9379 | .86113 | 357.51 | 55.294 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7128.5 | 68.020 | 19358. | -.00391 | 57.256 | F 1318100. |
| Stddev | 63.3 | .973 | 148. | .03747 | .137 | 1007. |
| %RSD | .88789 | 1.4306 | .76630 | 958.25 | .23947 | .07641 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111948-a-1-d  Acquired: 5/9/2019 11:39:14  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.4193 | 2.2832 | 4.431 | 66.475 | 2.2465 | -1.9607 |
| Stddev | .6087 | 2.2103 | 3.526 | 5.065 | .5198 | .1002 |
| %RSD | 25.161 | 96.808 | 79.57 | 7.6199 | 23.139 | 5.1110 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -7.0401 | 82.761 | 1.8658 | 10140. | 4584.6 |
| Stddev | 6.5056 | 5.427 | .2765 | 44. | 26.5 |
| %RSD | 92.408 | 6.5577 | 14.820 | .43786 | .57865 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3197.0 | 2068.9 | 21111. | 2654.6 |
| Stddev | 4.5 | 1.3 | 43. | 19.8 |
| %RSD | .14190 | .06493 | .20387 | .74600 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.488% | 87.863% | 90.503% | 104.20% |
| Range | | | | |

Sample Name: SD 240-111948-a-1d@5 Acquired: 5/9/2019 11:44:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.43280 | 24.754 | 2.2799 | 482.37 | 31.439 | .13304 | 188420. |
| Stddev | .43583 | 26.926 | .6576 | 4.06 | .135 | .07607 | 708. |
| %RSD | 100.70 | 108.77 | 28.843 | .84211 | .43005 | 57.179 | .37565 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1933 | -.42822 | 8.0432 | -.90167 | -3.1325 | 1456.0 | 13.196 |
| Stddev | .0734 | .14902 | .2052 | .82074 | 2.5873 | 45.1 | 1.476 |
| %RSD | 37.96 | 34.801 | 2.5515 | 91.024 | 82.594 | 3.0963 | 11.183 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3953.5 | .14801 | 11.795 | 278130. | .24536 | -2.3825 | -2.391 |
| Stddev | 59.3 | .06684 | .226 | 1465. | .45017 | .5048 | .330 |
| %RSD | 1.5002 | 45.161 | 1.9161 | .52683 | 183.48 | 21.186 | 13.81 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-111948-a-1d@5 Acquired: 5/9/2019 11:44:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15.638 | 1.0453 | -.59310 | -3.6338 | 13.104 | .62143 | 2013.9 |
| Stddev | 1.066 | .9818 | .11816 | 2.4649 | .545 | .09976 | 7.2 |
| %RSD | 6.8172 | 93.920 | 19.923 | 67.833 | 4.1575 | 16.053 | .35942 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 953.81 |
| Stddev | 6.53 |
| %RSD | .68465 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3767.4 | 2296.8 | 23304. | 2761.8 |
| Stddev | 6.1 | 2.0 | 38. | 21.6 |
| %RSD | .16279 | .08756 | .16448 | .78233 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.314% | 97.540% | 99.903% | 108.41% |
| Range | | | | |

Sample Name: PDS 240-111948-a-1-d  Acquired: 5/9/2019 11:48:58  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.904 | 2046.9 | 2142.8 | 3492.0 | 2112.7 | 49.631 |
| Stddev | .372 | 7.3 | 2.8 | 16.3 | 18.1 | .365 |
| %RSD | .70365 | .35884 | .13170 | .46698 | .85485 | .73629 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 988050. | 53.08 | 499.73 | 235.04 | 264.02 | 1010.5 |
| Stddev | 3502. | .28 | .48 | 1.68 | 1.42 | 5.9 |
| %RSD | .35443 | .5230 | .09511 | .71499 | .53788 | .58389 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 59843. | 1154.1 | 68885. | 478.78 | 991.62 | F 1421600. |
| Stddev | 542. | 8.6 | 660. | 2.14 | 1.59 | 12461. |
| %RSD | .90554 | .74862 | .95777 | .44598 | .16069 | .87659 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: PDS 240-111948-a-1-d  Acquired: 5/9/2019 11:48:58  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 495.98 | 428.74 | 555.8 | 2276.0 | 2025.4 | 989.91 |
| Stddev | 1.22 | 1.99 | 7.1 | 9.5 | 9.2 | 4.90 |
| %RSD | .24554 | .46427 | 1.272 | .41947 | .45625 | .49479 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1713.1 | 574.65 | 520.99 | 11687. | 5664.6 |
| Stddev | 25.0 | 4.24 | 3.05 | 156. | 55.9 |
| %RSD | 1.4591 | .73859 | .58454 | 1.3363 | .98709 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3128.3 | 2050.6 | 20985. | 2630.3 |
| Stddev | 4.4 | 2.0 | 69. | 14.9 |
| %RSD | .14158 | .09537 | .32687 | .56677 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.823% | 87.085% | 89.961% | 103.25% |
| Range | | | | |

Sample Name: 240-111948-a-1e ms@5 Acquired: 5/9/2019 11:53:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 166.74 | 382.06 | 989.00 | 680.23 | 3729.8 | 9.4809 | 197180. |
| Stddev | 1.25 | 19.40 | 1.32 | 2.10 | 10.9 | .2324 | 395. |
| %RSD | .74781 | 5.0766 | .13344 | .30899 | .29110 | 2.4517 | .20042 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 198.1 | 93.341 | 940.87 | 47.420 | 193.81 | 10749. | 205.64 |
| Stddev | .2 | .924 | 1.67 | .611 | 4.51 | 43. | .59 |
| %RSD | .1232 | .99031 | .17717 | 1.2876 | 2.3266 | .40436 | .28854 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13269. | 93.231 | 193.73 | 287210. | 93.474 | 815.73 | 105.0 |
| Stddev | 158. | .293 | 1.01 | 4272. | .383 | 3.69 | .6 |
| %RSD | 1.1921 | .31431 | .52214 | 1.4876 | .40960 | .45275 | .5599 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111948-a-1e ms@5 Acquired: 5/9/2019 11:53:35 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 212.81 | 378.58 | 188.04 | 335.52 | 107.69 | 94.841 | 2244.8 |
| Stddev | 3.23 | .71 | .72 | 1.42 | 2.69 | .271 | 10.4 |
| %RSD | 1.5190 | .18795 | .38520 | .42297 | 2.5011 | .28606 | .46157 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1115.2 |
| Stddev | 11.9 |
| %RSD | 1.0644 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3695.0 | 2262.6 | 22992. | 2711.5 |
| Stddev | 8.8 | 2.8 | 89. | 16.2 |
| %RSD | .23795 | .12552 | .38757 | .59787 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.558% | 96.086% | 98.565% | 106.44% |
| Range | | | | |

Sample Name: 240-111948-a1f msd@5 Acquired: 5/9/2019 11:58:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 197.09 | 403.12 | 1059.0 | 722.66 | 2586.8 | 10.149 | 210680. |
| Stddev | .69 | 25.48 | 6.4 | 4.65 | 30.2 | .204 | 1928. |
| %RSD | .35074 | 6.3216 | .60210 | .64320 | 1.1665 | 2.0080 | .91509 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 212.1 | 99.356 | 1008.9 | 51.032 | 203.75 | 11372. | 219.00 |
| Stddev | .8 | .406 | 2.8 | .299 | 2.78 | 155. | 2.17 |
| %RSD | .3751 | .40818 | .28225 | .58672 | 1.3646 | 1.3620 | .99114 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 14103. | 99.214 | 206.30 | 309510. | 100.11 | 849.61 | 110.0 |
| Stddev | 58. | .108 | 1.26 | 3115. | .16 | 1.17 | 2.9 |
| %RSD | .40917 | .10934 | .61291 | 1.0063 | .15485 | .13753 | 2.614 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111948-a1f msd@5 Acquired: 5/9/2019 11:58:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 227.62 | 405.42 | 201.15 | 360.22 | 109.70 | 101.30 | 2387.1 |
| Stddev | 6.45 | .25 | .13 | 1.99 | 3.44 | .31 | 34.8 |
| %RSD | 2.8322 | .06255 | .06617 | .55117 | 3.1342 | .30429 | 1.4562 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1186.0 |
| Stddev | 9.2 |
| %RSD | .77529 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3646.8 | 2242.2 | 22594. | 2662.3 |
| Stddev | 9.3 | 8.3 | 59. | 36.9 |
| %RSD | .25620 | .36857 | .25932 | 1.3848 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.391% | 95.224% | 96.859% | 104.51% |
| Range | | | | |

Sample Name: 680-168469-a-1-c Acquired: 5/9/2019 12:02:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.58270 | F 874070. | 112.51 | 2546.7 | 520.59 | .31092 |
| Stddev | .44032 | 3177. | 2.75 | 6.4 | 1.48 | .12584 |
| %RSD | 75.565 | .36342 | 2.4480 | .25105 | .28363 | 40.472 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 500000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 247680. | 3.330 | 14.622 | 13.957 | 38.138 | 1295.6 |
| Stddev | 1059. | .121 | .644 | .450 | .251 | 12.7 |
| %RSD | .42775 | 3.646 | 4.4066 | 3.2217 | .65916 | .97726 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 57520. | 391.96 | 67321. | 1846.1 | 5300.6 | 251010. |
| Stddev | 258. | 1.64 | 540. | 3.0 | 14.1 | 773. |
| %RSD | .44843 | .41829 | .80243 | .16402 | .26635 | .30792 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 680-168469-a-1-c Acquired: 5/9/2019 12:02:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.023 | 3.1459 | 15.54 | 50.950 | 16.553 | 57.499 |
| Stddev | .807 | 2.8103 | 2.65 | 8.160 | .915 | .230 |
| %RSD | 1.5820 | 89.333 | 17.08 | 16.016 | 5.5259 | .39916 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -34.304 | 113.55 | 331.25 | 17755. | 2082.2 |
| Stddev | 4.365 | 8.76 | 1.19 | 173. | 14.2 |
| %RSD | 12.725 | 7.7162 | .35835 | .97218 | .68066 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3447.7 | 2258.1 | 22487. | 2776.4 |
| Stddev | 2.4 | 4.3 | 59. | 9.1 |
| %RSD | .06955 | .19021 | .26388 | .32609 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.565% | 95.897% | 96.401% | 108.98% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 12:07:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1026.8 | 25678. | 510.62 | 5244.2 | 1989.8 | 2063.7 | 51182. | 521.4 |
| Stddev | 1.1 | 205. | 3.30 | 46.5 | 10.0 | 7.9 | 184. | 1.5 |
| %RSD | .10632 | .79663 | .64713 | .88646 | .50119 | .38331 | .35895 | .2940 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2040.2 | 2059.6 | 2081.8 | 26590. | 49813. | 5208.3 | 51345. | 2050.2 |
| Stddev | 2.2 | 2.6 | 5.6 | 80. | 228. | 19.1 | 232. | 1.8 |
| %RSD | .10633 | .12487 | .27022 | .30174 | .45740 | .36721 | .45112 | .08770 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1993.0 | 50118. | 2017.7 | 481.78 | 546.1 | 516.50 | 5125.4 | 5160.7 |
| Stddev | 2.9 | 204. | 2.2 | 4.48 | 4.2 | 3.90 | 1.7 | 2.2 |
| %RSD | .14537 | .40675 | .11070 | .92928 | .7753 | .75461 | .03372 | .04298 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 12:07:30 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 962.26 | 2028.8 | 2016.3 | 5299.9 | 4989.7 |
| Stddev | 14.33 | 5.6 | 1.6 | 12.0 | 29.2 |
| %RSD | 1.4895 | .27689 | .07858 | .22651 | .58435 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3815.4 | 2330.2 | 23306. | 2680.2 |
| Stddev | 6.1 | 4.6 | 20. | 6.1 |
| %RSD | .16038 | .19793 | .08709 | .22946 |

Sample Name: CCB Acquired: 5/9/2019 12:11:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .52482 | 4.2739 | .73564 | 10.174 | -.09291 | .00114 | 46.667 | .1272 |
| Stddev | .14785 | 13.679 | 2.3575 | .168 | .34973 | .09985 | 4.329 | .0471 |
| %RSD | 28.172 | 320.05 | 320.46 | 1.6543 | 376.43 | 8761.3 | 9.2773 | 37.06 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .37287 | .09986 | -.47032 | 4.0683 | 103.70 | -.11806 | 2.1759 | 1.1829 |
| Stddev | .25485 | .27111 | .14383 | 3.4399 | 9.72 | 1.6404 | 37.470 | .0317 |
| %RSD | 68.348 | 271.49 | 30.581 | 84.554 | 9.3709 | 1389.5 | 1722.0 | 2.6815 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59144 | 306.58 | -.77082 | -1.0415 | .6466 | 1.4948 | 1.6483 | .20444 |
| Stddev | .12347 | 14.38 | .53045 | 2.0482 | 1.001 | 1.0535 | .1254 | .17548 |
| %RSD | 20.876 | 4.6907 | 68.816 | 196.65 | 154.7 | 70.475 | 7.6071 | 85.837 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 12:11:52 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .19169 | .74288 | 5.8491 | 7.2555 | -2.8772 |
| Stddev | 3.2321 | 5.5863 | .3031 | 6.7719 | 2.9907 |
| %RSD | 1686.1 | 751.97 | 5.1820 | 93.335 | 103.94 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4263.9 | 2409.6 | 24317. | 2739.0 |
| Stddev | 12.5 | .9 | 87. | 15.5 |
| %RSD | .29321 | .03724 | .35651 | .56539 |

Sample Name: mb 240-380224/1-a Acquired: 5/9/2019 12:16:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .30797 | -8.1074 | 1.2722 | 7.5663 | -.14835 | -.01644 | 23.529 | -.0309 |
| Stddev | .29717 | 16.815 | 1.1967 | .4046 | .22655 | .16348 | 4.413 | .0544 |
| %RSD | 96.492 | 207.41 | 94.066 | 5.3478 | 152.72 | 994.61 | 18.755 | 176.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .72811 | -.32069 | -.24744 | 1.0948 | 82.209 | -.80261 | -9.6899 | .09253 |
| Stddev | .15168 | .42555 | .34274 | 4.1954 | 16.837 | .56816 | 30.242 | .04272 |
| %RSD | 20.832 | 132.70 | 138.52 | 383.22 | 20.481 | 70.789 | 312.09 | 46.164 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .00469 | 239.55 | -.80872 | -.14670 | -1.376 | 2.1714 | 1.3736 | -.21519 |
| Stddev | .25503 | 2.30 | .80969 | 1.1890 | .949 | 3.0768 | .1789 | .08395 |
| %RSD | 5438.9 | .96208 | 100.12 | 810.50 | 68.98 | 141.69 | 13.024 | 39.010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380224/1-a Acquired: 5/9/2019 12:16:36 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.1444 | .04654 | 1.8343 | 9.1565 | -1.2838 |
| Stddev | 2.7415 | 3.6652 | .2080 | 5.7207 | 6.2913 |
| %RSD | 239.55 | 7875.9 | 11.338 | 62.477 | 490.06 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4347.3 | 2443.9 | 24464. | 2760.9 |
| Stddev | 9.9 | 6.2 | 48. | 25.4 |
| %RSD | .22718 | .25234 | .19482 | .91903 |

Sample Name: lcs 240-380224/2-a Acquired: 5/9/2019 12:21:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.862 | 2103.3 | 2135.7 | 1086.7 | 1986.4 | 52.446 | 50534. | 53.22 |
| Stddev | .528 | 30.3 | 4.4 | 1.2 | 9.9 | .255 | 198. | .12 |
| %RSD | 1.1027 | 1.4384 | .20573 | .10830 | .49839 | .48538 | .39108 | .2215 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 509.96 | 209.99 | 265.23 | 1083.4 | 50337. | 1042.6 | 51703. | 526.03 |
| Stddev | .98 | .48 | 1.41 | 5.2 | 270. | 4.3 | 53. | 1.86 |
| %RSD | .19310 | .23080 | .53320 | .47579 | .53645 | .41458 | .10175 | .35434 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 994.16 | 50589. | 510.48 | 500.87 | 564.7 | 2227.7 | 2055.9 | 1031.0 |
| Stddev | 1.21 | 218. | .71 | 2.10 | 4.6 | 11.2 | .8 | 2.1 |
| %RSD | .12131 | .43063 | .13973 | .41878 | .8218 | .50352 | .04015 | .20152 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380224/2-a Acquired: 5/9/2019 12:21:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1924.4 | 506.38 | 518.25 | 1103.2 | 1011.3 |
| Stddev | 15.3 | 5.36 | .11 | 8.2 | 5.4 |
| %RSD | .79600 | 1.0576 | .02073 | .73890 | .53201 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3920.1 | 2342.8 | 23570. | 2718.7 |
| Stddev | 2.9 | 4.1 | 44. | 14.7 |
| %RSD | .07419 | .17507 | .18676 | .54104 |

Sample Name: 240-112152-a-2-a Acquired: 5/9/2019 12:25:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.98218 | 157.85 | 5.3289 | 155.85 | 283.34 | .14000 | 432020. |
| Stddev | .23133 | 25.16 | 2.2886 | 2.07 | 1.55 | .05939 | 2500. |
| %RSD | 23.552 | 15.936 | 42.947 | 1.3306 | .54751 | 42.421 | .57871 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3120 | -.88008 | 2.8404 | 11.119 | 2075.4 | 4697.0 | 3475.3 |
| Stddev | .0146 | .10072 | .2852 | 1.103 | 8.1 | 44.0 | 17.4 |
| %RSD | 4.678 | 11.445 | 10.040 | 9.9229 | .39084 | .93689 | .50175 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 58053. | 147.63 | 8.2838 | 102280. | 2.4483 | 1.2594 | -1.303 |
| Stddev | 444. | .20 | .5903 | 471. | .9436 | 1.3066 | 3.215 |
| %RSD | .76515 | .13823 | 7.1262 | .46046 | 38.540 | 103.74 | 246.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-2-a  Acquired: 5/9/2019 12:25:39  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.7979 | 1.5604 | -.44400 | 3.2475 | -1.9713 | 237.95 | 12373. |
| Stddev | .7603 | .3822 | .05614 | 2.3047 | 3.0996 | .90 | 406. |
| %RSD | 20.020 | 24.497 | 12.645 | 70.969 | 157.24 | .38016 | 3.2781 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 895.66 |
| Stddev | 10.15 |
| %RSD | 1.1337 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3664.9 | 2234.6 | 22636. | 2664.0 |
| Stddev | 3.3 | 3.1 | 97. | 22.8 |
| %RSD | .09090 | .13671 | .43041 | .85660 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.828% | 94.898% | 97.040% | 104.57% |
| Range | | | | |

Sample Name: SD 240-112152-a-2a@5 Acquired: 5/9/2019 12:30:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.04369 | 42.465 | 3.1276 | 33.783 | 59.057 | .25976 | 90815. | .1779 |
| Stddev | .14606 | 3.720 | 1.9058 | 1.176 | .313 | .04763 | 674. | .1551 |
| %RSD | 334.29 | 8.7610 | 60.936 | 3.4801 | .52953 | 18.336 | .74265 | 87.14 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23605 | .57478 | 1.9214 | 436.69 | 995.05 | 699.92 | 12119. | 31.720 |
| Stddev | .11742 | .33061 | .6159 | 1.11 | 12.15 | 4.62 | 67. | .155 |
| %RSD | 49.744 | 57.520 | 32.053 | .25425 | 1.2209 | .66019 | .54942 | .49008 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.4920 | 20878. | -.08918 | .65941 | 2.815 | 4.1515 | .70671 | -.02376 |
| Stddev | .1754 | 135. | .19106 | .39745 | 2.812 | 2.7113 | .61261 | .16628 |
| %RSD | 11.757 | .64584 | 214.24 | 60.274 | 99.89 | 65.307 | 86.685 | 699.73 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112152-a-2a@5 Acquired: 5/9/2019 12:30:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .24586 | .95497 | 47.823 | 2800.4 | 190.64 |
| Stddev | .60917 | 4.5631 | .331 | 52.5 | 6.97 |
| %RSD | 247.77 | 477.83 | .69303 | 1.8753 | 3.6548 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4003.6 | 2319.5 | 23289. | 2668.5 |
| Stddev | 12.6 | 7.2 | 42. | 28.0 |
| %RSD | .31449 | .31170 | .18178 | 1.0497 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.038% | 98.504% | 99.837% | 104.75% |
| Range | | | | |

Sample Name: PDS 240-112152-a-2-a Acquired: 5/9/2019 12:35:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.822 | 2177.3 | 2216.9 | 1258.9 | 2239.9 | 51.193 | 440670. |
| Stddev | 1.069 | 15.4 | 6.3 | 4.0 | 15.9 | .348 | 4105. |
| %RSD | 2.0234 | .70640 | .28361 | .31845 | .70971 | .67998 | .93150 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55.18 | 518.45 | 205.21 | 281.14 | 2948.9 | 55129. | 4248.9 |
| Stddev | .30 | 1.86 | 2.47 | 6.14 | 16.6 | 479. | 17.3 |
| %RSD | .5488 | .35884 | 1.2055 | 2.1822 | .56454 | .86901 | .40678 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 104370. | 651.27 | 1026.0 | 143820. | 517.77 | 486.20 | 590.7 |
| Stddev | 1080. | 8.17 | 3.2 | 1107. | 2.21 | 1.24 | 6.2 |
| %RSD | 1.0348 | 1.2547 | .31518 | .76937 | .42662 | .25457 | 1.057 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: PDS 240-112152-a-2-a  Acquired: 5/9/2019 12:35:02  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2343.2 | 2149.7 | 1038.9 | 1918.2 | 503.72 | 743.76 | 14896. |
| Stddev | 10.8 | 7.7 | 16.2 | 13.6 | 4.04 | 5.14 | 90. |
| %RSD | .46021 | .35756 | 1.5637 | .70672 | .80186 | .69052 | .60370 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1773.7 |
| Stddev | 10.7 |
| %RSD | .60046 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3518.4 | 2172.0 | 22614. | 2676.6 |
| Stddev | 17.9 | 7.8 | 104. | 26.0 |
| %RSD | .50933 | .35926 | .45856 | .96966 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.279% | 92.240% | 96.943% | 105.07% |
| Range | | | | |

Sample Name: 240-112152-a-2-b ms  Acquired: 5/9/2019 12:39:29  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 41.297 | 1907.9 | 1912.1 | 1086.0 | 1936.6 | 43.791 | 389170. |
| Stddev | .448 | 21.6 | 7.3 | 9.1 | 9.2 | .561 | 368. |
| %RSD | 1.0852 | 1.1312 | .38408 | .84060 | .47417 | 1.2803 | .09462 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46.92 | 442.24 | 175.37 | 244.87 | 2594.5 | 47637. | 3728.9 |
| Stddev | .37 | 1.05 | .64 | .49 | 15.7 | 130. | 16.9 |
| %RSD | .7962 | .23795 | .36483 | .19843 | .60604 | .27192 | .45450 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 90036. | 559.23 | 864.92 | 125600. | 440.08 | 417.30 | 508.0 |
| Stddev | 418. | .26 | 2.51 | 353. | .31 | 1.81 | 1.8 |
| %RSD | .46379 | .04658 | .29029 | .28068 | .07035 | .43284 | .3494 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-2-b ms  Acquired: 5/9/2019 12:39:29  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2004.6 | 1792.1 | 885.62 | 1622.2 | 438.67 | 620.30 | 12679. |
| Stddev | 11.5 | 5.0 | .40 | 26.5 | 2.49 | .75 | 156. |
| %RSD | .57276 | .28074 | .04546 | 1.6343 | .56683 | .12141 | 1.2341 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1561.6 |
| Stddev | 8.3 |
| %RSD | .53010 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3664.8 | 2241.8 | 23084. | 2766.0 |
| Stddev | 6.8 | 4.5 | 44. | 17.0 |
| %RSD | .18447 | .20169 | .18958 | .61541 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.827% | 95.206% | 98.959% | 108.58% |
| Range | | | | |

Sample Name: 240-112152-a-2-c msd  Acquired: 5/9/2019 12:43:49  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46.324 | 2201.4 | 2191.3 | 1254.0 | 2238.4 | 50.823 | 442750. |
| Stddev | .489 | 29.9 | 6.3 | 2.9 | 18.3 | .433 | 3520. |
| %RSD | 1.0558 | 1.3585 | .28831 | .22811 | .81636 | .85108 | .79500 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.87 | 506.86 | 201.38 | 278.89 | 2982.1 | 55010. | 4299.2 |
| Stddev | .28 | .77 | .61 | 1.12 | 18.2 | 397. | 21.7 |
| %RSD | .5173 | .15157 | .30403 | .40091 | .61027 | .72204 | .50511 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 103560. | 640.01 | 986.32 | 144200. | 503.39 | 472.14 | 571.6 |
| Stddev | 1150. | 1.46 | 2.01 | 885. | .07 | 1.66 | 5.2 |
| %RSD | 1.1104 | .22829 | .20387 | .61389 | .01322 | .35200 | .9021 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-2-c msd  Acquired: 5/9/2019 12:43:49  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2284.3 | 2057.8 | 1012.9 | 1843.8 | 503.45 | 722.22 | 16245. |
| Stddev | 9.8 | 5.2 | 1.6 | 7.0 | 7.86 | .88 | 65. |
| %RSD | .43056 | .25345 | .15655 | .37843 | 1.5606 | .12161 | .39963 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1789.9 |
| Stddev | 9.0 |
| %RSD | .50383 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3602.6 | 2226.1 | 23135. | 2747.7 |
| Stddev | 4.5 | 1.2 | 37. | 5.9 |
| %RSD | .12547 | .05490 | .15969 | .21383 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.319% | 94.540% | 99.180% | 107.86% |
| Range | | | | |

Sample Name: 240-112152-a-1-a Acquired: 5/9/2019 12:48:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.62770 | 184.45 | 3.5311 | 144.69 | 340.61 | .26513 | 383380. |
| Stddev | .52670 | 10.31 | 1.5054 | 1.00 | 1.24 | .18746 | 4875. |
| %RSD | 83.910 | 5.5872 | 42.634 | .69016 | .36374 | 70.705 | 1.2715 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4765 | -.65893 | .91090 | 13.869 | 2128.9 | 4182.6 | 3121.5 |
| Stddev | .0312 | .15268 | .11343 | 1.273 | 17.2 | 22.1 | 5.4 |
| %RSD | 6.552 | 23.171 | 12.452 | 9.1792 | .80558 | .52852 | .17259 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51215. | 151.51 | 7.5510 | 91391. | 3.2549 | .66422 | -2.394 |
| Stddev | 189. | .23 | .0969 | 251. | .6962 | 2.1999 | 2.802 |
| %RSD | .36819 | .15153 | 1.2830 | .27462 | 21.390 | 331.20 | 117.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-1-a  Acquired: 5/9/2019 12:48:16  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7126 | 2.2163 | -.29551 | 1.4780 | .07422 | 268.34 | 14805. |
| Stddev | 5.2122 | 1.2765 | .30208 | 4.5593 | 5.3318 | 1.22 | 89. |
| %RSD | 192.15 | 57.596 | 102.22 | 308.47 | 7183.9 | .45388 | .60337 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 809.10 |
| Stddev | 5.39 |
| %RSD | .66623 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3832.2 | 2317.7 | 23945. | 2844.6 |
| Stddev | 14.7 | 7.1 | 45. | 40.9 |
| %RSD | .38248 | .30419 | .18860 | 1.4362 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.883% | 98.427% | 102.65% | 111.66% |
| Range | | | | |

Sample Name: 240-112152-a-3-a Acquired: 5/9/2019 12:52:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.57937 | 108.49 | 5.2725 | 137.35 | 249.73 | .02229 | 408420. |
| Stddev | .37320 | 40.29 | .5118 | 1.44 | 2.94 | .12766 | 4769. |
| %RSD | 64.414 | 37.139 | 9.7067 | 1.0499 | 1.1783 | 572.67 | 1.1675 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4870 | -.93966 | .75723 | 8.6004 | 1908.4 | 4470.3 | 3351.3 |
| Stddev | .1044 | .08116 | .39539 | .9749 | 14.9 | 47.3 | 36.1 |
| %RSD | 21.45 | 8.6370 | 52.215 | 11.336 | .78178 | 1.0589 | 1.0773 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 54978. | 134.38 | 7.4400 | 98055. | .47157 | 1.9607 | -3.533 |
| Stddev | 137. | 2.25 | .1488 | 990. | .47595 | 2.0583 | 1.047 |
| %RSD | .24858 | 1.6722 | 2.0001 | 1.0097 | 100.93 | 104.98 | 29.63 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-3-a Acquired: 5/9/2019 12:52:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6718 | 1.7509 | -.67349 | .12558 | .58784 | 214.16 | 14864. |
| Stddev | 1.9689 | .6757 | .12766 | 1.4142 | 5.6554 | .92 | 37. |
| %RSD | 117.77 | 38.593 | 18.955 | 1126.1 | 962.07 | .42979 | .24787 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 854.78 |
| Stddev | 2.62 |
| %RSD | .30596 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3808.3 | 2311.1 | 23731. | 2759.8 |
| Stddev | 10.8 | 5.2 | 345. | 12.1 |
| %RSD | .28237 | .22681 | 1.4523 | .43997 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.304% | 98.149% | 101.73% | 108.33% |
| Range | | | | |

Sample Name: 240-112152-a-4-a Acquired: 5/9/2019 12:57:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0028 | 134.90 | 3.6542 | 148.89 | 220.27 | -.00349 | 381640. |
| Stddev | .3995 | 14.50 | 1.9614 | 1.56 | 2.49 | .30864 | 53. |
| %RSD | 39.834 | 10.751 | 53.675 | 1.0488 | 1.1291 | 8832.9 | .01394 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .5268 | -.67654 | 1.3577 | 8.1879 | 1796.2 | 4184.7 | 3103.4 |
| Stddev | .0698 | .26171 | .1654 | .4709 | 14.6 | 42.9 | 21.5 |
| %RSD | 13.25 | 38.684 | 12.182 | 5.7510 | .81492 | 1.0260 | .69248 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51049. | 128.62 | 6.8067 | 90249. | 1.0749 | 1.7050 | .4666 |
| Stddev | 264. | .40 | .4625 | 816. | .2951 | 1.8165 | 1.967 |
| %RSD | .51803 | .31045 | 6.7953 | .90395 | 27.455 | 106.54 | 421.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112152-a-4-a  Acquired: 5/9/2019 12:57:45  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.3405 | 1.7737 | -.67953 | -.64775 | 1.8791 | 206.41 | 13876. |
| Stddev | 5.0630 | .9150 | .33151 | 4.6999 | 6.2441 | .63 | 88. |
| %RSD | 216.33 | 51.588 | 48.786 | 725.58 | 332.30 | .30741 | .63512 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 790.43 |
| Stddev | 2.87 |
| %RSD | .36363 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3789.7 | 2296.1 | 23607. | 2902.9 |
| Stddev | 8.3 | 3.7 | 108. | 18.3 |
| %RSD | .21978 | .16022 | .45806 | .63200 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.854% | 97.509% | 101.20% | 113.95% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 13:02:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1005.3 | 25453. | 510.16 | 5201.8 | 2010.1 | 2063.6 | 50203. | 520.6 |
| Stddev | 1.8 | 49. | 1.33 | 33.8 | 7.5 | 7.8 | 95. | .6 |
| %RSD | .18152 | .19162 | .26054 | .64987 | .37359 | .37859 | .18889 | .1106 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2021.8 | 2006.4 | 2073.2 | 26328. | 49670. | 5240.1 | 50051. | 1991.9 |
| Stddev | 1.2 | .9 | 6.2 | 37. | 159. | 10.5 | 159. | 1.4 |
| %RSD | .06122 | .04397 | .29672 | .13984 | .31971 | .19992 | .31730 | .06937 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1990.0 | 50311. | 1995.0 | 476.25 | 548.8 | 515.98 | 5022.7 | 5108.4 |
| Stddev | 3.7 | 170. | 1.7 | 2.71 | 1.1 | .38 | 9.8 | 2.0 |
| %RSD | .18803 | .33763 | .08763 | .56985 | .1949 | .07338 | .19427 | .03939 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 13:02:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 931.01 | 2020.1 | 1947.9 | 5208.5 | 4937.6 |
| Stddev | 14.58 | 20.6 | 1.2 | 55.0 | 27.8 |
| %RSD | 1.5662 | 1.0211 | .05934 | 1.0553 | .56304 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3987.0 | 2421.4 | 24996. | 2934.5 |
| Stddev | 2.4 | 1.1 | 16. | 5.4 |
| %RSD | .06054 | .04379 | .06334 | .18264 |

Sample Name: CCB Acquired: 5/9/2019 13:06:53 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39751 | -4.3042 | .59027 | 7.5553 | -.46782 | .03946 | 50.200 | .1282 |
| Stddev | .30515 | 30.460 | 3.3241 | 1.6160 | .19598 | .09966 | 6.059 | .0938 |
| %RSD | 76.764 | 707.69 | 563.15 | 21.389 | 41.893 | 252.58 | 12.069 | 73.12 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .57344 | -.19226 | -.82436 | .82790 | 65.324 | -1.0073 | 9.5113 | 1.0916 |
| Stddev | .35119 | .28745 | .37367 | 1.0495 | 40.992 | .4371 | 21.938 | .0561 |
| %RSD | 61.242 | 149.52 | 45.328 | 126.77 | 62.752 | 43.390 | 230.65 | 5.1394 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .73074 | 148.31 | -1.7322 | -1.5856 | .1384 | 2.6418 | .41815 | .12880 |
| Stddev | .33309 | 5.71 | .2420 | 2.1697 | 1.517 | 2.3713 | .17930 | .08979 |
| %RSD | 45.582 | 3.8490 | 13.972 | 136.84 | 1097. | 89.758 | 42.879 | 69.714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 13:06:53 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.79134 | -.75319 | 5.8157 | 20.784 | 2.5389 |
| Stddev | .97522 | 3.1871 | .0646 | 1.999 | 4.1293 |
| %RSD | 123.24 | 423.15 | 1.1108 | 9.6185 | 162.64 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4429.9 | 2479.1 | 25543. | 2949.7 |
| Stddev | 8.0 | 4.5 | 76. | 28.7 |
| %RSD | .18091 | .18350 | .29779 | .97318 |

Sample Name: 680-168469-a-1-c@5 Acquired: 5/9/2019 13:11:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28274 | 177000. | 20.061 | 528.17 | 107.18 | .07403 | 50186. |
| Stddev | .18401 | 862. | 1.958 | 1.41 | .55 | .30639 | 245. |
| %RSD | 65.080 | .48712 | 9.7611 | .26723 | .51753 | 413.89 | .48758 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .7923 | 3.2187 | 2.4211 | 7.3754 | 266.49 | 11519. | 79.312 |
| Stddev | .0697 | .0353 | .1508 | .4155 | .57 | 71. | 1.788 |
| %RSD | 8.800 | 1.0962 | 6.2303 | 5.6341 | .21328 | .61265 | 2.2547 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13790. | 376.80 | 1120.8 | 52369. | 9.4236 | 1.0413 | 4.286 |
| Stddev | 47. | .95 | 4.0 | 274. | .1164 | .5696 | 3.673 |
| %RSD | .34071 | .25314 | .36102 | .52350 | 1.2350 | 54.698 | 85.71 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 680-168469-a-1-c@5 Acquired: 5/9/2019 13:11:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.6074 | 3.4873 | 11.717 | -7.8222 | 28.089 | 63.278 | 3594.9 |
| Stddev | 3.5544 | .8249 | .082 | 2.3998 | 6.123 | .260 | 43.2 |
| %RSD | 53.795 | 23.655 | .69903 | 30.680 | 21.800 | .41155 | 1.2029 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 435.95 |
| Stddev | 3.67 |
| %RSD | .84135 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4030.6 | 2456.7 | 25026. | 3021.4 |
| Stddev | 5.8 | 4.5 | 43. | 22.2 |
| %RSD | .14367 | .18519 | .17208 | .73495 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.693% | 104.33% | 107.29% | 118.60% |
| Range | | | | |

Sample Name: CCV-410446 Acquired: 5/9/2019 13:16:17 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1027.6 | 25167. | 515.00 | 5251.7 | 2000.5 | 2039.4 | 50392. | 525.7 |
| Stddev | 1.6 | 174. | 4.09 | 16.2 | 13.9 | 11.5 | 248. | 1.1 |
| %RSD | .15143 | .68943 | .79362 | .30912 | .69355 | .56399 | .49298 | .2066 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2048.5 | 2037.8 | 2116.5 | 26378. | 49283. | 5230.7 | 50322. | 2030.8 |
| Stddev | 2.6 | 1.1 | 4.6 | 103. | 303. | 28.7 | 327. | 3.4 |
| %RSD | .12819 | .05264 | .21841 | .38935 | .61441 | .54892 | .64919 | .16563 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2015.0 | 50132. | 2020.0 | 483.78 | F 556.5 | 517.21 | 5094.3 | 5191.0 |
| Stddev | 4.0 | 303. | 2.3 | 1.45 | 2.7 | 1.42 | 10.2 | 7.2 |
| %RSD | .19698 | .60390 | .11596 | .29953 | .4821 | .27402 | .20052 | .13860 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | 500.0 | | | |
| Range | | | | | 10.50% | | | |

Sample Name: CCV-410446 Acquired: 5/9/2019 13:16:17 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 948.35 | 2017.5 | 1972.9 | 5201.2 | 4916.5 |
| Stddev | 11.58 | 8.4 | 2.3 | 29.9 | 34.7 |
| %RSD | 1.2207 | .41526 | .11711 | .57532 | .70526 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3944.1 | 2395.7 | 24506. | 2947.6 |
| Stddev | 5.9 | 5.7 | 61. | 16.0 |
| %RSD | .14888 | .23726 | .24977 | .54189 |

Sample Name: CCB Acquired: 5/9/2019 13:20:38 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27018 | -2.0794 | .54967 | 7.9165 | -.49916 | -.01482 | 38.410 |
| Stddev | .17061 | 19.878 | 1.6347 | .7530 | .05126 | .17229 | 3.040 |
| %RSD | 63.145 | 955.95 | 297.39 | 9.5115 | 10.269 | 1162.8 | 7.9148 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1487 | .61633 | -.13158 | -.29783 | -.89204 | 21.570 | .06514 |
| Stddev | .0808 | .09049 | .17053 | .80522 | 2.0961 | 11.917 | .52690 |
| %RSD | 54.33 | 14.682 | 129.59 | 270.36 | 234.98 | 55.251 | 808.90 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.3949 | 1.1460 | .70018 | 108.28 | -1.1460 | -.16466 | .7019 |
| Stddev | 18.138 | .0829 | .47201 | 12.35 | .3361 | 1.6134 | 1.133 |
| %RSD | 336.21 | 7.2351 | 67.413 | 11.402 | 29.332 | 979.84 | 161.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB  Acquired: 5/9/2019 13:20:38  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 6.3953 | .93047 | .24309 | -1.6165 | 1.9522 | 6.9128 | 15.429 |
| Stddev | 3.0539 | .50435 | .03347 | .9510 | 3.0410 | .2230 | 2.584 |
| %RSD | 47.752 | 54.204 | 13.767 | 58.827 | 155.78 | 3.2255 | 16.746 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 5.0000 | | | | | | |
| Low Limit | -5.0000 | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 5.0226 |
| Stddev | 5.5337 |
| %RSD | 110.18 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4455.3 | 2493.9 | 25623. | 2934.5 |
| Stddev | 10.1 | 7.5 | 27. | 11.3 |
| %RSD | .22623 | .30260 | .10574 | .38586 |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 13:25:21 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.474 | 179.02 | 15.539 | 106.99 | 196.50 | 5.1116 | 5024.7 | 5.430 |
| Stddev | .497 | 18.78 | 3.192 | .48 | .44 | .1020 | 14.7 | .105 |
| %RSD | 4.7469 | 10.490 | 20.543 | .45184 | .22351 | 1.9947 | .29323 | 1.931 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.416 | 10.474 | 25.817 | 206.49 | 4804.1 | 51.119 | 5036.2 | 15.539 |
| Stddev | .161 | .177 | .369 | 2.39 | 42.1 | 1.608 | 38.7 | .098 |
| %RSD | 1.5460 | 1.6891 | 1.4288 | 1.1554 | .87644 | 3.1456 | .76916 | .62759 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 39.895 | 4983.2 | 37.010 | 9.5461 | 21.40 | 22.614 | 98.052 | 51.197 |
| Stddev | .490 | 3.8 | .535 | 2.0369 | 2.28 | 1.349 | .320 | .396 |
| %RSD | 1.2285 | .07705 | 1.4451 | 21.337 | 10.63 | 5.9674 | .32624 | .77295 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 13:25:21 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 17.295 | 48.475 | 49.046 | 515.11 | 51.371 |
| Stddev | 2.485 | 8.858 | .149 | 3.89 | 5.457 |
| %RSD | 14.367 | 18.274 | .30457 | .75607 | 10.622 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4385.4 | 2486.4 | 25496. | 2966.2 |
| Stddev | 7.5 | 11.1 | 41. | 12.1 |
| %RSD | .16997 | .44808 | .16103 | .40633 |

Sample Name: 240-112012-b-2-e Acquired: 5/9/2019 14:00:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.2311 | -136.25 | 3.5376 | 378.91 | 55.641 | .83851 |
| Stddev | .6671 | 29.93 | 1.9790 | 3.40 | .243 | .11095 |
| %RSD | 10.707 | 21.968 | 55.942 | .89769 | .43665 | 13.232 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 2548900. | .2492 | -2.6512 | 79.889 | -4.5985 | -2.5413 |
| Stddev | 5626. | .0842 | .1995 | .680 | .7577 | .4138 |
| %RSD | .22073 | 33.79 | 7.5254 | .85112 | 16.478 | 16.282 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1375.9 | 47.166 | 7.3169 | -.00782 | 8474.3 | 29120. |
| Stddev | 40.6 | 1.993 | 37.364 | .04879 | 29.3 | 88. |
| %RSD | 2.9510 | 4.2261 | 510.66 | 624.37 | .34557 | .30119 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112012-b-2-e Acquired: 5/9/2019 14:00:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6068 | .03014 | 3.749 | 16.753 | 1.3504 | -4.7796 |
| Stddev | 1.2552 | .53322 | 6.155 | 8.114 | 1.4876 | .1460 |
| %RSD | 78.120 | 1769.2 | 164.2 | 48.431 | 110.16 | 3.0552 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -16.338 | 5.7784 | 2.8789 | 440.38 | 1835.1 |
| Stddev | 1.923 | .8109 | .1176 | 20.88 | 8.8 |
| %RSD | 11.767 | 14.034 | 4.0858 | 4.7415 | .47699 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3142.6 | 2036.7 | 21384. | 2747.9 |
| Stddev | 5.4 | 6.8 | 35. | 14.2 |
| %RSD | .17213 | .33506 | .16282 | .51540 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.171% | 86.495% | 91.674% | 107.86% |
| Range | | | | |

Sample Name: 240-112012-b-4-e Acquired: 5/9/2019 14:05:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 38.614 | 19478. | 458.85 | F 133840. | 49.386 | 136.87 |
| Stddev | .241 | 342. | 1.29 | 2189. | .338 | 3.75 |
| %RSD | .62455 | 1.7551 | .28049 | 1.6352 | .68360 | 2.7391 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 20000. | | |
| Low Limit | | | | -500000. | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 394480. | F 5037. | -3517.7 | 15.985 | 1.0479 | -63.893 |
| Stddev | 1570. | 70. | 140.7 | .834 | 1.2137 | 3.892 |
| %RSD | .39791 | 1.393 | 4.0005 | 5.2162 | 115.81 | 6.0910 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 4000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 718310. | 518.19 | W 470020. | 8815.5 | F 384440. | F 1079700. |
| Stddev | 2813. | 1.37 | 1926. | 31.2 | 5664. | 6477. |
| %RSD | .39156 | .26393 | .40975 | .35340 | 1.4733 | .59987 |
| Check ? | Chk Fail | Chk Pass | Chk Warn | Chk Pass | Chk Fail | Chk Fail |
| High Limit | 500000. | | 450000. | | 10000. | 500000. |
| Low Limit | -500000. | | -500000. | | -500000. | -500000. |

Sample Name: 240-112012-b-4-e  Acquired: 5/9/2019 14:05:34  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -277460. | -100.99 | 512.4 | 2362.8 | -24.262 | 776.03 |
| Stddev | 10789. | 4.68 | 29.0 | 32.5 | 3.370 | .83 |
| %RSD | 3.8886 | 4.6298 | 5.658 | 1.3754 | 13.891 | .10722 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3188.2 | F 290880. | F -1166e3 | 73210. | 531.59 |
| Stddev | 61.9 | 1001. | 63510. | 153. | 7.13 |
| %RSD | 1.9419 | .34400 | 5.4470 | .20953 | 1.3422 |
| Check ? | Chk Pass | Chk Fail | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | 5000.0 | 30000. | | |
| Low Limit | | -500000. | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | W -984.48 | 1230.7 | 21043. | 2720.9 |
| Stddev | 41.74 | 12.8 | 40. | 16.7 |
| %RSD | 4.2395 | 1.0433 | .19041 | .61259 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass |
| Value | -23.862% | 52.265% | 90.211% | 106.80% |
| Range | -50.500% | | | |

Sample Name: 240-111831-b-16-c Acquired: 5/9/2019 14:10:31 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 24.057 | F 286320. | 2.7576 | 1116.5 | -.66328 | .58433 |
| Stddev | .322 | 1375. | 3.8504 | 3.1 | .08649 | .08717 |
| %RSD | 1.3392 | .48023 | 139.63 | .28198 | 13.040 | 14.918 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 582.50 | F 2185. | 28.752 | .18233 | .10298 | 1290.2 |
| Stddev | 3.26 | 5. | .232 | .35391 | .17245 | 7.2 |
| %RSD | .55941 | .2094 | .80718 | 194.10 | 167.45 | .55437 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 1000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 429910. | 4.9461 | 79.253 | F 4250.2 | 455.13 | 27469. |
| Stddev | 1716. | .4334 | 28.217 | 7.3 | 8.78 | 122. |
| %RSD | .39924 | 8.7626 | 35.604 | .17103 | 1.9299 | .44346 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | 100000. | | | 4000.0 | | |
| Low Limit | -500000. | | | -500000. | | |

Sample Name: 240-111831-b-16-c  Acquired: 5/9/2019 14:10:31  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 894.35 | 4.8596 | 3.885 | 6.7792 | 2.5622 | 1.5161 |
| Stddev | .93 | 1.6045 | 1.061 | 3.2675 | 1.1076 | .2348 |
| %RSD | .10421 | 33.018 | 27.31 | 48.200 | 43.230 | 15.485 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 92.025 | 14.489 | F 405430. | F 23368. | 8.8134 |
| Stddev | 2.236 | .427 | 1147. | 2084. | 3.4498 |
| %RSD | 2.4298 | 2.9482 | .28283 | 8.9163 | 39.142 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | 4000.0 | 10000. | |
| Low Limit | | | -500000. | -500000. | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3681.9 | 2410.9 | 24101. | 2944.9 |
| Stddev | 7.1 | 2.7 | 30. | 10.0 |
| %RSD | .19310 | .11363 | .12633 | .33898 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.241% | 102.39% | 103.32% | 115.60% |
| Range | | | | |

Sample Name: 240-111753-a-2-c  Acquired: 5/9/2019 14:15:13  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.89613 | 3381.4 | 11.015 | 1541.0 | 232.19 | .29989 |
| Stddev | .20742 | 23.5 | 1.847 | 5.8 | .93 | .07582 |
| %RSD | 23.147 | .69429 | 16.771 | .37595 | .39954 | 25.282 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 378550. | .7623 | 46.830 | 16.268 | 9.2723 | 3832.6 |
| Stddev | 850. | .1989 | .565 | .227 | .4040 | 10.4 |
| %RSD | .22451 | 26.09 | 1.2070 | 1.3941 | 4.3570 | .27132 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12987. | 71.610 | 37068. | 116.32 | 81.330 | F 866640. |
| Stddev | 17. | 2.018 | 111. | .47 | .350 | 3163. |
| %RSD | .12824 | 2.8176 | .29964 | .40675 | .43025 | .36498 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111753-a-2-c Acquired: 5/9/2019 14:15:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.421 | 1.3384 | 5.373 | 8.0918 | 2.2052 | 117.84 |
| Stddev | .483 | 1.4541 | .738 | 4.1808 | .5561 | 1.45 |
| %RSD | 3.8925 | 108.65 | 13.74 | 51.667 | 25.218 | 1.2277 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.0540 | 36.911 | 118.36 | 24689. | 5147.8 |
| Stddev | 2.9653 | 5.571 | 11.14 | 54. | 5.2 |
| %RSD | 73.146 | 15.094 | 9.4145 | .21708 | .10146 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3450.5 | 2222.4 | 22820. | 2790.9 |
| Stddev | 10.6 | 5.8 | 74. | 23.4 |
| %RSD | .30638 | .25911 | .32353 | .83838 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.632% | 94.379% | 97.826% | 109.55% |
| Range | | | | |

Sample Name: 240-111753-b-3-d Acquired: 5/9/2019 14:19:56 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9051 | 13.170 | 6.7809 | 902.86 | 401.68 | .21872 |
| Stddev | .4737 | 16.450 | 1.7328 | 9.58 | 5.03 | .14552 |
| %RSD | 24.865 | 124.90 | 25.555 | 1.0607 | 1.2525 | 66.531 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 664380. | .7678 | 47.208 | 3.2248 | -.17945 | 31.757 |
| Stddev | 5333. | .0418 | .149 | .7770 | .69123 | 4.512 |
| %RSD | .80267 | 5.438 | .31559 | 24.093 | 385.20 | 14.207 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5294.5 | 40.830 | 14679. | 1584.5 | 42.122 | F 1386700. |
| Stddev | 51.6 | 1.234 | 53. | 7.9 | .359 | 16273. |
| %RSD | .97475 | 3.0217 | .36086 | .49945 | .85153 | 1.1736 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111753-b-3-d  Acquired: 5/9/2019 14:19:56  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17.311 | -.60746 | -1.602 | 8.5474 | 1.8370 | -1.1860 |
| Stddev | 1.210 | 2.5612 | 3.312 | 2.1487 | 1.2592 | .0874 |
| %RSD | 6.9895 | 421.62 | 206.8 | 25.139 | 68.544 | 7.3717 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.7228 | 7.7457 | 32.318 | 11733. | 2923.2 |
| Stddev | 4.3445 | 3.1941 | .461 | 107. | 31.4 |
| %RSD | 75.915 | 41.237 | 1.4266 | .91271 | 1.0750 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3300.2 | 2144.0 | 21995. | 2809.8 |
| Stddev | 9.0 | 6.3 | 160. | 19.3 |
| %RSD | .27376 | .29463 | .72772 | .68646 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 79.989% | 91.051% | 94.290% | 110.29% |
| Range | | | | |

Sample Name: 240-112012-b-1-g Acquired: 5/9/2019 14:24:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .13711 | 129610. | 12.101 | 1490.5 | 977.34 | 19.343 |
| Stddev | .18351 | 423. | 3.698 | 6.6 | 1.26 | .152 |
| %RSD | 133.84 | .32603 | 30.556 | .44248 | .12917 | .78727 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 195600. | .5061 | .31127 | 21.047 | .71142 | 30482. |
| Stddev | 571. | .0868 | .15320 | .228 | .72363 | 84. |
| %RSD | .29192 | 17.16 | 49.220 | 1.0840 | 101.72 | .27526 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3647.8 | 17.937 | 38330. | 716.66 | 44.290 | F 1036800. |
| Stddev | 58.1 | 1.162 | 140. | 1.44 | .324 | 9544. |
| %RSD | 1.5923 | 6.4760 | .36586 | .20080 | .73099 | .92054 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112012-b-1-g Acquired: 5/9/2019 14:24:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 65.081 | -.21700 | .0703 | 7.6508 | 2.6138 | 396.42 |
| Stddev | .209 | 1.6917 | .5594 | 2.5456 | 1.4566 | .54 |
| %RSD | .32051 | 779.61 | 795.5 | 33.273 | 55.725 | .13664 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.6223 | 1171.9 | 56.104 | 10982. | 349.98 |
| Stddev | .4258 | 3.9 | .120 | 41. | 1.67 |
| %RSD | 26.248 | .33149 | .21401 | .37759 | .47797 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3415.2 | 2879.9 | 29555. | 3699.9 |
| Stddev | 8.8 | 4.1 | 48. | 28.2 |
| %RSD | .25816 | .14292 | .16307 | .76118 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.776% | 122.31% | 126.70% | 145.23% |
| Range | | | | |

Sample Name: 240-111831-b-1-c Acquired: 5/9/2019 14:29:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.3876 | F 579410. | -.87658 | 1324.3 | 5.6974 | .53099 |
| Stddev | .1671 | 1781. | 4.9919 | 8.1 | .0278 | .05414 |
| %RSD | 2.6163 | .30733 | 569.48 | .61363 | .48719 | 10.195 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4484.7 | 104.0 | 169.96 | 32.417 | 98.041 | 14809. |
| Stddev | 27.6 | .8 | .87 | .306 | .631 | 50. |
| %RSD | .61590 | .7997 | .50972 | .94342 | .64398 | .33550 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 941630. | 15.082 | 856.91 | 2503.1 | 31.312 | F 911960. |
| Stddev | 8537. | .344 | 9.64 | 15.5 | .410 | 11336. |
| %RSD | .90658 | 2.2776 | 1.1255 | .62085 | 1.3087 | 1.2430 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | 100000. | | | | | 100000. |
| Low Limit | -500000. | | | | | -500000. |

Sample Name: 240-111831-b-1-c  Acquired: 5/9/2019 14:29:39  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5414.6 | -.78055 | 5.588 | -.21531 | 2.3472 | .67725 |
| Stddev | 25.0 | 2.5279 | 1.010 | 5.8224 | 1.8204 | .19732 |
| %RSD | .46138 | 323.87 | 18.07 | 2704.2 | 77.556 | 29.136 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.3981 | 2.4823 | F 315530. | F 10581. | 10.328 |
| Stddev | 2.4245 | .7931 | 362. | 560. | 1.712 |
| %RSD | 44.915 | 31.951 | .11478 | 5.2936 | 16.573 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | 4000.0 | 10000. | |
| Low Limit | | | -500000. | -500000. | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3419.2 | 2343.0 | 23462. | 3018.7 |
| Stddev | 5.4 | 3.9 | 79. | 17.2 |
| %RSD | .15922 | .16609 | .33661 | .56969 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.875% | 99.500% | 100.58% | 118.49% |
| Range | | | | |

Sample Name: 240-111831-b-2-c Acquired: 5/9/2019 14:34:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3540 | F 540830. | -1.2806 | 1182.3 | 5.2132 | .52551 |
| Stddev | .2866 | 1189. | 6.8197 | 6.5 | .1566 | .07240 |
| %RSD | 21.166 | .21979 | 532.54 | .54657 | 3.0038 | 13.777 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4882.9 | 6.938 | 59.111 | 118.27 | 65.035 | 17527. |
| Stddev | 21.6 | .111 | .443 | .61 | .642 | 16. |
| %RSD | .44135 | 1.606 | .74965 | .51481 | .98717 | .09360 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 444700. | 49.635 | 996.74 | 1853.8 | 29.664 | F 867990. |
| Stddev | 1201. | 1.515 | 51.44 | 5.9 | .092 | 5628. |
| %RSD | .26999 | 3.0524 | 5.1606 | .31920 | .30959 | .64840 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | 100000. | | | | | 100000. |
| Low Limit | -500000. | | | | | -500000. |

Sample Name: 240-111831-b-2-c  Acquired: 5/9/2019 14:34:36  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2792.2 | -2.6437 | 5.491 | 1.2321 | 2.8119 | 1.5247 |
| Stddev | 2.3 | 1.4549 | 3.347 | .7481 | .4345 | .1985 |
| %RSD | .08132 | 55.032 | 60.96 | 60.724 | 15.454 | 13.018 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7707 | 4.6099 | F 80438. | 8532.8 | 7.0775 |
| Stddev | 3.3486 | 3.6208 | 610. | 199.2 | 5.1006 |
| %RSD | 189.11 | 78.545 | .75844 | 2.3343 | 72.067 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3545.7 | 2401.0 | 24018. | 3035.2 |
| Stddev | 9.0 | 5.3 | 46. | 11.0 |
| %RSD | .25269 | .21949 | .19126 | .36212 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.940% | 101.96% | 102.97% | 119.14% |
| Range | | | | |

Sample Name: 240-111831-b-3-c Acquired: 5/9/2019 14:39:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0658 | F 519450. | 1.8458 | 1303.1 | 5.1682 | .83871 |
| Stddev | .0850 | 2790. | 4.2925 | 8.4 | .0808 | .04620 |
| %RSD | 2.0906 | .53718 | 232.56 | .64386 | 1.5636 | 5.5084 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4762.7 | 120.9 | 853.85 | 111.98 | 292.36 | F 96751. |
| Stddev | 5.8 | .8 | 2.54 | .75 | .66 | 315. |
| %RSD | .12273 | .6605 | .29741 | .66699 | .22739 | .32565 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 50000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1043100. | 14.033 | 929.26 | F 6897.3 | 21.545 | F 613490. |
| Stddev | 6123. | .604 | 17.21 | 28.9 | .976 | 7502. |
| %RSD | .58701 | 4.3018 | 1.8518 | .41952 | 4.5305 | 1.2228 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | 100000. | | | 4000.0 | | 100000. |
| Low Limit | -500000. | | | -500000. | | -500000. |

Sample Name: 240-111831-b-3-c  Acquired: 5/9/2019 14:39:23  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 29262. | 1.7145 | 9.395 | -2.5872 | 1.2424 | .05999 |
| Stddev | 57. | 4.6832 | 4.763 | 6.1577 | .7813 | .09154 |
| %RSD | .19601 | 273.15 | 50.69 | 238.01 | 62.891 | 152.58 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.731 | 1.1651 | F 246950. | 5496.8 | 1.8117 |
| Stddev | .699 | 6.9842 | 1221. | 271.7 | 8.9535 |
| %RSD | 5.0872 | 599.47 | .49443 | 4.9426 | 494.22 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3488.8 | 2369.0 | 23595. | 2973.8 |
| Stddev | 6.9 | 3.7 | 88. | 9.8 |
| %RSD | .19695 | .15710 | .37203 | .32833 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.560% | 100.61% | 101.15% | 116.73% |
| Range | | | | |

Sample Name: 240-111831-b-4-c Acquired: 5/9/2019 14:44:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .74290 | F 878380. | 2.9642 | 1377.9 | 5.2593 | .32197 |
| Stddev | .77841 | 7621. | 5.8397 | 13.5 | .2051 | .03671 |
| %RSD | 104.78 | .86762 | 197.01 | .98317 | 3.8990 | 11.400 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4870.1 | 65.61 | 61.363 | 371.25 | 236.51 | 5787.4 |
| Stddev | 8.8 | .41 | .074 | 1.64 | .72 | 36.5 |
| %RSD | .18075 | .6175 | .12112 | .44139 | .30610 | .63010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1145200. | 12.370 | 1048.1 | 1096.2 | F 4117.2 | F 645470. |
| Stddev | 11357. | 1.379 | 21.3 | 1.8 | 8.3 | 1053. |
| %RSD | .99176 | 11.147 | 2.0309 | .16842 | .20206 | .16313 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Fail |
| High Limit | 100000. | | | | 4000.0 | 100000. |
| Low Limit | -500000. | | | | -500000. | -500000. |

Sample Name: 240-111831-b-4-c  Acquired: 5/9/2019 14:44:27  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 4871.9 | -7.3941 | 12.78 | -4.4358 | 2.4423 | .77042 |
| Stddev | 17.4 | 3.1044 | 1.05 | 4.5563 | 1.3261 | .09613 |
| %RSD | .35815 | 41.984 | 8.205 | 102.72 | 54.300 | 12.478 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.0920 | 7.5298 | F 7060.9 | F 19160. | 4.1038 |
| Stddev | 3.3161 | 5.2602 | 29.1 | 405. | 5.6648 |
| %RSD | 107.25 | 69.858 | .41269 | 2.1131 | 138.04 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | 4000.0 | 10000. | |
| Low Limit | | | -500000. | -500000. | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3369.9 | 2358.3 | 23541. | 2956.3 |
| Stddev | 7.0 | 3.6 | 100. | 12.9 |
| %RSD | .20669 | .15467 | .42346 | .43658 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.679% | 100.15% | 100.92% | 116.04% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 14:58:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1007.4 | 24422. | 505.15 | 5253.1 | 1959.0 | 1982.6 | 49641. | 512.9 |
| Stddev | 2.5 | 152. | 6.06 | 88.1 | 4.5 | 6.1 | 79. | .9 |
| %RSD | .25279 | .62305 | 1.2003 | 1.6768 | .23106 | .30543 | .15860 | .1740 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2005.6 | 1983.6 | 2072.2 | 25809. | 48321. | 5100.9 | 49574. | 1983.7 |
| Stddev | 3.0 | 3.0 | 3.1 | 38. | 183. | 10.8 | 52. | .9 |
| %RSD | .14837 | .15169 | .15198 | .14694 | .37936 | .21195 | .10416 | .04440 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1995.7 | 48723. | 1978.1 | 477.07 | 538.7 | 513.90 | 5003.8 | 5075.5 |
| Stddev | 7.0 | 119. | 2.5 | 2.38 | 2.6 | 7.18 | 14.8 | 2.2 |
| %RSD | .35107 | .24461 | .12455 | .49915 | .4752 | 1.3969 | .29506 | .04362 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 14:58:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 969.71 | 1979.1 | 1936.8 | 5156.3 | 4864.7 |
| Stddev | 29.96 | 4.7 | 4.2 | 6.3 | 16.3 |
| %RSD | 3.0892 | .23915 | .21929 | .12129 | .33502 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3961.0 | 2406.9 | 24690. | 2913.2 |
| Stddev | 1.5 | .5 | 26. | 6.1 |
| %RSD | .03715 | .02008 | .10418 | .21100 |

Sample Name: CCB Acquired: 5/9/2019 15:03:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .46643 | 16.041 | .66258 | 43.922 | -.38536 | .02812 | 5.5390 | .3200 |
| Stddev | .34529 | 26.247 | 2.6351 | 1.279 | .21947 | .24513 | 2.3148 | .1635 |
| %RSD | 74.029 | 163.62 | 397.70 | 2.9119 | 56.952 | 871.72 | 41.791 | 51.09 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .88387 | -.13244 | -.93319 | -2.5852 | 191.16 | .81028 | 9.9755 | .25670 |
| Stddev | .27414 | .19498 | .79876 | 2.1106 | 34.33 | .72138 | 19.423 | .03990 |
| %RSD | 31.016 | 147.22 | 85.595 | 81.643 | 17.957 | 89.029 | 194.71 | 15.543 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.956 | 144.40 | -1.1904 | -.75662 | .7934 | 4.1150 | .60927 | .11232 |
| Stddev | .442 | .55 | .4619 | .75905 | 2.514 | 3.5664 | .32449 | .15644 |
| %RSD | 4.0355 | .38208 | 38.800 | 100.32 | 316.9 | 86.668 | 53.258 | 139.29 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 15:03:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.77306 | 5.8595 | 5.6269 | 54.047 | 1.8323 |
| Stddev | 1.9342 | 2.8021 | .1386 | 13.777 | 3.9361 |
| %RSD | 250.20 | 47.822 | 2.4629 | 25.490 | 214.82 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4489.2 | 2510.0 | 25616. | 2959.4 |
| Stddev | 7.5 | 3.7 | 100. | 8.2 |
| %RSD | .16802 | .14559 | .39204 | .27874 |

Sample Name: 240-111831-b-1-c@10 Acquired: 5/9/2019 15:07:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .73423 | 60686. | -2.5463 | 178.79 | .12264 | .00834 | 485.35 |
| Stddev | .19579 | 242. | 2.1854 | .60 | .04818 | .13531 | 1.58 |
| %RSD | 26.667 | .39804 | 85.827 | .33438 | 39.290 | 1622.4 | .32599 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.70 | 17.184 | 3.3222 | 9.2640 | 1571.3 | 100200. | .10203 |
| Stddev | .10 | .280 | .2065 | .3631 | 7.4 | 393. | 1.0496 |
| %RSD | .8901 | 1.6317 | 6.2169 | 3.9199 | .47278 | .39246 | 1028.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 83.891 | 260.02 | 9.1396 | 105510. | 546.91 | -1.7600 | 2.040 |
| Stddev | 18.744 | .14 | .7527 | 355. | 1.28 | .8146 | 1.114 |
| %RSD | 22.344 | .05373 | 8.2354 | .33649 | .23406 | 46.286 | 54.61 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-1-c@10 Acquired: 5/9/2019 15:07:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.9881 | 1.8937 | .14873 | -2.6083 | -.28349 | F 71101. | 591.69 |
| Stddev | 2.1215 | .7336 | .16510 | 2.3919 | 6.0688 | 322. | 23.76 |
| %RSD | 53.195 | 38.741 | 111.01 | 91.704 | 2140.7 | .45217 | 4.0148 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 30000. | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 5.9903 |
| Stddev | 2.9363 |
| %RSD | 49.017 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4054.4 | 2473.5 | 25212. | 2932.2 |
| Stddev | 10.2 | 6.5 | 56. | 16.5 |
| %RSD | .25229 | .26246 | .22224 | .56429 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.271% | 105.05% | 108.08% | 115.10% |
| Range | | | | |

Sample Name: 240-111831-b-2-c@10 Acquired: 5/9/2019 15:12:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19834 | 56143. | 3.5827 | 155.80 | .15300 | -.00391 | 522.55 |
| Stddev | .24800 | 168. | 3.0600 | 1.02 | .22487 | .26751 | 6.40 |
| %RSD | 125.03 | .29962 | 85.411 | .65722 | 146.98 | 6840.7 | 1.2252 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .7211 | 6.3823 | 12.436 | 5.9443 | 1855.9 | 46022. | 4.3360 |
| Stddev | .1417 | .1146 | .129 | .2825 | 16.7 | 114. | 1.0102 |
| %RSD | 19.65 | 1.7953 | 1.0372 | 4.7526 | .89793 | .24819 | 23.299 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 116.71 | 194.04 | 8.2022 | 100060. | 282.78 | -.40988 | .9620 |
| Stddev | 23.50 | .68 | .3623 | 277. | 1.11 | .76276 | 1.074 |
| %RSD | 20.139 | .35114 | 4.4170 | .27691 | .39395 | 186.09 | 111.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-2-c@10 Acquired: 5/9/2019 15:12:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.4673 | 1.2526 | .09064 | -4.7050 | .48260 | 8727.6 | 595.64 |
| Stddev | 4.5379 | .3448 | .08272 | 2.1565 | 2.8101 | 10.5 | 21.07 |
| %RSD | 70.167 | 27.524 | 91.259 | 45.833 | 582.28 | .12047 | 3.5368 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2.2371 |
| Stddev | 2.7356 |
| %RSD | 122.28 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4097.3 | 2475.8 | 25122. | 2939.8 |
| Stddev | 5.5 | 3.5 | 50. | 8.6 |
| %RSD | .13540 | .14071 | .19863 | .29146 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.309% | 105.14% | 107.69% | 115.40% |
| Range | | | | |

Sample Name: 240-111831-b-3-c@10 Acquired: 5/9/2019 15:17:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .70148 | 53057. | -.65053 | 158.81 | .15416 | -.12394 | 484.71 |
| Stddev | .09917 | 270. | 2.0982 | .75 | .08678 | .03221 | 4.11 |
| %RSD | 14.137 | .50890 | 322.54 | .47354 | 56.294 | 25.987 | .84822 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.29 | 84.382 | 11.383 | 28.464 | 10176. | 109850. | .44873 |
| Stddev | .05 | .378 | .195 | 1.379 | 68. | 602. | .59793 |
| %RSD | .4403 | .44838 | 1.7121 | 4.8446 | .66870 | .54808 | 133.25 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 113.42 | 729.23 | 6.3603 | 69136. | 2904.5 | -1.4818 | .0499 |
| Stddev | 27.40 | .51 | .3311 | 326. | 6.5 | 2.0121 | 1.560 |
| %RSD | 24.157 | .07008 | 5.2062 | .47126 | .22217 | 135.79 | 3123. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-3-c@10 Acquired: 5/9/2019 15:17:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12453 | 1.4370 | -.15863 | -1.3150 | 2.2489 | F 39400. | 246.41 |
| Stddev | 1.9701 | .6287 | .10018 | 1.2111 | 6.5550 | 127. | 8.67 |
| %RSD | 1582.0 | 43.749 | 63.155 | 92.097 | 291.47 | .32359 | 3.5186 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 30000. | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 4.9989 |
| Stddev | 3.9242 |
| %RSD | 78.501 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4082.0 | 2464.0 | 25130. | 2928.9 |
| Stddev | 9.6 | 5.5 | 20. | 13.6 |
| %RSD | .23541 | .22436 | .07872 | .46554 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.940% | 104.64% | 107.73% | 114.97% |
| Range | | | | |

Sample Name: 240-111831-b-4-c@10 Acquired: 5/9/2019 15:21:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .44496 | 89550. | -1.4649 | 164.46 | .26536 | -.06031 | 497.18 |
| Stddev | .34799 | 716. | 1.5696 | 2.83 | .28729 | .05798 | 2.08 |
| %RSD | 78.207 | .79922 | 107.15 | 1.7225 | 108.27 | 96.137 | .41874 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.655 | 6.1268 | 38.445 | 23.519 | 600.50 | 120340. | 1.0656 |
| Stddev | .153 | .1473 | .575 | .999 | 7.56 | 722. | .7353 |
| %RSD | 2.305 | 2.4041 | 1.4963 | 4.2463 | 1.2582 | .60034 | 69.006 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 143.65 | 115.19 | 450.31 | 72238. | 473.60 | -2.4611 | .5913 |
| Stddev | 38.51 | .68 | 3.05 | 463. | 3.31 | 3.0545 | 3.376 |
| %RSD | 26.805 | .58760 | .67679 | .64075 | .69922 | 124.11 | 570.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-4-c@10 Acquired: 5/9/2019 15:21:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.3497 | .60897 | .01984 | -.51156 | 3.9731 | 660.11 | 1596.0 |
| Stddev | 1.0203 | 1.0724 | .22741 | 2.8956 | 4.3311 | 1.52 | 59.7 |
| %RSD | 43.421 | 176.10 | 1146.2 | 566.03 | 109.01 | .22990 | 3.7381 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 7.1075 |
| Stddev | 2.9004 |
| %RSD | 40.807 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4053.8 | 2472.2 | 25134. | 2961.2 |
| Stddev | 6.7 | .8 | 64. | 18.1 |
| %RSD | .16578 | .03198 | .25484 | .61016 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.256% | 104.99% | 107.75% | 116.24% |
| Range | | | | |

Sample Name: 240-111831-b-5-c@10 Acquired: 5/9/2019 15:26:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1844 | 23476. | -1.5877 | 92.853 | -.34860 | -.15638 |
| Stddev | .3125 | 119. | .9624 | .812 | .14739 | .12426 |
| %RSD | 26.384 | .50665 | 60.618 | .87405 | 42.281 | 79.462 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 164.28 | 75.44 | 1.8937 | .07099 | -.42462 | 8.6881 |
| Stddev | 6.93 | .11 | .1545 | .23206 | .83989 | 2.1635 |
| %RSD | 4.2211 | .1510 | 8.1585 | 326.88 | 197.80 | 24.902 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 102400. | -1.5546 | 30.623 | 48.114 | 23.804 | 97453. |
| Stddev | 530. | .9904 | 3.100 | .258 | .548 | 355. |
| %RSD | .51723 | 63.708 | 10.124 | .53521 | 2.3004 | .36403 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-b-5-c@10 Acquired: 5/9/2019 15:26:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.710 | -.91822 | -1.952 | 1.7194 | 1.0628 | -.23916 |
| Stddev | .388 | .80494 | 4.174 | 3.6846 | .7773 | .03699 |
| %RSD | .77985 | 87.664 | 213.9 | 214.30 | 73.137 | 15.465 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28323 | -1.2833 | F 95114. | 291.61 | 5.9593 |
| Stddev | 2.0148 | 4.2914 | 588. | 10.81 | 2.5529 |
| %RSD | 711.37 | 334.41 | .61829 | 3.7066 | 42.839 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4090.0 | 2467.6 | 25138. | 2950.6 |
| Stddev | 19.0 | 8.0 | 107. | 20.8 |
| %RSD | .46560 | .32403 | .42463 | .70628 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.133% | 104.79% | 107.77% | 115.82% |
| Range | | | | |

Sample Name: 240-111831-b-6-c@10 Acquired: 5/9/2019 15:31:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23871 | F 74788. | -1.3577 | 159.38 | -.07696 | -.03572 |
| Stddev | .10853 | 1659. | 2.6243 | 1.40 | .23244 | .18833 |
| %RSD | 45.467 | 2.2178 | 193.29 | .88152 | 302.03 | 527.31 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 481.56 | 72.50 | 2.4759 | 9.8642 | 18.890 | 687.04 |
| Stddev | 10.41 | .39 | .3514 | .2061 | .451 | 19.73 |
| %RSD | 2.1614 | .5318 | 14.193 | 2.0889 | 2.3885 | 2.8716 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 135180. | -1.2696 | 104.39 | 85.877 | 1045.4 | 84107. |
| Stddev | 3079. | .9230 | 21.59 | .408 | 3.7 | 1973. |
| %RSD | 2.2775 | 72.702 | 20.684 | .47475 | .35477 | 2.3459 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-b-6-c@10 Acquired: 5/9/2019 15:31:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 115.80 | -1.0853 | 1.564 | 2.6591 | 1.2239 | -.18225 |
| Stddev | .43 | 1.8993 | 3.323 | 2.2458 | 1.0108 | .23857 |
| %RSD | .36918 | 175.00 | 212.5 | 84.458 | 82.586 | 130.91 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8342 | 4.6569 | 3214.5 | 1840.0 | 6.7591 |
| Stddev | 2.1541 | 4.8956 | 4.9 | 19.5 | 4.7963 |
| %RSD | 117.44 | 105.13 | .15376 | 1.0594 | 70.961 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4028.7 | 2455.5 | 25168. | 2951.6 |
| Stddev | 3.0 | 5.2 | 57. | 61.0 |
| %RSD | .07568 | .21021 | .22771 | 2.0657 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.647% | 104.28% | 107.89% | 115.86% |
| Range | | | | |

Sample Name: 240-111831-b-7-c@10 Acquired: 5/9/2019 15:35:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .87415 | F 59773. | -2.5579 | 149.27 | -.29515 | .00151 |
| Stddev | .24185 | 188. | .3442 | 1.53 | .05628 | .08448 |
| %RSD | 27.667 | .31400 | 13.457 | 1.0232 | 19.068 | 5580.8 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 527.53 | 5.535 | 4.7602 | 2.4441 | 8.8884 | 598.89 |
| Stddev | 8.66 | .022 | .0310 | .3383 | .5857 | .73 |
| %RSD | 1.6423 | .4057 | .65082 | 13.843 | 6.5896 | .12267 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 96196. | -1.2025 | 94.370 | 63.387 | 5.2591 | F 101420. |
| Stddev | 348. | .1216 | 11.384 | .228 | .5281 | 242. |
| %RSD | .36156 | 10.115 | 12.063 | .35985 | 10.041 | .23862 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111831-b-7-c@10 Acquired: 5/9/2019 15:35:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 231.68 | -1.3440 | -1.586 | 5.9875 | 1.7125 | -.13781 |
| Stddev | .98 | .8809 | 1.055 | 4.3279 | 1.1177 | .14604 |
| %RSD | .42465 | 65.539 | 66.54 | 72.283 | 65.269 | 105.97 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4317 | 3.7190 | F 69927. | 359.07 | 4.1116 |
| Stddev | 3.6380 | 3.0370 | 268. | 22.49 | .8725 |
| %RSD | 254.11 | 81.660 | .38291 | 6.2637 | 21.221 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4042.5 | 2455.5 | 25223. | 2995.9 |
| Stddev | 3.6 | 2.5 | 31. | 7.4 |
| %RSD | .08919 | .10298 | .12321 | .24680 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.982% | 104.28% | 108.13% | 117.60% |
| Range | | | | |

Sample Name: 240-111831-b-8-c@10 Acquired: 5/9/2019 15:40:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .51022 | F 76799. | .68103 | 159.59 | -.05272 | -.05045 |
| Stddev | .28020 | 453. | 1.4847 | 1.30 | .20215 | .11327 |
| %RSD | 54.919 | .58933 | 218.01 | .81299 | 383.45 | 224.52 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 481.83 | 27.34 | 3.9009 | 32.278 | 24.931 | 164.90 |
| Stddev | 8.29 | .04 | .4164 | .177 | .581 | 2.27 |
| %RSD | 1.7207 | .1342 | 10.673 | .54790 | 2.3323 | 1.3763 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 229240. | 224.09 | 115.93 | 93.210 | 48.795 | 46386. |
| Stddev | 1359. | 1.23 | 23.28 | .092 | .705 | 319. |
| %RSD | .59288 | .54925 | 20.084 | .09882 | 1.4453 | .68804 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-b-8-c@10 Acquired: 5/9/2019 15:40:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 458.41 | -1.9953 | 3.587 | 5.2583 | 1.1651 | .05848 |
| Stddev | 2.26 | 1.4000 | 1.963 | 3.8224 | .3669 | .08961 |
| %RSD | .49307 | 70.163 | 54.74 | 72.693 | 31.493 | 153.24 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.2554 | 1.7784 | 251.99 | 447.89 | 3.7291 |
| Stddev | 2.6904 | 3.1843 | .36 | 16.21 | 4.7164 |
| %RSD | 119.29 | 179.05 | .14383 | 3.6192 | 126.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4003.0 | 2440.6 | 24852. | 2970.5 |
| Stddev | 2.4 | 3.3 | 41. | 15.5 |
| %RSD | .05951 | .13345 | .16367 | .52285 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.024% | 103.65% | 106.54% | 116.60% |
| Range | | | | |

Sample Name: 240-111831-b-9-c@10 Acquired: 5/9/2019 15:45:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .33615 | F 146210. | -.58345 | 156.54 | -.02804 | .03433 |
| Stddev | .31831 | 266. | 3.1290 | .99 | .10903 | .19966 |
| %RSD | 94.693 | .18165 | 536.30 | .63162 | 388.87 | 581.61 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 543.45 | 6.088 | 4.5700 | 3.5424 | 12.323 | 1681.7 |
| Stddev | 1.60 | .133 | .1921 | .3210 | .304 | 6.0 |
| %RSD | .29390 | 2.184 | 4.2035 | 9.0607 | 2.4704 | .35886 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 162820. | .16945 | 97.147 | 65.893 | 5.4997 | 17032. |
| Stddev | 270. | .26441 | 26.678 | .544 | .4618 | 19. |
| %RSD | .16589 | 156.05 | 27.461 | .82624 | 8.3968 | .11122 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-b-9-c@10 Acquired: 5/9/2019 15:45:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 189.36 | -1.4521 | 2.638 | .65814 | .78376 | .04013 |
| Stddev | .36 | 1.8785 | 2.644 | 6.0925 | .43656 | .13749 |
| %RSD | .19038 | 129.37 | 100.2 | 925.72 | 55.700 | 342.64 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0056 | 4.7599 | F 18936. | 543.67 | 5.1883 |
| Stddev | 2.0595 | 1.6113 | 28. | 59.59 | 4.7455 |
| %RSD | 204.80 | 33.851 | .14972 | 10.961 | 91.464 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4041.9 | 2486.2 | 25045. | 3000.2 |
| Stddev | 3.2 | .7 | 94. | 3.3 |
| %RSD | .07839 | .02698 | .37511 | .10877 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.967% | 105.59% | 107.37% | 117.77% |
| Range | | | | |

Sample Name: 240-111831-b-10-c@10 Acquired: 5/9/2019 15:49:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0076 | F 53321. | 1.3980 | 116.39 | -.07596 | -.04060 | 376.37 |
| Stddev | .2568 | 160. | 2.3057 | 1.13 | .13143 | .23261 | 5.46 |
| %RSD | 25.485 | .30064 | 164.93 | .96716 | 173.01 | 573.00 | 1.4509 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | | |
| Low Limit | | -500000. | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3659 | 104.36 | -.62079 | 24.441 | 3249.2 | 94502. | -.82629 |
| Stddev | .1118 | .28 | .40587 | .630 | 13.7 | 256. | 1.2655 |
| %RSD | 30.54 | .26901 | 65.379 | 2.5777 | .42108 | .27044 | 153.16 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 45.268 | 332.26 | 3.5143 | 83722. | 3336.8 | -1.9038 | .3932 |
| Stddev | 18.850 | .23 | .2626 | 228. | 6.9 | .2481 | .7631 |
| %RSD | 41.641 | .06848 | 7.4721 | .27232 | .20797 | 13.034 | 194.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-10-c@10 Acquired: 5/9/2019 15:49:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.3238 | 1.0886 | -.34547 | 2.0260 | .30841 | F 79498. | 217.53 |
| Stddev | 3.0780 | .3326 | .31895 | 3.2846 | 1.4768 | 238. | 13.94 |
| %RSD | 71.186 | 30.554 | 92.325 | 162.12 | 478.86 | .29889 | 6.4078 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 4000.0 | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 6.6887 |
| Stddev | 6.3497 |
| %RSD | 94.933 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4065.2 | 2460.2 | 24987. | 2927.1 |
| Stddev | 4.0 | 2.2 | 59. | 6.2 |
| %RSD | .09814 | .09007 | .23696 | .21343 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.531% | 104.48% | 107.12% | 114.90% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 15:54:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1012.2 | 24903. | 507.59 | 5285.4 | 1996.6 | 2022.2 | 50031. | 516.8 |
| Stddev | 6.8 | 188. | 3.43 | 66.2 | 8.0 | 9.2 | 107. | .5 |
| %RSD | .66866 | .75560 | .67631 | 1.2520 | .40103 | .45714 | .21469 | .0980 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2021.7 | 1997.2 | 2084.4 | 26075. | 49133. | 5179.3 | 49865. | 1994.5 |
| Stddev | .9 | 4.0 | 14.9 | 96. | 179. | 13.3 | 44. | 10.9 |
| %RSD | .04275 | .20069 | .71507 | .36880 | .36449 | .25657 | .08886 | .54515 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2002.0 | 49826. | 1993.7 | 475.62 | 543.8 | 518.18 | 5044.6 | 5117.7 |
| Stddev | 3.1 | 192. | 3.4 | 3.70 | 3.0 | 3.63 | 8.1 | 14.7 |
| %RSD | .15498 | .38523 | .17133 | .77853 | .5488 | .70073 | .16100 | .28687 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 15:54:33 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 985.77 | 1996.2 | 1943.6 | 5123.0 | 4931.8 |
| Stddev | 16.36 | 7.4 | 3.1 | 14.0 | 7.9 |
| %RSD | 1.6602 | .37283 | .16014 | .27389 | .16092 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3958.5 | 2407.7 | 24653. | 2913.8 |
| Stddev | 4.3 | 2.5 | 45. | 9.9 |
| %RSD | .10811 | .10358 | .18144 | .33957 |

Sample Name: CCB Acquired: 5/9/2019 15:58:54 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .42586 | -4.2587 | .60888 | 18.649 | -.36613 | .08721 | -1.1538 | .1794 |
| Stddev | .18566 | 36.575 | 1.5488 | .278 | .11276 | .06533 | 2.0257 | .0797 |
| %RSD | 43.597 | 858.82 | 254.36 | 1.4924 | 30.799 | 74.904 | 175.57 | 44.42 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .66726 | -.02143 | -.60386 | -1.6587 | 134.04 | -1.1989 | 7.0877 | .28765 |
| Stddev | .11562 | .38081 | .55131 | 1.3922 | 18.31 | .4298 | 27.466 | .03217 |
| %RSD | 17.327 | 1777.2 | 91.298 | 83.934 | 13.658 | 35.852 | 387.52 | 11.182 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0113 | 53.385 | -1.3249 | -.65921 | .0826 | 2.7244 | .11496 | .04863 |
| Stddev | .3526 | 7.574 | .7264 | .75521 | .6164 | 1.9916 | .47519 | .23505 |
| %RSD | 8.7895 | 14.188 | 54.829 | 114.56 | 746.1 | 73.104 | 413.36 | 483.32 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 15:58:54 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.8178 | 2.6619 | 1.6693 | 9.5546 | 4.5088 |
| Stddev | 1.3053 | 3.9222 | .1986 | 11.912 | 5.0281 |
| %RSD | 34.189 | 147.35 | 11.897 | 124.68 | 111.52 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4455.4 | 2482.7 | 25651. | 2932.9 |
| Stddev | 4.9 | 2.2 | 63. | 15.3 |
| %RSD | .11092 | .08668 | .24693 | .52331 |

Sample Name: 240-111831-b-11-c@10 Acquired: 5/9/2019 16:03:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .97019 | 30791. | .54092 | 93.508 | -.23134 | -.15581 |
| Stddev | .14762 | 200. | 1.5308 | .509 | .13400 | .11315 |
| %RSD | 15.216 | .64827 | 282.99 | .54467 | 57.923 | 72.622 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 191.69 | 52.93 | 5.8429 | -.03402 | -1.1314 | 1723.8 |
| Stddev | 4.40 | .06 | .0074 | .08720 | .3000 | 4.4 |
| %RSD | 2.2977 | .1072 | .12740 | 256.30 | 26.516 | .25474 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 83061. | -.15354 | 15.299 | 121.53 | 14.527 | F 111540. |
| Stddev | 283. | .25670 | 5.700 | .21 | .092 | 434. |
| %RSD | .34129 | 167.18 | 37.258 | .17508 | .63468 | .38943 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111831-b-11-c@10 Acquired: 5/9/2019 16:03:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 151.18 | -1.2633 | -.5574 | 6.9517 | 1.4733 | .01526 |
| Stddev | .11 | .9691 | 1.212 | 2.2131 | .5215 | .12825 |
| %RSD | .07210 | 76.716 | 217.5 | 31.836 | 35.396 | 840.26 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6771 | 1.0547 | F 91790. | 311.07 | 8.5351 |
| Stddev | .6842 | .3788 | 245. | 20.49 | 2.9277 |
| %RSD | 40.795 | 35.916 | .26648 | 6.5868 | 34.302 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4041.7 | 2437.6 | 24888. | 2915.4 |
| Stddev | 8.4 | 6.1 | 57. | 10.3 |
| %RSD | .20906 | .25215 | .22892 | .35238 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.962% | 103.52% | 106.69% | 114.44% |
| Range | | | | |

Sample Name: 240-111831-b-12-c@10 Acquired: 5/9/2019 16:08:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .63617 | F 88774. | 2.2780 | 185.87 | .12450 | .01733 |
| Stddev | .13990 | 289. | 2.2467 | .77 | .22900 | .11234 |
| %RSD | 21.992 | .32517 | 98.624 | .41640 | 183.93 | 648.29 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 545.97 | 27.65 | 3.6645 | 56.266 | 20.265 | 2516.7 |
| Stddev | 2.36 | .21 | .1466 | .467 | .637 | 9.0 |
| %RSD | .43198 | .7698 | 4.0013 | .82973 | 3.1445 | .35580 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 136260. | .83980 | 114.78 | 107.61 | 1305.2 | 90982. |
| Stddev | 224. | 1.1727 | 22.95 | .27 | 5.5 | 114. |
| %RSD | .16449 | 139.64 | 19.997 | .24830 | .41932 | .12553 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-b-12-c@10 Acquired: 5/9/2019 16:08:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 244.58 | -.73492 | 1.026 | 1.0470 | 1.0725 | .17134 |
| Stddev | 1.09 | 1.6703 | 3.122 | 5.1747 | 1.0964 | .32887 |
| %RSD | .44471 | 227.27 | 304.2 | 494.25 | 102.22 | 191.94 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.8584 | -1.1793 | F 4322.5 | 2061.1 | 6.1967 |
| Stddev | 1.3303 | 1.3523 | 1.9 | 17.5 | 2.3444 |
| %RSD | 34.479 | 114.67 | .04290 | .84863 | 37.834 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3994.6 | 2442.2 | 24862. | 2913.7 |
| Stddev | 3.4 | 6.9 | 9. | 4.7 |
| %RSD | .08611 | .28128 | .03669 | .16283 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.821% | 103.72% | 106.58% | 114.37% |
| Range | | | | |

Sample Name: 240-111831-b-17-c@10 Acquired: 5/9/2019 16:13:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1428 | 44191. | -3.3095 | 105.20 | -.15929 | .02505 |
| Stddev | .5443 | 213. | 1.4591 | .60 | .12964 | .10292 |
| %RSD | 47.625 | .48300 | 44.089 | .56971 | 81.388 | 410.92 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 188.90 | 25.34 | 5.0273 | 9.3771 | 12.067 | 31.613 |
| Stddev | 4.87 | .29 | .1177 | .1895 | .375 | 5.275 |
| %RSD | 2.5777 | 1.152 | 2.3412 | 2.0210 | 3.1100 | 16.686 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 98921. | -1.0768 | 31.778 | 107.44 | 1425.4 | F 110240. |
| Stddev | 533. | 2.1527 | 4.654 | .21 | .7 | 458. |
| %RSD | .53872 | 199.92 | 14.645 | .19317 | .04575 | .41525 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111831-b-17-c@10 Acquired: 5/9/2019 16:13:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 226.40 | .19822 | .4131 | 3.3307 | 1.4096 | -.26984 |
| Stddev | 1.06 | .52768 | 4.797 | 3.3881 | 1.0042 | .23582 |
| %RSD | .46724 | 266.21 | 1161. | 101.72 | 71.240 | 87.392 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.4378 | .27232 | F 79096. | 1275.7 | 1.6020 |
| Stddev | 2.5529 | 3.9410 | 334. | 10.6 | 1.1512 |
| %RSD | 104.72 | 1447.2 | .42284 | .82725 | 71.862 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3984.0 | 2424.8 | 24730. | 2920.6 |
| Stddev | 5.7 | 3.0 | 45. | 29.4 |
| %RSD | .14305 | .12262 | .17999 | 1.0069 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.563% | 102.98% | 106.01% | 114.64% |
| Range | | | | |

Sample Name: 240-111831-b-18-c@10 Acquired: 5/9/2019 16:17:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .87189 | 37876. | -.56917 | 87.054 | -.10560 | -.04754 | 211.43 |
| Stddev | .46048 | 84. | .48202 | 1.535 | .25576 | .06971 | 5.80 |
| %RSD | 52.814 | .22286 | 84.689 | 1.7638 | 242.19 | 146.64 | 2.7411 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.326 | 13.363 | .15946 | -.78322 | 2305.9 | 93661. | -.89468 |
| Stddev | .195 | .195 | .31840 | .40521 | 12.8 | 171. | 1.2657 |
| %RSD | 8.379 | 1.4561 | 199.67 | 51.736 | .55676 | .18309 | 141.47 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48.794 | 53.443 | 8.1205 | 97905. | 462.74 | -.36837 | 1.413 |
| Stddev | 12.350 | .289 | .2981 | 189. | 2.25 | 2.0909 | 2.245 |
| %RSD | 25.311 | .54069 | 3.6713 | .19330 | .48605 | 567.61 | 158.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-b-18-c@10 Acquired: 5/9/2019 16:17:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.66331 | 1.7578 | -.21646 | -.16672 | 5.0284 | F 86659. | 107.06 |
| Stddev | 3.8992 | .7729 | .16773 | 2.6485 | 10.725 | 341. | 7.67 |
| %RSD | 587.84 | 43.969 | 77.490 | 1588.6 | 213.28 | .39320 | 7.1632 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 4000.0 | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 4.5534 |
| Stddev | 2.7874 |
| %RSD | 61.216 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4075.8 | 2462.7 | 25145. | 2912.4 |
| Stddev | 4.0 | 4.9 | 76. | 13.9 |
| %RSD | .09898 | .20006 | .30369 | .47817 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.788% | 104.59% | 107.79% | 114.32% |
| Range | | | | |

Sample Name: 240-112106-e-1-a Acquired: 5/9/2019 16:22:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40956 | 9.7577 | -.67245 | 117.27 | 56.896 | -.07184 | 8043.3 | .1493 |
| Stddev | .20817 | 8.9092 | 2.0902 | .92 | .158 | .13223 | 39.1 | .1120 |
| %RSD | 50.827 | 91.304 | 310.83 | .78227 | .27797 | 184.05 | .48644 | 75.05 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .48419 | .60785 | -.24663 | 48.698 | 1870.4 | .51433 | 4110.6 | .88022 |
| Stddev | .10556 | .27597 | 1.1965 | 2.523 | 9.3 | 1.1554 | 12.2 | .01168 |
| %RSD | 21.802 | 45.401 | 485.12 | 5.1799 | .49486 | 224.64 | .29670 | 1.3269 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.0382 | 36292. | -.72934 | .24405 | -1.505 | 5.1349 | 1.4361 | .02768 |
| Stddev | .2631 | 143. | .21791 | 1.0479 | 2.693 | 2.2842 | .7984 | .20879 |
| %RSD | 12.909 | .39474 | 29.878 | 429.36 | 178.9 | 44.483 | 55.592 | 754.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112106-e-1-a Acquired: 5/9/2019 16:22:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .16728 | -3.2017 | 10.630 | 11179. | 131.08 |
| Stddev | 3.1187 | 2.7860 | .541 | 19. | 1.39 |
| %RSD | 1864.4 | 87.018 | 5.0854 | .16970 | 1.0627 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4417.0 | 2516.8 | 26058. | 3000.8 |
| Stddev | 2.5 | 3.0 | 108. | 9.3 |
| %RSD | .05697 | .11775 | .41524 | .31140 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.06% | 106.88% | 111.71% | 117.79% |
| Range | | | | |

Sample Name: 240-112106-e-2-a Acquired: 5/9/2019 16:27:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .54457 | -8.6088 | -.37072 | 90.527 | 30.975 | -.10545 | 7827.5 | .1410 |
| Stddev | .28513 | 5.7646 | 2.7527 | 1.196 | .366 | .18303 | 42.5 | .1336 |
| %RSD | 52.359 | 66.962 | 742.52 | 1.3216 | 1.1809 | 173.58 | .54357 | 94.78 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0314 | -.32082 | -1.1180 | 742.24 | 1865.0 | 2.4385 | 2797.6 | 39.074 |
| Stddev | .1695 | .29445 | .4678 | 2.82 | 29.1 | .5199 | 13.8 | .045 |
| %RSD | 16.434 | 91.781 | 41.838 | .37933 | 1.5579 | 21.320 | .49273 | .11479 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.984 | 35390. | -.56975 | .64620 | -.4593 | 5.3393 | .09525 | .09575 |
| Stddev | .064 | 186. | .11294 | .57639 | .4266 | 1.9238 | .70113 | .15533 |
| %RSD | .57919 | .52460 | 19.823 | 89.197 | 92.87 | 36.031 | 736.07 | 162.22 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112106-e-2-a Acquired: 5/9/2019 16:27:16 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.97855 | 4.2581 | 5.6929 | 3352.6 | 89.960 |
| Stddev | 3.4316 | 3.4964 | .1528 | 14.5 | 3.756 |
| %RSD | 350.68 | 82.112 | 2.6845 | .43113 | 4.1755 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4382.5 | 2495.7 | 25727. | 2989.6 |
| Stddev | 5.2 | 7.9 | 74. | 13.0 |
| %RSD | .11763 | .31580 | .28769 | .43587 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.22% | 105.99% | 110.29% | 117.35% |
| Range | | | | |

Sample Name: 240-112106-e-3-a Acquired: 5/9/2019 16:31:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .09799 | 10.655 | 3.1896 | 110.63 | 117.50 | -.01912 | 10974. | .0703 |
| Stddev | .39504 | 25.663 | 1.4844 | .85 | .71 | .11244 | 49. | .1176 |
| %RSD | 403.14 | 240.86 | 46.538 | .77100 | .60736 | 587.98 | .44775 | 167.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .44950 | -.22309 | -.36839 | 4014.3 | 2857.8 | 7.4539 | 4716.3 | 184.81 |
| Stddev | .08489 | .06928 | .97435 | 16.2 | 37.6 | 1.2623 | 24.1 | .69 |
| %RSD | 18.885 | 31.054 | 264.49 | .40323 | 1.3142 | 16.935 | .51160 | .37302 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.1387 | 36433. | -1.0840 | -.50466 | .8292 | 2.8355 | .36214 | -.08775 |
| Stddev | .3435 | 95. | .2169 | 1.2544 | 2.983 | 2.9927 | .69079 | .05329 |
| %RSD | 16.061 | .25976 | 20.014 | 248.57 | 359.7 | 105.54 | 190.75 | 60.735 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112106-e-3-a Acquired: 5/9/2019 16:31:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.40132 | -.71822 | 4.4778 | 9810.9 | 182.52 |
| Stddev | 1.5546 | 4.0982 | .0230 | 182.7 | 9.06 |
| %RSD | 387.36 | 570.60 | .51272 | 1.8624 | 4.9624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4339.5 | 2492.9 | 25689. | 2971.1 |
| Stddev | 9.0 | 6.4 | 20. | 15.2 |
| %RSD | .20716 | .25488 | .07597 | .51013 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.18% | 105.87% | 110.13% | 116.62% |
| Range | | | | |

Sample Name: 240-112106-e-4-a Acquired: 5/9/2019 16:36:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28048 | -27.152 | 16.176 | 126.40 | 137.78 | -.00632 | 19342. | .0758 |
| Stddev | .20732 | 31.418 | 1.773 | .92 | .38 | .12082 | 50. | .0806 |
| %RSD | 73.915 | 115.71 | 10.958 | .72557 | .27908 | 1912.1 | .25851 | 106.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.9181 | -.02237 | -1.1582 | 32212. | 2635.1 | 1.2928 | 9858.9 | 427.30 |
| Stddev | .1814 | .14977 | .3326 | 77. | 56.7 | 1.7105 | 79.6 | 2.39 |
| %RSD | 3.0651 | 669.46 | 28.712 | .23897 | 2.1516 | 132.31 | .80766 | .56048 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.2531 | 39982. | .26167 | -1.5848 | -.0585 | 7.0668 | 1.6490 | -.29438 |
| Stddev | .1174 | 46. | .61419 | 1.5006 | 2.584 | 2.3053 | .2486 | .14527 |
| %RSD | 1.8776 | .11519 | 234.72 | 94.686 | 4421. | 32.621 | 15.075 | 49.347 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112106-e-4-a Acquired: 5/9/2019 16:36:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0285 | -4.7347 | 3.9779 | 9553.3 | 282.15 |
| Stddev | 2.3623 | 4.4510 | .3794 | 22.3 | 7.71 |
| %RSD | 229.69 | 94.009 | 9.5379 | .23297 | 2.7328 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4282.7 | 2470.3 | 25464. | 2951.0 |
| Stddev | 7.4 | 2.5 | 75. | 4.9 |
| %RSD | .17191 | .10210 | .29520 | .16772 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.80% | 104.91% | 109.16% | 115.83% |
| Range | | | | |

Sample Name: 240-112106-e-5-a Acquired: 5/9/2019 16:41:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12303 | -14.337 | 1.3130 | 11.086 | -.36966 | -.19615 | 27.728 | .0345 |
| Stddev | .19677 | 7.460 | .8786 | 1.088 | .12902 | .13009 | 3.574 | .0510 |
| %RSD | 159.94 | 52.034 | 66.918 | 9.8104 | 34.902 | 66.320 | 12.888 | 148.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .95293 | -.01941 | -.22076 | 2.9534 | 66.002 | .85226 | 14.211 | .23246 |
| Stddev | .17908 | .46052 | .14626 | .5436 | 13.443 | .29696 | 40.822 | .02781 |
| %RSD | 18.792 | 2372.9 | 66.255 | 18.406 | 20.367 | 34.844 | 287.25 | 11.965 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.8598 | 85.638 | -.84791 | -1.3439 | .0574 | 4.1535 | .76399 | -.08771 |
| Stddev | .3005 | 7.895 | .52114 | 1.5220 | .8455 | 1.9185 | .94392 | .18234 |
| %RSD | 16.155 | 9.2194 | 61.461 | 113.25 | 1473. | 46.189 | 123.55 | 207.88 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112106-e-5-a Acquired: 5/9/2019 16:41:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.2212 | -1.5041 | 3.7133 | 64.545 | 1.3922 |
| Stddev | 1.7898 | 3.1902 | .1442 | 3.985 | 2.9879 |
| %RSD | 146.56 | 212.09 | 3.8841 | 6.1743 | 214.61 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4543.4 | 2521.9 | 25963. | 2979.6 |
| Stddev | 11.6 | 5.7 | 49. | 4.4 |
| %RSD | .25582 | .22581 | .18955 | .14849 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 110.12% | 107.10% | 111.30% | 116.96% |
| Range | | | | |

Sample Name: 240-112111-k-2-a Acquired: 5/9/2019 16:46:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.07005 | 8.9448 | 1.4438 | 25.208 | 262.56 | .21876 | 46141. | .0837 |
| Stddev | .06079 | 2.1146 | 1.3425 | 1.032 | .49 | .05902 | 36. | .0699 |
| %RSD | 86.782 | 23.640 | 92.985 | 4.0957 | .18727 | 26.978 | .07860 | 83.50 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 21.114 | 1.1851 | -.66137 | 28004. | 1755.5 | 15.911 | 4683.4 | 1705.6 |
| Stddev | .292 | .2545 | .30638 | 47. | 12.4 | .815 | 35.9 | 3.2 |
| %RSD | 1.3830 | 21.474 | 46.324 | .16788 | .70827 | 5.1193 | .76746 | .18822 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6529 | 45828. | 31.775 | 1.0981 | -.0693 | 1.3175 | .87978 | .43299 |
| Stddev | .3265 | 61. | .730 | .5220 | 1.964 | 1.2021 | .62507 | .12824 |
| %RSD | 19.753 | .13335 | 2.2984 | 47.541 | 2831. | 91.244 | 71.049 | 29.618 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112111-k-2-a Acquired: 5/9/2019 16:46:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6082 | 4.8252 | 100.22 | 7721.7 | 145.90 |
| Stddev | 1.5878 | 3.9873 | .75 | 29.1 | 4.35 |
| %RSD | 98.737 | 82.635 | .74671 | .37681 | 2.9795 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4247.1 | 2468.9 | 25371. | 2960.8 |
| Stddev | 6.9 | 6.5 | 42. | 8.4 |
| %RSD | .16276 | .26175 | .16603 | .28484 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.94% | 104.85% | 108.76% | 116.22% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 16:50:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 974.76 | 24744. | 496.51 | 5131.0 | 1987.1 | 2010.7 | 48951. | 507.2 |
| Stddev | 2.21 | 124. | 2.82 | 81.4 | 1.7 | 2.1 | 137. | .6 |
| %RSD | .22664 | .50066 | .56895 | 1.5871 | .08483 | .10445 | .27993 | .1217 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1975.8 | 1941.0 | 2010.0 | 25497. | 48986. | 5108.1 | 48516. | 1924.0 |
| Stddev | .9 | .4 | 4.6 | 42. | 74. | 3.9 | 186. | 2.8 |
| %RSD | .04605 | .02028 | .23068 | .16291 | .15095 | .07645 | .38241 | .14555 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1960.1 | 49489. | 1949.6 | 465.89 | 535.1 | 506.31 | 4923.6 | 4969.1 |
| Stddev | 3.2 | 35. | 1.6 | 1.67 | 1.0 | 6.32 | 8.4 | 3.8 |
| %RSD | .16261 | .07129 | .08426 | .35886 | .1905 | 1.2483 | .17027 | .07714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 16:50:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 935.05 | 1961.5 | 1893.4 | 4977.9 | 4833.8 |
| Stddev | 21.38 | 9.9 | 2.9 | 50.8 | 33.8 |
| %RSD | 2.2865 | .50228 | .15430 | 1.0207 | .69838 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4020.1 | 2440.7 | 25321. | 2936.4 |
| Stddev | 3.4 | 2.5 | 17. | 10.6 |
| %RSD | .08399 | .10174 | .06609 | .36180 |

Sample Name: CCB Acquired: 5/9/2019 16:55:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38550 | -11.640 | -1.5456 | 12.024 | -.41043 | .31813 | 3.0364 | .1681 |
| Stddev | .36988 | 19.805 | 1.3292 | .347 | .08434 | .14905 | 1.1631 | .0712 |
| %RSD | 95.948 | 170.14 | 85.999 | 2.8873 | 20.550 | 46.851 | 38.305 | 42.36 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .83345 | .00574 | -.56012 | .17106 | 53.347 | -.48847 | 7.4431 | .28942 |
| Stddev | .09825 | .42305 | .49233 | 2.8152 | 10.451 | 1.3123 | 16.077 | .05078 |
| %RSD | 11.789 | 7369.6 | 87.897 | 1645.7 | 19.591 | 268.65 | 216.00 | 17.544 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.9627 | 20.728 | -1.4275 | .22596 | -.4563 | 1.7834 | 1.1466 | .37313 |
| Stddev | .2769 | 4.886 | .0955 | 1.9349 | 2.640 | 3.3877 | .5266 | .17728 |
| %RSD | 9.3451 | 23.572 | 6.6874 | 856.28 | 578.6 | 189.95 | 45.925 | 47.510 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 16:55:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.4064 | 5.0291 | .36548 | 14.961 | 1.8278 |
| Stddev | 1.4973 | 2.4684 | .13872 | 2.064 | 4.3399 |
| %RSD | 43.954 | 49.083 | 37.955 | 13.795 | 237.44 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4602.4 | 2566.7 | 26436. | 3037.3 |
| Stddev | 4.7 | 3.8 | 58. | 11.6 |
| %RSD | .10154 | .14936 | .21972 | .38311 |

Sample Name: 240-112111-k-3-a Acquired: 5/9/2019 16:59:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40276 | 12.785 | 3.2324 | 20.283 | 73.153 | .50164 | 1303.1 |
| Stddev | .35318 | 10.284 | .3144 | .174 | .064 | .20321 | 8.1 |
| %RSD | 87.691 | 80.437 | 9.7256 | .85765 | .08788 | 40.509 | .61936 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0423 | 59.045 | -.68602 | .88692 | 20442. | 475.29 | 2.2283 |
| Stddev | .0498 | .254 | .15804 | .48020 | 68. | 21.92 | 1.7819 |
| %RSD | 117.6 | .42963 | 23.037 | 54.142 | .33498 | 4.6118 | 79.970 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7003.0 | 4838.5 | 1.5972 | 172960. | 73.650 | 2.2154 | -1.631 |
| Stddev | 30.8 | 55.5 | .3310 | 319. | .611 | 1.8117 | 2.234 |
| %RSD | .44024 | 1.1469 | 20.722 | .18453 | .83026 | 81.779 | 136.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112111-k-3-a Acquired: 5/9/2019 16:59:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.7599 | 1.4945 | .67786 | 3.5452 | .08166 | 21.865 | 5334.1 |
| Stddev | 3.8160 | .5682 | .04955 | 1.8389 | 4.8334 | .085 | 51.6 |
| %RSD | 80.169 | 38.020 | 7.3101 | 51.870 | 5919.3 | .38955 | .96753 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 41.420 |
| Stddev | 1.913 |
| %RSD | 4.6183 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4237.5 | 2538.0 | 26174. | 3116.5 |
| Stddev | 3.6 | 5.1 | 172. | 5.4 |
| %RSD | .08522 | .20173 | .65877 | .17451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.71% | 107.78% | 112.21% | 122.33% |
| Range | | | | |

Sample Name: 240-112111-k-4-a Acquired: 5/9/2019 17:04:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06745 | 12.627 | 2.4116 | 16.581 | 180.26 | .32518 | 3703.8 |
| Stddev | .21311 | 5.991 | 1.9694 | 1.064 | 1.15 | .04972 | 24.1 |
| %RSD | 315.93 | 47.442 | 81.663 | 6.4155 | .63648 | 15.291 | .65101 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2006 | 75.381 | -.18757 | -.14993 | 125490. | 809.09 | 3.8943 |
| Stddev | .1015 | 1.038 | .20800 | .30020 | 555. | 21.83 | 1.3348 |
| %RSD | 50.62 | 1.3764 | 110.89 | 200.23 | .44200 | 2.6983 | 34.275 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17040. | 5208.4 | .93543 | 69585. | 9.7068 | 1.1724 | -.7535 |
| Stddev | 137. | 36.8 | .12229 | 375. | .8379 | 2.1324 | 1.483 |
| %RSD | .80658 | .70700 | 13.073 | .53928 | 8.6325 | 181.89 | 196.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112111-k-4-a  Acquired: 5/9/2019 17:04:38  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2761 | 2.7692 | .29406 | 4.7114 | 2.8553 | 3.8864 | 5870.1 |
| Stddev | 2.0096 | .2302 | .20479 | 1.6441 | 8.6637 | .0928 | 35.4 |
| %RSD | 46.996 | 8.3117 | 69.644 | 34.896 | 303.43 | 2.3888 | .60283 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 60.315 |
| Stddev | 4.653 |
| %RSD | 7.7144 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4196.6 | 2453.7 | 25415. | 2974.4 |
| Stddev | 26.4 | 11.5 | 70. | 24.0 |
| %RSD | .62902 | .46807 | .27379 | .80680 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.72% | 104.20% | 108.95% | 116.75% |
| Range | | | | |

Sample Name: 240-112111-k-5-a Acquired: 5/9/2019 17:09:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19906 | 29.995 | 1.7426 | 13.476 | 135.47 | 5.9140 | 1744.4 | .0480 |
| Stddev | .55156 | 27.150 | .8143 | .346 | .72 | .1022 | 11.0 | .0498 |
| %RSD | 277.08 | 90.514 | 46.729 | 2.5690 | .53456 | 1.7284 | .62842 | 103.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 35.857 | -.42139 | -.79013 | 17970. | 741.82 | 7.6151 | 3326.4 | 2217.1 |
| Stddev | .486 | .31268 | .39341 | 39. | 35.84 | .8111 | 29.2 | 4.0 |
| %RSD | 1.3567 | 74.203 | 49.790 | .21920 | 4.8316 | 10.651 | .87932 | .18123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1746 | 38695. | 52.424 | -1.0134 | -1.096 | 4.5311 | 1.5373 | .58348 |
| Stddev | .3195 | 81. | .883 | 1.5112 | 1.529 | 3.5211 | .5186 | .26681 |
| %RSD | 27.202 | .20863 | 1.6846 | 149.12 | 139.5 | 77.711 | 33.733 | 45.727 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112111-k-5-a Acquired: 5/9/2019 17:09:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0154 | 5.0312 | 5.8968 | 7538.8 | 40.428 |
| Stddev | 1.6779 | 2.7792 | .2215 | 63.7 | 4.708 |
| %RSD | 165.24 | 55.238 | 3.7569 | .84431 | 11.645 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4481.1 | 2574.9 | 26396. | 3079.1 |
| Stddev | 3.1 | 2.1 | 77. | 4.2 |
| %RSD | .07028 | .08232 | .29054 | .13625 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 108.61% | 109.35% | 113.16% | 120.86% |
| Range | | | | |

Sample Name: 240-112118-c-1-a Acquired: 5/9/2019 17:14:05 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.26660 | 1.2621 | 91.075 | 728.70 | 47.420 | -.01349 | 152280. |
| Stddev | .34822 | 8.4283 | .980 | 2.70 | .096 | .06565 | 291. |
| %RSD | 130.62 | 667.82 | 1.0761 | .37011 | .20146 | 486.62 | .19094 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4210 | 3.8832 | .13904 | -.57530 | 11480. | 3162.9 | 6.0382 |
| Stddev | .1377 | .4710 | .04420 | .28631 | 49. | 41.3 | .9676 |
| %RSD | 32.69 | 12.128 | 31.793 | 49.767 | .42714 | 1.3045 | 16.024 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 30033. | 89.062 | 18.242 | 32482. | 1.2486 | -1.4872 | -.3024 |
| Stddev | 159. | .355 | .394 | 156. | .4757 | .5850 | 1.958 |
| %RSD | .52898 | .39864 | 2.1604 | .47920 | 38.094 | 39.334 | 647.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112118-c-1-a  Acquired: 5/9/2019 17:14:05  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.10443 | 1.1444 | -.31734 | .96475 | 3.0046 | 4.2531 | 5277.4 |
| Stddev | .94894 | .8002 | .06543 | .85986 | 2.6302 | .0711 | 28.2 |
| %RSD | 908.65 | 69.919 | 20.617 | 89.129 | 87.540 | 1.6722 | .53473 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 622.14 |
| Stddev | 5.04 |
| %RSD | .80962 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4146.3 | 2430.9 | 25266. | 2993.6 |
| Stddev | 6.8 | 2.2 | 60. | 9.2 |
| %RSD | .16418 | .09013 | .23939 | .30627 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.50% | 103.24% | 108.31% | 117.51% |
| Range | | | | |

Sample Name: 240-112118-c-2-a Acquired: 5/9/2019 17:18:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.83537 | -16.911 | 9.7984 | 12087. | 78.888 | .19172 | 365440. |
| Stddev | .48965 | 10.466 | 1.5326 | 77. | .427 | .09779 | 3807. |
| %RSD | 58.615 | 61.886 | 15.642 | .63728 | .54133 | 51.007 | 1.0418 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2934 | -.43837 | -.06134 | .73647 | 9151.5 | 5513.3 | 9.2218 |
| Stddev | .0218 | .17806 | .26403 | .85393 | 34.3 | 26.7 | 1.3720 |
| %RSD | 7.444 | 40.619 | 430.44 | 115.95 | .37455 | .48494 | 14.878 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 58230. | 490.93 | 14.934 | 96974. | .05811 | -.13832 | -3.349 |
| Stddev | 193. | .26 | .136 | 278. | .93716 | 1.0602 | .860 |
| %RSD | .33061 | .05261 | .90932 | .28701 | 1612.7 | 766.49 | 25.67 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112118-c-2-a  Acquired: 5/9/2019 17:18:45  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .98288 | .81696 | -.87523 | 2.5403 | 8.7194 | 1.6223 | 7942.1 |
| Stddev | 1.1029 | .51015 | .18037 | 3.3352 | 1.1654 | .1102 | 44.4 |
| %RSD | 112.21 | 62.444 | 20.608 | 131.29 | 13.366 | 6.7905 | .55927 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1059.1 |
| Stddev | 5.5 |
| %RSD | .51539 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3841.0 | 2330.9 | 24871. | 2992.2 |
| Stddev | 22.1 | 9.1 | 216. | 47.1 |
| %RSD | .57522 | .38855 | .87036 | 1.5735 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.096% | 98.988% | 106.62% | 117.45% |
| Range | | | | |

Sample Name: 240-112143-b-1-a Acquired: 5/9/2019 17:23:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.51557 | -5.2763 | 2.0867 | 152.96 | 83.266 | .07742 | 153320. |
| Stddev | .39361 | 6.9575 | 1.6318 | 4.69 | .271 | .08862 | 741. |
| %RSD | 76.344 | 131.86 | 78.201 | 3.0681 | .32560 | 114.47 | .48314 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .5046 | .16533 | 13.515 | 9.2963 | 503.00 | 7928.4 | 17.809 |
| Stddev | .0590 | .16371 | .184 | .5150 | 2.19 | 58.1 | .995 |
| %RSD | 11.69 | 99.019 | 1.3612 | 5.5400 | .43477 | .73300 | 5.5865 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32494. | 23.816 | 129.24 | 101370. | 1.4852 | .65740 | -.3889 |
| Stddev | 222. | .063 | .09 | 457. | .6099 | .68971 | 1.585 |
| %RSD | .68231 | .26447 | .06843 | .45110 | 41.061 | 104.91 | 407.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112143-b-1-a  Acquired: 5/9/2019 17:23:26  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.5886 | 1.3202 | -.30380 | .85207 | 2.5626 | 8.0438 | 8353.9 |
| Stddev | 2.8577 | .6108 | .18344 | 4.8248 | 6.3458 | .1254 | 9.1 |
| %RSD | 37.658 | 46.268 | 60.382 | 566.25 | 247.63 | 1.5590 | .10868 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 349.16 |
| Stddev | 1.32 |
| %RSD | .37931 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4007.1 | 2387.2 | 24405. | 2877.2 |
| Stddev | 2.9 | 3.1 | 12. | 16.3 |
| %RSD | .07303 | .13170 | .04999 | .56488 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.122% | 101.38% | 104.62% | 112.94% |
| Range | | | | |

Sample Name: 240-112146-b-2-a Acquired: 5/9/2019 17:28:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .93355 | 267.55 | 2.2022 | 43.579 | 33.525 | .03298 | 35674. | .1570 |
| Stddev | .22596 | 8.86 | 1.4106 | .638 | .132 | .09863 | 93. | .1264 |
| %RSD | 24.204 | 3.3106 | 64.053 | 1.4636 | .39419 | 299.09 | .26193 | 80.53 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3258 | 50.602 | 14.425 | 5297.8 | 4831.2 | 1.6039 | 8854.0 | 9.8212 |
| Stddev | .2096 | .300 | .104 | 18.3 | 43.2 | .1026 | 66.8 | .0391 |
| %RSD | 15.807 | .59212 | .72286 | .34566 | .89389 | 6.3982 | .75434 | .39772 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2765 | 21619. | 1.1327 | 15.472 | 1.586 | 2.5292 | 1.9669 | 3.7805 |
| Stddev | .0609 | 61. | .7851 | .538 | 1.477 | 2.0443 | .3016 | .1021 |
| %RSD | 2.6760 | .28371 | 69.310 | 3.4787 | 93.13 | 80.827 | 15.332 | 2.7007 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112146-b-2-a Acquired: 5/9/2019 17:28:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .37479 | 8.5314 | 173.96 | 632.16 | 178.48 |
| Stddev | 2.8748 | 3.5598 | .65 | 7.03 | 3.38 |
| %RSD | 767.04 | 41.725 | .37244 | 1.1124 | 1.8911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4289.4 | 2470.2 | 25247. | 2914.1 |
| Stddev | 10.5 | 7.0 | 35. | 6.5 |
| %RSD | .24570 | .28365 | .13846 | .22451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.96% | 104.90% | 108.23% | 114.39% |
| Range | | | | |

Sample Name: 240-112150-q-1-a Acquired: 5/9/2019 17:32:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20314 | 129.12 | -1.1310 | 31.370 | 56.667 | -.06180 | 97954. | .2166 |
| Stddev | .30607 | 12.44 | 1.4646 | 1.011 | .734 | .12757 | 300. | .1000 |
| %RSD | 150.67 | 9.6370 | 129.50 | 3.2236 | 1.2956 | 206.41 | .30601 | 46.16 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14869 | -.16782 | -.53641 | 118.12 | 896.95 | 7.1963 | 26316. | 3.7279 |
| Stddev | .35866 | .39143 | .32895 | 3.36 | 45.03 | .9379 | 116. | .0206 |
| %RSD | 241.21 | 233.24 | 61.325 | 2.8468 | 5.0199 | 13.033 | .43982 | .55300 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1364 | 11083. | -.62958 | .97030 | 1.091 | 5.5476 | 1.5511 | 1.4934 |
| Stddev | .1925 | 58. | .47562 | .70265 | 1.433 | 3.1055 | .1699 | .1180 |
| %RSD | 16.939 | .52079 | 75.546 | 72.416 | 131.3 | 55.980 | 10.951 | 7.9024 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112150-q-1-a Acquired: 5/9/2019 17:32:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.71813 | 8.0695 | 1.7166 | 4730.8 | 606.30 |
| Stddev | 4.2355 | 3.0656 | .0340 | 58.3 | 1.14 |
| %RSD | 589.79 | 37.990 | 1.9804 | 1.2315 | .18781 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4178.7 | 2431.9 | 24803. | 2882.2 |
| Stddev | 2.3 | 2.6 | 96. | 9.7 |
| %RSD | .05469 | .10551 | .38615 | .33712 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.28% | 103.28% | 106.33% | 113.14% |
| Range | | | | |

Sample Name: 240-112150-r-1-a  Acquired: 5/9/2019 17:37:27  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28619 | 5.4603 | -2.2941 | 27.508 | 53.087 | .05532 | 92944. | .2153 |
| Stddev | .14789 | 7.5935 | 2.3022 | .351 | .268 | .05338 | 278. | .1627 |
| %RSD | 51.677 | 139.07 | 100.35 | 1.2773 | .50502 | 96.503 | .29905 | 75.57 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39123 | -.05055 | .33162 | -.37834 | 768.76 | 6.2133 | 24967. | .39727 |
| Stddev | .14826 | .27388 | .53533 | 2.4878 | 20.12 | .6480 | 146. | .04853 |
| %RSD | 37.896 | 541.80 | 161.43 | 657.54 | 2.6177 | 10.429 | .58297 | 12.215 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3336 | 10545. | .25206 | -2.1443 | .0327 | 3.0732 | .59027 | -.75562 |
| Stddev | .3769 | 28. | .70998 | 1.5266 | 3.796 | 2.4396 | .92465 | .17691 |
| %RSD | 28.265 | .26647 | 281.67 | 71.195 | 11590. | 79.384 | 156.65 | 23.412 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112150-r-1-a Acquired: 5/9/2019 17:37:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.65091 | .89357 | 3.7841 | 4280.0 | 574.36 |
| Stddev | 1.4511 | 1.9850 | .1963 | 4.8 | 4.99 |
| %RSD | 222.93 | 222.14 | 5.1873 | .11241 | .86908 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4185.6 | 2433.5 | 24837. | 2896.7 |
| Stddev | 10.4 | 4.5 | 108. | 2.5 |
| %RSD | .24844 | .18363 | .43342 | .08602 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.45% | 103.35% | 106.47% | 113.71% |
| Range | | | | |

Sample Name: 240-111448-b8c msd@2 Acquired: 5/9/2019 17:42:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18.066 | 89758. | 837.55 | 405.08 | 1346.2 | 28.353 | 56233. |
| Stddev | .347 | 159. | 4.54 | 2.67 | 1.2 | .207 | 85. |
| %RSD | 1.9189 | .17737 | .54191 | .65956 | .08661 | .72932 | .15096 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 21.95 | 510.69 | 186.90 | 222.26 | 130940. | 29104. | 524.78 |
| Stddev | .17 | 1.17 | .50 | .11 | 155. | 72. | 1.20 |
| %RSD | .7666 | .22876 | .26778 | .04974 | .11819 | .24576 | .22821 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42887. | 6182.1 | 383.86 | 21055. | 487.60 | 270.72 | 79.33 |
| Stddev | 76. | 15.4 | .45 | 28. | 2.12 | .77 | 1.70 |
| %RSD | .17724 | .24843 | .11719 | .13375 | .43430 | .28307 | 2.140 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111448-b8c msd@2 Acquired: 5/9/2019 17:42:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 787.64 | 862.35 | 828.95 | 877.51 | 358.12 | 617.24 | 1646.8 |
| Stddev | 1.90 | 1.26 | 1.14 | 6.19 | 4.95 | 1.42 | 14.2 |
| %RSD | .24170 | .14625 | .13698 | .70580 | 1.3813 | .23008 | .86374 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 492.66 |
| Stddev | 4.27 |
| %RSD | .86662 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4034.7 | 2911.4 | 29643. | 3461.3 |
| Stddev | 6.3 | 4.0 | 101. | 18.8 |
| %RSD | .15520 | .13641 | .34107 | .54266 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.791% | 123.64% | 127.08% | 135.87% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 17:46:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 974.41 | 23868. | 484.91 | 5001.8 | 1894.4 | 1928.4 | 47955. | 496.6 |
| Stddev | 1.43 | 29. | .51 | 27.3 | 2.9 | 2.5 | 154. | .9 |
| %RSD | .14678 | .12237 | .10539 | .54538 | .15354 | .12787 | .32046 | .1844 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1937.0 | 1930.0 | 1991.9 | 24953. | 47134. | 4978.4 | 48001. | 1927.1 |
| Stddev | 1.6 | 2.2 | 8.4 | 76. | 79. | 12.3 | 400. | 3.6 |
| %RSD | .08254 | .11648 | .42170 | .30294 | .16679 | .24715 | .83354 | .18552 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1905.6 | 48000. | 1912.7 | 456.19 | 525.9 | 496.17 | 4828.7 | 4903.6 |
| Stddev | 4.3 | 54. | 3.4 | 4.15 | 2.0 | 7.08 | 4.4 | 4.4 |
| %RSD | .22741 | .11307 | .17600 | .90872 | .3727 | 1.4278 | .09127 | .09055 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 17:46:44 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 919.58 | 1912.8 | 1871.9 | 4922.1 | 4708.9 |
| Stddev | 16.35 | 8.7 | 1.2 | 21.8 | 11.8 |
| %RSD | 1.7784 | .45431 | .06430 | .44243 | .24954 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4029.8 | 2451.7 | 24988. | 2926.6 |
| Stddev | 4.2 | 2.6 | 40. | 3.0 |
| %RSD | .10305 | .10714 | .15821 | .10372 |

Sample Name: CCB Acquired: 5/9/2019 17:51:05 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .50833 | -34.614 | -.07347 | 8.6389 | -.36298 | -.02753 | .47261 | .1106 |
| Stddev | .22546 | 13.537 | 1.3289 | .7472 | .09640 | .04254 | 1.7725 | .1169 |
| %RSD | 44.353 | 39.108 | 1808.8 | 8.6495 | 26.557 | 154.54 | 375.06 | 105.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .91969 | .02294 | -.50185 | .96703 | 51.094 | .70455 | -4.6154 | .27268 |
| Stddev | .20375 | .27543 | .50369 | 3.4967 | 12.862 | .79595 | 33.479 | .07027 |
| %RSD | 22.154 | 1200.9 | 100.37 | 361.59 | 25.174 | 112.97 | 725.38 | 25.770 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.1682 | -4.1606 | -1.0085 | .79590 | -1.253 | 1.7534 | .94870 | .27030 |
| Stddev | .0443 | 7.2931 | .2704 | .18765 | 1.036 | 1.7446 | .68482 | .26702 |
| %RSD | 2.0451 | 175.29 | 26.814 | 23.577 | 82.73 | 99.502 | 72.185 | 98.789 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 17:51:05 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.53446 | -3.5313 | .20042 | 7.7257 | 6.5477 |
| Stddev | 1.5168 | 7.0155 | .04821 | 6.1522 | 3.2268 |
| %RSD | 283.80 | 198.67 | 24.054 | 79.633 | 49.281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4524.9 | 2529.9 | 25876. | 2932.7 |
| Stddev | 12.1 | 4.0 | 14. | 6.4 |
| %RSD | .26784 | .15830 | .05473 | .21887 |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 17:55:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.092 | 181.54 | 14.770 | 108.94 | 194.70 | 5.0525 | 4956.3 |
| Stddev | .867 | 31.69 | 2.123 | 1.32 | .70 | .2054 | 28.3 |
| %RSD | 8.5915 | 17.458 | 14.372 | 1.2123 | .36051 | 4.0654 | .57050 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.286 | 9.9552 | 9.9130 | 24.753 | 204.68 | 4892.5 | 50.819 |
| Stddev | .126 | .0704 | .1489 | .923 | 1.46 | 43.4 | 1.164 |
| %RSD | 2.388 | .70731 | 1.5018 | 3.7274 | .71263 | .88659 | 2.2911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4930.7 | 15.306 | 40.913 | 4892.4 | 36.397 | 9.9559 | 22.89 |
| Stddev | 34.7 | .076 | .546 | 8.2 | .517 | 1.3936 | 3.65 |
| %RSD | .70394 | .49357 | 1.3340 | .16664 | 1.4194 | 13.998 | 15.95 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 17:55:50 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 26.953 | 96.332 | 49.753 | 17.382 | 50.132 | 52.526 | 498.23 |
| Stddev | 1.999 | .441 | .135 | 2.879 | 6.733 | .060 | 10.37 |
| %RSD | 7.4178 | .45809 | .27203 | 16.565 | 13.430 | .11508 | 2.0821 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 20.000 | | | | | | |
| Range | 30.500% | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 50.602 |
| Stddev | 5.329 |
| %RSD | 10.532 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4400.3 | 2497.6 | 25489. | 2833.7 |
| Stddev | 10.2 | 7.0 | 50. | 7.7 |
| %RSD | .23233 | .27889 | .19749 | .27082 |

Sample Name: 480-152753-a-24-a@2 Acquired: 5/9/2019 18:00:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28458 | 66613. | 15.640 | 20.449 | 830.51 | 3.0607 | 12522. |
| Stddev | .41393 | 153. | 2.511 | .470 | 1.63 | .1285 | 38. |
| %RSD | 145.45 | .22931 | 16.054 | 2.3006 | .19666 | 4.1981 | .30694 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.423 | 46.441 | 82.514 | 38.110 | 108020. | 4856.2 | 174.02 |
| Stddev | .053 | .457 | .244 | .483 | 377. | 24.4 | 2.04 |
| %RSD | 3.740 | .98382 | .29518 | 1.2665 | .34934 | .50334 | 1.1714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17308. | 7477.3 | 3.6343 | 808.51 | 85.990 | 37.641 | 1.075 |
| Stddev | 19. | 29.8 | .2776 | 7.03 | .235 | 1.229 | .901 |
| %RSD | .10825 | .39841 | 7.6377 | .86976 | .27341 | 3.2657 | 83.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 480-152753-a-24-a@2 Acquired: 5/9/2019 18:00:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.9418 | 20.357 | 319.62 | 8.0587 | 118.62 | 347.09 | 800.43 |
| Stddev | 2.8366 | .831 | .67 | .8122 | 6.02 | .28 | 3.86 |
| %RSD | 96.426 | 4.0806 | .20987 | 10.078 | 5.0782 | .08183 | .48254 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 171.49 |
| Stddev | 3.66 |
| %RSD | 2.1337 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4211.8 | 2792.1 | 28192. | 3205.5 |
| Stddev | 4.4 | 4.0 | 89. | 9.4 |
| %RSD | .10473 | .14438 | .31500 | .29324 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.08% | 118.58% | 120.86% | 125.83% |
| Range | | | | |

Sample Name: 480-152753-a-28-a@2 Acquired: 5/9/2019 18:05:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.34174 | 70467. | 26.762 | 18.894 | 808.15 | 3.7200 | 14658. |
| Stddev | .24016 | 168. | .600 | .558 | .59 | .1904 | 25. |
| %RSD | 70.277 | .23813 | 2.2404 | 2.9521 | .07333 | 5.1185 | .17298 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.519 | 68.687 | 87.062 | 46.250 | 152720. | 4093.1 | 221.52 |
| Stddev | .127 | .090 | .849 | 1.179 | 196. | 38.2 | .37 |
| %RSD | 3.593 | .13167 | .97568 | 2.5495 | .12825 | .93327 | .16588 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 19043. | 9838.3 | 5.0458 | 697.25 | 105.04 | 45.537 | -.4862 |
| Stddev | 73. | 70.3 | .1571 | 5.64 | .14 | 1.351 | 4.264 |
| %RSD | .38578 | .71473 | 3.1138 | .80861 | .13456 | 2.9678 | 877.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 480-152753-a-28-a@2 Acquired: 5/9/2019 18:05:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.8719 | 25.116 | 356.17 | 8.5088 | 150.58 | 368.77 | 787.73 |
| Stddev | 1.2349 | .553 | 1.25 | .9812 | 3.71 | 1.21 | 4.20 |
| %RSD | 25.347 | 2.2016 | .35234 | 11.531 | 2.4659 | .32759 | .53262 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 145.83 |
| Stddev | 4.58 |
| %RSD | 3.1438 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4189.2 | 2821.3 | 28482. | 3239.2 |
| Stddev | 14.2 | 4.7 | 115. | 11.6 |
| %RSD | .33797 | .16622 | .40391 | .35721 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.54% | 119.81% | 122.10% | 127.15% |
| Range | | | | |

Sample Name: 480-152753-a-30-a@2 Acquired: 5/9/2019 18:09:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.06966 | 49610. | 18.744 | 15.905 | 566.13 | 2.9472 | 8621.1 |
| Stddev | .27472 | 282. | 3.689 | .619 | 3.31 | .1003 | 40.4 |
| %RSD | 394.39 | .56757 | 19.680 | 3.8947 | .58392 | 3.4047 | .46891 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.900 | 56.458 | 68.839 | 36.608 | 108060. | 3757.1 | 221.79 |
| Stddev | .119 | .077 | .191 | .418 | 469. | 28.3 | 1.93 |
| %RSD | 4.096 | .13692 | .27690 | 1.1428 | .43437 | .75436 | .86999 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15286. | 7284.4 | 4.2996 | 509.71 | 82.222 | 27.461 | -1.636 |
| Stddev | 93. | 56.2 | .3176 | 8.81 | .481 | 2.042 | 2.523 |
| %RSD | .60828 | .77090 | 7.3860 | 1.7286 | .58461 | 7.4366 | 154.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 480-152753-a-30-a@2 Acquired: 5/9/2019 18:09:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.8056 | 19.135 | 386.85 | 8.4343 | 109.23 | 232.75 | 654.44 |
| Stddev | 1.4215 | .590 | .78 | 2.4085 | 2.67 | .34 | 11.88 |
| %RSD | 29.580 | 3.0838 | .20128 | 28.556 | 2.4483 | .14678 | 1.8147 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 100.51 |
| Stddev | 1.72 |
| %RSD | 1.7077 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4238.7 | 2735.2 | 27677. | 3136.9 |
| Stddev | 4.2 | 7.4 | 65. | 15.8 |
| %RSD | .09915 | .27098 | .23655 | .50331 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.74% | 116.16% | 118.65% | 123.13% |
| Range | | | | |

Sample Name: 480-152753-a-56-a@5 Acquired: 5/9/2019 18:14:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .44430 | 33948. | 10.937 | 9.5173 | 493.91 | 1.3745 | 5757.1 | 1.564 |
| Stddev | .32796 | 42. | .290 | .9237 | 1.90 | .0885 | 18.1 | .205 |
| %RSD | 73.813 | .12493 | 2.6557 | 9.7059 | .38434 | 6.4349 | .31499 | 13.10 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 35.482 | 42.969 | 15.582 | 66110. | 2391.9 | 54.398 | 9319.6 | 7860.9 |
| Stddev | .073 | .303 | .795 | 39. | 26.3 | 1.360 | 42.8 | 33.6 |
| %RSD | .20508 | .70619 | 5.1009 | .05907 | 1.0987 | 2.5001 | .45884 | .42717 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.7186 | 225.47 | 40.477 | 19.258 | -.6285 | 2.4143 | 8.7862 | 221.46 |
| Stddev | .1074 | 6.21 | .510 | 2.096 | 2.093 | .5472 | .9296 | 1.33 |
| %RSD | 2.2755 | 2.7544 | 1.2602 | 10.882 | 333.0 | 22.665 | 10.580 | .60169 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 480-152753-a-56-a@5 Acquired: 5/9/2019 18:14:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.7596 | 79.261 | 199.38 | 277.20 | 38.300 |
| Stddev | 1.2092 | 1.698 | .35 | 2.55 | 3.624 |
| %RSD | 15.583 | 2.1417 | .17622 | .91888 | 9.4615 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4326.3 | 2638.5 | 26686. | 3006.9 |
| Stddev | 8.9 | 5.4 | 60. | 9.1 |
| %RSD | .20501 | .20487 | .22632 | .30382 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 104.86% | 112.05% | 114.40% | 118.03% |
| Range | | | | |

Sample Name: 480-152753-a-58-a@2 Acquired: 5/9/2019 18:19:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.31619 | 57117. | 21.549 | 19.778 | 799.08 | 2.1709 | 11766. | 1.882 |
| Stddev | .34337 | 1408. | 1.593 | .986 | 20.49 | .0852 | 303. | .142 |
| %RSD | 108.59 | 2.4646 | 7.3916 | 4.9840 | 2.5640 | 3.9266 | 2.5785 | 7.558 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42.320 | 66.120 | 35.109 | 86225. | 5088.7 | 92.086 | 14456. | 8146.4 |
| Stddev | .143 | .428 | .153 | 2239. | 152.1 | 2.877 | 377. | 32.3 |
| %RSD | .33678 | .64723 | .43497 | 2.5965 | 2.9897 | 3.1247 | 2.6110 | .39693 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.7412 | 478.87 | 68.722 | 41.509 | .8437 | 4.4575 | 19.881 | 475.14 |
| Stddev | .4308 | 17.09 | .403 | .884 | 2.860 | 4.6971 | .423 | .91 |
| %RSD | 6.3902 | 3.5697 | .58692 | 2.1305 | 339.0 | 105.38 | 2.1270 | .19183 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 480-152753-a-58-a@2 Acquired: 5/9/2019 18:19:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.1818 | 104.08 | 299.47 | 813.86 | 63.362 |
| Stddev | 1.4874 | 5.02 | .87 | 37.25 | 6.204 |
| %RSD | 18.179 | 4.8220 | .29011 | 4.5765 | 9.7912 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4215.2 | 2687.1 | 27019. | 3026.0 |
| Stddev | 14.2 | 7.5 | 125. | 73.1 |
| %RSD | .33677 | .28040 | .46401 | 2.4148 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.17% | 114.12% | 115.83% | 118.78% |
| Range | | | | |

Sample Name: 480-152753-a-59-a@2 Acquired: 5/9/2019 18:24:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.33971 | 64291. | 15.347 | 19.540 | 662.65 | 2.7512 | 12008. |
| Stddev | .11467 | 506. | 1.955 | .679 | 3.61 | .0443 | 54. |
| %RSD | 33.755 | .78727 | 12.737 | 3.4748 | .54509 | 1.6088 | .44673 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.588 | 44.014 | 78.743 | 25.760 | 107420. | 5371.9 | 107.67 |
| Stddev | .093 | .234 | .425 | .083 | 427. | 18.5 | 1.32 |
| %RSD | 5.851 | .53108 | .53957 | .32270 | .39795 | .34493 | 1.2262 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18138. | 7627.8 | 4.7806 | 591.55 | 77.854 | 31.532 | -2.060 |
| Stddev | 63. | 39.0 | .0991 | 10.23 | .212 | 1.056 | .958 |
| %RSD | .34708 | .51170 | 2.0731 | 1.7296 | .27204 | 3.3477 | 46.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 480-152753-a-59-a@2 Acquired: 5/9/2019 18:24:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.5576 | 19.318 | 506.06 | 7.5793 | 99.238 | 370.77 | 737.53 |
| Stddev | 1.3938 | .532 | .47 | .4669 | 1.316 | .98 | 2.83 |
| %RSD | 54.496 | 2.7518 | .09264 | 6.1602 | 1.3264 | .26427 | .38438 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 66.551 |
| Stddev | 1.919 |
| %RSD | 2.8832 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4126.9 | 2686.6 | 27054. | 3062.8 |
| Stddev | 11.6 | 4.6 | 86. | 16.5 |
| %RSD | .28107 | .16987 | .31802 | .53833 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.03% | 114.09% | 115.98% | 120.23% |
| Range | | | | |

Sample Name: 480-152753-a-65-a@2 Acquired: 5/9/2019 18:28:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.58884 | 62635. | 25.417 | 21.796 | 849.71 | 3.2403 | 10757. |
| Stddev | .51977 | 222. | 1.784 | .353 | 2.32 | .0812 | 37. |
| %RSD | 88.270 | .35517 | 7.0190 | 1.6217 | .27332 | 2.5055 | .34185 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.428 | 62.464 | 74.984 | 30.175 | 169880. | 5597.4 | 101.76 |
| Stddev | .143 | .484 | .148 | .842 | 498. | 18.4 | 1.60 |
| %RSD | 10.03 | .77466 | .19770 | 2.7894 | .29308 | .32885 | 1.5713 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16313. | 10303. | 6.6135 | 883.77 | 72.539 | 46.208 | 2.883 |
| Stddev | 81. | 115. | .1194 | 3.61 | .123 | .755 | 4.431 |
| %RSD | .49397 | 1.1187 | 1.8060 | .40805 | .16990 | 1.6333 | 153.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 480-152753-a-65-a@2 Acquired: 5/9/2019 18:28:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3288 | 19.317 | 601.71 | 9.0963 | 136.03 | 384.39 | 1096.3 |
| Stddev | 2.1430 | 1.023 | 2.09 | 1.2926 | 6.33 | .78 | 6.1 |
| %RSD | 161.27 | 5.2936 | .34748 | 14.211 | 4.6526 | .20383 | .55573 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 62.802 |
| Stddev | 3.305 |
| %RSD | 5.2630 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4148.6 | 2680.3 | 27036. | 3096.3 |
| Stddev | 8.1 | 2.0 | 84. | 1.4 |
| %RSD | .19586 | .07593 | .30956 | .04391 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.55% | 113.83% | 115.90% | 121.54% |
| Range | | | | |

Sample Name: 240-111977-a-5-a Acquired: 5/9/2019 18:33:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.17756 | .18449 | -1.9981 | 84.235 | 161.79 | -.01646 | 116690. |
| Stddev | .39416 | 8.6571 | 1.9378 | 1.095 | .54 | .10175 | 502. |
| %RSD | 221.99 | 4692.4 | 96.983 | 1.2999 | .33131 | 618.13 | .43056 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4237 | .22856 | -.05232 | -.81253 | 500.22 | 1662.2 | 17.913 |
| Stddev | .0714 | .17792 | .19300 | .43300 | 3.28 | 16.3 | 1.212 |
| %RSD | 16.85 | 77.845 | 368.89 | 53.291 | .65581 | .98320 | 6.7665 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 40186. | 189.50 | 1.1443 | 8206.3 | .66427 | -.70700 | .2906 |
| Stddev | 260. | .53 | .3221 | 38.8 | .30400 | 1.7284 | 2.801 |
| %RSD | .64692 | .28074 | 28.147 | .47329 | 45.765 | 244.47 | 963.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111977-a-5-a  Acquired: 5/9/2019 18:33:40  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1384 | 1.1350 | -.57989 | 1.2250 | -4.5747 | 4.4609 | 11500. |
| Stddev | 1.5497 | .5605 | .07281 | .1413 | 3.7908 | .0454 | 84. |
| %RSD | 136.13 | 49.384 | 12.556 | 11.534 | 82.865 | 1.0170 | .73154 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 278.94 |
| Stddev | 10.06 |
| %RSD | 3.6056 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4089.8 | 2396.8 | 24459. | 2785.2 |
| Stddev | 5.3 | 7.0 | 33. | 20.1 |
| %RSD | .12970 | .29198 | .13651 | .72323 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.128% | 101.79% | 104.85% | 109.33% |
| Range | | | | |

Sample Name: SD 240-111977-a-5a@5 Acquired: 5/9/2019 18:38:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04694 | 11.220 | 1.3460 | 18.220 | 32.147 | .00517 | 23182. | .0281 |
| Stddev | .37224 | 7.025 | 2.1116 | .609 | .203 | .22433 | 15. | .1602 |
| %RSD | 793.07 | 62.617 | 156.87 | 3.3423 | .63172 | 4341.5 | .06425 | 571.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .35167 | -.15247 | -.56337 | 96.851 | 327.86 | 3.5632 | 8083.3 | 40.944 |
| Stddev | .07022 | .09944 | .15764 | 1.554 | 13.37 | 1.5032 | 13.7 | .117 |
| %RSD | 19.967 | 65.220 | 27.982 | 1.6046 | 4.0778 | 42.186 | .16943 | .28618 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1717 | 1790.7 | -.91826 | -.40149 | -.2367 | 3.2110 | .87806 | -.26204 |
| Stddev | .3636 | 7.2 | .39103 | .44415 | 1.502 | 4.1543 | .28443 | .08960 |
| %RSD | 31.031 | .40202 | 42.584 | 110.63 | 634.5 | 129.38 | 32.393 | 34.195 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-111977-a-5a@5 Acquired: 5/9/2019 18:38:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.2384 | -.07397 | .87822 | 2273.6 | 60.661 |
| Stddev | 1.0321 | 2.0310 | .08527 | 23.0 | 2.580 |
| %RSD | 46.106 | 2745.7 | 9.7089 | 1.0115 | 4.2527 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4299.9 | 2441.7 | 24809. | 2779.8 |
| Stddev | 9.6 | 1.0 | 9. | 5.1 |
| %RSD | .22302 | .03928 | .03580 | .18279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 104.22% | 103.69% | 106.36% | 109.12% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 18:43:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1008.9 | 24820. | 498.07 | 5207.3 | 1949.3 | 1997.4 | 49878. | 511.8 |
| Stddev | 2.0 | 158. | 2.04 | 53.6 | 11.1 | 10.0 | 168. | 1.4 |
| %RSD | .19392 | .63699 | .40969 | 1.0294 | .56958 | .49996 | .33724 | .2723 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1999.6 | 2017.5 | 2046.5 | 25843. | 48730. | 5112.4 | 49932. | 2003.5 |
| Stddev | 3.3 | 1.5 | 3.4 | 81. | 265. | 22.5 | 141. | 1.2 |
| %RSD | .16256 | .07593 | .16634 | .31149 | .54310 | .43940 | .28214 | .05774 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1960.8 | 49586. | 1973.7 | 473.87 | 534.0 | 503.60 | 5015.9 | 5073.2 |
| Stddev | 3.7 | 252. | 2.3 | 2.79 | 3.5 | 5.25 | 1.5 | 2.9 |
| %RSD | .18937 | .50918 | .11660 | .58816 | .6562 | 1.0427 | .02948 | .05721 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 18:43:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 969.89 | 1980.9 | 1962.9 | 5112.1 | 4878.1 |
| Stddev | 8.12 | 10.5 | 2.9 | 39.2 | 42.7 |
| %RSD | .83708 | .53225 | .14914 | .76629 | .87499 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3874.6 | 2365.8 | 23782. | 2737.7 |
| Stddev | 6.8 | 6.4 | 56. | 13.2 |
| %RSD | .17644 | .27119 | .23678 | .48122 |

Sample Name: CCB Acquired: 5/9/2019 18:47:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14188 | -5.4198 | -.24343 | 6.8150 | -.31213 | .13371 | -.23511 | .1181 |
| Stddev | .26683 | 31.376 | 3.4485 | .3108 | .20154 | .09529 | 4.0565 | .0644 |
| %RSD | 188.06 | 578.91 | 1416.6 | 4.5611 | 64.569 | 71.262 | 1725.4 | 54.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .57214 | -.42506 | -.66108 | -2.7006 | 44.923 | 1.3210 | 36.835 | .27921 |
| Stddev | .38876 | .11424 | 1.2635 | 1.5526 | 22.849 | .2923 | 25.808 | .02845 |
| %RSD | 67.948 | 26.877 | 191.13 | 57.492 | 50.864 | 22.131 | 70.065 | 10.191 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7452 | -28.449 | -1.2650 | -1.0392 | -2.840 | 3.5022 | 1.3277 | .07156 |
| Stddev | .0793 | 5.710 | .5177 | .5697 | 1.945 | .9861 | .1226 | .03388 |
| %RSD | 4.5410 | 20.070 | 40.921 | 54.823 | 68.48 | 28.156 | 9.2333 | 47.351 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 18:47:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.2065 | -.00432 | .17596 | 16.044 | 3.6081 |
| Stddev | 1.0081 | 3.0585 | .05745 | 11.980 | 6.6267 |
| %RSD | 83.555 | 70806. | 32.651 | 74.670 | 183.66 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4360.8 | 2444.5 | 24544. | 2772.2 |
| Stddev | 7.4 | 2.8 | 27. | 22.8 |
| %RSD | .17057 | .11454 | .10842 | .82368 |

Sample Name: 240-111977-a-5-b ms  Acquired: 5/9/2019 18:52:09  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.553 | 2027.9 | 2125.3 | 1183.1 | 2105.8 | 51.260 | 162130. |
| Stddev | .158 | 16.6 | 8.6 | 1.3 | 15.6 | .216 | 1097. |
| %RSD | .29979 | .81740 | .40320 | .10792 | .73958 | .42050 | .67644 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.13 | 506.80 | 204.08 | 264.44 | 1529.6 | 52094. | 1067.5 |
| Stddev | .12 | .63 | .74 | .72 | 18.1 | 402. | 9.7 |
| %RSD | .2268 | .12510 | .36115 | .27095 | 1.1803 | .77125 | .91138 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 90239. | 691.32 | 987.59 | 59135. | 504.07 | 489.28 | 567.6 |
| Stddev | 921. | 1.25 | 3.20 | 432. | .61 | 1.74 | 4.1 |
| %RSD | 1.0205 | .18051 | .32357 | .72990 | .12031 | .35540 | .7234 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111977-a-5-b ms  Acquired: 5/9/2019 18:52:09  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2201.7 | 2063.3 | 1019.4 | 1930.7 | 501.92 | 506.84 | 12312. |
| Stddev | 15.1 | 10.3 | 1.3 | 3.9 | 4.10 | 1.84 | 93. |
| %RSD | .68568 | .49972 | .12492 | .20273 | .81601 | .36331 | .75874 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1251.2 |
| Stddev | 19.2 |
| %RSD | 1.5315 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3827.5 | 2330.8 | 23824. | 2757.9 |
| Stddev | 2.6 | 5.1 | 12. | 25.2 |
| %RSD | .06799 | .21705 | .04984 | .91265 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.770% | 98.985% | 102.13% | 108.26% |
| Range | | | | |

Sample Name: 240-111977-a-5-c msd  Acquired: 5/9/2019 18:56:27  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.266 | 2048.5 | 2113.1 | 1185.7 | 2129.0 | 51.434 | 164250. |
| Stddev | .450 | 23.8 | 12.0 | 7.5 | 1.2 | .163 | 166. |
| %RSD | .86005 | 1.1624 | .56878 | .63328 | .05765 | .31756 | .10128 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.78 | 504.79 | 203.17 | 260.98 | 1534.5 | 53068. | 1068.2 |
| Stddev | .22 | .43 | .73 | 1.06 | 12.1 | 93. | 2.4 |
| %RSD | .4189 | .08552 | .35862 | .40475 | .78907 | .17527 | .22846 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 90644. | 687.99 | 982.67 | 60026. | 501.25 | 485.80 | 563.7 |
| Stddev | 148. | 2.75 | .82 | 65. | 1.51 | 4.56 | 2.9 |
| %RSD | .16275 | .39916 | .08381 | .10767 | .30076 | .93929 | .5104 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111977-a-5-c msd  Acquired: 5/9/2019 18:56:27  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2191.9 | 2056.1 | 1010.5 | 1964.2 | 504.32 | 506.82 | 12490. |
| Stddev | 9.7 | 6.5 | 2.6 | 27.3 | 5.87 | 2.40 | 61. |
| %RSD | .44061 | .31612 | .25407 | 1.3917 | 1.1646 | .47321 | .49121 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1258.7 |
| Stddev | 3.6 |
| %RSD | .28886 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3821.6 | 2334.1 | 23821. | 2737.3 |
| Stddev | 8.6 | 2.5 | 85. | 8.1 |
| %RSD | .22477 | .10687 | .35648 | .29734 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.628% | 99.123% | 102.12% | 107.45% |
| Range | | | | |

Sample Name: 240-111977-a-1-a Acquired: 5/9/2019 19:00:46 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .02129 | 76.748 | 34.244 | 17595. | 15.243 | -.10731 | 26637. |
| Stddev | .54785 | 14.882 | .710 | 155. | .447 | .06128 | 181. |
| %RSD | 2572.7 | 19.391 | 2.0737 | .87837 | 2.9327 | 57.105 | .68112 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0467 | .74296 | 1.3398 | .27534 | 290.13 | 1656.6 | 2.9090 |
| Stddev | .2030 | .11226 | .1666 | .24080 | 6.74 | 62.1 | 1.3989 |
| %RSD | 434.7 | 15.109 | 12.436 | 87.457 | 2.3242 | 3.7475 | 48.089 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13774. | 183.44 | 5.2841 | 286050. | 1.2388 | -1.0088 | -.7462 |
| Stddev | 126. | .23 | .3622 | 1600. | .6240 | .2348 | 3.133 |
| %RSD | .91367 | .12337 | 6.8546 | .55938 | 50.371 | 23.273 | 419.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111977-a-1-a  Acquired: 5/9/2019 19:00:46  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.3164 | 1.8081 | 4.2259 | 1.2499 | 11.225 | 3.7112 | 15749. |
| Stddev | 1.2321 | .6713 | .1762 | .7230 | 1.210 | .3475 | 79. |
| %RSD | 28.544 | 37.126 | 4.1694 | 57.840 | 10.775 | 9.3634 | .50245 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 54.038 |
| Stddev | 1.290 |
| %RSD | 2.3863 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3893.7 | 2377.1 | 23701. | 2797.7 |
| Stddev | 3.7 | 1.3 | 29. | 20.4 |
| %RSD | .09432 | .05666 | .12301 | .72817 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.374% | 100.95% | 101.61% | 109.82% |
| Range | | | | |

Sample Name: 240-111977-a-2-a Acquired: 5/9/2019 19:05:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19635 | 19.586 | 1.3605 | 60.715 | 81.519 | -.01900 | 40943. | .3279 |
| Stddev | .26862 | 2.641 | .8359 | 1.799 | .414 | .15878 | 84. | .0745 |
| %RSD | 136.81 | 13.484 | 61.443 | 2.9632 | .50770 | 835.77 | .20618 | 22.71 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04586 | -.03779 | 4.6702 | 128.82 | 789.33 | 10.499 | 34785. | 20.281 |
| Stddev | .30070 | .32402 | .2908 | 5.90 | 7.76 | .720 | 227. | .033 |
| %RSD | 655.65 | 857.43 | 6.2276 | 4.5817 | .98318 | 6.8620 | .65340 | .16287 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2379 | 12839. | .21556 | -.21520 | .1879 | 5.0476 | 2.0390 | .95782 |
| Stddev | .4950 | 51. | .81003 | .71720 | .7049 | 2.3527 | .5405 | .12581 |
| %RSD | 22.120 | .40005 | 375.77 | 333.26 | 375.2 | 46.610 | 26.510 | 13.135 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111977-a-2-a Acquired: 5/9/2019 19:05:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.14441 | 3.3213 | 61.308 | 9768.0 | 67.016 |
| Stddev | 1.3562 | 5.1320 | .200 | 61.7 | 5.152 |
| %RSD | 939.14 | 154.52 | .32598 | .63211 | 7.6881 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4160.5 | 2417.9 | 24438. | 2796.7 |
| Stddev | 17.2 | 6.8 | 36. | .1 |
| %RSD | .41260 | .28042 | .14533 | .00514 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.84% | 102.68% | 104.76% | 109.78% |
| Range | | | | |

Sample Name: 240-111977-a-2-b ms  Acquired: 5/9/2019 19:10:13  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.747 | 2032.8 | 2105.1 | 1144.1 | 2027.8 | 51.278 | 89807. | 52.67 |
| Stddev | .558 | 2.3 | 11.7 | 12.5 | 18.2 | .724 | 1108. | .31 |
| %RSD | 1.0776 | .11211 | .55387 | 1.0905 | .89837 | 1.4128 | 1.2333 | .5801 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 500.98 | 202.53 | 262.80 | 1176.2 | 50868. | 1044.5 | 85408. | 522.20 |
| Stddev | .85 | .44 | 2.05 | 8.1 | 381. | 13.1 | 668. | 2.65 |
| %RSD | .16899 | .21629 | .78057 | .68497 | .74880 | 1.2543 | .78158 | .50734 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 981.24 | 63581. | 498.69 | 485.36 | 558.4 | 2176.8 | 2029.8 | 1009.0 |
| Stddev | 3.72 | 591. | 1.44 | 1.01 | 2.1 | 13.8 | 8.8 | 3.9 |
| %RSD | .37948 | .92901 | .28803 | .20751 | .3716 | .63483 | .43297 | .38223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111977-a-2-b ms  Acquired: 5/9/2019 19:10:13  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1936.1 | 502.24 | 560.04 | 10873. | 1049.6 |
| Stddev | 32.7 | 9.28 | 3.61 | 111. | 14.5 |
| %RSD | 1.6904 | 1.8473 | .64521 | 1.0220 | 1.3812 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3908.8 | 2368.7 | 24132. | 2788.7 |
| Stddev | 10.4 | 7.6 | 81. | 18.5 |
| %RSD | .26639 | .31907 | .33440 | .66212 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.741% | 100.59% | 103.45% | 109.46% |
| Range | | | | |

Sample Name: 240-111977-a-2-c msd Acquired: 5/9/2019 19:14:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.671 | 2086.2 | 2124.7 | 1155.8 | 2065.5 | 51.917 | 92250. | 53.25 |
| Stddev | .307 | 23.4 | 4.8 | 8.4 | 4.5 | .530 | 258. | .11 |
| %RSD | .58355 | 1.1233 | .22615 | .72798 | .22016 | 1.0218 | .27943 | .2092 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 507.29 | 204.70 | 266.93 | 1202.3 | 51971. | 1059.6 | 87316. | 530.65 |
| Stddev | 1.15 | 1.16 | .38 | 6.0 | 158. | 3.0 | 262. | .97 |
| %RSD | .22764 | .56607 | .14135 | .49966 | .30365 | .28600 | .30018 | .18337 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 993.41 | 64999. | 504.92 | 489.98 | 560.0 | 2206.5 | 2054.6 | 1020.5 |
| Stddev | 1.94 | 201. | .58 | 1.26 | 3.3 | 5.0 | 3.2 | 3.2 |
| %RSD | .19570 | .30998 | .11561 | .25631 | .5945 | .22804 | .15607 | .31792 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111977-a-2-c msd  Acquired: 5/9/2019 19:14:32  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1979.3 | 507.48 | 570.46 | 11086. | 1068.0 |
| Stddev | 36.9 | 3.88 | 1.93 | 33. | 7.7 |
| %RSD | 1.8641 | .76500 | .33796 | .29612 | .71909 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3878.8 | 2351.2 | 23979. | 2753.7 |
| Stddev | 3.8 | 1.6 | 52. | 4.2 |
| %RSD | .09725 | .06629 | .21871 | .15409 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.013% | 99.850% | 102.79% | 108.09% |
| Range | | | | |

Sample Name: 240-112012-b-4-e@20 Acquired: 5/9/2019 19:18:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7616 | 336.50 | 8.7216 | 5178.9 | 2.3981 | 6.4488 | 23702. |
| Stddev | .2410 | 15.74 | 2.8497 | 8.8 | .1513 | .1520 | 99. |
| %RSD | 8.7251 | 4.6763 | 32.674 | .16935 | 6.3098 | 2.3574 | .41680 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 173.2 | 67.093 | 1.0958 | -.68572 | -8.2579 | 38997. | 26.150 |
| Stddev | .2 | .436 | .4760 | 1.6036 | 2.4975 | 86. | 1.456 |
| %RSD | .0983 | .64966 | 43.434 | 233.85 | 30.245 | .22072 | 5.5671 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 27017. | 544.01 | F 20515. | 62696. | 5498.2 | -5.6655 | 2.573 |
| Stddev | 21. | .64 | 88. | 177. | 27.3 | 1.3380 | 2.148 |
| %RSD | .07657 | .11805 | .42882 | .28156 | .49717 | 23.616 | 83.48 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 10000. | | | | |
| Low Limit | | | -500000. | | | | |

Sample Name: 240-112012-b-4-e@20 Acquired: 5/9/2019 19:18:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 76.125 | 2.1636 | 45.122 | 16.605 | F 16902. | F 84133. | 3760.3 |
| Stddev | 2.869 | .3011 | .239 | 2.937 | 40. | 374. | 36.4 |
| %RSD | 3.7693 | 13.916 | .53020 | 17.687 | .23503 | .44499 | .96829 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | | | 5000.0 | 30000. | |
| Low Limit | | | | | -500000. | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 31.641 |
| Stddev | 3.559 |
| %RSD | 11.249 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3756.4 | 2339.0 | 24089. | 2777.9 |
| Stddev | 15.1 | 3.6 | 27. | 10.3 |
| %RSD | .40290 | .15472 | .11063 | .37170 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.048% | 99.331% | 103.27% | 109.04% |
| Range | | | | |

Sample Name: 240-111831-b-16-c@20 Acquired: 5/9/2019 19:23:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6216 | 15361. | .97609 | 68.572 | -.19712 | .12677 |
| Stddev | .3227 | 34. | 3.4545 | 1.046 | .16114 | .08956 |
| %RSD | 19.904 | .22292 | 353.92 | 1.5250 | 81.747 | 70.653 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 35.116 | 119.4 | 2.0206 | -.47233 | -.08382 | 63.388 |
| Stddev | 3.564 | .7 | .2572 | .34178 | .82480 | 1.107 |
| %RSD | 10.149 | .5759 | 12.730 | 72.361 | 984.00 | 1.7458 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 22289. | -.70106 | 12.491 | 231.24 | 34.914 | 1441.9 |
| Stddev | 59. | 1.3757 | 38.640 | .52 | .174 | 2.9 |
| %RSD | .26651 | 196.23 | 309.34 | .22402 | .49921 | .20148 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-111831-b-16-c@20 Acquired: 5/9/2019 19:23:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42.824 | -1.6518 | -1.032 | 3.4492 | 1.1114 | -.03425 |
| Stddev | .123 | 1.7741 | 4.663 | 2.2108 | .0762 | .15604 |
| %RSD | .28742 | 107.40 | 451.7 | 64.094 | 6.8569 | 455.63 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.8780 | 2.4080 | F 120540. | 539.34 | 1.9443 |
| Stddev | 2.3003 | 9.0877 | 733. | 20.54 | 8.0491 |
| %RSD | 59.318 | 377.39 | .60770 | 3.8088 | 413.99 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4289.6 | 2494.8 | 25095. | 2837.2 |
| Stddev | 12.6 | 5.1 | 59. | 15.9 |
| %RSD | .29375 | .20639 | .23628 | .55929 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.97% | 105.95% | 107.58% | 111.37% |
| Range | | | | |

Sample Name: mb 240-380218/1-a Acquired: 5/9/2019 19:28:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12840 | -17.068 | 1.3652 | 9.1701 | -.17187 | -.08388 | 57.320 | -.0353 |
| Stddev | .70131 | 7.830 | 3.4219 | 1.0655 | .25138 | .14193 | 4.030 | .0732 |
| %RSD | 546.20 | 45.871 | 250.65 | 11.619 | 146.26 | 169.20 | 7.0310 | 207.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .71159 | -.21724 | -.78252 | 5.5488 | 61.706 | .20684 | 19.849 | .16254 |
| Stddev | .09519 | .23916 | .67912 | 1.4924 | 18.443 | .90080 | 8.378 | .02663 |
| %RSD | 13.377 | 110.09 | 86.786 | 26.896 | 29.889 | 435.51 | 42.210 | 16.381 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.2721 | 69.925 | -1.0049 | .00730 | .5815 | .91872 | 1.2304 | -.13433 |
| Stddev | .5404 | 5.094 | .5120 | 1.7169 | 1.344 | 1.3727 | .6090 | .09308 |
| %RSD | 8.6155 | 7.2853 | 50.945 | 23511. | 231.1 | 149.41 | 49.497 | 69.292 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380218/1-a Acquired: 5/9/2019 19:28:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8617 | 3.2737 | 9.6282 | 1.1415 | 3.7312 |
| Stddev | 1.1777 | 2.2020 | .9059 | 9.9428 | 3.5201 |
| %RSD | 63.260 | 67.265 | 9.4087 | 871.05 | 94.343 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4507.8 | 2519.1 | 25698. | 2866.1 |
| Stddev | 11.9 | 4.2 | 114. | 14.8 |
| %RSD | .26338 | .16828 | .44247 | .51638 |

Sample Name: lcs 240-380218/2-a Acquired: 5/9/2019 19:32:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.770 | 2048.2 | 2137.8 | 1114.1 | 1979.6 | 51.595 | 49915. | 53.34 |
| Stddev | .718 | 25.8 | 3.8 | 6.3 | 7.1 | .315 | 169. | .15 |
| %RSD | 1.5039 | 1.2587 | .17853 | .56625 | .35986 | .61032 | .33784 | .2889 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 510.33 | 207.66 | 266.46 | 1080.0 | 49980. | 1045.8 | 50997. | 520.27 |
| Stddev | .31 | .31 | 1.36 | .8 | 258. | 2.6 | 102. | .24 |
| %RSD | .06122 | .14724 | .51144 | .07535 | .51569 | .25253 | .20027 | .04679 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.0 | 50757. | 508.45 | 500.43 | 567.8 | 2241.8 | 2040.0 | 1030.9 |
| Stddev | 4.2 | 195. | 1.05 | 1.01 | 3.7 | 3.8 | 2.6 | .9 |
| %RSD | .41578 | .38411 | .20710 | .20168 | .6586 | .16911 | .12577 | .08844 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380218/2-a Acquired: 5/9/2019 19:32:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1981.3 | 505.82 | 513.75 | 1107.7 | 1006.2 |
| Stddev | 11.6 | 4.06 | 1.33 | 10.2 | 5.5 |
| %RSD | .58387 | .80172 | .25911 | .91639 | .55117 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4030.5 | 2396.5 | 24606. | 2854.9 |
| Stddev | 9.1 | 6.3 | 36. | 18.2 |
| %RSD | .22640 | .26354 | .14541 | .63599 |

Sample Name: CCV-4140446 Acquired: 5/9/2019 19:37:17 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 995.92 | 24985. | 499.40 | 5151.5 | 1963.5 | 2013.8 | 49511. | 511.6 |
| Stddev | 2.84 | 58. | 2.92 | 31.9 | 4.0 | 4.9 | 83. | 1.3 |
| %RSD | .28502 | .23353 | .58495 | .61921 | .20582 | .24122 | .16791 | .2460 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1988.2 | 1993.2 | 2034.0 | 25748. | 49086. | 5156.9 | 49596. | 1974.8 |
| Stddev | 1.9 | 3.4 | 4.1 | 60. | 222. | 15.8 | 142. | 1.9 |
| %RSD | .09626 | .16807 | .20042 | .23435 | .45271 | .30675 | .28676 | .09497 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1959.6 | 49934. | 1965.0 | 470.68 | 533.4 | 504.05 | 4973.1 | 5033.0 |
| Stddev | .5 | 142. | 2.7 | 2.16 | 7.3 | 4.02 | 5.1 | 4.3 |
| %RSD | .02771 | .28408 | .13531 | .45933 | 1.363 | .79726 | .10334 | .08476 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 19:37:17 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 939.61 | 1970.2 | 1930.9 | 5064.6 | 4863.9 |
| Stddev | 7.53 | 11.2 | 2.4 | 52.1 | 42.1 |
| %RSD | .80157 | .57014 | .12599 | 1.0285 | .86540 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3920.4 | 2385.8 | 24268. | 2787.0 |
| Stddev | 8.6 | 6.3 | 37. | 10.9 |
| %RSD | .21937 | .26359 | .15327 | .39036 |

Sample Name: CCB Acquired: 5/9/2019 19:41:39 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38946 | -10.605 | 1.7573 | 11.456 | -.22011 | -.09152 | 3.0478 |
| Stddev | .58232 | 7.131 | 1.5682 | .961 | .18337 | .07687 | 5.9370 |
| %RSD | 149.52 | 67.247 | 89.238 | 8.3854 | 83.312 | 84.000 | 194.80 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1081 | .42346 | -.06659 | -.58048 | -2.6680 | 66.198 | 1.6925 |
| Stddev | .0817 | .17452 | .08935 | .21482 | 3.0161 | 16.339 | 1.5662 |
| %RSD | 75.61 | 41.213 | 134.16 | 37.008 | 113.05 | 24.682 | 92.532 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 25.931 | .26755 | 5.4771 | -12.376 | -.88147 | -.96262 | 1.697 |
| Stddev | 6.293 | .04718 | .5829 | 4.625 | .81881 | .23154 | 2.988 |
| %RSD | 24.267 | 17.634 | 10.642 | 37.371 | 92.892 | 24.053 | 176.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB  Acquired: 5/9/2019 19:41:39  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 6.0432 | .96364 | .02919 | -1.8559 | 2.4066 | .54804 | 11.895 |
| Stddev | 1.7536 | .78898 | .20027 | 1.3812 | 1.5065 | .22082 | 6.304 |
| %RSD | 29.018 | 81.875 | 686.02 | 74.423 | 62.597 | 40.293 | 52.997 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 5.0000 | | | | | | |
| Low Limit | -5.0000 | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1.2000 |
| Stddev | 2.9492 |
| %RSD | 245.76 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4459.1 | 2497.3 | 25316. | 2859.8 |
| Stddev | 6.8 | 4.6 | 68. | 22.6 |
| %RSD | .15249 | .18618 | .26736 | .79134 |

Sample Name: 240-112167-b-1-a Acquired: 5/9/2019 19:46:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.06908 | 239.83 | -.39924 | 11.714 | 38.429 | -.08163 | 10685. | .0574 |
| Stddev | .29732 | 12.78 | 3.4688 | .590 | .116 | .14376 | 57. | .1006 |
| %RSD | 430.42 | 5.3290 | 868.85 | 5.0405 | .30277 | 176.12 | .52913 | 175.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .80743 | 4.9355 | .12529 | 221.24 | 6690.8 | 62.115 | 8120.7 | 5.4232 |
| Stddev | .08017 | .4091 | .62552 | 3.51 | 3.3 | 1.319 | 47.7 | .0535 |
| %RSD | 9.9288 | 8.2889 | 499.26 | 1.5870 | .04868 | 2.1242 | .58732 | .98652 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.1013 | 5380.0 | -.52851 | -.42893 | 1.404 | 6.1826 | 1.2774 | 4.2724 |
| Stddev | .4132 | 17.9 | .06645 | .41268 | 2.854 | 3.1498 | 1.0479 | .1719 |
| %RSD | 13.324 | .33320 | 12.574 | 96.211 | 203.3 | 50.946 | 82.032 | 4.0226 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-1-a Acquired: 5/9/2019 19:46:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.73854 | -1.3851 | 11.713 | 720.12 | 223.29 |
| Stddev | 1.1707 | 8.8714 | .273 | 22.52 | 9.41 |
| %RSD | 158.52 | 640.50 | 2.3284 | 3.1275 | 4.2160 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4416.5 | 2503.6 | 25632. | 2907.4 |
| Stddev | 9.7 | 5.9 | 22. | 12.9 |
| %RSD | .21920 | .23407 | .08511 | .44390 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.05% | 106.32% | 109.88% | 114.12% |
| Range | | | | |

Sample Name: PDS 240-112167-b-1-a  Acquired: 5/9/2019 19:51:06  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 38.704 | 2276.3 | 2064.6 | 1075.2 | 2013.5 | 51.129 | 60162. | 52.94 |
| Stddev | .289 | 38.8 | 3.7 | 3.0 | 1.9 | .239 | 215. | .32 |
| %RSD | .74547 | 1.7054 | .17774 | .27838 | .09583 | .46726 | .35676 | .5983 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 499.71 | 206.60 | 262.54 | 1243.7 | 56248. | 1098.8 | 58627. | 505.30 |
| Stddev | .39 | .37 | 1.69 | 3.6 | 8. | .5 | 181. | .78 |
| %RSD | .07758 | .17986 | .64499 | .28878 | .01335 | .04681 | .30920 | .15446 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 999.95 | 55853. | 497.59 | 488.80 | 552.1 | 2181.1 | 2023.5 | 1025.0 |
| Stddev | 1.76 | 40. | 1.11 | 2.00 | 4.2 | 6.8 | 6.6 | 2.4 |
| %RSD | .17604 | .07151 | .22368 | .40985 | .7606 | .31209 | .32765 | .23684 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: PDS 240-112167-b-1-a Acquired: 5/9/2019 19:51:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1942.4 | 495.47 | 507.45 | 1721.0 | 1184.2 |
| Stddev | 8.6 | 7.92 | 2.17 | 15.2 | 10.0 |
| %RSD | .44322 | 1.5986 | .42849 | .88488 | .84060 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4018.2 | 2394.2 | 24500. | 2840.5 |
| Stddev | 7.5 | 2.1 | 23. | 11.4 |
| %RSD | .18557 | .08887 | .09519 | .40210 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.393% | 101.68% | 105.03% | 111.50% |
| Range | | | | |

Sample Name: 240-112167-b-1-b ms  Acquired: 5/9/2019 19:55:24  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46.776 | 2373.1 | 2106.8 | 1089.8 | 2003.8 | 51.237 | 59332. | 52.44 |
| Stddev | .382 | 39.2 | 8.6 | 16.4 | 10.6 | .160 | 294. | .14 |
| %RSD | .81591 | 1.6502 | .40612 | 1.5028 | .52906 | .31146 | .49562 | .2696 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 503.51 | 207.47 | 262.95 | 1287.9 | 56105. | 1098.4 | 58002. | 515.41 |
| Stddev | 1.24 | .52 | .35 | 9.7 | 364. | 6.7 | 439. | 1.37 |
| %RSD | .24649 | .25284 | .13444 | .75550 | .64907 | .61373 | .75691 | .26666 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 991.26 | 55584. | 502.18 | 490.24 | 560.9 | 2206.5 | 2027.2 | 1017.6 |
| Stddev | .71 | 322. | 1.85 | 1.01 | 1.6 | 11.5 | 5.7 | 1.3 |
| %RSD | .07131 | .57899 | .36763 | .20510 | .2910 | .51987 | .27992 | .12689 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-1-b ms  Acquired: 5/9/2019 19:55:24  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1932.4 | 503.81 | 518.23 | 1942.6 | 1199.4 |
| Stddev | 45.4 | 4.35 | .83 | 40.4 | 15.7 |
| %RSD | 2.3500 | .86267 | .16051 | 2.0818 | 1.3062 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4030.4 | 2408.9 | 24569. | 2845.8 |
| Stddev | 12.6 | 4.0 | 82. | 11.3 |
| %RSD | .31183 | .16530 | .33211 | .39746 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.688% | 102.30% | 105.33% | 111.71% |
| Range | | | | |

Sample Name: 240-112167-b-1-c msd Acquired: 5/9/2019 19:59:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48.208 | 2411.8 | 2153.7 | 1115.2 | 2032.3 | 51.346 | 60233. | 54.10 |
| Stddev | .158 | 28.0 | 3.9 | 4.8 | 7.4 | .259 | 412. | .10 |
| %RSD | .32783 | 1.1596 | .17933 | .43028 | .36234 | .50354 | .68459 | .1908 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 514.81 | 213.03 | 270.68 | 1299.7 | 56956. | 1116.9 | 58774. | 527.65 |
| Stddev | .85 | .64 | 1.03 | 15.4 | 299. | 6.7 | 565. | 1.30 |
| %RSD | .16493 | .29886 | .38221 | 1.1820 | .52497 | .59886 | .96165 | .24661 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1018.1 | 56357. | 513.94 | 504.79 | 572.2 | 2242.8 | 2058.3 | 1043.1 |
| Stddev | 2.9 | 308. | 1.75 | 1.75 | 1.4 | 2.9 | 7.2 | 1.9 |
| %RSD | .28497 | .54612 | .34039 | .34756 | .2466 | .12775 | .34928 | .17847 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-1-c msd  Acquired: 5/9/2019 19:59:43  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1958.2 | 511.81 | 519.57 | 1953.4 | 1208.0 |
| Stddev | 23.4 | 6.99 | 2.19 | 21.3 | 14.8 |
| %RSD | 1.1952 | 1.3655 | .42094 | 1.0903 | 1.2243 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3993.3 | 2381.1 | 24484. | 2876.4 |
| Stddev | 7.3 | 6.0 | 82. | 21.4 |
| %RSD | .18185 | .25395 | .33666 | .74302 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.789% | 101.12% | 104.96% | 112.91% |
| Range | | | | |

Sample Name: 240-112167-b-3-a Acquired: 5/9/2019 20:04:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.18610 | -24.575 | -1.4300 | 10.125 | 18.236 | -.08184 | 5400.9 | .0322 |
| Stddev | .11725 | 17.404 | 2.0179 | .517 | .166 | .15293 | 20.4 | .1056 |
| %RSD | 63.004 | 70.822 | 141.11 | 5.1053 | .90895 | 186.88 | .37711 | 328.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .74626 | 4.6991 | -.23545 | -3.8105 | 6681.1 | 62.356 | 7646.0 | .01496 |
| Stddev | .34296 | .3927 | .22708 | 1.2859 | 21.7 | 1.624 | 42.8 | .03543 |
| %RSD | 45.957 | 8.3580 | 96.444 | 33.746 | .32483 | 2.6049 | .55915 | 236.83 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.8899 | 5380.6 | -1.0606 | -.41733 | 2.451 | 2.0031 | 1.5926 | .06074 |
| Stddev | .5547 | 14.8 | .3708 | .68582 | 2.579 | 1.4048 | 1.2384 | .12299 |
| %RSD | 19.196 | .27428 | 34.962 | 164.34 | 105.2 | 70.131 | 77.760 | 202.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-3-a Acquired: 5/9/2019 20:04:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.5529 | -.82312 | 3.0399 | 327.00 | 113.34 |
| Stddev | 1.7359 | 7.5074 | .0906 | 2.16 | 1.24 |
| %RSD | 111.78 | 912.07 | 2.9801 | .66121 | 1.0964 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4387.6 | 2477.1 | 25316. | 2880.0 |
| Stddev | 2.8 | .7 | 9. | 9.7 |
| %RSD | .06390 | .02644 | .03610 | .33727 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.35% | 105.20% | 108.53% | 113.05% |
| Range | | | | |

Sample Name: SD 240-112167-b-3a@5 Acquired: 5/9/2019 20:08:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.02831 | -12.961 | -.32398 | 5.1554 | 3.3305 | -.00432 | 1106.3 | .1373 |
| Stddev | .29172 | 14.788 | .46786 | 1.3910 | .2181 | .16848 | 1.1 | .0213 |
| %RSD | 1030.5 | 114.09 | 144.41 | 26.982 | 6.5480 | 3899.6 | .10027 | 15.49 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .62659 | .48179 | -.50915 | -1.5330 | 1384.7 | 12.191 | 1541.8 | -.04302 |
| Stddev | .32555 | .32953 | .20015 | 2.9399 | 27.2 | .963 | 46.7 | .02489 |
| %RSD | 51.955 | 68.397 | 39.311 | 191.78 | 1.9622 | 7.9029 | 3.0320 | 57.861 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.6252 | 1082.2 | -.96231 | .38128 | -.7662 | 3.2344 | .81830 | -.20858 |
| Stddev | .4814 | 1.7 | .31705 | .59777 | 2.351 | 2.5164 | .97829 | .12202 |
| %RSD | 13.281 | .15376 | 32.946 | 156.78 | 306.9 | 77.802 | 119.55 | 58.503 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112167-b-3a@5 Acquired: 5/9/2019 20:08:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.86992 | 3.5090 | 1.8180 | 79.043 | 27.522 |
| Stddev | .08514 | 2.5944 | .0788 | 11.836 | 1.598 |
| %RSD | 9.7876 | 73.935 | 4.3331 | 14.975 | 5.8065 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4422.9 | 2487.2 | 25443. | 2860.1 |
| Stddev | 12.0 | 6.3 | 40. | 5.8 |
| %RSD | .27215 | .25257 | .15630 | .20330 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.20% | 105.63% | 109.07% | 112.27% |
| Range | | | | |

Sample Name: PDS 240-112167-b-3-a Acquired: 5/9/2019 20:13:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 28.073 | 1519.7 | 2092.3 | 1082.0 | 1566.5 | 39.432 | 43864. | 53.75 |
| Stddev | .744 | 62.8 | 122.5 | 62.6 | 43.1 | 1.162 | 1114. | 3.29 |
| %RSD | 2.6493 | 4.1313 | 5.8547 | 5.7880 | 2.7483 | 2.9466 | 2.5401 | 6.123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 506.83 | 179.22 | 228.41 | 805.17 | 46395. | 874.87 | 46707. | 434.29 |
| Stddev | 29.92 | 6.81 | 7.98 | 28.17 | 643. | 22.77 | 1211. | 14.41 |
| %RSD | 5.9039 | 3.8012 | 3.4935 | 3.4990 | 1.3853 | 2.6030 | 2.5924 | 3.3169 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 999.55 | 45074. | 506.41 | 495.76 | 545.7 | 2198.6 | 2008.0 | 1013.0 |
| Stddev | 1.23 | 884. | 30.69 | 32.02 | 4.4 | 135.0 | 12.0 | 3.0 |
| %RSD | .12307 | 1.9619 | 6.0603 | 6.4585 | .8038 | 6.1419 | .59725 | .29293 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: PDS 240-112167-b-3-a  Acquired: 5/9/2019 20:13:28  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1928.9 | 395.03 | 500.83 | 1338.5 | 877.76 |
| Stddev | 110.6 | 8.57 | 31.08 | 9.9 | 19.13 |
| %RSD | 5.7361 | 2.1695 | 6.2059 | .73816 | 2.1789 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4035.8 | 2409.6 | 24736. | 2894.9 |
| Stddev | 15.0 | 6.3 | 73. | 19.0 |
| %RSD | .37260 | .26171 | .29331 | .65473 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.820% | 102.33% | 106.04% | 113.63% |
| Range | | | | |

Sample Name: 240-112167-b-3-b ms  Acquired: 5/9/2019 20:17:48  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46.808 | 2010.4 | 2121.1 | 1088.7 | 2008.3 | 51.211 | 54712. | 53.64 |
| Stddev | .530 | 24.0 | 6.6 | 7.5 | 8.7 | .614 | 135. | .11 |
| %RSD | 1.1332 | 1.1920 | .30970 | .68722 | .43425 | 1.1992 | .24744 | .1959 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 509.55 | 207.88 | 263.97 | 1061.9 | 56562. | 1103.9 | 57943. | 510.63 |
| Stddev | 1.07 | .95 | .77 | 7.5 | 280. | 3.7 | 54. | .88 |
| %RSD | .21041 | .45510 | .29165 | .71017 | .49438 | .33735 | .09331 | .17244 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.1 | 55924. | 508.08 | 498.69 | 559.2 | 2220.3 | 2032.6 | 1022.8 |
| Stddev | .8 | 229. | .36 | .96 | 2.5 | 17.9 | 7.9 | 1.1 |
| %RSD | .07981 | .40889 | .07022 | .19195 | .4508 | .80637 | .38657 | .10869 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-3-b ms  Acquired: 5/9/2019 20:17:48  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1935.5 | 507.62 | 505.63 | 1410.9 | 1114.3 |
| Stddev | 8.6 | 7.75 | 1.64 | 9.0 | 7.0 |
| %RSD | .44534 | 1.5275 | .32499 | .63499 | .62892 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4044.0 | 2420.1 | 24827. | 2886.4 |
| Stddev | 4.3 | 4.3 | 40. | 19.4 |
| %RSD | .10612 | .17581 | .16132 | .67184 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.018% | 102.77% | 106.43% | 113.30% |
| Range | | | | |

Sample Name: 240-112167-b-3-c msd Acquired: 5/9/2019 20:22:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.462 | 1976.7 | 2120.2 | 1091.6 | 1985.9 | 50.749 | 54283. | 53.39 |
| Stddev | .317 | 53.6 | 1.2 | 13.4 | 5.9 | .619 | 123. | .15 |
| %RSD | .66833 | 2.7122 | .05466 | 1.2314 | .29522 | 1.2195 | .22601 | .2865 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 506.68 | 205.76 | 265.27 | 1056.8 | 55912. | 1093.0 | 57535. | 510.58 |
| Stddev | 1.58 | .40 | 1.28 | 5.9 | 161. | 2.4 | 183. | .80 |
| %RSD | .31145 | .19524 | .48423 | .55988 | .28843 | .21586 | .31838 | .15757 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1003.1 | 55315. | 506.19 | 496.51 | 562.5 | 2222.7 | 2019.1 | 1018.4 |
| Stddev | 3.6 | 147. | 1.08 | 5.42 | .7 | 20.0 | 14.7 | 1.5 |
| %RSD | .36374 | .26632 | .21264 | 1.0921 | .1231 | .89987 | .72862 | .14513 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-b-3-c msd  Acquired: 5/9/2019 20:22:07  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1944.6 | 502.71 | 502.71 | 1398.1 | 1103.0 |
| Stddev | 26.7 | 8.20 | 2.54 | 21.2 | 9.0 |
| %RSD | 1.3744 | 1.6321 | .50493 | 1.5175 | .81870 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4011.4 | 2394.2 | 24637. | 2889.1 |
| Stddev | 2.5 | 3.4 | 60. | 10.6 |
| %RSD | .06214 | .14087 | .24499 | .36712 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.227% | 101.68% | 105.62% | 113.41% |
| Range | | | | |

Sample Name: 240-112167-a-2-a Acquired: 5/9/2019 20:26:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .53854 | 117.18 | 2.2449 | 8.0129 | 48.164 | -.08272 | 14360. | .1784 |
| Stddev | .20569 | 16.36 | .9608 | .9907 | .551 | .14634 | 65. | .0845 |
| %RSD | 38.194 | 13.960 | 42.798 | 12.364 | 1.1435 | 176.91 | .45144 | 47.38 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .61315 | 4.4884 | .85327 | 121.30 | 6589.1 | 61.329 | 8298.4 | 5.0688 |
| Stddev | .22654 | .5138 | .05245 | 4.90 | 10.5 | .376 | 21.2 | .0087 |
| %RSD | 36.947 | 11.446 | 6.1469 | 4.0432 | .15939 | .61372 | .25536 | .17133 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .79675 | 5313.7 | -1.0806 | -1.9039 | 2.008 | 3.0648 | 1.7048 | 1.5937 |
| Stddev | .39071 | 23.6 | .5173 | 1.7166 | .942 | .6717 | .4685 | .2498 |
| %RSD | 49.037 | .44463 | 47.868 | 90.163 | 46.93 | 21.918 | 27.480 | 15.673 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-2-a Acquired: 5/9/2019 20:26:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5393 | .48231 | 11.300 | 534.89 | 270.12 |
| Stddev | 1.1740 | 3.9419 | .073 | 2.84 | 4.43 |
| %RSD | 76.266 | 817.29 | .64460 | .53132 | 1.6398 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4347.7 | 2474.5 | 25258. | 2939.0 |
| Stddev | 4.4 | 1.9 | 82. | 18.1 |
| %RSD | .10078 | .07823 | .32499 | .61717 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.38% | 105.09% | 108.28% | 115.36% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 20:31:10 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1011.8 | 24979. | 506.18 | 5142.0 | 1988.3 | 2011.8 | 50204. | 517.3 |
| Stddev | 2.7 | 35. | 4.34 | 46.1 | 7.8 | 8.4 | 131. | .5 |
| %RSD | .27107 | .13990 | .85657 | .89559 | .39068 | .41747 | .26125 | .0880 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2024.5 | 2002.7 | 2059.4 | 25982. | 49525. | 5197.0 | 50081. | 1991.5 |
| Stddev | 2.6 | 3.3 | 3.6 | 175. | 156. | 17.9 | 31. | 3.3 |
| %RSD | .12970 | .16431 | .17312 | .67267 | .31552 | .34403 | .06178 | .16517 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1996.6 | 50328. | 2003.7 | 479.25 | 538.2 | 509.63 | 5036.7 | 5102.7 |
| Stddev | 2.0 | 133. | 5.7 | 3.32 | 4.2 | 3.23 | 4.9 | 2.3 |
| %RSD | .09822 | .26479 | .28608 | .69228 | .7793 | .63316 | .09638 | .04589 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 20:31:10 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 938.97 | 2002.1 | 1959.5 | 5130.8 | 4947.5 |
| Stddev | 7.72 | 6.9 | 3.9 | 34.8 | 26.5 |
| %RSD | .82244 | .34462 | .19651 | .67810 | .53608 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3895.4 | 2373.7 | 24157. | 2792.4 |
| Stddev | 6.8 | 3.3 | 70. | 5.9 |
| %RSD | .17572 | .14054 | .28978 | .21277 |

Sample Name: CCB Acquired: 5/9/2019 20:35:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32611 | -41.007 | 1.3028 | 8.2318 | -.19619 | .00262 | .23701 | .1593 |
| Stddev | .35327 | 7.066 | 3.5879 | 1.3013 | .29956 | .05772 | 4.7292 | .0458 |
| %RSD | 108.33 | 17.232 | 275.40 | 15.808 | 152.69 | 2203.4 | 1995.4 | 28.75 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .54968 | -.01602 | -.49326 | -.32470 | 18.437 | .52779 | 4.9184 | .18158 |
| Stddev | .11634 | .20639 | .26865 | .50755 | 17.711 | .79105 | 2.3253 | .02370 |
| %RSD | 21.166 | 1288.6 | 54.465 | 156.32 | 96.061 | 149.88 | 47.278 | 13.052 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1336 | -14.958 | -.93676 | -.33010 | -.1051 | 3.3262 | .66933 | .21200 |
| Stddev | .0112 | 3.093 | .38757 | .84968 | 1.979 | 1.6534 | .90128 | .30152 |
| %RSD | .98624 | 20.676 | 41.373 | 257.40 | 1884. | 49.709 | 134.65 | 142.23 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 20:35:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.11411 | 3.9108 | .20388 | -3.6118 | -2.0655 |
| Stddev | .82543 | 3.8821 | .18499 | 15.921 | 3.0783 |
| %RSD | 723.38 | 99.268 | 90.736 | 440.79 | 149.03 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4408.6 | 2476.6 | 25171. | 2815.1 |
| Stddev | 4.6 | .8 | 5. | 10.2 |
| %RSD | .10323 | .03237 | .02075 | .36158 |

Sample Name: 240-112167-a-4-a Acquired: 5/9/2019 20:40:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34671 | -17.423 | 1.8736 | 8.5750 | 16.988 | -.20591 | 5013.0 | .0744 |
| Stddev | .09957 | 12.008 | 1.9777 | .6966 | .082 | .08112 | 13.6 | .1877 |
| %RSD | 28.717 | 68.919 | 105.56 | 8.1235 | .48372 | 39.398 | .27227 | 252.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39502 | 4.4596 | .17735 | 1.9226 | 6419.2 | 59.288 | 7178.9 | .05470 |
| Stddev | .10987 | .1172 | .45265 | 3.7682 | 70.7 | 1.687 | 36.0 | .01402 |
| %RSD | 27.813 | 2.6289 | 255.22 | 196.00 | 1.1011 | 2.8450 | .50188 | 25.632 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15.030 | 5217.4 | -.65313 | -1.2797 | 1.943 | 3.4996 | 1.1010 | -.17955 |
| Stddev | 1.058 | 14.8 | .07259 | 2.3964 | .693 | 2.6478 | .7489 | .03077 |
| %RSD | 7.0403 | .28430 | 11.115 | 187.26 | 35.68 | 75.661 | 68.020 | 17.138 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-4-a Acquired: 5/9/2019 20:40:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.1039 | 3.2811 | 2.6850 | 345.57 | 109.65 |
| Stddev | 1.8338 | 1.7848 | .1431 | 5.77 | .80 |
| %RSD | 87.163 | 54.395 | 5.3299 | 1.6708 | .72787 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4398.4 | 2488.0 | 25485. | 2913.3 |
| Stddev | 13.3 | 6.0 | 120. | 6.6 |
| %RSD | .30212 | .24176 | .47141 | .22615 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.61% | 105.66% | 109.25% | 114.36% |
| Range | | | | |

Sample Name: 240-112167-a-5-a Acquired: 5/9/2019 20:44:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28631 | 97.317 | 1.7487 | 8.2532 | 33.171 | -.15640 | 8994.6 | .0248 |
| Stddev | .18332 | 1.687 | 3.0650 | 1.0882 | .259 | .05608 | 36.4 | .0632 |
| %RSD | 64.029 | 1.7337 | 175.27 | 13.185 | .77940 | 35.858 | .40427 | 255.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .69072 | 4.3727 | -.06776 | 109.50 | 6356.8 | 58.941 | 7526.2 | 4.3910 |
| Stddev | .11760 | .3038 | .32757 | 3.05 | 5.7 | .747 | 9.7 | .0737 |
| %RSD | 17.026 | 6.9478 | 483.44 | 2.7900 | .08888 | 1.2681 | .12922 | 1.6791 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .63268 | 5121.3 | -.48404 | -1.6292 | -.2813 | 2.6449 | 1.3385 | 1.1583 |
| Stddev | .40836 | 13.5 | .13399 | 1.5123 | 3.076 | 1.0067 | .2005 | .2108 |
| %RSD | 64.544 | .26292 | 27.682 | 92.823 | 1093. | 38.062 | 14.982 | 18.196 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-5-a Acquired: 5/9/2019 20:44:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.49506 | 6.1016 | 10.636 | 449.65 | 198.89 |
| Stddev | 2.2871 | 1.2414 | .090 | 12.31 | 2.63 |
| %RSD | 461.99 | 20.345 | .84640 | 2.7381 | 1.3223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4382.7 | 2485.8 | 25225. | 2866.0 |
| Stddev | 4.9 | 1.5 | 102. | 2.7 |
| %RSD | .11233 | .05843 | .40424 | .09393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.23% | 105.57% | 108.14% | 112.50% |
| Range | | | | |

Sample Name: 240-112167-a-6-a Acquired: 5/9/2019 20:49:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .43789 | -22.725 | .00800 | 8.6203 | 17.528 | -.13828 | 5285.4 | .1309 |
| Stddev | .32774 | 13.226 | .94123 | 1.1804 | .047 | .02480 | 39.8 | .1115 |
| %RSD | 74.845 | 58.201 | 11769. | 13.693 | .26659 | 17.936 | .75382 | 85.18 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .71275 | 4.6102 | -.40209 | 1.9761 | 6527.0 | 59.524 | 7564.7 | .10312 |
| Stddev | .28274 | .3255 | .33233 | 1.7218 | 61.0 | .841 | 98.7 | .06462 |
| %RSD | 39.669 | 7.0606 | 82.651 | 87.132 | .93499 | 1.4126 | 1.3047 | 62.659 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.0367 | 5222.1 | -.48276 | -.92407 | -.2783 | 7.4261 | .90509 | -.20947 |
| Stddev | .3636 | 15.2 | .12301 | .83888 | 2.478 | 2.1700 | .28278 | .40883 |
| %RSD | 6.0230 | .29060 | 25.480 | 90.781 | 890.4 | 29.221 | 31.244 | 195.17 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-6-a Acquired: 5/9/2019 20:49:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28039 | 6.6795 | 2.0301 | 340.91 | 116.22 |
| Stddev | 5.7242 | 5.0468 | .2448 | 2.93 | 6.53 |
| %RSD | 2041.5 | 75.556 | 12.056 | .85857 | 5.6157 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4401.5 | 2494.9 | 25347. | 2909.3 |
| Stddev | 15.4 | 6.0 | 106. | 17.0 |
| %RSD | .34892 | .24211 | .41963 | .58398 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.68% | 105.95% | 108.66% | 114.20% |
| Range | | | | |

Sample Name: 240-112167-a-7-a Acquired: 5/9/2019 20:54:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .20146 | 126.64 | -.64685 | 5.3949 | 115.49 | .60486 | 1883.0 | .2852 |
| Stddev | .07537 | 14.64 | .81068 | 1.3138 | .89 | .21800 | 6.8 | .0393 |
| %RSD | 37.410 | 11.559 | 125.33 | 24.353 | .76988 | 36.042 | .36162 | 13.78 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .62499 | .44274 | .78998 | 142.48 | 7456.5 | 10.611 | 2835.3 | 20.447 |
| Stddev | .15957 | .29602 | .45574 | 5.06 | 29.7 | .097 | 73.0 | .192 |
| %RSD | 25.532 | 66.859 | 57.691 | 3.5530 | .39845 | .91401 | 2.5750 | .93997 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .45442 | 2958.7 | 5.0421 | .70437 | -.4792 | 3.8219 | 1.5321 | 2.6629 |
| Stddev | .48217 | 18.2 | 1.0250 | .32474 | 3.306 | 1.6493 | .6068 | .4454 |
| %RSD | 106.11 | .61461 | 20.328 | 46.104 | 689.8 | 43.155 | 39.606 | 16.726 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-7-a Acquired: 5/9/2019 20:54:23 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.66440 | -1.3094 | 34.025 | 7838.1 | 13.765 |
| Stddev | 2.1974 | 3.8939 | .187 | 43.2 | 6.265 |
| %RSD | 330.73 | 297.37 | .54901 | .55093 | 45.510 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4431.0 | 2507.8 | 25475. | 2938.9 |
| Stddev | 13.5 | 12.3 | 49. | 7.9 |
| %RSD | .30532 | .49179 | .19317 | .26798 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.40% | 106.50% | 109.21% | 115.36% |
| Range | | | | |

Sample Name: 240-112167-a-8-a Acquired: 5/9/2019 20:59:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15241 | 59.181 | .73880 | 4.7216 | 117.10 | .44482 | 1579.5 | .1715 |
| Stddev | .34721 | 15.775 | 2.8742 | .6793 | .99 | .08516 | 7.5 | .0590 |
| %RSD | 227.81 | 26.656 | 389.04 | 14.386 | .84140 | 19.146 | .47690 | 34.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .64001 | .02067 | .48823 | 15.097 | 7803.8 | 11.531 | 2761.3 | 18.735 |
| Stddev | .08276 | .00185 | .69962 | 1.305 | 90.7 | .175 | 41.1 | .074 |
| %RSD | 12.931 | 8.9586 | 143.30 | 8.6428 | 1.1622 | 1.5197 | 1.4876 | .39501 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 22.908 | 2586.1 | 5.1974 | .34309 | 1.846 | -1.0839 | 2.0289 | .55585 |
| Stddev | 1.366 | 23.3 | .5834 | .81174 | 2.346 | 3.0337 | .6058 | .18775 |
| %RSD | 5.9615 | .90137 | 11.226 | 236.60 | 127.1 | 279.89 | 29.857 | 33.776 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-8-a Acquired: 5/9/2019 20:59:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.09196 | -2.1026 | 24.515 | 7894.8 | 18.987 |
| Stddev | 2.7443 | 4.7411 | .130 | 21.5 | 5.271 |
| %RSD | 2984.2 | 225.48 | .52927 | .27240 | 27.760 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4411.4 | 2497.9 | 25276. | 2877.6 |
| Stddev | 5.4 | 2.2 | 105. | 2.8 |
| %RSD | .12201 | .08712 | .41665 | .09613 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.92% | 106.08% | 108.36% | 112.95% |
| Range | | | | |

Sample Name: 240-112167-a-9-a Acquired: 5/9/2019 21:03:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11398 | 53.873 | .88937 | 8.2959 | 29.062 | .02487 | 2286.4 | .0542 |
| Stddev | .31289 | 30.477 | 4.5185 | .4948 | .104 | .06448 | 5.3 | .1660 |
| %RSD | 274.51 | 56.571 | 508.05 | 5.9644 | .35803 | 259.26 | .23224 | 306.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15.951 | .28798 | 1.1961 | 24.746 | 2204.4 | 2.6945 | 1630.9 | 274.09 |
| Stddev | .249 | .27451 | .9235 | 1.522 | 30.8 | .4138 | 14.7 | .47 |
| %RSD | 1.5617 | 95.322 | 77.211 | 6.1500 | 1.3983 | 15.357 | .89859 | .17038 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .24829 | 31281. | 1.7788 | -.93665 | -.6952 | 3.8083 | 1.1177 | .18269 |
| Stddev | .08733 | 151. | .6996 | 1.0739 | .3124 | 4.0739 | .6192 | .10364 |
| %RSD | 35.171 | .48150 | 39.330 | 114.66 | 44.94 | 106.97 | 55.396 | 56.732 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-9-a Acquired: 5/9/2019 21:03:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8404 | -2.1945 | 23.893 | 4042.9 | 13.833 |
| Stddev | 2.1550 | 5.0408 | .139 | 127.2 | 4.519 |
| %RSD | 117.09 | 229.70 | .58209 | 3.1454 | 32.671 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4354.2 | 2484.1 | 24988. | 2870.4 |
| Stddev | 3.7 | 2.7 | 44. | 14.3 |
| %RSD | .08528 | .10774 | .17720 | .49765 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.54% | 105.49% | 107.12% | 112.67% |
| Range | | | | |

Sample Name: 240-112167-a-10-a  Acquired: 5/9/2019 21:08:28  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .25793 | 33.897 | 1.5515 | 9.5573 | 14.844 | .00873 | 1905.2 | .1131 |
| Stddev | .25139 | 30.865 | .9062 | .5615 | .063 | .08390 | 9.8 | .0558 |
| %RSD | 97.464 | 91.057 | 58.407 | 5.8751 | .42412 | 961.21 | .51377 | 49.30 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.735 | .18362 | 1.2084 | 2.3371 | 2059.6 | 2.9703 | 1361.3 | 229.54 |
| Stddev | .307 | .15968 | .7226 | 2.7840 | 25.5 | .2797 | 13.7 | .42 |
| %RSD | 2.2373 | 86.963 | 59.797 | 119.12 | 1.2363 | 9.4154 | 1.0034 | .18515 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 14.975 | 28777. | 1.5062 | .10970 | -.2790 | 5.0085 | 1.8038 | -.17916 |
| Stddev | .921 | 53. | .4591 | 1.6915 | .8629 | 5.0902 | .2350 | .17789 |
| %RSD | 6.1474 | .18312 | 30.481 | 1542.0 | 309.3 | 101.63 | 13.025 | 99.292 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-10-a Acquired: 5/9/2019 21:08:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .54458 | 3.9858 | 19.817 | 4706.7 | 14.403 |
| Stddev | 2.8920 | 1.8038 | .213 | 13.9 | 1.979 |
| %RSD | 531.05 | 45.255 | 1.0772 | .29525 | 13.743 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4344.1 | 2479.0 | 25222. | 2890.5 |
| Stddev | 9.0 | 5.0 | 20. | 1.4 |
| %RSD | .20823 | .20337 | .08045 | .04975 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.29% | 105.28% | 108.13% | 113.46% |
| Range | | | | |

Sample Name: 240-112167-a-11-a Acquired: 5/9/2019 21:13:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .76105 | 40.405 | 2.7680 | 3.7364 | 53.961 | .62525 | 3662.3 | .4090 |
| Stddev | .26269 | 19.316 | 1.0860 | .5709 | .071 | .08775 | 7.3 | .1761 |
| %RSD | 34.517 | 47.806 | 39.234 | 15.279 | .13107 | 14.035 | .19865 | 43.05 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2292 | .21549 | 1.7275 | 38.701 | 6702.7 | 3.1957 | 3342.7 | 18.569 |
| Stddev | .1289 | .25772 | .1757 | 1.644 | 54.2 | 1.2037 | 27.3 | .052 |
| %RSD | 10.489 | 119.60 | 10.171 | 4.2479 | .80853 | 37.666 | .81724 | .28024 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40308 | 11031. | 3.5557 | .82763 | -.9964 | 3.7800 | 1.3570 | .08717 |
| Stddev | .50884 | 14. | .1913 | 1.1716 | 3.261 | 3.3492 | .4978 | .14213 |
| %RSD | 126.24 | .12640 | 5.3795 | 141.56 | 327.2 | 88.603 | 36.681 | 163.04 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-11-a Acquired: 5/9/2019 21:13:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.69753 | -.26130 | 69.998 | 8581.2 | 17.702 |
| Stddev | 1.8960 | 6.9955 | .332 | 28.2 | 4.575 |
| %RSD | 271.81 | 2677.2 | .47399 | .32817 | 25.843 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4391.5 | 2494.2 | 25321. | 2883.7 |
| Stddev | .8 | 3.2 | 91. | 9.1 |
| %RSD | .01734 | .12651 | .36024 | .31500 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.44% | 105.92% | 108.55% | 113.19% |
| Range | | | | |

Sample Name: 240-112167-a-12-a Acquired: 5/9/2019 21:17:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .10119 | -6.1702 | 1.0674 | 3.8304 | 50.923 | .59590 | 3491.0 | .4036 |
| Stddev | .46431 | 9.2267 | 2.9709 | .6081 | .408 | .09819 | 18.9 | .0717 |
| %RSD | 458.86 | 149.54 | 278.33 | 15.876 | .80074 | 16.477 | .54266 | 17.76 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0699 | -.21070 | .53706 | 1.6922 | 6793.6 | 3.4898 | 3205.1 | 17.043 |
| Stddev | .0493 | .31746 | .38967 | 3.9844 | 23.7 | 1.5925 | 18.4 | .073 |
| %RSD | 4.6095 | 150.67 | 72.557 | 235.45 | .34823 | 45.633 | .57382 | .43113 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 21.804 | 11084. | 3.0309 | -1.0418 | -2.253 | 3.3583 | .84117 | -.27013 |
| Stddev | 2.143 | 48. | .2121 | 1.2573 | 1.400 | 1.1347 | .34105 | .21739 |
| %RSD | 9.8281 | .43349 | 6.9993 | 120.68 | 62.16 | 33.789 | 40.545 | 80.477 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-12-a Acquired: 5/9/2019 21:17:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.1113 | 1.8563 | 65.106 | 8781.5 | 17.102 |
| Stddev | 1.5400 | 4.8180 | .359 | 20.9 | 4.224 |
| %RSD | 138.58 | 259.55 | .55166 | .23803 | 24.702 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4393.6 | 2500.1 | 25369. | 2893.8 |
| Stddev | 5.3 | 6.6 | 72. | 8.2 |
| %RSD | .12088 | .26321 | .28350 | .28291 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.49% | 106.17% | 108.76% | 113.59% |
| Range | | | | |

Sample Name: 240-112167-a-13-a Acquired: 5/9/2019 21:22:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11691 | 119.74 | .49963 | 7.3043 | 27.493 | .02070 | 18481. | -.0260 |
| Stddev | .21613 | 16.25 | 1.0174 | .9655 | .333 | .10059 | 43. | .0799 |
| %RSD | 184.87 | 13.575 | 203.63 | 13.218 | 1.2107 | 485.83 | .23422 | 306.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27678 | 1.0137 | -.12394 | 85.087 | 5757.8 | 15.061 | 934.45 | 7.5865 |
| Stddev | .12641 | .3816 | .46382 | 2.443 | 56.5 | .511 | 23.76 | .1066 |
| %RSD | 45.671 | 37.642 | 374.22 | 2.8712 | .98076 | 3.3958 | 2.5423 | 1.4053 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .72211 | 9976.0 | -1.1190 | -1.1103 | -1.171 | 2.2712 | .91074 | .85990 |
| Stddev | .31181 | 37.1 | .4104 | 1.5042 | .614 | 5.6025 | .11174 | .10298 |
| %RSD | 43.181 | .37201 | 36.680 | 135.48 | 52.40 | 246.67 | 12.269 | 11.976 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-13-a Acquired: 5/9/2019 21:22:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .09050 | .02291 | 13.576 | 6236.2 | 213.30 |
| Stddev | 1.7325 | 2.8572 | .100 | 19.1 | 6.39 |
| %RSD | 1914.4 | 12473. | .73392 | .30648 | 2.9978 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4393.6 | 2497.0 | 25450. | 2881.4 |
| Stddev | 4.5 | 3.4 | 36. | 8.5 |
| %RSD | .10247 | .13607 | .13980 | .29444 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.49% | 106.04% | 109.10% | 113.10% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 21:27:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1040.7 | 25579. | 512.83 | 5285.3 | 2040.3 | 2064.2 | 51341. | 526.6 |
| Stddev | 3.1 | 128. | 1.95 | 23.4 | 8.9 | 9.9 | 159. | .1 |
| %RSD | .29924 | .50172 | .38094 | .44233 | .43502 | .47904 | .31012 | .0223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2067.0 | 2051.8 | 2124.2 | 26519. | 50738. | 5315.5 | 51257. | 2046.6 |
| Stddev | 2.0 | 8.1 | 6.3 | 128. | 140. | 22.6 | 180. | 8.9 |
| %RSD | .09470 | .39309 | .29890 | .48336 | .27686 | .42491 | .35163 | .43540 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2037.3 | 51584. | 2047.0 | 489.25 | 549.7 | 521.51 | 5141.8 | 5233.7 |
| Stddev | 2.9 | 196. | 2.3 | 4.66 | 5.9 | 6.52 | 7.0 | 16.4 |
| %RSD | .14221 | .38019 | .11035 | .95312 | 1.070 | 1.2495 | .13658 | .31256 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 21:27:13 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 974.05 | 2035.6 | 2003.1 | 5237.4 | 5068.1 |
| Stddev | 6.89 | 10.9 | 3.2 | 20.7 | 15.6 |
| %RSD | .70763 | .53719 | .16180 | .39583 | .30846 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3908.7 | 2386.4 | 24141. | 2801.1 |
| Stddev | 8.5 | 2.0 | 88. | 5.8 |
| %RSD | .21695 | .08431 | .36322 | .20744 |

Sample Name: CCB Acquired: 5/9/2019 21:31:34 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .18680 | .82841 | 2.1073 | 5.5487 | -.24566 | -.06028 | 1.6851 | .1510 |
| Stddev | .07696 | 12.343 | 1.1427 | 1.2236 | .29499 | .08000 | 1.3730 | .0339 |
| %RSD | 41.196 | 1490.0 | 54.227 | 22.051 | 120.08 | 132.71 | 81.479 | 22.47 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .56566 | -.03951 | -.80879 | 1.0542 | 72.973 | .99829 | 5.9331 | .20148 |
| Stddev | .32244 | .18170 | .76003 | 2.2042 | 27.739 | 2.8200 | 11.599 | .08217 |
| %RSD | 57.003 | 459.84 | 93.972 | 209.09 | 38.012 | 282.48 | 195.50 | 40.783 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2874 | -26.862 | -1.3922 | -1.2443 | -.1348 | 1.5899 | 1.1022 | .22483 |
| Stddev | .2439 | 10.201 | .2521 | .6960 | 2.469 | 2.0956 | .4394 | .15561 |
| %RSD | 18.948 | 37.973 | 18.106 | 55.938 | 1832. | 131.81 | 39.868 | 69.213 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 21:31:34 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.2319 | .11507 | 1.4007 | 12.692 | 6.6846 |
| Stddev | 2.6374 | 5.0124 | .1326 | 15.012 | 2.2709 |
| %RSD | 118.17 | 4356.0 | 9.4684 | 118.28 | 33.973 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4418.7 | 2481.4 | 25139. | 2825.8 |
| Stddev | 6.2 | 2.1 | 20. | 8.7 |
| %RSD | .14094 | .08304 | .07842 | .30822 |

Sample Name: 240-112167-a-14-a  Acquired: 5/9/2019 21:36:18  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .44577 | 7.2410 | -.14166 | 8.8483 | 7.9430 | .02551 | 18011. | .1039 |
| Stddev | .72432 | 5.1208 | 1.9789 | .4328 | .1660 | .04217 | 33. | .1398 |
| %RSD | 162.49 | 70.719 | 1397.0 | 4.8908 | 2.0893 | 165.28 | .18291 | 134.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .60859 | 2.2559 | .27605 | 29.858 | 5925.2 | 15.924 | 922.31 | 5.8014 |
| Stddev | .11509 | .5229 | .70978 | 1.240 | 14.3 | 1.976 | 29.01 | .0994 |
| %RSD | 18.911 | 23.180 | 257.12 | 4.1546 | .24058 | 12.408 | 3.1456 | 1.7127 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17.032 | 10073. | -.19291 | -.74061 | .0317 | 3.4798 | 1.0736 | -.10906 |
| Stddev | 1.176 | 13. | .92718 | .12631 | 2.367 | 2.7058 | .2437 | .13937 |
| %RSD | 6.9071 | .13182 | 480.63 | 17.056 | 7464. | 77.755 | 22.696 | 127.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-14-a  Acquired: 5/9/2019 21:36:18  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8769 | 5.3187 | 19.032 | 4235.8 | 206.35 |
| Stddev | 2.3868 | 4.4437 | .107 | 10.6 | 2.82 |
| %RSD | 127.16 | 83.548 | .56172 | .25093 | 1.3654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4394.0 | 2494.0 | 25465. | 2865.5 |
| Stddev | 5.1 | 4.8 | 82. | 11.1 |
| %RSD | .11611 | .19429 | .32325 | .38884 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.50% | 105.92% | 109.17% | 112.48% |
| Range | | | | |

Sample Name: 240-112167-a-15-a  Acquired: 5/9/2019 21:41:01  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.04833 | 135.78 | 2.2669 | 19.457 | 77.081 | .00595 | 29778. | -.0452 |
| Stddev | .32026 | 32.41 | 1.9339 | 1.248 | .191 | .08788 | 56. | .0999 |
| %RSD | 662.71 | 23.872 | 85.312 | 6.4168 | .24841 | 1477.4 | .18723 | 221.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .84409 | .59143 | -.22614 | 194.82 | 1988.8 | -.00435 | 2015.3 | 26.761 |
| Stddev | .05520 | .13836 | .62358 | 1.17 | 22.0 | .52009 | 44.1 | .174 |
| %RSD | 6.5394 | 23.395 | 275.75 | .59823 | 1.1071 | 11950. | 2.1880 | .65092 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32519 | 79762. | .14379 | -.45788 | -2.194 | 7.6216 | .69415 | 1.3806 |
| Stddev | .08749 | 95. | .39212 | 1.0775 | 2.884 | 1.1733 | .52217 | .0916 |
| %RSD | 26.904 | .11964 | 272.69 | 235.32 | 131.5 | 15.394 | 75.225 | 6.6372 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-15-a Acquired: 5/9/2019 21:41:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .28165 | .12842 | 5.3247 | 2039.7 | 103.20 |
| Stddev | 1.6509 | 4.9105 | .2254 | 13.1 | 3.43 |
| %RSD | 586.13 | 3823.9 | 4.2323 | .64148 | 3.3257 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4152.5 | 2436.0 | 24625. | 2866.0 |
| Stddev | .4 | 1.4 | 96. | 4.7 |
| %RSD | .00991 | .05828 | .39093 | .16539 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.65% | 103.45% | 105.57% | 112.50% |
| Range | | | | |

Sample Name: 240-112167-a-16-a Acquired: 5/9/2019 21:45:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .07012 | 11.077 | -1.0803 | 20.666 | 78.442 | .00973 | 30918. | .1085 |
| Stddev | .50960 | 18.697 | 3.2677 | .405 | .354 | .17070 | 58. | .1506 |
| %RSD | 726.76 | 168.79 | 302.47 | 1.9608 | .45158 | 1754.0 | .18706 | 138.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .66753 | .67435 | -.39401 | 118.83 | 2174.3 | -.58504 | 2094.8 | 23.483 |
| Stddev | .18584 | .27177 | .35707 | 4.21 | 42.8 | 2.4676 | 16.7 | .058 |
| %RSD | 27.840 | 40.301 | 90.626 | 3.5443 | 1.9685 | 421.78 | .79592 | .24806 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 22.148 | 85492. | .43300 | -1.5351 | .8891 | 4.6291 | 1.4803 | -.07953 |
| Stddev | 1.627 | 80. | .21583 | 4.0439 | 1.500 | 3.5929 | 1.1044 | .07310 |
| %RSD | 7.3483 | .09372 | 49.846 | 263.43 | 168.7 | 77.615 | 74.605 | 91.911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-16-a Acquired: 5/9/2019 21:45:42 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.59988 | 2.7570 | 9.0232 | 1983.3 | 114.17 |
| Stddev | 1.9953 | 6.8359 | .0785 | 16.8 | 7.35 |
| %RSD | 332.61 | 247.95 | .87029 | .84462 | 6.4416 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4160.9 | 2444.1 | 24709. | 2812.1 |
| Stddev | 1.5 | 3.3 | 68. | 6.6 |
| %RSD | .03716 | .13689 | .27611 | .23518 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.85% | 103.79% | 105.92% | 110.38% |
| Range | | | | |

Sample Name: 240-112167-a-17-a  Acquired: 5/9/2019 21:50:24  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .08302 | 5.0955 | 1.5479 | 2.6042 | -.28405 | -.01381 | 71.303 | .1050 |
| Stddev | .29985 | 16.636 | 3.1249 | .8346 | .28532 | .08857 | 4.248 | .1603 |
| %RSD | 361.18 | 326.49 | 201.88 | 32.048 | 100.45 | 641.53 | 5.9574 | 152.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .85484 | -.48230 | -.10128 | -2.0902 | 32.871 | -.66822 | 29.097 | .18299 |
| Stddev | .19327 | .29104 | .38207 | 3.3960 | 27.345 | 1.3351 | 22.198 | .03742 |
| %RSD | 22.609 | 60.344 | 377.24 | 162.47 | 83.189 | 199.81 | 76.287 | 20.449 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27277 | 291.32 | -.61737 | -1.2584 | .2408 | 4.8796 | 2.1226 | -.26423 |
| Stddev | .29024 | 5.63 | .52929 | .8500 | 1.168 | 3.5767 | .1588 | .27970 |
| %RSD | 106.41 | 1.9316 | 85.734 | 67.552 | 485.0 | 73.299 | 7.4826 | 105.85 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-17-a Acquired: 5/9/2019 21:50:24 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.5759 | 4.9314 | 1.2697 | 196.71 | 4.5310 |
| Stddev | 1.3014 | 1.6330 | .0463 | 5.33 | 3.1613 |
| %RSD | 50.522 | 33.114 | 3.6460 | 2.7113 | 69.771 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4447.0 | 2501.7 | 25254. | 2871.6 |
| Stddev | 3.3 | .9 | 8. | .8 |
| %RSD | .07453 | .03628 | .03028 | .02755 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.79% | 106.24% | 108.26% | 112.72% |
| Range | | | | |

Sample Name: 240-112167-a-18-a Acquired: 5/9/2019 21:55:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .10616 | -12.593 | .39167 | 2.7229 | -.33642 | -.07181 | 67.234 | -.0270 |
| Stddev | .33582 | 8.525 | .75041 | .6199 | .14614 | .03988 | 3.829 | .1728 |
| %RSD | 316.34 | 67.692 | 191.59 | 22.767 | 43.438 | 55.542 | 5.6948 | 640.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59297 | -.07015 | -.21455 | -3.6474 | 32.399 | 1.1213 | -8.7275 | .14954 |
| Stddev | .11113 | .22500 | .86501 | 4.8619 | 24.406 | .6007 | 8.0852 | .01378 |
| %RSD | 18.742 | 320.74 | 403.18 | 133.30 | 75.329 | 53.572 | 92.641 | 9.2123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .25276 | 282.66 | -1.1513 | -.34819 | .7175 | 4.5752 | 1.2453 | -.36863 |
| Stddev | .14222 | 5.24 | .4599 | .21665 | 2.599 | 4.5818 | .5930 | .01696 |
| %RSD | 56.269 | 1.8553 | 39.946 | 62.222 | 362.2 | 100.15 | 47.621 | 4.6010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112167-a-18-a  Acquired: 5/9/2019 21:55:07  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8901 | 4.8501 | 1.2589 | 199.48 | 5.3390 |
| Stddev | 2.9663 | 1.3820 | .1109 | 9.23 | 2.6268 |
| %RSD | 156.94 | 28.493 | 8.8116 | 4.6264 | 49.200 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4420.9 | 2484.5 | 25208. | 2833.9 |
| Stddev | 7.5 | .9 | 34. | 20.8 |
| %RSD | .17063 | .03813 | .13511 | .73366 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 107.15% | 105.51% | 108.07% | 111.24% |
| Range | | | | |

Sample Name: 240-112159-a-1-a Acquired: 5/9/2019 21:59:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28043 | -9.6954 | .58648 | 31.762 | 117.39 | -.07002 | 36416. | .2001 |
| Stddev | .14487 | 14.715 | 1.8006 | .684 | .60 | .11588 | 120. | .1739 |
| %RSD | 51.658 | 151.77 | 307.02 | 2.1547 | .50808 | 165.49 | .33054 | 86.92 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .36285 | -.16299 | 3.5597 | 39.293 | 1287.3 | 21.120 | 10938. | .47513 |
| Stddev | .21475 | .42328 | .2773 | 4.611 | 27.3 | 1.699 | 41. | .06488 |
| %RSD | 59.184 | 259.70 | 7.7906 | 11.734 | 2.1229 | 8.0461 | .37373 | 13.656 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .26290 | 13055. | -.64574 | -.24427 | -3.112 | 4.1853 | .99178 | -.29997 |
| Stddev | .41061 | 43. | .31014 | 3.1137 | 2.818 | 2.6897 | .54997 | .09426 |
| %RSD | 156.18 | .32747 | 48.029 | 1274.7 | 90.56 | 64.265 | 55.453 | 31.425 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112159-a-1-a Acquired: 5/9/2019 21:59:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.82483 | .49286 | 3.5895 | 5486.4 | 248.80 |
| Stddev | 1.5773 | 4.2694 | .0859 | 7.4 | 7.04 |
| %RSD | 191.23 | 866.25 | 2.3940 | .13451 | 2.8305 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4272.4 | 2457.9 | 24918. | 2827.7 |
| Stddev | 7.6 | 4.8 | 100. | 7.7 |
| %RSD | .17785 | .19709 | .40016 | .27172 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.55% | 104.38% | 106.82% | 111.00% |
| Range | | | | |

Sample Name: 240-112162-a-1-a Acquired: 5/9/2019 22:04:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .30268 | 7.6421 | 4.1229 | 31.582 | 128.49 | .02252 | 39930. | .0359 |
| Stddev | .30559 | 18.372 | 2.2228 | .444 | 1.06 | .17909 | 162. | .0678 |
| %RSD | 100.96 | 240.41 | 53.913 | 1.4056 | .82128 | 795.10 | .40507 | 188.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .08790 | .09789 | 6.9567 | 20.625 | 1585.4 | 16.573 | 4714.7 | 2.2047 |
| Stddev | .10976 | .09916 | .6972 | 2.552 | 23.3 | 1.590 | 25.7 | .0633 |
| %RSD | 124.88 | 101.30 | 10.022 | 12.375 | 1.4705 | 9.5927 | .54613 | 2.8716 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04414 | 7288.9 | -.57278 | -.98117 | -.8135 | 3.1387 | .98401 | -.25594 |
| Stddev | .08398 | 38.1 | .44488 | 1.1845 | 1.288 | 2.1000 | .91801 | .21480 |
| %RSD | 190.26 | .52219 | 77.670 | 120.73 | 158.3 | 66.907 | 93.293 | 83.926 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112162-a-1-a Acquired: 5/9/2019 22:04:33 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0108 | -2.9442 | 13.281 | 4369.0 | 570.34 |
| Stddev | 1.6151 | 7.3589 | .308 | 63.5 | 3.51 |
| %RSD | 159.78 | 249.95 | 2.3190 | 1.4544 | .61580 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4310.0 | 2465.8 | 24968. | 2810.3 |
| Stddev | 4.8 | 7.5 | 58. | 21.4 |
| %RSD | .11083 | .30274 | .23359 | .76062 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 104.47% | 104.72% | 107.04% | 110.31% |
| Range | | | | |

Sample Name: mb 240-380225/1-a Acquired: 5/9/2019 22:09:16 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49468 | 7.2183 | .30383 | .63958 | -.00781 | -.08740 | 51.372 |
| Stddev | .47313 | 16.149 | 1.9101 | .44577 | .27733 | .16716 | 2.857 |
| %RSD | 95.644 | 223.72 | 628.68 | 69.698 | 3549.9 | 191.26 | 5.5615 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2468 | .35607 | -.01351 | -.83016 | 7.1262 | 55.097 | -.57434 |
| Stddev | .0659 | .14692 | .21145 | 1.2743 | 4.2667 | 27.843 | 1.6958 |
| %RSD | 26.69 | 41.262 | 1564.9 | 153.51 | 59.873 | 50.535 | 295.26 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.4019 | 1.7846 | 1.5906 | 19.974 | -.82483 | .26315 | -1.940 |
| Stddev | 37.792 | .0690 | .4674 | 1.797 | .23339 | 1.2737 | 3.929 |
| %RSD | 699.61 | 3.8680 | 29.387 | 8.9990 | 28.296 | 484.02 | 202.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: mb 240-380225/1-a  Acquired: 5/9/2019 22:09:16  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2411 | 36.638 | -.00215 | -2.0119 | F 6.2416 | 1.4323 | 12.083 |
| Stddev | 1.6273 | .800 | .25765 | 2.7706 | 1.5871 | .0642 | 8.618 |
| %RSD | 131.11 | 2.1843 | 11982. | 137.71 | 25.428 | 4.4809 | 71.322 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | | 5.0000 | | |
| Low Limit | | | | | -1000.0 | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 5.5244 |
| Stddev | 3.7526 |
| %RSD | 67.927 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4299.2 | 2427.8 | 24907. | 2802.2 |
| Stddev | 10.7 | 4.9 | 57. | 4.5 |
| %RSD | .24837 | .20097 | .22830 | .16112 |

Sample Name: lcs 240-380225/2-a Acquired: 5/9/2019 22:13:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.675 | 1936.7 | 1948.9 | 964.17 | 1907.7 | 48.338 | 48061. | 50.16 |
| Stddev | .160 | 29.6 | 4.5 | 6.59 | 7.9 | .532 | 312. | .27 |
| %RSD | .32285 | 1.5271 | .22857 | .68358 | .41375 | 1.1000 | .64908 | .5420 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 486.47 | 196.70 | 254.51 | 1024.6 | 47763. | 1005.3 | 48818. | 493.78 |
| Stddev | 1.06 | .98 | .96 | 5.0 | 267. | 5.5 | 326. | 1.50 |
| %RSD | .21709 | .49598 | .37761 | .48727 | .55988 | .55004 | .66762 | .30408 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 963.65 | 48636. | 484.87 | 471.06 | 510.1 | 1946.2 | 1935.8 | 988.32 |
| Stddev | 3.85 | 247. | 1.45 | 1.76 | 4.7 | 13.9 | 15.3 | 1.46 |
| %RSD | .39930 | .50715 | .29832 | .37377 | .9204 | .71298 | .78837 | .14799 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380225/2-a Acquired: 5/9/2019 22:13:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1764.4 | 491.23 | 477.04 | 1025.1 | 964.37 |
| Stddev | 24.8 | 1.95 | 3.21 | 4.7 | 12.65 |
| %RSD | 1.4054 | .39712 | .67313 | .45382 | 1.3119 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3945.0 | 2346.7 | 23958. | 2753.6 |
| Stddev | 2.7 | 3.5 | 39. | 17.9 |
| %RSD | .06789 | .15025 | .16223 | .65019 |

Sample Name: 240-112036-b-21-b  Acquired: 5/9/2019 22:18:19  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.9174 | 15942. | 22.201 | 86.794 | 188.21 | 2.3383 |
| Stddev | .3622 | 63. | .654 | .368 | .38 | .1208 |
| %RSD | 9.2466 | .39472 | 2.9475 | .42344 | .19996 | 5.1645 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1547700. | 2.325 | 6.9178 | 45.245 | 49.400 | 37422. |
| Stddev | 12191. | .119 | .3130 | .499 | .482 | 44. |
| %RSD | .78769 | 5.134 | 4.5239 | 1.1035 | .97634 | .11667 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6111.6 | 114.76 | F 900140. | 1244.4 | 5.1981 | 2110.5 |
| Stddev | 44.7 | .82 | 1364. | 1.8 | .7137 | 37.6 |
| %RSD | .73116 | .71515 | .15154 | .14362 | 13.730 | 1.7820 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: 240-112036-b-21-b Acquired: 5/9/2019 22:18:19 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 43.259 | 75.159 | 2.684 | 5.3324 | 45.329 | 279.49 |
| Stddev | .349 | 1.794 | 5.098 | 1.9981 | .732 | .90 |
| %RSD | .80621 | 2.3866 | 189.9 | 37.470 | 1.6144 | .32211 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.5853 | 40.641 | 294.19 | 5855.2 | 955.33 |
| Stddev | 3.2771 | 5.468 | .36 | 91.4 | 4.25 |
| %RSD | 206.72 | 13.454 | .12325 | 1.5606 | .44436 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3092.1 | 2088.0 | 22049. | 2660.8 |
| Stddev | 1.3 | 3.7 | 33. | 1.1 |
| %RSD | .04093 | .17953 | .14805 | .04129 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.945% | 88.673% | 94.524% | 104.44% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 22:23:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1027.3 | 25759. | 512.09 | 5198.2 | 2049.8 | 2081.5 | 51372. | 522.0 |
| Stddev | 6.6 | 64. | 1.58 | 38.5 | 9.6 | 8.2 | 280. | .8 |
| %RSD | .64033 | .25014 | .30898 | .74115 | .46991 | .39631 | .54418 | .1610 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2057.4 | 2027.8 | 2086.3 | 26491. | 51379. | 5322.0 | 51400. | 2018.7 |
| Stddev | 3.7 | 5.2 | 9.1 | 118. | 232. | 23.5 | 352. | 9.1 |
| %RSD | .17919 | .25415 | .43554 | .44394 | .45248 | .44150 | .68504 | .45026 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2022.8 | 51921. | 2036.9 | 487.46 | 542.3 | 521.34 | 5110.2 | 5172.3 |
| Stddev | 3.8 | 211. | 1.3 | 6.00 | 2.4 | 1.40 | 11.5 | 11.5 |
| %RSD | .18824 | .40660 | .06253 | 1.2302 | .4501 | .26875 | .22532 | .22306 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 22:23:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 947.21 | 2039.1 | 1998.8 | 5240.0 | 5062.8 |
| Stddev | 13.92 | 10.6 | 2.6 | 53.5 | 34.3 |
| %RSD | 1.4699 | .52109 | .13141 | 1.0208 | .67771 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3910.1 | 2389.7 | 24243. | 2735.4 |
| Stddev | 9.1 | 6.9 | 88. | 14.3 |
| %RSD | .23300 | .28834 | .36463 | .52099 |

Sample Name: CCB Acquired: 5/9/2019 22:27:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27978 | -20.697 | .99077 | 5.5934 | -.10732 | -.09508 | 33.961 |
| Stddev | .29462 | 11.889 | 1.6398 | .5742 | .02308 | .11442 | 1.589 |
| %RSD | 105.31 | 57.442 | 165.50 | 10.266 | 21.510 | 120.34 | 4.6790 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1430 | .47216 | .02462 | -.88078 | 2.8448 | 63.241 | -1.6665 |
| Stddev | .0639 | .55861 | .29983 | .80875 | 2.1639 | 14.662 | 1.0826 |
| %RSD | 44.69 | 118.31 | 1217.9 | 91.822 | 76.064 | 23.185 | 64.963 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 23.263 | .18588 | .46297 | 56.802 | -1.3485 | -1.4930 | -.8892 |
| Stddev | 7.477 | .03015 | .18233 | 9.386 | .3042 | .8686 | 1.239 |
| %RSD | 32.140 | 16.221 | 39.383 | 16.524 | 22.557 | 58.179 | 139.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB  Acquired: 5/9/2019 22:27:28  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5.9287 | .76938 | .18879 | -1.3061 | -.21056 | 1.3019 | 14.166 |
| Stddev | 2.9959 | .26716 | .19425 | 1.3915 | .79224 | .1174 | 9.721 |
| %RSD | 50.532 | 34.724 | 102.89 | 106.54 | 376.26 | 9.0208 | 68.620 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 5.0000 | | | | | | |
| Low Limit | -5.0000 | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 4.6072 |
| Stddev | 1.9277 |
| %RSD | 41.841 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4345.4 | 2443.1 | 24964. | 2814.2 |
| Stddev | 3.8 | .5 | 86. | 8.7 |
| %RSD | .08763 | .02201 | .34304 | .30902 |

Sample Name: SD 240-112036-b21b@5 Acquired: 5/9/2019 22:32:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.91895 | 3236.0 | 1.9359 | 20.299 | 38.163 | .48143 | 340080. |
| Stddev | .60745 | 42.6 | 2.1738 | .281 | .052 | .05325 | 1480. |
| %RSD | 66.103 | 1.3174 | 112.29 | 1.3839 | .13736 | 11.061 | .43531 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.075 | 1.1091 | 10.040 | 9.5622 | 8111.5 | 1250.5 | 21.212 |
| Stddev | .106 | .3191 | .231 | .4865 | 55.4 | 3.2 | 1.504 |
| %RSD | 9.836 | 28.768 | 2.2996 | 5.0881 | .68338 | .25766 | 7.0912 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 183160. | 268.61 | 1.3501 | 461.45 | 9.0326 | 16.131 | .7029 |
| Stddev | 898. | .46 | .2152 | 9.42 | .5324 | 1.241 | .9454 |
| %RSD | .49005 | .17017 | 15.941 | 2.0424 | 5.8937 | 7.6955 | 134.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-112036-b21b@5 Acquired: 5/9/2019 22:32:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.8974 | 9.2546 | 59.294 | -1.7487 | 12.989 | 60.545 | 1248.6 |
| Stddev | 1.6584 | .8357 | .374 | 1.5104 | 4.893 | .058 | 3.1 |
| %RSD | 57.238 | 9.0305 | .63083 | 86.371 | 37.667 | .09556 | .24517 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 207.61 |
| Stddev | 2.98 |
| %RSD | 1.4353 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3702.9 | 2264.4 | 23444. | 2725.5 |
| Stddev | 6.9 | 2.3 | 58. | 2.5 |
| %RSD | .18549 | .10144 | .24752 | .09316 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.750% | 96.164% | 100.50% | 106.98% |
| Range | | | | |

Sample Name: PDS 240-112036-b-21b Acquired: 5/9/2019 22:36:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33.107 | 17537. | 2004.8 | 1075.8 | 2077.2 | 46.676 |
| Stddev | .244 | 89. | 3.8 | 11.9 | 12.5 | .338 |
| %RSD | .73732 | .50746 | .19071 | 1.1061 | .59989 | .72452 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1554800. | 54.04 | 502.35 | 222.19 | 305.27 | 37558. |
| Stddev | 4544. | .23 | 1.20 | .53 | .64 | 91. |
| %RSD | .29225 | .4239 | .23796 | .24062 | .21084 | .24233 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 56806. | 1178.9 | F 929270. | 1664.8 | 952.05 | 53333. |
| Stddev | 397. | 2.5 | 2535. | 5.4 | 3.14 | 301. |
| %RSD | .69816 | .20811 | .27281 | .32163 | .33025 | .56524 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: PDS 240-112036-b-21b Acquired: 5/9/2019 22:36:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 527.14 | 489.86 | 546.7 | 2001.1 | 2117.5 | 1245.3 |
| Stddev | 2.90 | 3.38 | 2.8 | 7.9 | 7.5 | 1.8 |
| %RSD | .55087 | .69024 | .5084 | .39282 | .35245 | .14621 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1767.6 | 498.74 | 769.47 | 6821.5 | 1802.4 |
| Stddev | 19.8 | 7.35 | 2.77 | 98.5 | .9 |
| %RSD | 1.1229 | 1.4738 | .36000 | 1.4440 | .04992 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3044.4 | 2073.1 | 21869. | 2663.7 |
| Stddev | 7.3 | 8.0 | 47. | 19.2 |
| %RSD | .23902 | .38517 | .21604 | .72060 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 73.789% | 88.041% | 93.753% | 104.56% |
| Range | | | | |

Sample Name: 240-112036-b-21-c ms  Acquired: 5/9/2019 22:41:20  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46.322 | 31528. | 1966.7 | 1075.8 | 2074.0 | 45.845 |
| Stddev | .691 | 120. | 1.8 | 2.2 | 3.7 | .058 |
| %RSD | 1.4911 | .38151 | .09316 | .20168 | .18050 | .12554 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1597900. | 52.17 | 510.88 | 254.77 | 324.87 | 60749. |
| Stddev | 10257. | .26 | .66 | .92 | .98 | 121. |
| %RSD | .64186 | .5030 | .12851 | .35950 | .30204 | .19938 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 62419. | 1239.3 | F 942600. | 2000.2 | 874.85 | 51140. |
| Stddev | 68. | .5 | 2110. | 8.6 | 2.35 | 56. |
| %RSD | .10905 | .04278 | .22382 | .43143 | .26888 | .10931 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: 240-112036-b-21-c ms  Acquired: 5/9/2019 22:41:20  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 559.00 | 514.53 | 392.8 | 1914.8 | 1988.8 | 1256.8 |
| Stddev | 1.36 | 4.35 | 6.0 | 13.3 | 9.4 | 3.3 |
| %RSD | .24305 | .84638 | 1.535 | .69431 | .47304 | .26473 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1730.3 | 525.31 | 848.62 | 10170. | 1701.8 |
| Stddev | 10.8 | 7.77 | 4.94 | 35. | 12.7 |
| %RSD | .62364 | 1.4798 | .58179 | .34485 | .74444 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3005.0 | 2119.3 | 22278. | 2738.1 |
| Stddev | 7.7 | 6.4 | 44. | .5 |
| %RSD | .25564 | .30226 | .19708 | .01867 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 72.834% | 90.003% | 95.505% | 107.48% |
| Range | | | | |

Sample Name: 240-112036-b-21d msd  Acquired: 5/9/2019 22:45:47  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.265 | 28466. | 1974.3 | 1070.6 | 2059.6 | 44.705 |
| Stddev | .706 | 252. | 5.2 | 13.0 | 16.3 | .415 |
| %RSD | 1.4928 | .88357 | .26442 | 1.2150 | .79222 | .92835 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1641900. | 52.78 | 504.76 | 256.11 | 327.05 | 55604. |
| Stddev | 16601. | .24 | .96 | 1.07 | 2.09 | 388. |
| %RSD | 1.0111 | .4585 | .19093 | .41912 | .63917 | .69760 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 60039. | 1215.8 | F 1007700. | 1975.4 | 878.20 | 50675. |
| Stddev | 482. | 7.9 | 7424. | 5.0 | 2.31 | 390. |
| %RSD | .80299 | .65209 | .73677 | .25522 | .26337 | .76895 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: 240-112036-b-21d msd  Acquired: 5/9/2019 22:45:47  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 550.56 | 509.38 | 401.2 | 1939.0 | 1980.9 | 1254.0 |
| Stddev | .84 | 2.65 | 6.4 | 3.6 | 10.9 | .8 |
| %RSD | .15224 | .52074 | 1.594 | .18587 | .54876 | .06401 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1714.5 | 509.73 | 861.54 | 11038. | 1846.8 |
| Stddev | 31.9 | 12.43 | 3.61 | 102. | 15.7 |
| %RSD | 1.8629 | 2.4391 | .41883 | .92509 | .85003 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2996.9 | 2081.7 | 22036. | 2753.6 |
| Stddev | 5.5 | 4.1 | 50. | 20.2 |
| %RSD | .18465 | .19536 | .22696 | .73434 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 72.639% | 88.404% | 94.469% | 108.09% |
| Range | | | | |

Sample Name: 240-112036-b-22-b Acquired: 5/9/2019 22:50:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.2455 | 124200. | 26.160 | 216.42 | 1724.0 | 30.042 |
| Stddev | .4685 | 629. | 3.476 | 1.33 | 6.4 | .338 |
| %RSD | 37.618 | .50654 | 13.288 | .61303 | .37235 | 1.1237 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1026200. | 10.50 | 20.113 | 98.698 | 159.71 | 80656. |
| Stddev | 11438. | .06 | .194 | .197 | 1.70 | 123. |
| %RSD | 1.1146 | .5685 | .96586 | .19964 | 1.0647 | .15251 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8080.6 | 172.64 | 336100. | 7869.7 | 14.402 | 5186.5 |
| Stddev | 28.4 | 1.54 | 514. | 37.2 | .371 | 25.5 |
| %RSD | .35173 | .89312 | .15280 | .47329 | 2.5793 | .49112 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112036-b-22-b  Acquired: 5/9/2019 22:50:15  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 99.243 | 345.14 | 2.544 | 15.090 | 85.967 | 1874.8 |
| Stddev | .611 | 2.58 | 3.967 | 7.652 | 1.267 | 2.9 |
| %RSD | .61523 | .74835 | 156.0 | 50.709 | 1.4739 | .15576 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.2614 | 50.989 | 2293.1 | 1431.7 | 1448.9 |
| Stddev | 2.4396 | 4.324 | 8.3 | 16.9 | 1.1 |
| %RSD | 29.530 | 8.4800 | .36295 | 1.1820 | .07256 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3264.5 | 2654.6 | 27230. | 3316.7 |
| Stddev | 4.2 | 4.1 | 10. | 16.8 |
| %RSD | .12939 | .15297 | .03646 | .50592 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 79.125% | 112.74% | 116.73% | 130.19% |
| Range | | | | |

Sample Name: 240-112036-b-23-a  Acquired: 5/9/2019 22:55:08  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.7784 | 87410. | 98.525 | 37.286 | 439.86 | 4.6310 | 240040. |
| Stddev | .3586 | 274. | 2.065 | .230 | .81 | .1417 | 454. |
| %RSD | 20.161 | .31363 | 2.0962 | .61597 | .18390 | 3.0607 | .18914 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.351 | 96.968 | 131.60 | 220.53 | 216250. | 8254.6 | 195.76 |
| Stddev | .070 | .144 | .57 | 1.50 | 475. | 14.7 | 1.75 |
| %RSD | 5.169 | .14902 | .43224 | .67960 | .21946 | .17806 | .89194 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 70945. | 2926.1 | 29.785 | 2960.4 | 289.23 | 85.409 | 4.414 |
| Stddev | 451. | 4.1 | .398 | 8.6 | 1.89 | .887 | 1.368 |
| %RSD | .63610 | .14126 | 1.3352 | .28928 | .65498 | 1.0384 | 31.00 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-23-a  Acquired: 5/9/2019 22:55:08  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.1070 | 30.748 | 713.36 | 4.4420 | 151.91 | 521.86 | 1756.9 |
| Stddev | 3.4274 | .256 | 1.63 | 2.9990 | 4.08 | 2.08 | 5.5 |
| %RSD | 48.226 | .83112 | .22851 | 67.515 | 2.6829 | .39929 | .31463 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 332.14 |
| Stddev | 2.48 |
| %RSD | .74626 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3824.5 | 2704.1 | 27897. | 3219.9 |
| Stddev | 4.2 | 5.3 | 81. | 3.4 |
| %RSD | .10965 | .19523 | .29053 | .10596 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.697% | 114.84% | 119.59% | 126.39% |
| Range | | | | |

Sample Name: 240-112036-b-24-e  Acquired: 5/9/2019 22:59:40  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.609 | 140440. | 62.595 | 213.93 | 1782.8 | 29.342 |
| Stddev | .272 | 122. | 1.328 | 2.75 | .6 | .111 |
| %RSD | 1.9995 | .08704 | 2.1216 | 1.2860 | .03243 | .37747 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 941890. | 100.6 | 39.578 | 311.87 | 568.60 | 168050. |
| Stddev | 8006. | .2 | .586 | .97 | 1.25 | 123. |
| %RSD | .85004 | .2472 | 1.4805 | .31124 | .21975 | .07308 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11283. | 178.73 | 190880. | W 13818. | 37.813 | 5051.9 |
| Stddev | 27. | .26 | 415. | 18. | .190 | 5.8 |
| %RSD | .23880 | .14381 | .21724 | .12924 | .50375 | .11578 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Warn | Chk Pass | Chk Pass |
| High Limit | | | | 13500. | | |
| Low Limit | | | | -500000. | | |

Sample Name: 240-112036-b-24-e Acquired: 5/9/2019 22:59:40 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 185.60 | 1781.3 | 12.54 | 9.0538 | 305.34 | 2185.6 |
| Stddev | .81 | 6.0 | 5.41 | 3.3198 | 1.04 | 6.0 |
| %RSD | .43738 | .33578 | 43.16 | 36.667 | .34025 | .27424 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 11.367 | 98.059 | 21201. | 3519.7 | 1374.2 |
| Stddev | 4.115 | 5.043 | 53. | 20.5 | 4.8 |
| %RSD | 36.204 | 5.1432 | .25128 | .58223 | .34836 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3369.3 | 2694.7 | 27684. | 3373.6 |
| Stddev | 1.7 | .9 | 40. | 6.0 |
| %RSD | .05184 | .03453 | .14296 | .17841 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.664% | 114.44% | 118.68% | 132.43% |
| Range | | | | |

Sample Name: 240-112036-b-25-c Acquired: 5/9/2019 23:04:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.7133 | 109530. | 139.76 | 97.248 | 684.81 | 5.9962 | 316510. |
| Stddev | .2536 | 655. | 2.00 | 1.098 | 3.96 | .0591 | 945. |
| %RSD | 14.802 | .59791 | 1.4278 | 1.1292 | .57822 | .98521 | .29845 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.460 | 198.31 | 172.13 | 268.23 | 265380. | 21969. | 258.02 |
| Stddev | .084 | .87 | .30 | 1.18 | 864. | 87. | 2.40 |
| %RSD | 3.425 | .43956 | .17702 | .44007 | .32546 | .39752 | .93006 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 95830. | 4127.2 | 59.105 | 1311.3 | 393.38 | 120.22 | 4.414 |
| Stddev | 352. | 24.8 | .358 | 6.3 | 1.86 | .75 | 1.567 |
| %RSD | .36759 | .59970 | .60617 | .48105 | .47239 | .62288 | 35.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-25-c  Acquired: 5/9/2019 23:04:25  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.3248 | 37.561 | 875.76 | 4.7321 | 206.77 | 776.37 | 2321.0 |
| Stddev | 4.6455 | .911 | .34 | 2.5075 | 4.30 | 1.05 | 10.3 |
| %RSD | 73.449 | 2.4251 | .03920 | 52.988 | 2.0796 | .13473 | .44344 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 501.48 |
| Stddev | 6.49 |
| %RSD | 1.2947 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3764.0 | 2666.1 | 27358. | 3223.7 |
| Stddev | 8.6 | 4.6 | 4. | 14.6 |
| %RSD | .22822 | .17213 | .01595 | .45370 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.231% | 113.22% | 117.28% | 126.54% |
| Range | | | | |

Sample Name: 240-112036-b-26-c  Acquired: 5/9/2019 23:09:05  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33.877 | 157290. | 64.218 | 233.70 | 1519.8 | 25.695 |
| Stddev | .424 | 748. | 5.833 | 1.97 | 6.3 | .258 |
| %RSD | 1.2519 | .47555 | 9.0828 | .84147 | .41291 | 1.0027 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1032400. | 185.9 | 33.538 | 375.30 | 669.63 | 184200. |
| Stddev | 5274. | .4 | .155 | .82 | 3.04 | 775. |
| %RSD | .51084 | .2015 | .46217 | .21797 | .45365 | .42055 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12759. | 172.98 | 179260. | F 18233. | 63.742 | 6187.8 |
| Stddev | 65. | 1.07 | 443. | 33. | .179 | 28.4 |
| %RSD | .51258 | .61662 | .24688 | .17831 | .28031 | .45922 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 15000. | | |
| Low Limit | | | | -500000. | | |

Sample Name: 240-112036-b-26-c  Acquired: 5/9/2019 23:09:05  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 195.07 | 4052.1 | 16.88 | 14.911 | 666.48 | 3143.8 |
| Stddev | 1.57 | 13.6 | 3.15 | 4.755 | 1.61 | 3.5 |
| %RSD | .80382 | .33531 | 18.64 | 31.889 | .24146 | .11118 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 16.029 | 95.824 | F 42169. | 3650.7 | 1658.0 |
| Stddev | 1.488 | .566 | 54. | 10.0 | 4.4 |
| %RSD | 9.2827 | .59072 | .12694 | .27441 | .26650 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 30000. | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3342.7 | 2652.0 | 27251. | 3349.3 |
| Stddev | 5.4 | 5.0 | 52. | 13.4 |
| %RSD | .16152 | .18802 | .19240 | .40042 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.019% | 112.62% | 116.82% | 131.47% |
| Range | | | | |

Sample Name: 240-112036-b-27-c Acquired: 5/9/2019 23:13:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.62288 | 111430. | 173.39 | 61.534 | 924.38 | 8.1070 | 79024. |
| Stddev | .18152 | 530. | 1.34 | .758 | 4.08 | .0811 | 177. |
| %RSD | 29.143 | .47530 | .77146 | 1.2325 | .44091 | 1.0007 | .22446 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.529 | 99.052 | 167.31 | 226.62 | 358640. | 12483. | 154.41 |
| Stddev | .155 | .148 | .73 | 1.18 | 933. | 63. | .61 |
| %RSD | 2.369 | .14963 | .43775 | .51922 | .26016 | .50112 | .39212 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 36765. | 3160.9 | 84.590 | 1259.2 | 272.47 | 253.08 | 6.412 |
| Stddev | 214. | 5.3 | .222 | 13.2 | 1.05 | 2.31 | 5.985 |
| %RSD | .58279 | .16767 | .26285 | 1.0486 | .38458 | .91099 | 93.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-27-c  Acquired: 5/9/2019 23:13:49  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.9031 | 48.164 | 720.91 | 6.2727 | 188.58 | 1566.3 | 3446.8 |
| Stddev | 2.6834 | .426 | .78 | 1.9389 | 2.78 | 3.8 | 7.8 |
| %RSD | 33.955 | .88371 | .10754 | 30.911 | 1.4754 | .24501 | .22762 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 245.39 |
| Stddev | 4.70 |
| %RSD | 1.9155 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3999.2 | 2749.1 | 28283. | 3286.9 |
| Stddev | 7.5 | 5.9 | 7. | 5.7 |
| %RSD | .18729 | .21499 | .02572 | .17258 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.932% | 116.75% | 121.25% | 129.02% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 23:18:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1020.9 | 25127. | 510.57 | 5209.5 | 2008.8 | 2024.4 | 50412. | 519.4 |
| Stddev | 4.2 | 166. | 2.20 | 40.4 | 1.9 | 4.8 | 230. | 1.1 |
| %RSD | .41187 | .66150 | .43053 | .77518 | .09685 | .23837 | .45571 | .2025 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2040.9 | 2012.9 | 2076.0 | 25944. | 50014. | 5204.8 | 50263. | 2004.8 |
| Stddev | 1.4 | 3.3 | 6.7 | 109. | 101. | 17.8 | 218. | 5.2 |
| %RSD | .06812 | .16500 | .32478 | .41924 | .20256 | .34194 | .43336 | .25860 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2011.5 | 50709. | 2021.4 | 484.88 | 539.6 | 519.50 | 5065.5 | 5144.3 |
| Stddev | 1.4 | 171. | 1.0 | 1.63 | 3.6 | 4.50 | .5 | 5.7 |
| %RSD | .06788 | .33755 | .04806 | .33576 | .6711 | .86674 | .00889 | .11093 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/9/2019 23:18:19 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 960.50 | 2003.0 | 1978.3 | 5103.9 | 4958.4 |
| Stddev | 18.17 | 4.2 | 1.8 | 51.3 | 41.2 |
| %RSD | 1.8914 | .20795 | .08994 | 1.0060 | .83096 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3957.1 | 2414.6 | 24600. | 2822.2 |
| Stddev | 3.5 | 4.0 | 62. | 25.3 |
| %RSD | .08898 | .16653 | .25389 | .89648 |

Sample Name: CCB Acquired: 5/9/2019 23:22:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .47641 | -4.6250 | .52631 | 4.3156 | -.25066 | .03373 | 15.397 | .1719 |
| Stddev | .10489 | 7.9952 | 2.8984 | .4666 | .23134 | .16219 | 5.253 | .1023 |
| %RSD | 22.016 | 172.87 | 550.69 | 10.812 | 92.290 | 480.85 | 34.116 | 59.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .25011 | -.46384 | -.67050 | 8.5890 | 57.640 | .27675 | -22.530 | .45240 |
| Stddev | .23395 | .47228 | .02276 | 2.7007 | 14.686 | .07943 | 3.385 | .04968 |
| %RSD | 93.537 | 101.82 | 3.3947 | 31.443 | 25.479 | 28.701 | 15.025 | 10.981 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .33312 | 16.805 | -.77279 | -2.0389 | -.5371 | 4.9598 | .76280 | .22880 |
| Stddev | .09169 | 5.132 | .10517 | 1.1551 | 1.955 | 4.3084 | 1.2544 | .18444 |
| %RSD | 27.526 | 30.541 | 13.609 | 56.651 | 364.0 | 86.867 | 164.45 | 80.614 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/9/2019 23:22:40 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.2117 | 2.1782 | 1.5725 | 12.527 | 3.5504 |
| Stddev | .9117 | 5.6910 | .0667 | 18.048 | 2.0147 |
| %RSD | 41.221 | 261.27 | 4.2408 | 144.07 | 56.745 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4488.7 | 2522.3 | 25465. | 2865.2 |
| Stddev | 7.7 | 3.2 | 26. | 5.5 |
| %RSD | .17210 | .12817 | .10281 | .19359 |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 23:27:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.511 | 193.73 | 14.027 | 103.39 | 196.36 | 4.8817 | 5011.1 | 5.233 |
| Stddev | .267 | 4.68 | 1.456 | .62 | .37 | .1469 | 31.8 | .007 |
| %RSD | 2.5430 | 2.4135 | 10.383 | .59601 | .18684 | 3.0098 | .63417 | .1302 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.066 | 10.194 | 24.439 | 204.42 | 4892.3 | 51.097 | 5001.2 | 15.764 |
| Stddev | .368 | .182 | .574 | 3.44 | 28.1 | .623 | 73.6 | .088 |
| %RSD | 3.6528 | 1.7835 | 2.3469 | 1.6850 | .57362 | 1.2199 | 1.4713 | .56006 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 39.910 | 4938.1 | 37.813 | 8.0400 | 21.53 | 22.775 | 96.954 | 50.976 |
| Stddev | .167 | 3.5 | .553 | .6354 | 3.01 | 2.016 | .869 | .091 |
| %RSD | .41868 | .07139 | 1.4618 | 7.9029 | 13.97 | 8.8528 | .89639 | .17862 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/9/2019 23:27:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 14.972 | 52.474 | 53.399 | 496.35 | 51.051 |
| Stddev | 1.479 | 2.990 | .269 | 5.40 | 1.154 |
| %RSD | 9.8766 | 5.6971 | .50433 | 1.0878 | 2.2608 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4402.5 | 2501.7 | 25442. | 2845.2 |
| Stddev | 3.7 | 2.8 | 30. | 8.1 |
| %RSD | .08497 | .11223 | .11960 | .28615 |

Sample Name: 240-112036-b-28-c Acquired: 5/9/2019 23:32:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.2849 | 116230. | 120.70 | 90.547 | 926.22 | 9.0028 | 153490. |
| Stddev | .2234 | 559. | 2.41 | 1.495 | 5.25 | .1593 | 533. |
| %RSD | 3.5552 | .48122 | 1.9978 | 1.6507 | .56685 | 1.7690 | .34749 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 34.48 | 99.268 | 200.83 | 667.40 | 249040. | 13619. | 192.90 |
| Stddev | .07 | .874 | 1.44 | 1.70 | 1161. | 57. | .33 |
| %RSD | .1965 | .88062 | .71523 | .25527 | .46619 | .42212 | .16921 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50573. | 7712.6 | 44.642 | 4090.4 | 232.45 | 1656.6 | 12.73 |
| Stddev | 189. | 36.6 | .616 | 21.1 | 1.43 | 3.9 | 3.11 |
| %RSD | .37404 | .47429 | 1.3793 | .51508 | .61380 | .23748 | 24.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-28-c  Acquired: 5/9/2019 23:32:07  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0570 | 179.82 | 997.56 | 10.679 | 203.52 | 7434.3 | 3637.2 |
| Stddev | 3.4818 | 1.34 | 2.36 | 2.241 | 2.18 | 24.7 | 27.1 |
| %RSD | 68.851 | .74670 | .23610 | 20.982 | 1.0710 | .33194 | .74508 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 390.32 |
| Stddev | .75 |
| %RSD | .19120 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3900.8 | 2707.1 | 27607. | 3258.4 |
| Stddev | 7.4 | 3.1 | 48. | 14.1 |
| %RSD | .18966 | .11278 | .17563 | .43241 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.547% | 114.97% | 118.35% | 127.90% |
| Range | | | | |

Sample Name: 240-112036-b-29-c Acquired: 5/9/2019 23:36:44 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3451 | 115330. | 239.96 | 133.41 | 882.26 | 6.1586 | 419230. |
| Stddev | .4311 | 427. | .53 | 2.14 | 2.68 | .0246 | 2734. |
| %RSD | 32.048 | .37002 | .22142 | 1.6050 | .30412 | .39901 | .65206 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.700 | 136.45 | 188.82 | 241.31 | 260410. | 27300. | 295.98 |
| Stddev | .121 | .57 | .67 | 1.00 | 616. | 41. | 2.73 |
| %RSD | 7.112 | .41848 | .35421 | .41605 | .23663 | .14835 | .92376 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 120530. | 3533.7 | 44.482 | 1668.2 | 370.12 | 119.24 | .6939 |
| Stddev | 428. | 5.3 | .333 | 4.4 | .78 | 1.42 | 4.234 |
| %RSD | .35488 | .14976 | .74781 | .26547 | .20962 | 1.1910 | 610.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-29-c  Acquired: 5/9/2019 23:36:44  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.6781 | 37.300 | 1316.7 | 8.5277 | 213.27 | 632.05 | 2777.4 |
| Stddev | 4.0689 | .737 | 1.1 | 2.6209 | 3.19 | .70 | 23.3 |
| %RSD | 86.978 | 1.9745 | .08368 | 30.734 | 1.4956 | .11017 | .83753 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 657.01 |
| Stddev | 5.69 |
| %RSD | .86614 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3681.2 | 2627.2 | 26908. | 3211.7 |
| Stddev | 5.4 | 5.9 | 25. | 1.9 |
| %RSD | .14556 | .22417 | .09461 | .05830 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.224% | 111.57% | 115.35% | 126.07% |
| Range | | | | |

Sample Name: 240-112036-d-34-b Acquired: 5/9/2019 23:41:25 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0560 | 105790. | 148.69 | 56.579 | 670.43 | 7.7942 | 72816. |
| Stddev | .2561 | 518. | .43 | 1.268 | 2.94 | .0970 | 423. |
| %RSD | 24.253 | .48920 | .29187 | 2.2410 | .43913 | 1.2440 | .58137 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.573 | 108.57 | 169.59 | 338.39 | 294590. | 14367. | 211.82 |
| Stddev | .030 | .55 | .40 | .60 | 1513. | 106. | 1.11 |
| %RSD | 1.182 | .51038 | .23683 | .17760 | .51368 | .73988 | .52404 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49797. | 3617.7 | 56.718 | 4521.3 | 358.09 | 161.97 | 4.517 |
| Stddev | 414. | 7.2 | .453 | 20.5 | .81 | .88 | 2.369 |
| %RSD | .83138 | .19894 | .79899 | .45308 | .22652 | .54102 | 52.44 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-d-34-b  Acquired: 5/9/2019 23:41:25  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.1190 | 36.960 | 693.02 | 4.2993 | 235.87 | 952.16 | 2525.6 |
| Stddev | 1.7003 | .627 | .86 | 2.4300 | 2.51 | 1.22 | 8.4 |
| %RSD | 41.279 | 1.6971 | .12406 | 56.521 | 1.0653 | .12817 | .33287 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 198.19 |
| Stddev | 1.59 |
| %RSD | .80405 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3995.9 | 2817.8 | 28804. | 3340.4 |
| Stddev | 4.6 | 2.4 | 103. | 34.6 |
| %RSD | .11520 | .08634 | .35742 | 1.0348 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.851% | 119.67% | 123.48% | 131.12% |
| Range | | | | |

Sample Name: 240-112036-d-35-b Acquired: 5/9/2019 23:45:57 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4669 | 102200. | 125.59 | 86.268 | 622.32 | 5.6805 | 298590. |
| Stddev | .2527 | 384. | 4.99 | 1.019 | 1.54 | .1068 | 735. |
| %RSD | 17.226 | .37599 | 3.9694 | 1.1811 | .24747 | 1.8806 | .24606 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.900 | 146.30 | 156.75 | 252.40 | 249630. | 19775. | 217.97 |
| Stddev | .093 | .62 | 1.21 | 2.36 | 415. | 59. | 1.48 |
| %RSD | 3.195 | .42605 | .77494 | .93322 | .16608 | .29884 | .67970 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 80323. | 3949.6 | 56.281 | 4820.0 | 338.86 | 104.76 | 3.412 |
| Stddev | 410. | 14.5 | .631 | 10.2 | 2.03 | 1.44 | 2.630 |
| %RSD | .51065 | .36765 | 1.1218 | .21126 | .59979 | 1.3757 | 77.11 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-d-35-b  Acquired: 5/9/2019 23:45:57  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.6404 | 40.362 | 926.39 | 4.3988 | 194.76 | 709.22 | 2528.8 |
| Stddev | 2.1839 | 1.025 | 2.38 | .8754 | 4.05 | 1.14 | 22.7 |
| %RSD | 22.654 | 2.5389 | .25701 | 19.902 | 2.0804 | .16026 | .89585 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 393.30 |
| Stddev | 5.69 |
| %RSD | 1.4476 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3778.3 | 2644.5 | 27141. | 3174.5 |
| Stddev | 5.0 | 1.7 | 91. | 3.7 |
| %RSD | .13218 | .06615 | .33636 | .11774 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.578% | 112.31% | 116.35% | 124.61% |
| Range | | | | |

Sample Name: 240-112036-b-38-b  Acquired: 5/9/2019 23:50:30  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4293 | 109800. | 237.50 | 63.089 | 1300.4 | 6.8267 | 19250. |
| Stddev | .2318 | 415. | .61 | 1.473 | 3.4 | .2676 | 81. |
| %RSD | 16.221 | .37756 | .25869 | 2.3354 | .25764 | 3.9205 | .42069 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.847 | 298.15 | 166.62 | 277.39 | 385920. | 15982. | 173.34 |
| Stddev | .173 | 1.00 | .64 | 1.21 | 1435. | 35. | 1.49 |
| %RSD | 3.569 | .33536 | .38608 | .43499 | .37177 | .22196 | .86105 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33652. | F 15658. | 87.910 | 2622.6 | 534.04 | 132.31 | 6.908 |
| Stddev | 200. | 88. | .406 | 5.5 | 1.63 | 2.38 | 1.073 |
| %RSD | .59545 | .56137 | .46171 | .20976 | .30513 | 1.7962 | 15.54 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 15000. | | | | | |
| Low Limit | | -500000. | | | | | |

Sample Name: 240-112036-b-38-b  Acquired: 5/9/2019 23:50:30  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.8291 | 43.808 | 806.87 | 17.903 | 207.79 | 933.32 | 2343.8 |
| Stddev | 2.4522 | 1.018 | 1.79 | 2.629 | 3.59 | 1.94 | 9.4 |
| %RSD | 31.321 | 2.3246 | .22133 | 14.684 | 1.7261 | .20752 | .40037 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 136.90 |
| Stddev | 2.66 |
| %RSD | 1.9452 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4048.2 | 2821.0 | 28748. | 3302.6 |
| Stddev | 6.0 | 1.4 | 64. | 2.8 |
| %RSD | .14850 | .04866 | .22252 | .08356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.119% | 119.80% | 123.24% | 129.64% |
| Range | | | | |

Sample Name: 240-112036-b-39-b Acquired: 5/9/2019 23:55:10 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.0470 | 121550. | 143.61 | 106.26 | 627.90 | 6.7091 | 276690. |
| Stddev | .5213 | 209. | 1.68 | .72 | 1.38 | .2281 | 476. |
| %RSD | 25.465 | .17217 | 1.1721 | .68058 | .21995 | 3.3991 | .17197 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.254 | 154.55 | 186.99 | 291.01 | 285250. | 23332. | 251.01 |
| Stddev | .064 | .49 | .51 | 1.92 | 501. | 36. | 1.67 |
| %RSD | 1.956 | .31504 | .27466 | .65845 | .17575 | .15329 | .66331 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 86271. | 4516.5 | 53.716 | 2989.4 | 403.30 | 121.08 | 5.658 |
| Stddev | 193. | 19.8 | .270 | 6.7 | .55 | 1.11 | 1.955 |
| %RSD | .22397 | .43829 | .50272 | .22462 | .13731 | .91680 | 34.55 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-39-b  Acquired: 5/9/2019 23:55:10  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.4592 | 39.515 | 1117.9 | 9.9066 | 225.29 | 863.62 | 2882.0 |
| Stddev | 3.7055 | 1.897 | .9 | 3.5907 | 1.36 | 2.49 | 18.1 |
| %RSD | 83.096 | 4.8003 | .07948 | 36.245 | .60283 | .28855 | .62649 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 425.74 |
| Stddev | 4.82 |
| %RSD | 1.1318 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3747.3 | 2698.7 | 27857. | 3270.7 |
| Stddev | 7.5 | 7.9 | 66. | 10.7 |
| %RSD | .19946 | .29431 | .23825 | .32690 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.825% | 114.61% | 119.42% | 128.39% |
| Range | | | | |

Sample Name: 240-112036-b-40-c Acquired: 5/9/2019 23:59:51 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.2490 | 105000. | 104.44 | 104.60 | 798.71 | 6.3529 |
| Stddev | .2596 | 506. | 1.77 | 2.37 | 1.65 | .1332 |
| %RSD | 11.544 | .48200 | 1.6913 | 2.2627 | .20647 | 2.0965 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 738220. | 2.545 | 85.916 | 175.50 | 210.81 | 199910. |
| Stddev | 5601. | .194 | .193 | .51 | 1.03 | 524. |
| %RSD | .75867 | 7.623 | .22433 | .29142 | .49075 | .26193 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 720000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16517. | 179.60 | 181080. | 4222.9 | 29.213 | 1143.4 |
| Stddev | 100. | .97 | 634. | 5.6 | .222 | 8.0 |
| %RSD | .60318 | .53999 | .35008 | .13235 | .75865 | .70333 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112036-b-40-c  Acquired: 5/9/2019 23:59:51  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 246.83 | 132.54 | 1.606 | 4.0838 | 38.775 | 1498.6 |
| Stddev | 1.03 | .51 | 2.153 | 3.8851 | .463 | 6.0 |
| %RSD | .41595 | .38770 | 134.1 | 95.133 | 1.1938 | .40353 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.0029 | 206.81 | 610.52 | 4050.1 | 922.26 |
| Stddev | 1.1923 | 3.31 | .55 | 94.2 | 4.40 |
| %RSD | 19.862 | 1.6001 | .08973 | 2.3257 | .47728 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3493.4 | 2536.2 | 26140. | 3159.4 |
| Stddev | 3.6 | 1.8 | 76. | .4 |
| %RSD | .10244 | .06948 | .29008 | .01347 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.673% | 107.71% | 112.06% | 124.02% |
| Range | | | | |

Sample Name: 240-112036-b-41-e Acquired: 5/10/2019 0:04:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.4234 | 96191. | 84.714 | 203.15 | 997.61 | 9.0552 |
| Stddev | .1433 | 403. | 3.919 | .44 | 2.06 | .1829 |
| %RSD | 4.1846 | .41907 | 4.6257 | .21554 | .20637 | 2.0196 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1180700. | 2.071 | 50.051 | 169.32 | 147.97 | 130180. |
| Stddev | 4720. | .237 | .139 | .67 | .86 | 263. |
| %RSD | .39974 | 11.43 | .27788 | .39656 | .57882 | .20229 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12583. | 152.83 | 290640. | 5525.4 | 39.896 | 3551.3 |
| Stddev | 29. | 1.30 | 634. | 26.5 | .511 | 16.5 |
| %RSD | .23346 | .84920 | .21820 | .47883 | 1.2816 | .46384 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112036-b-41-e Acquired: 5/10/2019 0:04:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 164.14 | 119.84 | 3.869 | -.05471 | 42.134 | 2766.9 |
| Stddev | .30 | .78 | 4.062 | 2.0975 | .623 | 4.0 |
| %RSD | .18526 | .64920 | 105.0 | 3834.2 | 1.4784 | .14544 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .86717 | 169.62 | 552.54 | 1812.8 | 1052.4 |
| Stddev | 3.5883 | 1.25 | 2.57 | 13.4 | 5.9 |
| %RSD | 413.80 | .73569 | .46504 | .73673 | .55814 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3305.9 | 2474.0 | 25511. | 3102.2 |
| Stddev | 7.9 | 5.7 | 14. | 13.0 |
| %RSD | .23769 | .23110 | .05511 | .41988 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 80.128% | 105.06% | 109.36% | 121.77% |
| Range | | | | |

Sample Name: 240-112036-b-42-c Acquired: 5/10/2019 0:09:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.6760 | 89183. | 97.704 | 67.151 | 580.75 | 5.6133 | 376130. |
| Stddev | .3527 | 349. | 1.135 | .520 | 1.39 | .0652 | 2506. |
| %RSD | 21.046 | .39081 | 1.1618 | .77500 | .23908 | 1.1608 | .66627 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.347 | 79.972 | 153.27 | 206.34 | 192900. | 14563. | 168.41 |
| Stddev | .225 | .278 | .62 | .18 | 665. | 46. | 1.65 |
| %RSD | 9.600 | .34706 | .40269 | .08626 | .34496 | .31282 | .97892 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 103620. | 3245.8 | 29.774 | 924.88 | 236.67 | 130.18 | 5.446 |
| Stddev | 176. | 7.8 | .569 | 7.69 | .77 | .72 | .968 |
| %RSD | .17013 | .24109 | 1.9108 | .83137 | .32533 | .55113 | 17.78 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-42-c  Acquired: 5/10/2019 0:09:27  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.2867 | 38.848 | 855.93 | 2.8910 | 180.19 | 597.94 | 3137.1 |
| Stddev | 5.1891 | .173 | .68 | 2.4178 | 5.89 | 3.77 | 31.4 |
| %RSD | 98.154 | .44505 | .07990 | 83.632 | 3.2672 | .63133 | 1.0010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 435.58 |
| Stddev | 4.27 |
| %RSD | .98113 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3722.2 | 2560.3 | 26314. | 3090.6 |
| Stddev | 9.3 | 5.4 | 112. | 6.8 |
| %RSD | .24938 | .21157 | .42440 | .22062 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.218% | 108.73% | 112.81% | 121.32% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 0:14:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1026.1 | 25155. | 507.39 | 5211.1 | 2014.5 | 2022.5 | 50515. | 518.0 |
| Stddev | .9 | 106. | 2.64 | 17.2 | 11.7 | 10.5 | 229. | .8 |
| %RSD | .08946 | .42093 | .52037 | .32967 | .58053 | .51998 | .45275 | .1501 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2039.9 | 2009.2 | 2087.4 | 25969. | 50084. | 5215.1 | 50369. | 2010.6 |
| Stddev | 1.9 | 4.5 | 2.5 | 152. | 269. | 30.8 | 289. | 3.1 |
| %RSD | .09208 | .22436 | .11981 | .58712 | .53726 | .59091 | .57398 | .15213 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2011.3 | 50847. | 2017.7 | 486.11 | 533.8 | 519.18 | 5071.2 | 5141.8 |
| Stddev | 2.5 | 298. | .7 | 2.40 | 2.6 | 3.00 | 9.4 | 6.4 |
| %RSD | .12399 | .58557 | .03572 | .49285 | .4895 | .57712 | .18514 | .12517 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 0:14:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 967.70 | 2011.6 | 1982.5 | 5171.4 | 4991.6 |
| Stddev | 7.08 | 18.6 | 4.9 | 33.4 | 48.6 |
| %RSD | .73143 | .92505 | .24849 | .64671 | .97356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3947.5 | 2413.1 | 24510. | 2814.3 |
| Stddev | 9.0 | 3.7 | 67. | 15.5 |
| %RSD | .22828 | .15272 | .27506 | .55146 |

Sample Name: CCB Acquired: 5/10/2019 0:18:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27975 | 7.0530 | -.10850 | 4.0993 | -.25571 | .12604 | 22.710 | .1433 |
| Stddev | .23119 | 14.282 | 1.1796 | .4289 | .16721 | .15154 | 2.297 | .1147 |
| %RSD | 82.644 | 202.50 | 1087.2 | 10.464 | 65.390 | 120.23 | 10.115 | 80.04 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49580 | -.28980 | -.67326 | 7.4680 | 21.257 | .39853 | -7.7590 | .41306 |
| Stddev | .21734 | .24281 | .44607 | 2.9495 | 23.839 | 1.1459 | 42.546 | .02057 |
| %RSD | 43.837 | 83.784 | 66.255 | 39.495 | 112.15 | 287.54 | 548.33 | 4.9789 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .41153 | 5.6767 | -.74185 | -.53352 | -1.097 | 4.0142 | .75635 | .44176 |
| Stddev | .43733 | 7.2863 | .06785 | 1.4343 | .846 | .7384 | .40144 | .19919 |
| %RSD | 106.27 | 128.35 | 9.1462 | 268.84 | 77.14 | 18.395 | 53.076 | 45.090 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 0:18:28 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.1475 | 2.8262 | 1.3504 | 19.260 | 1.4560 |
| Stddev | 1.7757 | 1.2347 | .1656 | 6.713 | 4.8163 |
| %RSD | 154.75 | 43.689 | 12.263 | 34.855 | 330.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4474.7 | 2513.7 | 25497. | 2826.1 |
| Stddev | 17.8 | 8.1 | 49. | 11.1 |
| %RSD | .39731 | .32302 | .19329 | .39381 |

Sample Name: 240-112036-b-43-c Acquired: 5/10/2019 0:23:12 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4919 | 101250. | 96.185 | 74.859 | 477.55 | 5.0829 | 178380. |
| Stddev | .2391 | 413. | 3.172 | 1.388 | 2.13 | .0869 | 185. |
| %RSD | 16.024 | .40755 | 3.2976 | 1.8537 | .44697 | 1.7096 | .10378 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.908 | 85.935 | 150.07 | 219.99 | 229940. | 16633. | 237.32 |
| Stddev | .152 | .367 | .79 | .34 | 289. | 56. | 2.26 |
| %RSD | 7.961 | .42727 | .52928 | .15228 | .12552 | .33901 | .95386 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 68217. | 1629.1 | 39.976 | 1182.2 | 284.89 | 103.57 | 4.682 |
| Stddev | 389. | 2.9 | .179 | 7.1 | .60 | .48 | .581 |
| %RSD | .57025 | .17538 | .44790 | .60231 | .20968 | .46275 | 12.41 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-43-c  Acquired: 5/10/2019 0:23:12  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.6663 | 34.944 | 843.74 | 2.9389 | 185.46 | 663.79 | 2498.9 |
| Stddev | 1.8269 | .377 | .52 | 2.4096 | 4.35 | 3.33 | 14.4 |
| %RSD | 39.151 | 1.0777 | .06109 | 81.990 | 2.3474 | .50199 | .57561 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 274.46 |
| Stddev | 6.22 |
| %RSD | 2.2666 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3879.9 | 2664.3 | 27241. | 3177.9 |
| Stddev | 4.2 | 3.5 | 14. | 3.1 |
| %RSD | .10920 | .13253 | .05282 | .09652 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.039% | 113.15% | 116.78% | 124.74% |
| Range | | | | |

Sample Name: 240-112119-b-1-a Acquired: 5/10/2019 0:27:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.1935 | 105140. | 70.989 | 60.206 | 763.38 | 7.2562 | 395980. |
| Stddev | .2838 | 399. | 1.279 | 1.110 | .86 | .0092 | 2721. |
| %RSD | 12.940 | .37983 | 1.8020 | 1.8434 | .11269 | .12730 | .68717 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.074 | 102.20 | 161.67 | 176.44 | 185340. | 13501. | 132.45 |
| Stddev | .096 | .31 | 1.68 | .51 | 222. | 51. | .58 |
| %RSD | 3.105 | .30630 | 1.0417 | .28711 | .11990 | .37735 | .43490 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 126080. | 4794.7 | 358.12 | 2031.4 | 528.24 | 124.90 | 2.609 |
| Stddev | 193. | 14.6 | .85 | 12.0 | 1.80 | .49 | 1.376 |
| %RSD | .15271 | .30432 | .23656 | .58969 | .34144 | .39317 | 52.73 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112119-b-1-a  Acquired: 5/10/2019 0:27:45  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7292 | 40.709 | 828.76 | 6.5961 | 2354.1 | 874.68 | 3240.4 |
| Stddev | 4.6860 | 1.351 | 1.41 | 3.8933 | 4.3 | 1.87 | 47.7 |
| %RSD | 171.70 | 3.3183 | .17029 | 59.025 | .18163 | .21335 | 1.4707 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 426.84 |
| Stddev | 4.39 |
| %RSD | 1.0284 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3672.7 | 2663.2 | 27343. | 3236.4 |
| Stddev | 6.3 | 5.6 | 96. | 1.7 |
| %RSD | .17266 | .21119 | .35041 | .05223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.018% | 113.10% | 117.22% | 127.04% |
| Range | | | | |

Sample Name: 240-112119-b-2-a Acquired: 5/10/2019 0:32:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .46258 | 92284. | 53.721 | 48.383 | 516.13 | 7.1208 | 242660. |
| Stddev | .13417 | 98. | 3.032 | .967 | .38 | .0914 | 286. |
| %RSD | 29.004 | .10629 | 5.6446 | 1.9986 | .07391 | 1.2828 | .11775 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.863 | 69.985 | 141.50 | 173.25 | 104560. | 8066.2 | 76.248 |
| Stddev | .075 | .757 | 1.13 | 1.74 | 64. | 31.0 | .823 |
| %RSD | 1.535 | 1.0811 | .79910 | 1.0049 | .06148 | .38471 | 1.0800 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 79460. | 2840.5 | 491.68 | 1138.1 | 1373.0 | 292.32 | 5.489 |
| Stddev | 322. | 1.7 | .90 | 5.6 | 7.5 | 2.65 | 3.027 |
| %RSD | .40551 | .05926 | .18283 | .49531 | .54264 | .90718 | 55.14 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112119-b-2-a Acquired: 5/10/2019 0:32:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11.168 | 45.855 | 789.55 | 15.208 | F 8188.4 | 2329.9 | 3963.3 |
| Stddev | 1.642 | .543 | .81 | .449 | 31.0 | 4.7 | 69.8 |
| %RSD | 14.702 | 1.1850 | .10284 | 2.9528 | .37911 | .20116 | 1.7600 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | | 5000.0 | | |
| Low Limit | | | | | -500000. | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 579.61 |
| Stddev | 2.85 |
| %RSD | .49151 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3832.0 | 2546.6 | 25862. | 3038.3 |
| Stddev | 4.7 | 2.5 | 54. | 12.2 |
| %RSD | .12366 | .09807 | .20793 | .40135 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.878% | 108.15% | 110.87% | 119.26% |
| Range | | | | |

Sample Name: 240-112119-b-3-a Acquired: 5/10/2019 0:37:02 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .21185 | 72416. | 45.044 | 39.667 | 374.98 | 6.0011 | 71037. |
| Stddev | .20570 | 142. | .518 | .323 | .85 | .2103 | 129. |
| %RSD | 97.099 | .19546 | 1.1490 | .81439 | .22661 | 3.5040 | .18182 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.616 | 60.687 | 336.42 | 196.57 | 100820. | 8234.0 | 68.385 |
| Stddev | .103 | .369 | 1.05 | 1.96 | 23. | 37.6 | .683 |
| %RSD | 2.857 | .60801 | .31136 | .99860 | .02275 | .45655 | .99907 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42451. | 3136.5 | 458.10 | 961.67 | 727.15 | 250.53 | 1.016 |
| Stddev | 162. | 11.8 | 1.19 | .62 | 2.34 | .69 | 4.153 |
| %RSD | .38246 | .37676 | .25989 | .06461 | .32225 | .27689 | 408.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112119-b-3-a  Acquired: 5/10/2019 0:37:02  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.1105 | 61.308 | 808.83 | 10.890 | F 7249.2 | 1720.8 | 4140.3 |
| Stddev | .6631 | .512 | 1.60 | 4.042 | 7.5 | 5.4 | 27.7 |
| %RSD | 7.2780 | .83509 | .19760 | 37.115 | .10375 | .31183 | .66799 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | | 5000.0 | | |
| Low Limit | | | | | -500000. | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 201.36 |
| Stddev | 1.48 |
| %RSD | .73616 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4034.1 | 2562.5 | 25893. | 3024.0 |
| Stddev | 13.2 | 5.3 | 61. | 15.3 |
| %RSD | .32666 | .20672 | .23537 | .50644 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.778% | 108.82% | 111.00% | 118.70% |
| Range | | | | |

Sample Name: lb 240-380088/1-b Acquired: 5/10/2019 0:41:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23914 | 6.6767 | 1.3664 | F 622.78 | 3.0071 | -.13402 |
| Stddev | .22660 | 8.8845 | 1.3307 | 7.05 | .1406 | .06197 |
| %RSD | 94.754 | 133.07 | 97.387 | 1.1314 | 4.6764 | 46.241 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 200.00 | | |
| Low Limit | | | | -1000.0 | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2761.7 | .1810 | .31773 | 3.1116 | -.60241 | 10.309 |
| Stddev | 19.5 | .1668 | .17851 | .2006 | .59184 | 2.494 |
| %RSD | .70492 | 92.18 | 56.183 | 6.4469 | 98.246 | 24.190 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1002.1 | 4.9598 | 668.76 | .64913 | .37390 | 1219900. |
| Stddev | 90.7 | .8171 | 20.96 | .06330 | .45505 | 13382. |
| %RSD | 9.0519 | 16.474 | 3.1337 | 9.7518 | 121.71 | 1.0970 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: lb 240-380088/1-b Acquired: 5/10/2019 0:41:32 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7330 | .99255 | .5710 | 9.8033 | 1.1201 | -.06254 |
| Stddev | .0868 | .58727 | .3371 | 3.9300 | .2371 | .13861 |
| %RSD | 3.1750 | 59.168 | 59.04 | 40.089 | 21.168 | 221.62 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.5020 | 2.3030 | 5.3149 | 458.43 | 5.7163 |
| Stddev | 1.5335 | 3.3172 | .0582 | 11.04 | 7.2682 |
| %RSD | 34.063 | 144.04 | 1.0954 | 2.4091 | 127.15 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3597.0 | 2278.7 | 22782. | 2801.6 |
| Stddev | 10.3 | 6.5 | 37. | 18.7 |
| %RSD | .28726 | .28340 | .16394 | .66672 |

Sample Name: mb 240-380266/2-a Acquired: 5/10/2019 0:46:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .21070 | 7.3601 | -.72701 | -.86473 | -.32908 | -.10947 | 55.652 | .1907 |
| Stddev | .06111 | 13.255 | 1.7523 | .61800 | .18575 | .17265 | 3.411 | .1568 |
| %RSD | 29.001 | 180.09 | 241.03 | 71.468 | 56.445 | 157.71 | 6.1296 | 82.24 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59056 | -.14165 | -.43686 | 7.0871 | 163.64 | 1.1888 | 35.187 | .14798 |
| Stddev | .03001 | .22395 | .16142 | 2.9618 | 35.63 | 1.6107 | 7.420 | .01194 |
| %RSD | 5.0814 | 158.10 | 36.950 | 41.791 | 21.772 | 135.49 | 21.087 | 8.0685 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20257 | 328.77 | -1.4138 | -.78878 | -1.774 | 3.9823 | .05934 | .00138 |
| Stddev | .25298 | 29.28 | .4065 | 1.0689 | 1.906 | 3.6175 | .23465 | .12093 |
| %RSD | 124.88 | 8.9055 | 28.755 | 135.51 | 107.5 | 90.841 | 395.42 | 8747.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380266/2-a Acquired: 5/10/2019 0:46:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.3699 | 1.9477 | 8.0182 | 40.482 | 4.4977 |
| Stddev | .8353 | 2.1230 | .1044 | 7.653 | 3.7148 |
| %RSD | 35.246 | 109.00 | 1.3017 | 18.905 | 82.592 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4446.6 | 2494.5 | 25548. | 2852.7 |
| Stddev | 9.0 | 2.3 | 49. | 7.0 |
| %RSD | .20317 | .09389 | .19336 | .24615 |

Sample Name: lcs 240-380266/3-a Acquired: 5/10/2019 0:51:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.129 | 1894.8 | 2085.8 | F 1700.3 | 1880.0 | 47.623 |
| Stddev | .658 | 22.5 | 6.9 | 4.8 | 8.4 | .417 |
| %RSD | 1.3385 | 1.1889 | .32939 | .28033 | .44491 | .87546 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | | 1000.0 | | |
| Range | | | | 20.500% | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49614. | 51.88 | 500.94 | 196.73 | 260.68 | 1004.1 |
| Stddev | 396. | .16 | 1.18 | 1.13 | .43 | 6.6 |
| %RSD | .79745 | .3051 | .23593 | .57326 | .16635 | .65763 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51008. | 1031.1 | 47918. | 485.83 | 947.99 | 1395400. |
| Stddev | 387. | 7.3 | 533. | 1.91 | 1.06 | 10560. |
| %RSD | .75961 | .70627 | 1.1130 | .39398 | .11209 | .75676 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| Value | | | | | | |
| Range | | | | | | |

Sample Name: lcs 240-380266/3-a Acquired: 5/10/2019 0:51:06 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 500.39 | 445.12 | 534.8 | 2145.2 | 2007.9 | 981.56 |
| Stddev | 1.01 | 3.83 | 1.1 | 14.8 | 5.6 | 2.75 |
| %RSD | .20151 | .86070 | .2007 | .68828 | .27664 | .27977 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1783.5 | 480.33 | 526.99 | F 1636.2 | 940.25 |
| Stddev | 7.3 | 4.76 | 1.94 | 15.5 | 8.14 |
| %RSD | .41034 | .99133 | .36735 | .94940 | .86527 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| Value | | | | 1000.0 | |
| Range | | | | 20.500% | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3451.7 | 2225.1 | 22428. | 2788.8 |
| Stddev | 4.4 | 4.0 | 149. | 36.1 |
| %RSD | .12746 | .18174 | .66595 | 1.2961 |

Sample Name: 240-111924-d-1-c Acquired: 5/10/2019 0:55:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19351 | 2.7935 | 28.606 | 705.63 | 196.09 | 1.0420 |
| Stddev | .39914 | 3.2569 | 3.002 | 2.71 | .37 | .1766 |
| %RSD | 206.26 | 116.59 | 10.495 | .38459 | .18927 | 16.947 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9427.7 | .5291 | 2.3194 | 4.4878 | 2.2452 | 15.332 |
| Stddev | 41.6 | .0976 | .1370 | .3515 | 1.0325 | 4.453 |
| %RSD | .44159 | 18.44 | 5.9056 | 7.8321 | 45.986 | 29.041 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2601.5 | 20.268 | 4438.3 | 26.710 | 3.0903 | F 1179600. |
| Stddev | 86.9 | .827 | 15.5 | .234 | .2756 | 23802. |
| %RSD | 3.3391 | 4.0817 | .34977 | .87458 | 8.9166 | 2.0177 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111924-d-1-c Acquired: 5/10/2019 0:55:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 28.423 | 1.0538 | -4.185 | 11.565 | 2.0061 | .55703 |
| Stddev | 1.021 | 1.1655 | 1.388 | 2.236 | .0478 | .28838 |
| %RSD | 3.5920 | 110.60 | 33.16 | 19.332 | 2.3830 | 51.770 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.2455 | -1.8590 | 42.087 | 38478. | 244.31 |
| Stddev | 2.7810 | 3.9000 | .120 | 165. | 3.84 |
| %RSD | 53.017 | 209.79 | .28540 | .42895 | 1.5732 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3630.3 | 2341.9 | 23529. | 2888.8 |
| Stddev | 7.3 | 3.4 | 65. | 20.1 |
| %RSD | .20005 | .14307 | .27463 | .69669 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.990% | 99.455% | 100.87% | 113.39% |
| Range | | | | |

Sample Name: SD 240-111924-d-1c@5 Acquired: 5/10/2019 1:00:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .07699 | 6.9464 | 6.2631 | 146.94 | 40.824 | .19352 | 1989.7 |
| Stddev | .44699 | 14.274 | 2.0274 | .84 | .182 | .17123 | 11.8 |
| %RSD | 580.57 | 205.48 | 32.371 | .56953 | .44518 | 88.480 | .59063 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2570 | 1.0333 | .88599 | .24614 | .03131 | 640.82 | 6.1645 |
| Stddev | .0457 | .1622 | .11518 | .31336 | 2.7328 | 14.47 | 1.0853 |
| %RSD | 17.79 | 15.693 | 13.000 | 127.31 | 8729.0 | 2.2579 | 17.606 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 906.91 | 5.5329 | .53887 | 258350. | 4.9723 | .83723 | -1.900 |
| Stddev | 10.11 | .0198 | .14223 | 2128. | .6239 | .68937 | .357 |
| %RSD | 1.1145 | .35795 | 26.395 | .82356 | 12.547 | 82.340 | 18.77 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-111924-d-1c@5 Acquired: 5/10/2019 1:00:26 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2639 | .55251 | -.07883 | -1.5718 | -.67958 | 10.100 | 8125.9 |
| Stddev | 2.8607 | .43949 | .30087 | 1.5665 | 6.5508 | .070 | 48.9 |
| %RSD | 126.36 | 79.545 | 381.69 | 99.660 | 963.96 | .69424 | .60231 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 53.283 |
| Stddev | 7.348 |
| %RSD | 13.790 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4027.5 | 2425.9 | 24609. | 2893.2 |
| Stddev | 7.7 | 4.0 | 42. | 17.7 |
| %RSD | .19144 | .16652 | .16995 | .61110 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.617% | 103.02% | 105.50% | 113.57% |
| Range | | | | |

Sample Name: PDS 240-111924-d-1-c  Acquired: 5/10/2019 1:05:16  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 29.245 | 1907.8 | 2087.6 | 1919.2 | 2163.9 | 49.345 |
| Stddev | 1.062 | 37.1 | 10.0 | 16.2 | 22.2 | .476 |
| %RSD | 3.6320 | 1.9463 | .47769 | .84377 | 1.0248 | .96492 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 60014. | 52.07 | 513.50 | 196.61 | 266.85 | 997.25 |
| Stddev | 514. | .34 | 1.45 | 1.09 | 1.11 | 5.71 |
| %RSD | .85685 | .6620 | .28177 | .55676 | .41668 | .57223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52975. | 1050.2 | 53371. | 508.75 | 950.44 | F 1591700. |
| Stddev | 496. | 8.6 | 492. | 1.19 | 3.97 | 29246. |
| %RSD | .93624 | .81648 | .92222 | .23465 | .41741 | 1.8374 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: PDS 240-111924-d-1-c  Acquired: 5/10/2019 1:05:16  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 544.57 | 433.25 | 528.5 | 2162.0 | 2075.9 | 992.56 |
| Stddev | 2.64 | 3.98 | 2.0 | 17.6 | 12.2 | 2.00 |
| %RSD | .48447 | .91912 | .3824 | .81409 | .58570 | .20171 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1777.8 | 477.85 | 589.77 | 56436. | 1262.3 |
| Stddev | 9.6 | 2.98 | 3.03 | 476. | 14.2 |
| %RSD | .53934 | .62380 | .51423 | .84400 | 1.1211 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3409.6 | 2267.3 | 23107. | 2934.8 |
| Stddev | 10.0 | 8.3 | 74. | 35.2 |
| %RSD | .29272 | .36650 | .32101 | 1.1998 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.641% | 96.287% | 99.060% | 115.20% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 1:09:47 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1022.6 | 25265. | 508.23 | 5266.9 | 1996.8 | 2033.8 | 50331. | 520.3 |
| Stddev | 1.8 | 371. | 1.02 | 11.6 | 22.7 | 26.0 | 426. | 1.1 |
| %RSD | .17880 | 1.4688 | .20146 | .22043 | 1.1391 | 1.2798 | .84678 | .2093 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2031.0 | 2034.6 | 2072.4 | 26006. | 50224. | 5217.6 | 50365. | 2013.8 |
| Stddev | 4.8 | 4.4 | 2.0 | 226. | 563. | 47.9 | 480. | 2.8 |
| %RSD | .23523 | .21849 | .09856 | .86807 | 1.1219 | .91760 | .95317 | .13863 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2003.7 | 50298. | 2008.2 | 482.38 | 545.1 | 514.35 | 5075.9 | 5134.9 |
| Stddev | 2.5 | 556. | 4.0 | 3.16 | 1.1 | 1.47 | 14.7 | 10.1 |
| %RSD | .12566 | 1.1048 | .19837 | .65571 | .1955 | .28512 | .28880 | .19667 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 1:09:47 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 980.28 | 2001.0 | 1983.6 | 5275.1 | 4971.8 |
| Stddev | 5.30 | 4.2 | 8.3 | 73.5 | 55.1 |
| %RSD | .54055 | .20945 | .41703 | 1.3930 | 1.1076 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3868.6 | 2361.4 | 23715. | 2680.3 |
| Stddev | 17.1 | 9.3 | 89. | 45.1 |
| %RSD | .44074 | .39568 | .37656 | 1.6809 |

Sample Name: CCB Acquired: 5/10/2019 1:14:09 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .33978 | 5.3620 | .94865 | 6.0526 | .07857 | .08716 | 3.8175 |
| Stddev | .21609 | 16.463 | 2.3367 | .8566 | .05619 | .07084 | 6.1284 |
| %RSD | 63.597 | 307.03 | 246.32 | 14.153 | 71.517 | 81.277 | 160.53 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0800 | .45853 | -.18464 | -.75892 | 4.0877 | 184.80 | 2.6579 |
| Stddev | .1234 | .19411 | .48902 | .14171 | 3.4351 | 30.09 | 1.1535 |
| %RSD | 154.2 | 42.333 | 264.85 | 18.673 | 84.035 | 16.281 | 43.399 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -23.521 | .30576 | .57210 | 272.75 | -.96513 | -.81671 | 1.290 |
| Stddev | 24.853 | .06205 | .09539 | 5.77 | .76432 | 1.2921 | 2.320 |
| %RSD | 105.67 | 20.294 | 16.673 | 2.1172 | 79.193 | 158.20 | 179.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB  Acquired: 5/10/2019 1:14:09  Type: QC
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5.3916 | 1.3574 | .27842 | -3.0303 | 1.6898 | 1.2462 | 26.645 |
| Stddev | 3.2762 | .3510 | .15190 | .9884 | 3.9156 | .1703 | 7.896 |
| %RSD | 60.765 | 25.859 | 54.559 | 32.618 | 231.72 | 13.662 | 29.636 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 5.0000 | | | | | | |
| Low Limit | -5.0000 | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | .78709 |
| Stddev | 3.4957 |
| %RSD | 444.13 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4341.5 | 2439.5 | 24604. | 2697.7 |
| Stddev | 2.5 | 1.2 | 97. | 9.1 |
| %RSD | .05679 | .04767 | .39359 | .33848 |

Sample Name: 240-111924-d-1d ms@5 Acquired: 5/10/2019 1:18:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 223.70 | 433.88 | 1143.9 | 414.56 | 10710. | 11.155 | 13360. |
| Stddev | 1.36 | 2.00 | 1.2 | .55 | 79. | .265 | 73. |
| %RSD | .60624 | .46118 | .10357 | .13228 | .73919 | 2.3770 | .54937 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 230.4 | 112.78 | 1103.7 | 57.365 | 222.88 | 11724. | 229.77 |
| Stddev | .7 | .19 | .4 | .463 | .78 | 87. | 4.56 |
| %RSD | .2882 | .16862 | .03928 | .80773 | .35079 | .73841 | 1.9828 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12085. | 116.66 | 214.75 | 344270. | 118.24 | 1045.8 | 115.4 |
| Stddev | 107. | .27 | .29 | 4944. | .62 | 6.5 | 1.4 |
| %RSD | .88657 | .23568 | .13412 | 1.4360 | .52532 | .62544 | 1.194 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111924-d-1d ms@5 Acquired: 5/10/2019 1:18:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 235.10 | 444.50 | 223.06 | 411.51 | 104.81 | 124.33 | 9575.6 |
| Stddev | 4.13 | 1.46 | .41 | 3.43 | 5.56 | .22 | 171.8 |
| %RSD | 1.7560 | .32833 | .18424 | .83259 | 5.3013 | .18074 | 1.7941 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 282.62 |
| Stddev | 7.43 |
| %RSD | 2.6281 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3885.8 | 2386.5 | 23817. | 2723.0 |
| Stddev | 5.7 | 3.7 | 79. | 8.1 |
| %RSD | .14593 | .15677 | .33238 | .29740 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.184% | 101.35% | 102.10% | 106.89% |
| Range | | | | |

Sample Name: 240-111924-d1e msd@5 Acquired: 5/10/2019 1:23:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 273.29 | 573.03 | 1485.2 | 523.88 | 14314. | 15.083 | 17693. |
| Stddev | .11 | 15.66 | 2.6 | 2.64 | 81. | .236 | 103. |
| %RSD | .04135 | 2.7330 | .17735 | .50475 | .56312 | 1.5664 | .58372 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 293.6 | 151.46 | 1483.7 | 76.384 | 303.97 | 15404. | 303.28 |
| Stddev | .6 | .38 | 1.0 | 1.163 | 1.83 | 120. | 1.21 |
| %RSD | .1994 | .24999 | .06437 | 1.5224 | .60061 | .78178 | .39808 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16190. | 155.23 | 285.35 | 444550. | 158.48 | 1350.2 | 145.9 |
| Stddev | 99. | .06 | .74 | 487. | .49 | 1.9 | 2.9 |
| %RSD | .61157 | .03862 | .25898 | .10962 | .30727 | .14157 | 1.972 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111924-d1e msd@5 Acquired: 5/10/2019 1:23:38 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 302.85 | 587.19 | 296.44 | 509.19 | 144.41 | 167.33 | 1361.9 |
| Stddev | 2.14 | 3.86 | .43 | 4.31 | 3.40 | .88 | 18.3 |
| %RSD | .70684 | .65715 | .14465 | .84642 | 2.3540 | .52320 | 1.3444 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 377.44 |
| Stddev | 6.08 |
| %RSD | 1.6098 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3777.7 | 2347.4 | 23442. | 2739.8 |
| Stddev | 10.8 | 7.2 | 62. | 23.9 |
| %RSD | .28573 | .30685 | .26345 | .87102 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.562% | 99.687% | 100.49% | 107.54% |
| Range | | | | |

Sample Name: 240-111916-a-1-b Acquired: 5/10/2019 1:28:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.9423 | 79.470 | 20.097 | 6682.7 | 70.005 | .13814 | 18353. |
| Stddev | .5162 | 20.554 | .803 | 28.6 | .622 | .15718 | 99. |
| %RSD | 6.4987 | 25.864 | 3.9939 | .42798 | .88861 | 113.79 | .54176 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 40.26 | 24.952 | 28.707 | 374.75 | 771.72 | 332210. | 325.05 |
| Stddev | .22 | .060 | .117 | 2.49 | 6.40 | 1705. | 1.72 |
| %RSD | .5531 | .24079 | .40588 | .66498 | .82940 | .51308 | .52854 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3798.4 | 405.31 | 71.174 | 401600. | 26.793 | .79396 | 70.14 |
| Stddev | 25.4 | .30 | 2.446 | 5844. | .618 | 2.6405 | 4.66 |
| %RSD | .66809 | .07496 | 3.4368 | 1.4551 | 2.3052 | 332.58 | 6.648 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111916-a-1-b  Acquired: 5/10/2019 1:28:21  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 45.506 | 10.679 | 1.5817 | -15.351 | 20.184 | 1299.5 | 12331. |
| Stddev | .969 | .596 | .4234 | .216 | 3.266 | 1.4 | 61. |
| %RSD | 2.1285 | 5.5787 | 26.769 | 1.4080 | 16.179 | .11067 | .49125 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 81.296 |
| Stddev | 2.236 |
| %RSD | 2.7507 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3613.4 | 2232.9 | 22258. | 2636.5 |
| Stddev | 2.6 | 3.9 | 43. | 15.4 |
| %RSD | .07107 | .17430 | .19330 | .58355 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.581% | 94.825% | 95.417% | 103.49% |
| Range | | | | |

Sample Name: 240-111916-a-2-i Acquired: 5/10/2019 1:33:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32715 | 25.033 | 80.037 | 1991.1 | 10275. | -.08673 |
| Stddev | .13161 | 19.768 | 1.521 | 13.2 | 114. | .04766 |
| %RSD | 40.230 | 78.967 | 1.9000 | .66250 | 1.1142 | 54.953 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51342. | 1.195 | 3.1390 | 14.103 | 809.17 | 378.48 |
| Stddev | 373. | .204 | .3579 | .166 | 2.16 | 4.47 |
| %RSD | .72702 | 17.09 | 11.402 | 1.1799 | .26738 | 1.1815 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 23126. | 55.646 | 146800. | 1492.4 | 37.333 | F 1300800. |
| Stddev | 230. | 1.512 | 911. | 2.7 | 1.428 | 6876. |
| %RSD | .99610 | 2.7179 | .62064 | .17832 | 3.8247 | .52863 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111916-a-2-i Acquired: 5/10/2019 1:33:06 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 76.521 | -.14687 | 1.235 | 13.223 | 5.7678 | -.09899 |
| Stddev | .982 | .85924 | 2.030 | 4.776 | .8011 | .10043 |
| %RSD | 1.2828 | 585.02 | 164.3 | 36.115 | 13.890 | 101.45 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.5146 | 1.7888 | 3694.3 | 5943.1 | 311.74 |
| Stddev | 2.3434 | 3.2625 | 25.6 | 42.6 | 5.24 |
| %RSD | 51.906 | 182.38 | .69276 | .71683 | 1.6818 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3422.0 | 2208.5 | 22506. | 2721.5 |
| Stddev | 11.5 | 10.0 | 122. | 22.2 |
| %RSD | .33511 | .45387 | .54231 | .81516 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.942% | 93.792% | 96.484% | 106.83% |
| Range | | | | |

Sample Name: 240-111916-a-3-e Acquired: 5/10/2019 1:37:58 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .33020 | -5.9844 | 18.782 | 333.61 | 271.57 | -.05231 | 7520.1 |
| Stddev | .51105 | 37.007 | .408 | 4.39 | .65 | .11936 | 15.9 |
| %RSD | 154.77 | 618.39 | 2.1741 | 1.3171 | .23927 | 228.17 | .21088 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3358 | 1.0791 | 1.0212 | 163.28 | 189.77 | 57139. | 25.975 |
| Stddev | .1300 | .4337 | .4559 | .79 | 4.09 | 261. | .608 |
| %RSD | 38.71 | 40.192 | 44.642 | .48279 | 2.1565 | .45717 | 2.3392 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 63853. | 130.79 | 32.454 | 135660. | 4.1798 | -.67421 | 3.038 |
| Stddev | 626. | .17 | 2.120 | 523. | .3427 | 2.5362 | 1.916 |
| %RSD | .98104 | .13054 | 6.5328 | .38536 | 8.1996 | 376.17 | 63.09 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111916-a-3-e  Acquired: 5/10/2019 1:37:58  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2813 | 2.6326 | .13647 | -4.4064 | 4.7125 | 48.012 | 463.20 |
| Stddev | 2.6301 | 1.2764 | .16220 | 2.1498 | 3.6341 | .252 | 7.71 |
| %RSD | 61.432 | 48.485 | 118.85 | 48.788 | 77.117 | .52509 | 1.6636 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 38.403 |
| Stddev | 5.567 |
| %RSD | 14.495 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3944.2 | 2361.7 | 24020. | 2751.2 |
| Stddev | 1.1 | 6.4 | 83. | 7.8 |
| %RSD | .02793 | .27018 | .34557 | .28227 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.598% | 100.29% | 102.97% | 107.99% |
| Range | | | | |

Sample Name: 240-111934-d-1-i Acquired: 5/10/2019 1:42:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.6558 | 27.680 | 4.9822 | 935.11 | 298.62 | .27511 |
| Stddev | .2203 | 7.542 | 3.2575 | 11.94 | 1.11 | .27968 |
| %RSD | 13.304 | 27.247 | 65.382 | 1.2764 | .37176 | 101.66 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 733920. | 2.766 | 9.0561 | 2.5829 | 40.170 | 42.729 |
| Stddev | 5832. | .096 | .1696 | .0368 | .640 | 4.559 |
| %RSD | .79461 | 3.454 | 1.8731 | 1.4232 | 1.5937 | 10.669 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 720000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4835.2 | 26.845 | 16900. | 5731.2 | 15.797 | F 1412300. |
| Stddev | 109.6 | 2.459 | 187. | 43.8 | .440 | 5689. |
| %RSD | 2.2675 | 9.1611 | 1.1089 | .76350 | 2.7881 | .40281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111934-d-1-i Acquired: 5/10/2019 1:42:39 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 63.886 | 2.5060 | 11.66 | 8.7302 | 2.1684 | -.72775 |
| Stddev | .414 | .9896 | 2.15 | 5.6469 | 1.0608 | .14419 |
| %RSD | .64749 | 39.488 | 18.46 | 64.682 | 48.921 | 19.812 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.7628 | 3.3471 | 107.52 | 12271. | 817.06 |
| Stddev | 5.5526 | 5.9163 | .62 | 114. | 4.30 |
| %RSD | 82.106 | 176.76 | .57696 | .93043 | .52594 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3252.5 | 2120.5 | 21489. | 2620.8 |
| Stddev | 15.6 | 7.7 | 13. | 8.9 |
| %RSD | .47879 | .36138 | .06238 | .33901 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.833% | 90.052% | 92.120% | 102.87% |
| Range | | | | |

Sample Name: 240-112005-a-1-b Acquired: 5/10/2019 1:47:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06198 | 8664.6 | 5.0524 | 1532.2 | 18.798 | -.15901 |
| Stddev | .21609 | 136.4 | 1.2843 | 7.7 | .207 | .05621 |
| %RSD | 348.64 | 1.5740 | 25.420 | .50455 | 1.1013 | 35.353 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8638.0 | .2064 | -.00583 | 6.5183 | 23.516 | 1578.2 |
| Stddev | 51.7 | .1716 | .49589 | .2918 | .525 | 2.5 |
| %RSD | .59856 | 83.13 | 8504.2 | 4.4760 | 2.2346 | .16061 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2791.5 | 11.036 | 1675.5 | 76.137 | 5.4243 | F 1332900. |
| Stddev | 58.1 | 2.091 | 15.3 | .049 | .1847 | 22018. |
| %RSD | 2.0828 | 18.943 | .91115 | .06480 | 3.4050 | 1.6518 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112005-a-1-b Acquired: 5/10/2019 1:47:43 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.554 | 1.1827 | -.4014 | 3.3107 | 2.0744 | .01165 |
| Stddev | .878 | 2.1986 | 2.744 | 3.4200 | .3882 | .28780 |
| %RSD | 6.4769 | 185.90 | 683.6 | 103.30 | 18.716 | 2471.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.3553 | 4.4184 | 87.871 | 668.33 | 16.541 |
| Stddev | 2.4861 | 5.9396 | .239 | 8.19 | 1.901 |
| %RSD | 57.082 | 134.43 | .27218 | 1.2251 | 11.492 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3495.4 | 2255.4 | 22595. | 2729.4 |
| Stddev | 4.8 | 1.8 | 75. | 22.6 |
| %RSD | .13806 | .07800 | .33007 | .82648 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.721% | 95.781% | 96.864% | 107.14% |
| Range | | | | |

Sample Name: lb 240-380090/1-b Acquired: 5/10/2019 1:52:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23717 | -6.6285 | .30810 | 10.461 | -.00735 | -.09766 | 90.068 | .2659 |
| Stddev | .31023 | 10.453 | 1.8838 | .274 | .26417 | .23412 | 2.978 | .0715 |
| %RSD | 130.80 | 157.70 | 611.42 | 2.6195 | 3592.0 | 239.73 | 3.3069 | 26.90 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .36595 | .18018 | -.35131 | 1.8713 | 363.61 | 3.2163 | 15.438 | .12574 |
| Stddev | .24252 | .19022 | .30062 | 2.3914 | 16.86 | 1.2420 | 52.486 | .01284 |
| %RSD | 66.270 | 105.57 | 85.570 | 127.79 | 4.6357 | 38.615 | 339.98 | 10.213 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass | None | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .58335 | 14295. | -.90060 | -.28313 | -.8601 | 2.3541 | 30.975 | -.03850 |
| Stddev | .45887 | 91. | .31056 | .31323 | 2.281 | 2.8241 | 1.191 | .32712 |
| %RSD | 78.660 | .63518 | 34.484 | 110.63 | 265.2 | 119.96 | 3.8436 | 849.67 |
| Check ? | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: lb 240-380090/1-b Acquired: 5/10/2019 1:52:31 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.5656 | 1.3752 | .41899 | 16.218 | 2.3635 |
| Stddev | 1.2288 | 7.0740 | .06381 | 7.904 | 2.6970 |
| %RSD | 47.895 | 514.39 | 15.229 | 48.739 | 114.11 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4270.1 | 2416.5 | 24716. | 2764.9 |
| Stddev | 4.5 | 1.1 | 172. | 22.3 |
| %RSD | .10474 | .04605 | .69464 | .80780 |

Sample Name: mb 240-380198/2-a Acquired: 5/10/2019 1:57:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .25456 | 53.341 | .92964 | 2.6042 | -.15548 | -.11667 | 51.479 | .1896 |
| Stddev | .21065 | 14.676 | 2.6373 | .5547 | .10264 | .00429 | 3.572 | .0692 |
| %RSD | 82.749 | 27.513 | 283.69 | 21.299 | 66.015 | 3.6771 | 6.9387 | 36.52 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .18161 | -.00560 | -.80736 | 3.7634 | 198.86 | 1.9980 | 15.675 | .13129 |
| Stddev | .05774 | .04497 | .52386 | 2.3527 | 25.81 | 1.4627 | 20.610 | .01319 |
| %RSD | 31.792 | 802.65 | 64.885 | 62.514 | 12.981 | 73.209 | 131.49 | 10.043 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .37197 | 406.38 | -.99101 | -1.1442 | -.6264 | .49386 | 30.131 | .12236 |
| Stddev | .08923 | 14.40 | .30813 | 1.8569 | 2.178 | 3.0671 | .620 | .33716 |
| %RSD | 23.988 | 3.5426 | 31.093 | 162.29 | 347.8 | 621.05 | 2.0568 | 275.55 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380198/2-a Acquired: 5/10/2019 1:57:15 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.3830 | -.69056 | .97696 | 11.614 | 4.9197 |
| Stddev | .3828 | 3.9150 | .09072 | 4.597 | 5.2185 |
| %RSD | 11.316 | 566.93 | 9.2859 | 39.580 | 106.07 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4293.6 | 2420.9 | 24541. | 2732.3 |
| Stddev | 2.6 | 5.1 | 91. | 32.5 |
| %RSD | .05948 | .21272 | .36943 | 1.1913 |

Sample Name: lcs 240-380198/3-a Acquired: 5/10/2019 2:01:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.535 | 1885.9 | 1868.9 | 951.80 | 1859.5 | 47.441 | 72.999 | 47.93 |
| Stddev | .213 | 32.9 | 9.1 | 8.54 | 22.7 | .999 | 2.378 | .12 |
| %RSD | .44805 | 1.7470 | .48447 | .89744 | 1.2196 | 2.1057 | 3.2580 | .2541 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 470.80 | 194.53 | 245.67 | 1004.5 | 177.66 | 964.43 | 12.129 | 489.26 |
| Stddev | .39 | .84 | .94 | 12.1 | 19.74 | 10.95 | 37.190 | 1.29 |
| %RSD | .08224 | .43373 | .38229 | 1.2092 | 11.111 | 1.1353 | 306.63 | .26383 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 928.57 | 14231. | 470.56 | 470.35 | 490.8 | 1861.3 | 1848.6 | 951.47 |
| Stddev | 1.81 | 165. | 1.11 | 1.30 | 2.4 | 5.5 | 5.2 | 2.14 |
| %RSD | .19451 | 1.1603 | .23493 | .27722 | .4936 | .29772 | .27928 | .22453 |
| Check ? | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380198/3-a Acquired: 5/10/2019 2:01:58 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1830.9 | 466.56 | 460.25 | 957.25 | 963.06 |
| Stddev | 23.4 | 2.49 | 1.88 | 16.16 | 12.77 |
| %RSD | 1.2770 | .53321 | .40861 | 1.6882 | 1.3264 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4207.7 | 2420.7 | 24569. | 2727.5 |
| Stddev | 7.5 | 5.7 | 103. | 30.6 |
| %RSD | .17734 | .23617 | .41897 | 1.1220 |

Sample Name: CCV-4140446 Acquired: 5/10/2019 2:06:22 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1033.4 | 24953. | 509.83 | 5254.4 | 1978.6 | 2006.2 | 50513. | 519.2 |
| Stddev | 3.1 | 62. | 3.26 | 13.1 | 5.8 | 4.9 | 122. | 1.0 |
| %RSD | .30216 | .24741 | .63895 | .24850 | .29311 | .24293 | .24133 | .1842 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2039.0 | 2035.4 | 2086.2 | 25901. | 49707. | 5184.5 | 50652. | 2033.9 |
| Stddev | 1.3 | 1.7 | 2.9 | 77. | 172. | 8.9 | 128. | 3.3 |
| %RSD | .06320 | .08449 | .13695 | .29737 | .34639 | .17091 | .25178 | .16425 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2007.2 | 50174. | 2023.1 | 480.88 | 532.9 | 513.01 | 5098.1 | 5154.0 |
| Stddev | 2.9 | 116. | 2.3 | 1.17 | 5.2 | 5.42 | 5.4 | 8.1 |
| %RSD | .14517 | .23180 | .11480 | .24377 | .9814 | 1.0571 | .10574 | .15781 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 2:06:22 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 989.38 | 2003.3 | 2003.3 | 5182.5 | 4939.5 |
| Stddev | 1.13 | 9.5 | .9 | 4.6 | 15.2 |
| %RSD | .11448 | .47557 | .04647 | .08872 | .30840 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3838.8 | 2347.0 | 23564. | 2674.8 |
| Stddev | 3.7 | 2.6 | 68. | 8.1 |
| %RSD | .09710 | .11276 | .28804 | .30469 |

Sample Name: CCB Acquired: 5/10/2019 2:10:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .48658 | -.65069 | .59364 | 6.2420 | .04450 | -.04866 | 6.2138 | .1144 |
| Stddev | .20117 | 21.726 | .57079 | 1.0752 | .19732 | .08066 | 2.1652 | .0720 |
| %RSD | 41.344 | 3339.0 | 96.151 | 17.226 | 443.38 | 165.77 | 34.844 | 62.97 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32994 | -.07592 | .07067 | 2.0919 | 108.67 | .98752 | -9.4336 | .29466 |
| Stddev | .05330 | .51236 | .25034 | .6446 | 15.45 | .33770 | 20.442 | .04072 |
| %RSD | 16.153 | 674.86 | 354.25 | 30.814 | 14.221 | 34.197 | 216.69 | 13.820 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .64005 | 163.95 | -.65260 | -1.4793 | -1.687 | .95339 | -.05561 | .37904 |
| Stddev | .19999 | 3.20 | .44393 | 1.1915 | 1.840 | 3.5807 | .60840 | .29187 |
| %RSD | 31.246 | 1.9501 | 68.025 | 80.546 | 109.1 | 375.58 | 1094.1 | 77.003 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 2:10:43 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.7527 | .34602 | 1.4148 | 4.5646 | .96532 |
| Stddev | 1.0893 | 2.5231 | .1867 | 11.931 | 3.0645 |
| %RSD | 29.029 | 729.18 | 13.193 | 261.38 | 317.46 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4346.7 | 2446.2 | 24592. | 2698.2 |
| Stddev | 4.3 | 1.8 | 32. | 17.0 |
| %RSD | .09875 | .07403 | .13107 | .62929 |

Sample Name: 240-111916-a-2-c Acquired: 5/10/2019 2:15:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39479 | -.64177 | 3.1116 | 4.6435 | 82.078 | -.17436 | 104.39 | .2797 |
| Stddev | .30710 | 8.6810 | .9771 | .4590 | .669 | .14977 | 1.81 | .0275 |
| %RSD | 77.787 | 1352.7 | 31.403 | 9.8853 | .81534 | 85.902 | 1.7379 | 9.822 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49903 | .53607 | 27.775 | 97.587 | 129.18 | 4.9529 | 88.656 | 31.670 |
| Stddev | .10553 | .26199 | .477 | 1.542 | 9.95 | .9101 | 21.675 | .157 |
| %RSD | 21.148 | 48.872 | 1.7177 | 1.5803 | 7.6997 | 18.376 | 24.449 | .49475 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .31335 | 219.54 | 4.1012 | 1.1258 | .2006 | 9.3292 | 35.148 | 3.1431 |
| Stddev | .14367 | 2.86 | .1615 | 1.1268 | 3.729 | 1.8335 | .983 | .1558 |
| %RSD | 45.848 | 1.3039 | 3.9378 | 100.09 | 1859. | 19.653 | 2.7964 | 4.9584 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111916-a-2-c Acquired: 5/10/2019 2:15:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.2193 | 1.5179 | 622.72 | 53.411 | 2.1555 |
| Stddev | 3.7340 | 4.5883 | 1.22 | 12.536 | 3.9745 |
| %RSD | 60.039 | 302.28 | .19573 | 23.470 | 184.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4392.4 | 2439.0 | 24960. | 2781.2 |
| Stddev | 3.4 | 4.5 | 57. | 43.4 |
| %RSD | .07835 | .18457 | .22825 | 1.5605 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.46% | 103.58% | 107.00% | 109.17% |
| Range | | | | |

Sample Name: SD 240-111916-a-2c@5 Acquired: 5/10/2019 2:20:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .01491 | 11.629 | 1.3301 | 2.6473 | 16.338 | -.03667 | 22.114 | .0752 |
| Stddev | .33885 | 13.963 | .2508 | 1.2748 | .455 | .25106 | 3.546 | .0258 |
| %RSD | 2272.5 | 120.06 | 18.855 | 48.156 | 2.7869 | 684.71 | 16.035 | 34.35 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .35397 | -.11749 | 5.4787 | 13.789 | 62.971 | 2.8101 | 33.020 | 6.4553 |
| Stddev | .11669 | .77643 | .1856 | 1.632 | 33.295 | .2555 | 40.176 | .0063 |
| %RSD | 32.966 | 660.83 | 3.3883 | 11.837 | 52.873 | 9.0924 | 121.67 | .09841 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15303 | 119.84 | -.31813 | -.54300 | -.4665 | 7.0720 | 7.6980 | .53535 |
| Stddev | .47832 | .98 | .26730 | 1.5206 | 3.244 | 2.7051 | .6686 | .15537 |
| %RSD | 312.56 | .81482 | 84.023 | 280.03 | 695.3 | 38.251 | 8.6853 | 29.021 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-111916-a-2c@5 Acquired: 5/10/2019 2:20:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.5624 | .21356 | 134.32 | 16.652 | -.34740 |
| Stddev | .4398 | 4.4606 | .89 | 9.025 | .69348 |
| %RSD | 12.346 | 2088.7 | .66260 | 54.201 | 199.62 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4397.0 | 2456.0 | 24879. | 2757.4 |
| Stddev | 8.6 | 4.9 | 64. | 17.9 |
| %RSD | .19485 | .20136 | .25615 | .65069 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 106.57% | 104.30% | 106.65% | 108.24% |
| Range | | | | |

Sample Name: 240-111916-a-2d ms@5 Acquired: 5/10/2019 2:24:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 194.08 | 393.05 | 956.81 | 200.94 | 9588.4 | 9.6840 | 19.414 |
| Stddev | .49 | 2.23 | .51 | 1.20 | 21.9 | .1063 | 1.364 |
| %RSD | .25049 | .56809 | .05304 | .59757 | .22836 | 1.0979 | 7.0249 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 200.4 | 94.650 | 987.12 | 54.328 | 226.31 | 50.346 | 199.56 |
| Stddev | .6 | .434 | 2.41 | .469 | 3.96 | 52.831 | 1.92 |
| %RSD | .3130 | .45892 | .24460 | .86309 | 1.7514 | 104.93 | .96176 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.2994 | 105.19 | 189.94 | 101.25 | 93.893 | 976.54 | 100.1 |
| Stddev | 23.760 | .36 | .35 | 6.36 | .314 | 1.74 | 2.4 |
| %RSD | 377.18 | .34355 | .18628 | 6.2862 | .33461 | .17837 | 2.354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111916-a-2d ms@5 Acquired: 5/10/2019 2:24:50 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 196.37 | 375.77 | 195.05 | 363.07 | 91.076 | 225.25 | 190.96 |
| Stddev | 3.52 | .85 | .32 | 2.86 | 7.282 | .37 | 6.10 |
| %RSD | 1.7910 | .22653 | .16555 | .78673 | 7.9953 | .16481 | 3.1963 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 191.06 |
| Stddev | 5.44 |
| %RSD | 2.8457 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4343.3 | 2442.6 | 24739. | 2725.7 |
| Stddev | 14.0 | 8.7 | 62. | 14.9 |
| %RSD | .32163 | .35603 | .25171 | .54847 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.27% | 103.73% | 106.05% | 106.99% |
| Range | | | | |

Sample Name: 240-111916-a2e msd@5 Acquired: 5/10/2019 2:29:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 197.80 | 398.25 | 966.51 | 199.90 | 9504.0 | 9.5859 | 314.75 |
| Stddev | 1.00 | 7.11 | 1.46 | 2.58 | 69.4 | .1743 | 7.61 |
| %RSD | .50661 | 1.7852 | .15126 | 1.2928 | .73069 | 1.8180 | 2.4169 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 202.0 | 95.756 | 994.91 | 56.352 | 306.11 | 196.73 | 197.60 |
| Stddev | .5 | .388 | 2.86 | .372 | 5.93 | 20.28 | .84 |
| %RSD | .2276 | .40511 | .28699 | .65964 | 1.9365 | 10.308 | .42580 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 45.948 | 265.01 | 191.82 | 689.04 | 98.420 | 986.22 | 100.3 |
| Stddev | 35.664 | .63 | .78 | 7.58 | .223 | 3.96 | 3.0 |
| %RSD | 77.619 | .23667 | .40887 | 1.0996 | .22616 | .40140 | 2.948 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111916-a2e msd@5 Acquired: 5/10/2019 2:29:22 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 198.58 | 379.67 | 197.26 | 361.62 | 95.844 | 248.12 | 201.40 |
| Stddev | 1.37 | 1.90 | .23 | 1.74 | 10.014 | .77 | 4.12 |
| %RSD | .68802 | .49939 | .11455 | .48243 | 10.448 | .31038 | 2.0439 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 200.40 |
| Stddev | 3.70 |
| %RSD | 1.8462 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4340.4 | 2443.2 | 24714. | 2758.9 |
| Stddev | 6.2 | 3.2 | 126. | 28.3 |
| %RSD | .14318 | .13108 | .50825 | 1.0263 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.20% | 103.76% | 105.95% | 108.29% |
| Range | | | | |

Sample Name: 240-111916-a-3-c Acquired: 5/10/2019 2:33:55 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .56366 | 5.0979 | 3.8177 | 1.7825 | 26.280 | -.09263 | 75.368 | .2425 |
| Stddev | .61125 | 12.798 | .7040 | .0329 | .212 | .25857 | 7.770 | .0785 |
| %RSD | 108.44 | 251.05 | 18.440 | 1.8455 | .80818 | 279.16 | 10.309 | 32.37 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38555 | .35856 | 1.6440 | 43.324 | 100.70 | .69597 | 90.564 | .36530 |
| Stddev | .14917 | .61542 | .3505 | 3.485 | 30.24 | .74499 | 22.342 | .02953 |
| %RSD | 38.689 | 171.64 | 21.321 | 8.0431 | 30.029 | 107.04 | 24.670 | 8.0834 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .31113 | 118.80 | -.90320 | -.51657 | -1.592 | 11.306 | 31.641 | 2.9702 |
| Stddev | .23678 | 6.77 | .09367 | .82725 | .692 | 4.613 | .792 | .3569 |
| %RSD | 76.105 | 5.6952 | 10.371 | 160.14 | 43.49 | 40.801 | 2.5031 | 12.015 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111916-a-3-c Acquired: 5/10/2019 2:33:55 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.1174 | -1.5578 | 4.6439 | 46.559 | 4.7325 |
| Stddev | 3.5798 | 3.0798 | .2194 | 1.950 | 3.0027 |
| %RSD | 58.518 | 197.69 | 4.7250 | 4.1878 | 63.449 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4342.6 | 2414.4 | 24612. | 2737.1 |
| Stddev | 4.8 | 4.5 | 10. | 3.2 |
| %RSD | .11008 | .18597 | .03875 | .11793 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 105.26% | 102.53% | 105.51% | 107.44% |
| Range | | | | |

Sample Name: mb 240-379754/1-a Acquired: 5/10/2019 2:38:38 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05603 | 22.987 | -.25275 | 1.4901 | .56713 | -.02279 | 214.49 | -.0399 |
| Stddev | .29904 | 21.034 | 1.9777 | .4741 | .23323 | .18239 | 3.58 | .1178 |
| %RSD | 533.69 | 91.504 | 782.50 | 31.813 | 41.124 | 800.34 | 1.6678 | 295.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .87022 | .12325 | -.64986 | .49259 | 61.275 | .96488 | -4.1306 | .33166 |
| Stddev | .21809 | .06902 | .89165 | 2.2225 | 25.127 | .49535 | 20.562 | .05155 |
| %RSD | 25.062 | 56.001 | 137.21 | 451.19 | 41.007 | 51.338 | 497.79 | 15.544 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15489 | 128.75 | -.41061 | -.20814 | 1.652 | 3.3514 | 1.7247 | -.00377 |
| Stddev | .26119 | 6.28 | .31543 | .47557 | 1.570 | 2.8709 | .3226 | .04365 |
| %RSD | 168.63 | 4.8814 | 76.818 | 228.49 | 95.02 | 85.664 | 18.705 | 1156.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-379754/1-a Acquired: 5/10/2019 2:38:38 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.8320 | 2.0638 | .84584 | 11.402 | 4.4688 |
| Stddev | 1.3193 | .9851 | .16699 | 14.739 | 4.2578 |
| %RSD | 72.012 | 47.734 | 19.742 | 129.27 | 95.279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4405.2 | 2473.8 | 24846. | 2726.8 |
| Stddev | 4.4 | 5.9 | 26. | 16.5 |
| %RSD | .10042 | .23992 | .10361 | .60633 |

Sample Name: lcs 240-379754/2-a Acquired: 5/10/2019 2:43:21 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.288 | 1951.2 | 1994.0 | 1025.3 | 1873.0 | 48.579 | 48069. | 50.63 |
| Stddev | .197 | 47.7 | 5.4 | 8.2 | 20.8 | 1.016 | 450. | .27 |
| %RSD | .38363 | 2.4426 | .27202 | .79948 | 1.1121 | 2.0913 | .93584 | .5246 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 484.33 | 198.17 | 253.66 | 1010.4 | 47943. | 989.51 | 49042. | 497.52 |
| Stddev | .06 | .19 | .52 | 20.3 | 588. | 8.51 | 556. | 1.16 |
| %RSD | .01281 | .09615 | .20340 | 2.0069 | 1.2271 | .86017 | 1.1339 | .23300 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 944.66 | 48483. | 484.81 | 477.07 | 522.1 | 2090.6 | 1932.6 | 981.45 |
| Stddev | 4.15 | 541. | .94 | 2.73 | 2.0 | 5.9 | 5.9 | .43 |
| %RSD | .43965 | 1.1168 | .19302 | .57221 | .3898 | .28145 | .30571 | .04399 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-379754/2-a Acquired: 5/10/2019 2:43:21 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1868.1 | 472.37 | 487.79 | 1055.0 | 951.76 |
| Stddev | 24.7 | 8.66 | 1.53 | 27.8 | 18.80 |
| %RSD | 1.3227 | 1.8332 | .31357 | 2.6311 | 1.9750 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3973.4 | 2372.2 | 23809. | 2713.4 |
| Stddev | 3.5 | 5.1 | 106. | 33.5 |
| %RSD | .08714 | .21635 | .44491 | 1.2355 |

Sample Name: 240-111951-b-1-a Acquired: 5/10/2019 2:47:41 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.61166 | 30.685 | 3.8327 | 819.84 | 53.007 | -.00046 | 241440. |
| Stddev | .33725 | 8.563 | 2.6839 | 2.68 | .418 | .07468 | 577. |
| %RSD | 55.138 | 27.907 | 70.027 | .32707 | .78822 | 16089. | .23915 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .5150 | 7.4223 | .25908 | 1.3617 | 78.983 | 4935.6 | 6.4075 |
| Stddev | .1067 | .3371 | .46486 | .5384 | 4.694 | 17.8 | 1.2396 |
| %RSD | 20.72 | 4.5411 | 179.43 | 39.536 | 5.9435 | .36127 | 19.346 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 40896. | 463.54 | 10.017 | 15479. | 19.285 | -.04538 | .8600 |
| Stddev | 103. | 1.14 | .483 | 64. | .806 | 2.1317 | 2.890 |
| %RSD | .25244 | .24613 | 4.8171 | .41279 | 4.1795 | 4697.7 | 336.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-1-a  Acquired: 5/10/2019 2:47:41  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.4099 | 1.1367 | .85281 | -.86555 | 3.4260 | 9.9950 | 9395.3 |
| Stddev | 1.6495 | .4996 | .20980 | 1.6285 | 4.4786 | .1337 | 94.7 |
| %RSD | 17.529 | 43.956 | 24.601 | 188.14 | 130.72 | 1.3379 | 1.0077 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 994.17 |
| Stddev | 2.29 |
| %RSD | .23073 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3911.9 | 2321.7 | 23477. | 2673.1 |
| Stddev | 3.0 | 4.4 | 35. | 20.6 |
| %RSD | .07728 | .19153 | .14723 | .77134 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.815% | 98.599% | 100.65% | 104.93% |
| Range | | | | |

Sample Name: 240-111951-b-2-a Acquired: 5/10/2019 2:52:21 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.29073 | 227.04 | 4.0275 | 3054.0 | 42.188 | .69834 | 220290. |
| Stddev | .26858 | 19.81 | 1.5439 | 35.9 | .192 | .22611 | 976. |
| %RSD | 92.384 | 8.7254 | 38.335 | 1.1741 | .45607 | 32.379 | .44295 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2512 | .16810 | 1.1301 | .27903 | 37.104 | 7291.1 | 3.9341 |
| Stddev | .2956 | .19231 | .5436 | .36990 | 4.503 | 50.3 | .3767 |
| %RSD | 117.7 | 114.41 | 48.099 | 132.57 | 12.137 | .68927 | 9.5762 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20391. | 14.379 | 41.707 | 35530. | 1.1340 | -1.8167 | -1.421 |
| Stddev | 140. | .072 | .408 | 145. | .7796 | .3645 | 3.166 |
| %RSD | .68651 | .50302 | .97867 | .40731 | 68.747 | 20.067 | 222.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-2-a  Acquired: 5/10/2019 2:52:21  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15.212 | .48522 | .37925 | 1.1378 | 3.3908 | 4.5267 | 4935.4 |
| Stddev | 1.963 | .51371 | .15609 | 1.8993 | 2.7346 | .0876 | 47.5 |
| %RSD | 12.905 | 105.87 | 41.157 | 166.92 | 80.647 | 1.9340 | .96302 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1123.8 |
| Stddev | 16.4 |
| %RSD | 1.4567 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3863.0 | 2328.7 | 23444. | 2622.7 |
| Stddev | 31.3 | 15.6 | 77. | 22.8 |
| %RSD | .81040 | .67060 | .32851 | .87105 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.630% | 98.896% | 100.50% | 102.95% |
| Range | | | | |

Sample Name: 240-111951-b-3-a Acquired: 5/10/2019 2:57:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.84197 | 196.04 | 1.1099 | 3029.0 | 40.810 | .50868 | 216650. |
| Stddev | .30177 | 21.30 | 3.3330 | 63.7 | .216 | .09011 | 542. |
| %RSD | 35.841 | 10.865 | 300.30 | 2.1033 | .53025 | 17.715 | .25032 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3671 | -.01462 | 1.2756 | -.55598 | 28.262 | 7021.2 | 4.1115 |
| Stddev | .1069 | .19517 | .4492 | .69925 | 4.854 | 67.3 | 1.4113 |
| %RSD | 29.12 | 1335.2 | 35.213 | 125.77 | 17.177 | .95785 | 34.326 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 19977. | 12.509 | 41.291 | 34534. | 1.1582 | .01059 | -1.966 |
| Stddev | 152. | .070 | 1.068 | 145. | .4693 | 2.3493 | 3.007 |
| %RSD | .76159 | .55891 | 2.5866 | .41897 | 40.520 | 22189. | 152.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-3-a Acquired: 5/10/2019 2:57:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17.352 | 1.0789 | .43966 | 1.3079 | -2.8894 | 4.2989 | 4849.6 |
| Stddev | .903 | .7633 | .43358 | 2.2004 | 2.7163 | .0055 | 22.8 |
| %RSD | 5.2049 | 70.752 | 98.617 | 168.24 | 94.008 | .12887 | .46921 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1091.9 |
| Stddev | 8.8 |
| %RSD | .80154 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3816.9 | 2303.2 | 23381. | 2612.7 |
| Stddev | 53.1 | 28.4 | 154. | 13.6 |
| %RSD | 1.3905 | 1.2317 | .65927 | .52098 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.514% | 97.814% | 100.23% | 102.56% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 3:01:41 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1016.3 | 25246. | 502.15 | 5248.8 | 1975.2 | 2021.9 | 50637. | 515.3 |
| Stddev | 2.5 | 88. | 3.10 | 39.6 | 6.5 | 8.9 | 141. | 1.4 |
| %RSD | .24777 | .34865 | .61641 | .75510 | .32800 | .43812 | .27834 | .2637 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2024.3 | 2043.5 | 2033.8 | 26033. | 50064. | 5168.6 | 50889. | 2020.0 |
| Stddev | 1.2 | 3.0 | 4.3 | 64. | 230. | 11.7 | 77. | 2.6 |
| %RSD | .05693 | .14721 | .21349 | .24552 | .46025 | .22664 | .15094 | .12747 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1978.1 | 50558. | 2007.1 | 476.70 | 526.8 | 505.73 | 5096.8 | 5095.8 |
| Stddev | 4.0 | 202. | .5 | 6.40 | 2.1 | 4.39 | 3.2 | 11.1 |
| %RSD | .20459 | .40029 | .02708 | 1.3436 | .3948 | .86713 | .06371 | .21686 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 3:01:41 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 998.70 | 1998.3 | 2019.5 | 5208.4 | 4997.1 |
| Stddev | 5.86 | 16.3 | .7 | 38.2 | 22.4 |
| %RSD | .58687 | .81609 | .03679 | .73251 | .44888 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3767.9 | 2311.6 | 23044. | 2551.9 |
| Stddev | 5.7 | 5.2 | 62. | 9.5 |
| %RSD | .15170 | .22302 | .26936 | .37317 |

Sample Name: CCB Acquired: 5/10/2019 3:06:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05508 | -15.486 | .19230 | 7.8353 | -.19835 | .17391 | 4.9543 |
| Stddev | .02355 | 7.411 | 1.0397 | 1.9708 | .17919 | .14799 | 2.4910 |
| %RSD | 42.748 | 47.858 | 540.68 | 25.153 | 90.340 | 85.092 | 50.280 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2077 | .24707 | -.14834 | -.96689 | -.07656 | 15.269 | -.02605 |
| Stddev | .1720 | .11531 | .39594 | .32822 | 2.9973 | 28.558 | .75303 |
| %RSD | 82.82 | 46.669 | 266.92 | 33.946 | 3914.7 | 187.03 | 2890.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -31.029 | .19743 | .26007 | 28.977 | -.47348 | 1.4887 | -1.724 |
| Stddev | 34.230 | .06619 | .44482 | 9.832 | .47941 | 2.2709 | 1.032 |
| %RSD | 110.32 | 33.524 | 171.04 | 33.929 | 101.25 | 152.54 | 59.88 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 3:06:03 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5.0777 | .94356 | .27447 | .01207 | -1.0969 | 1.4539 | -2.5176 |
| Stddev | 4.3880 | .64780 | .27368 | 1.0067 | 4.3389 | .1187 | 9.4646 |
| %RSD | 86.418 | 68.655 | 99.713 | 8341.4 | 395.55 | 8.1675 | 375.93 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 5.0000 | | | | | | |
| Low Limit | -5.0000 | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 3.8427 |
| Stddev | 5.5909 |
| %RSD | 145.49 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4246.4 | 2397.5 | 23738. | 2590.3 |
| Stddev | 9.6 | 5.4 | 82. | 10.7 |
| %RSD | .22632 | .22554 | .34617 | .41477 |

Sample Name: 240-111951-b-4-a Acquired: 5/10/2019 3:10:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.92115 | 31.456 | 2.4419 | W 18229. | 52.994 | .21226 | 415650. |
| Stddev | .25115 | 6.862 | 1.2245 | 56. | .398 | .17313 | 1706. |
| %RSD | 27.264 | 21.813 | 50.144 | .30594 | .75049 | 81.562 | .41041 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Warn | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 18000. | | | |
| Low Limit | | | | -500000. | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3634 | -.89054 | .51504 | -1.0922 | 5266.2 | 12405. | 8.5268 |
| Stddev | .1588 | .22665 | .22152 | .3517 | 29.0 | 51. | 2.3260 |
| %RSD | 43.71 | 25.451 | 43.011 | 32.197 | .55083 | .41305 | 27.279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 71089. | 454.60 | 23.864 | 238420. | 1.4496 | -.24832 | -2.300 |
| Stddev | 266. | .76 | .196 | 280. | .3381 | 3.0562 | 2.224 |
| %RSD | .37383 | .16766 | .82283 | .11743 | 23.325 | 1230.8 | 96.70 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-4-a  Acquired: 5/10/2019 3:10:47  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.1376 | 1.5810 | -.14621 | -1.6845 | 1.1179 | .24142 | 5822.5 |
| Stddev | 3.3557 | 1.4357 | .23611 | 2.1076 | 3.9385 | .09815 | 32.4 |
| %RSD | 81.101 | 90.810 | 161.49 | 125.12 | 352.32 | 40.656 | .55695 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1115.7 |
| Stddev | 1.9 |
| %RSD | .16823 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3591.8 | 2235.0 | 22254. | 2499.2 |
| Stddev | 1.2 | 1.6 | 122. | 17.3 |
| %RSD | .03349 | .07015 | .54928 | .69038 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.057% | 94.917% | 95.403% | 98.101% |
| Range | | | | |

Sample Name: mb 240-379991/1-a Acquired: 5/10/2019 3:15:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .53362 | -11.578 | -.08455 | 18.880 | .09102 | -.12922 | 182.89 |
| Stddev | .07860 | 11.396 | 1.7837 | 1.514 | .13989 | .02151 | 1.28 |
| %RSD | 14.730 | 98.429 | 2109.7 | 8.0214 | 153.69 | 16.644 | .70089 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0630 | .85481 | F 6.1594 | .07507 | 29.595 | 42.971 | -.06536 |
| Stddev | .1432 | .13474 | .1372 | .39424 | 2.886 | 24.551 | .69297 |
| %RSD | 227.5 | 15.762 | 2.2272 | 525.17 | 9.7516 | 57.134 | 1060.2 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | | | | |
| Low Limit | | | -1000.0 | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -12.208 | 3.8424 | -.22879 | 148.75 | 2.5734 | -.09855 | .2564 |
| Stddev | 30.824 | .0775 | .28240 | 7.17 | .2947 | .86042 | 3.387 |
| %RSD | 252.48 | 2.0178 | 123.43 | 4.8193 | 11.452 | 873.09 | 1321. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: mb 240-379991/1-a Acquired: 5/10/2019 3:15:25 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.9629 | 2.1644 | -.06022 | -.00961 | F 5.3304 | F 20.628 | 18.071 |
| Stddev | 1.4225 | .1193 | .37133 | 2.1444 | 2.7683 | .133 | 6.068 |
| %RSD | 72.468 | 5.5113 | 616.58 | 22322. | 51.935 | .64470 | 33.578 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | | | 5.0000 | 20.000 | |
| Low Limit | | | | | -1000.0 | -1000.0 | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -.16218 |
| Stddev | 9.4653 |
| %RSD | 5836.1 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4430.2 | 2491.0 | 24848. | 2716.4 |
| Stddev | 16.7 | 6.4 | 82. | 16.1 |
| %RSD | .37736 | .25533 | .32922 | .59389 |

Sample Name: lcs 240-379991/2-a Acquired: 5/10/2019 3:20:09 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.194 | 1971.6 | 2038.1 | 1065.4 | 1904.2 | 49.882 | 48571. | 51.80 |
| Stddev | .499 | 16.2 | 3.3 | 9.1 | 2.6 | .326 | 117. | .12 |
| %RSD | .97390 | .82357 | .16163 | .85441 | .13758 | .65360 | .24091 | .2369 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 498.66 | 202.84 | 258.81 | 1038.0 | 48480. | 1008.7 | 49727. | 509.48 |
| Stddev | .60 | .22 | .78 | 9.7 | 56. | 1.3 | 89. | 1.11 |
| %RSD | .12088 | .10749 | .30225 | .93284 | .11505 | .13062 | .17829 | .21851 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 962.32 | 49002. | 497.10 | 487.47 | 537.3 | 2150.4 | 1982.4 | 993.06 |
| Stddev | .61 | 98. | .81 | 2.15 | 4.1 | 4.4 | 3.2 | 2.76 |
| %RSD | .06353 | .20023 | .16198 | .44107 | .7599 | .20332 | .16287 | .27797 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-379991/2-a Acquired: 5/10/2019 3:20:09 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1945.9 | 491.66 | 506.96 | 1070.8 | 977.94 |
| Stddev | 24.7 | 7.62 | .18 | 15.2 | 13.17 |
| %RSD | 1.2674 | 1.5501 | .03649 | 1.4199 | 1.3463 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4005.6 | 2396.1 | 24096. | 2695.9 |
| Stddev | 4.7 | 5.4 | 31. | 11.2 |
| %RSD | .11666 | .22404 | .12944 | .41590 |

Sample Name: 240-112030-a-1a@2 Acquired: 5/10/2019 3:24:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.32153 | 87.849 | 44.448 | 4617.0 | 17.827 | .04260 | 14849. | .0056 |
| Stddev | .53270 | 16.056 | 3.497 | 17.8 | .097 | .11725 | 39. | .1446 |
| %RSD | 165.67 | 18.277 | 7.8679 | .38582 | .54336 | 275.24 | .26059 | 2597. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.2152 | 3.5619 | 6.2652 | 653.94 | 91272. | 806.42 | 6036.7 | 11.762 |
| Stddev | .4123 | .3808 | .5809 | 3.52 | 1055. | 8.39 | 47.6 | .039 |
| %RSD | 33.932 | 10.692 | 9.2725 | .53862 | 1.1564 | 1.0405 | .78862 | .33343 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3882 | ^ ***** | 16.893 | -1.3126 | -1.295 | 6.6186 | 15.270 | 4.9602 |
| Stddev | .4591 | ----- | .736 | 1.8459 | 1.916 | 1.7335 | .806 | .2736 |
| %RSD | 33.073 | ----- | 4.3553 | 140.63 | 147.9 | 26.191 | 5.2812 | 5.5160 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112030-a-1a@2 Acquired: 5/10/2019 3:24:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -8.5113 | 1.8032 | 62.345 | 2336.8 | 115.71 |
| Stddev | 1.1328 | 1.6557 | .510 | 4.4 | .29 |
| %RSD | 13.310 | 91.818 | .81806 | .19041 | .25077 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2648.4 | 1878.1 | 17867. | 2422.5 |
| Stddev | 16.8 | 10.2 | 19. | 13.6 |
| %RSD | .63422 | .54468 | .10359 | .56014 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 64.191% | 79.758% | 76.594% | 95.091% |
| Range | | | | |

Sample Name: SD 240-112030a1a@10 Acquired: 5/10/2019 3:29:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.23334 | 8.3777 | 8.2135 | 908.61 | 3.6587 | -.16760 |
| Stddev | .64244 | 28.037 | 2.4164 | 6.77 | .3996 | .26845 |
| %RSD | 275.32 | 334.67 | 29.420 | .74552 | 10.923 | 160.17 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3112.3 | -.0196 | -.53186 | .62333 | .44512 | 131.08 |
| Stddev | 17.9 | .0535 | .02505 | .53491 | .56045 | 3.43 |
| %RSD | .57552 | 272.8 | 4.7102 | 85.815 | 125.91 | 2.6160 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17607. | 157.31 | 1282.5 | 2.3032 | .35512 | F 1890400. |
| Stddev | 78. | 2.23 | 10.0 | .0244 | .65048 | 8624. |
| %RSD | .44107 | 1.4153 | .78155 | 1.0604 | 183.17 | .45617 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: SD 240-112030a1a@10 Acquired: 5/10/2019 3:29:14 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2779 | -1.0105 | -3.254 | 4.0435 | 2.5751 | 1.0425 |
| Stddev | .5381 | 1.7437 | 2.181 | 1.3939 | .0501 | .0810 |
| %RSD | 12.579 | 172.56 | 67.02 | 34.471 | 1.9447 | 7.7715 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.7457 | -.36930 | 13.548 | 485.84 | 26.812 |
| Stddev | 2.1935 | 4.6817 | .198 | 4.91 | 2.660 |
| %RSD | 79.887 | 1267.7 | 1.4578 | 1.0106 | 9.9213 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3241.6 | 2134.3 | 20528. | 2451.5 |
| Stddev | 4.7 | 4.0 | 167. | 5.2 |
| %RSD | .14399 | .18580 | .81440 | .21048 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.570% | 90.639% | 88.001% | 96.227% |
| Range | | | | |

Sample Name: 240-112030-a1b ms@2 Acquired: 5/10/2019 3:34:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 34.620 | 1124.2 | 1316.8 | 5832.2 | 1015.2 | 24.420 | 39795. |
| Stddev | .414 | 9.5 | 3.6 | 44.8 | 9.5 | .116 | 219. |
| %RSD | 1.1969 | .84886 | .27166 | .76788 | .93815 | .47420 | .54959 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32.25 | 280.35 | 108.28 | 165.14 | 1218.3 | 144380. | 1599.5 |
| Stddev | .12 | .93 | .69 | 2.02 | 5.2 | 2218. | 25.9 |
| %RSD | .3669 | .33216 | .64034 | 1.2209 | .42824 | 1.5359 | 1.6213 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 30294. | 279.64 | 474.60 | ^ ***** | 294.65 | 220.24 | 308.0 |
| Stddev | 65. | 1.74 | 2.44 | ----- | 1.06 | 1.85 | 5.2 |
| %RSD | .21601 | .62339 | .51432 | ----- | .35940 | .83822 | 1.682 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112030-a1b ms@2 Acquired: 5/10/2019 3:34:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1234.5 | 1142.2 | 518.00 | 932.70 | 248.51 | 383.97 | 3150.6 |
| Stddev | 10.1 | 4.3 | 1.75 | 9.95 | 10.76 | 3.25 | 21.8 |
| %RSD | .81589 | .37718 | .33790 | 1.0665 | 4.3277 | .84676 | .69313 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 611.30 |
| Stddev | 7.67 |
| %RSD | 1.2552 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2454.0 | 1781.5 | 17061. | 2333.8 |
| Stddev | 16.1 | 7.7 | 108. | 15.0 |
| %RSD | .65445 | .43297 | .63387 | .64120 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 59.480% | 75.657% | 73.138% | 91.607% |
| Range | | | | |

Sample Name: 240-112030-a1c msd@2 Acquired: 5/10/2019 3:38:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32.767 | 1171.4 | 1347.8 | 5937.4 | 1061.2 | 25.483 | 41706. |
| Stddev | .498 | 45.5 | 5.1 | 46.6 | 3.8 | .091 | 77. |
| %RSD | 1.5184 | 3.8808 | .38025 | .78432 | .35524 | .35601 | .18360 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 29.06 | 289.14 | 112.88 | 171.37 | 1277.1 | 149770. | 1662.1 |
| Stddev | .06 | .78 | .81 | 1.06 | 4.5 | 1010. | 10.0 |
| %RSD | .2116 | .27038 | .71636 | .61909 | .34961 | .67461 | .60164 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 31821. | 284.10 | 489.31 | ^ ***** | 304.03 | 202.52 | 320.6 |
| Stddev | 113. | 1.47 | 3.37 | ----- | 1.45 | 2.69 | 4.3 |
| %RSD | .35612 | .51874 | .68845 | ----- | .47776 | 1.3303 | 1.328 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112030-a1c msd@2 Acquired: 5/10/2019 3:38:36 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1259.2 | 1172.2 | 539.18 | 920.11 | 263.47 | 390.73 | 3268.7 |
| Stddev | 11.8 | 4.5 | 2.80 | 20.66 | 8.95 | 1.55 | 29.8 |
| %RSD | .93525 | .38640 | .52017 | 2.2448 | 3.3987 | .39686 | .91096 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 645.05 |
| Stddev | 1.70 |
| %RSD | .26423 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2451.1 | 1777.5 | 16953. | 2315.1 |
| Stddev | 10.7 | 9.2 | 107. | 3.7 |
| %RSD | .43559 | .52010 | .63003 | .15816 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 59.408% | 75.485% | 72.675% | 90.875% |
| Range | | | | |

Sample Name: 240-112043-u-1-a Acquired: 5/10/2019 3:43:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.6118 | -13.254 | 3.5763 | 4017.4 | F 55401. | .51248 |
| Stddev | .4785 | 55.589 | 3.8796 | 33.5 | 1397. | .20207 |
| %RSD | 10.375 | 419.42 | 108.48 | .83472 | 2.5220 | 39.430 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | 25000. | |
| Low Limit | | | | | -500000. | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1755500. | -2.248 | 3.0029 | 1.9616 | -8.1190 | 11681. |
| Stddev | 17848. | .136 | .7453 | .4605 | .6756 | 91. |
| %RSD | 1.0167 | 6.038 | 24.819 | 23.478 | 8.3218 | .77543 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 94212. | 7057.6 | 212350. | 1489.5 | .36094 | F 2384200. |
| Stddev | 761. | 47.3 | 1192. | 4.4 | .33589 | 44941. |
| %RSD | .80765 | .67088 | .56141 | .29317 | 93.058 | 1.8849 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112043-u-1-a Acquired: 5/10/2019 3:43:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.7537 | 1.0760 | 2.310 | -1.7080 | .60893 | -10.892 |
| Stddev | 1.6776 | 2.1666 | 3.360 | 2.9693 | 1.1468 | .283 |
| %RSD | 24.839 | 201.37 | 145.4 | 173.85 | 188.32 | 2.5987 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.5577 | 5.2174 | 4.4723 | 1258.4 | F 285290. |
| Stddev | 2.5845 | .9270 | .1397 | 15.2 | 1621. |
| %RSD | 39.411 | 17.767 | 3.1246 | 1.2044 | .56827 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | 50000. |
| Low Limit | | | | | -500000. |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2657.5 | 1846.6 | 18914. | 2400.3 |
| Stddev | 13.0 | 13.1 | 112. | 24.3 |
| %RSD | .48884 | .70678 | .59324 | 1.0129 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 64.411% | 78.420% | 81.081% | 94.217% |
| Range | | | | |

Sample Name: 240-112064-b-2-a Acquired: 5/10/2019 3:48:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39431 | 1040.3 | 6.3844 | 8975.1 | 58.748 | .08855 | 71340. | .5148 |
| Stddev | .15866 | 13.6 | 1.3298 | 15.2 | .167 | .19405 | 183. | .1150 |
| %RSD | 40.239 | 1.3053 | 20.829 | .16970 | .28412 | 219.16 | .25685 | 22.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .78717 | 3.3476 | 8.3945 | 1629.4 | 3873.6 | 32.907 | 76002. | 130.30 |
| Stddev | .17675 | .3646 | .5277 | 12.3 | 39.6 | 1.213 | 453. | .41 |
| %RSD | 22.454 | 10.891 | 6.2861 | .75294 | 1.0223 | 3.6875 | .59615 | .31243 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.5324 | 26725. | 4.6352 | .73759 | -1.276 | 22.231 | 1.0746 | 44.231 |
| Stddev | .2816 | 82. | .6295 | 2.3100 | 1.350 | 3.594 | .6476 | .145 |
| %RSD | 6.2130 | .30841 | 13.581 | 313.18 | 105.8 | 16.168 | 60.263 | .32719 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-b-2-a Acquired: 5/10/2019 3:48:13 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.66894 | 7.6649 | 20.674 | 5059.2 | 275.24 |
| Stddev | 1.6432 | .9933 | .152 | 29.6 | 5.08 |
| %RSD | 245.64 | 12.959 | .73532 | .58433 | 1.8454 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4087.9 | 2409.7 | 24777. | 2790.3 |
| Stddev | 7.0 | 3.8 | 43. | 10.7 |
| %RSD | .17086 | .15685 | .17160 | .38258 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.082% | 102.34% | 106.22% | 109.53% |
| Range | | | | |

Sample Name: 240-112064-b-5-a@2 Acquired: 5/10/2019 3:52:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4069 | -1.1536 | -1.2415 | F 107990. | 33.178 | .11744 |
| Stddev | .1555 | 17.219 | 1.6371 | 985. | .232 | .02167 |
| %RSD | 11.054 | 1492.7 | 131.87 | .91207 | .69805 | 18.451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 20000. | | |
| Low Limit | | | | -500000. | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 433460. | -.1906 | -1.5936 | 7.8906 | -.42391 | 26.320 |
| Stddev | 2239. | .1865 | .2425 | .5881 | 1.1318 | 1.069 |
| %RSD | .51660 | 97.90 | 15.217 | 7.4532 | 267.00 | 4.0606 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11922. | 142.35 | F 971550. | 1469.9 | 20.926 | 94624. |
| Stddev | 16. | 1.00 | 3213. | 4.5 | .643 | 451. |
| %RSD | .13242 | .70438 | .33067 | .30874 | 3.0738 | .47641 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: 240-112064-b-5-a@2 Acquired: 5/10/2019 3:52:53 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0617 | -.36177 | 2.464 | 209.60 | .33064 | -2.5833 |
| Stddev | .8087 | .97470 | 1.729 | 2.80 | .46661 | .1515 |
| %RSD | 15.976 | 269.43 | 70.16 | 1.3360 | 141.12 | 5.8666 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.70769 | 9.9416 | 1.0350 | 4768.9 | 921.82 |
| Stddev | 1.9284 | 8.9392 | .2787 | 25.3 | 5.47 |
| %RSD | 272.50 | 89.917 | 26.923 | .53021 | .59322 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3389.3 | 2133.7 | 22119. | 2619.3 |
| Stddev | 1.7 | 3.3 | 82. | 9.5 |
| %RSD | .04908 | .15476 | .36851 | .36158 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.149% | 90.614% | 94.824% | 102.81% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 3:57:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 996.72 | 24436. | 491.71 | 5242.9 | 1929.0 | 1971.0 | 49185. | 505.9 |
| Stddev | 5.05 | 219. | 2.21 | 26.5 | 12.9 | 10.5 | 165. | 1.3 |
| %RSD | .50678 | .89458 | .45019 | .50630 | .67013 | .53052 | .33547 | .2650 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1978.0 | 1992.9 | 2011.4 | 25278. | 48838. | 5090.5 | 49164. | 1974.5 |
| Stddev | 3.1 | 4.4 | 10.0 | 43. | 283. | 27.3 | 157. | 7.8 |
| %RSD | .15561 | .22209 | .49591 | .17161 | .57934 | .53579 | .31863 | .39409 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1940.9 | 45869. | 1959.0 | 468.21 | 519.8 | 499.11 | 4955.7 | 5002.4 |
| Stddev | 3.0 | 340. | 3.6 | 1.55 | 8.6 | 2.77 | 13.2 | 10.3 |
| %RSD | .15234 | .74201 | .18446 | .33148 | 1.661 | .55480 | .26697 | .20489 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 3:57:42 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 965.21 | 1952.2 | 1949.9 | 5033.8 | 4828.1 |
| Stddev | 3.91 | 4.3 | 2.9 | 21.8 | 7.3 |
| %RSD | .40457 | .21986 | .15002 | .43304 | .15071 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3861.5 | 2358.7 | 23670. | 2655.3 |
| Stddev | 4.8 | 2.5 | 76. | 12.3 |
| %RSD | .12353 | .10744 | .32277 | .46189 |

Sample Name: CCB Acquired: 5/10/2019 4:02:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .03527 | -6.2601 | -.33410 | 63.722 | .08763 | -.03747 | 24.102 |
| Stddev | .42645 | 30.791 | 3.5030 | 3.176 | .29227 | .11420 | 2.670 |
| %RSD | 1209.0 | 491.85 | 1048.5 | 4.9844 | 333.54 | 304.82 | 11.079 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0038 | .58511 | -.40322 | -.21910 | -2.9086 | 296.82 | 1.7593 |
| Stddev | .1440 | .06194 | .41773 | .60307 | 1.2712 | 7.08 | 1.3295 |
| %RSD | 3830. | 10.587 | 103.60 | 275.25 | 43.704 | 2.3845 | 75.572 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2329 | .34622 | .32026 | F 1062.3 | -1.0621 | -1.4659 | -.3707 |
| Stddev | 29.037 | .03097 | .21247 | 18.1 | .3348 | 1.0829 | 3.754 |
| %RSD | 685.97 | 8.9447 | 66.344 | 1.7040 | 31.523 | 73.874 | 1013. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 1000.0 | | | |
| Low Limit | | | | -1000.0 | | | |

Sample Name: CCB Acquired: 5/10/2019 4:02:04 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.4633 | .38800 | .18711 | .17224 | 3.6474 | 1.4888 | 8.1669 |
| Stddev | 1.0621 | .44505 | .03700 | 2.9195 | 3.9906 | .1049 | 4.0046 |
| %RSD | 23.795 | 114.70 | 19.776 | 1695.1 | 109.41 | 7.0426 | 49.034 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 6.6797 |
| Stddev | 3.3976 |
| %RSD | 50.865 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4359.0 | 2457.3 | 24578. | 2691.1 |
| Stddev | 9.5 | 3.4 | 58. | 17.9 |
| %RSD | .21823 | .13730 | .23660 | .66529 |

Sample Name: 240-112064-b-5-a@20 Acquired: 5/10/2019 4:06:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05716 | -14.153 | 1.0964 | 11824. | 3.0763 | .02392 | 45828. | .4848 |
| Stddev | .39656 | 22.547 | 4.9988 | 60. | .2604 | .19239 | 226. | .0475 |
| %RSD | 693.80 | 159.31 | 455.91 | .50370 | 8.4654 | 804.31 | .49375 | 9.790 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.45145 | .84663 | .27508 | -1.3805 | 1319.5 | 14.562 | 96822. | 155.86 |
| Stddev | .33268 | .03232 | .43086 | 4.8632 | 5.0 | .767 | 487. | .21 |
| %RSD | 73.692 | 3.8172 | 156.63 | 352.29 | .37605 | 5.2677 | .50254 | .13399 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.1338 | 10805. | .22480 | -.38462 | -.1735 | 23.384 | .18814 | -.22746 |
| Stddev | .1244 | 19. | .37837 | .48263 | 3.162 | 1.861 | .35959 | .09091 |
| %RSD | 5.8293 | .17227 | 168.32 | 125.48 | 1823. | 7.9582 | 191.13 | 39.968 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-b-5-a@20 Acquired: 5/10/2019 4:06:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.1237 | -1.0982 | 1.4652 | 486.69 | 101.61 |
| Stddev | .9399 | 3.1226 | .1637 | 10.47 | 5.99 |
| %RSD | 83.643 | 284.34 | 11.174 | 2.1519 | 5.8932 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4003.6 | 2353.8 | 23859. | 2658.4 |
| Stddev | 2.1 | 2.4 | 36. | 7.3 |
| %RSD | .05334 | .10402 | .14986 | .27377 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.039% | 99.962% | 102.28% | 104.35% |
| Range | | | | |

Sample Name: 240-112064-a-6-a Acquired: 5/10/2019 4:11:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05887 | 613.49 | 2.1924 | 82.856 | 37.385 | -.02115 | 23660. | .1893 |
| Stddev | .16214 | 41.91 | 1.0143 | 2.444 | .168 | .05994 | 88. | .0532 |
| %RSD | 275.43 | 6.8319 | 46.266 | 2.9500 | .44830 | 283.38 | .37017 | 28.11 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .84762 | 1.0350 | 5.4539 | 1006.0 | 1869.9 | 5.1128 | 6277.9 | 92.835 |
| Stddev | .08982 | .3018 | .1882 | 4.6 | 51.7 | 2.9129 | 109.3 | .106 |
| %RSD | 10.597 | 29.158 | 3.4509 | .45759 | 2.7661 | 56.973 | 1.7417 | .11373 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .60573 | 14144. | 2.1087 | .74042 | .0508 | 5.2026 | 1.4097 | 6.6224 |
| Stddev | .49852 | 53. | .0852 | .71124 | 2.226 | 2.3328 | .2557 | .2140 |
| %RSD | 82.302 | .37544 | 4.0388 | 96.058 | 4378. | 44.839 | 18.137 | 3.2307 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-a-6-a Acquired: 5/10/2019 4:11:27 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.57542 | .86954 | 10.909 | 3156.7 | 110.26 |
| Stddev | 1.7049 | 1.4914 | .105 | 26.8 | 8.34 |
| %RSD | 296.29 | 171.52 | .96321 | .84861 | 7.5627 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4233.4 | 2424.5 | 24506. | 2721.0 |
| Stddev | .9 | 3.6 | 6. | 11.4 |
| %RSD | .02041 | .15043 | .02413 | .42068 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.61% | 102.96% | 105.06% | 106.81% |
| Range | | | | |

Sample Name: 240-112073-b-1-c Acquired: 5/10/2019 4:16:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.85007 | -26.741 | 7.2759 | 1535.4 | 34.078 | .03876 | 231190. |
| Stddev | .27943 | 11.858 | 2.7065 | 2.3 | .203 | .09684 | 484. |
| %RSD | 32.871 | 44.346 | 37.198 | .14778 | .59677 | 249.83 | .20943 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3534 | .61071 | -.52387 | -.63853 | 1439.8 | 4233.7 | 3.6590 |
| Stddev | .0369 | .12751 | .53855 | .50735 | 11.7 | 26.4 | 1.1603 |
| %RSD | 10.44 | 20.878 | 102.80 | 79.456 | .81574 | .62300 | 31.711 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 31937. | 369.39 | 26.216 | 42125. | 1.6849 | -.43971 | -1.830 |
| Stddev | 152. | 1.21 | .342 | 12. | .8167 | .98097 | 4.076 |
| %RSD | .47504 | .32697 | 1.3043 | .02767 | 48.471 | 223.09 | 222.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112073-b-1-c  Acquired: 5/10/2019 4:16:09  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.82372 | .60581 | -.69101 | 1.6895 | 5.5335 | .71682 | 5767.5 |
| Stddev | 4.4337 | .88617 | .03041 | 1.4920 | 1.5875 | .08534 | 14.6 |
| %RSD | 538.26 | 146.28 | 4.4015 | 88.312 | 28.688 | 11.906 | .25369 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 613.59 |
| Stddev | 2.90 |
| %RSD | .47200 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3887.8 | 2315.6 | 23456. | 2669.6 |
| Stddev | 23.9 | 11.8 | 90. | 15.8 |
| %RSD | .61585 | .50876 | .38316 | .59210 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.231% | 98.339% | 100.55% | 104.79% |
| Range | | | | |

Sample Name: 240-112073-b-2-c Acquired: 5/10/2019 4:20:48 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.2598 | -8.9301 | 2.2365 | 13496. | 24.799 | .17395 | 376890. |
| Stddev | .1403 | 19.805 | 1.3160 | 187. | .446 | .17188 | 2052. |
| %RSD | 11.137 | 221.78 | 58.841 | 1.3825 | 1.7992 | 98.812 | .54438 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1697 | -.93328 | -.43285 | -.65930 | 5774.1 | 5709.8 | 11.726 |
| Stddev | .1582 | .20550 | .49605 | .62660 | 9.1 | 14.1 | 1.872 |
| %RSD | 93.19 | 22.019 | 114.60 | 95.040 | .15785 | .24711 | 15.963 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 46638. | 503.60 | 53.197 | 240860. | .56604 | .54212 | -2.065 |
| Stddev | 197. | 1.01 | .225 | 1325. | .40478 | .12466 | 2.096 |
| %RSD | .42246 | .20089 | .42310 | .55015 | 71.511 | 22.996 | 101.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112073-b-2-c  Acquired: 5/10/2019 4:20:48  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3123 | 1.8277 | -.81732 | -.76887 | .67457 | .58147 | 8664.5 |
| Stddev | 3.9419 | .5922 | .37466 | 1.6333 | 4.1320 | .21690 | 27.2 |
| %RSD | 300.38 | 32.401 | 45.840 | 212.43 | 612.54 | 37.301 | .31405 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 793.35 |
| Stddev | 4.02 |
| %RSD | .50730 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3630.0 | 2252.0 | 22940. | 2632.6 |
| Stddev | 6.0 | 5.1 | 70. | 14.0 |
| %RSD | .16548 | .22539 | .30531 | .53191 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.982% | 95.638% | 98.341% | 103.34% |
| Range | | | | |

Sample Name: mb 240-379583/1-a Acquired: 5/10/2019 4:25:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40444 | 1.1695 | .35816 | 42.757 | -.11225 | -.07198 | 91.211 | .0627 |
| Stddev | .24273 | 15.778 | 1.4648 | 1.359 | .30475 | .01826 | 1.888 | .1695 |
| %RSD | 60.017 | 1349.1 | 408.98 | 3.1793 | 271.50 | 25.373 | 2.0698 | 270.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40283 | -.37313 | -.49370 | 7.3514 | 129.14 | .62057 | 17.863 | .66041 |
| Stddev | .31127 | .31492 | .43605 | 5.5810 | 18.29 | 1.8608 | 15.134 | .04164 |
| %RSD | 77.270 | 84.401 | 88.323 | 75.918 | 14.164 | 299.86 | 84.722 | 6.3052 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04046 | 574.65 | -.09003 | -.92218 | 1.230 | 3.1431 | .82064 | -.20555 |
| Stddev | .14392 | 12.99 | .25649 | 1.8083 | 1.852 | 1.0383 | .33855 | .13007 |
| %RSD | 355.71 | 2.2602 | 284.89 | 196.09 | 150.6 | 33.033 | 41.254 | 63.279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-379583/1-a Acquired: 5/10/2019 4:25:26 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.98234 | -5.1882 | .91265 | 9.4846 | 6.2126 |
| Stddev | 1.1039 | 6.8509 | .05497 | 4.5847 | 2.6688 |
| %RSD | 112.38 | 132.05 | 6.0226 | 48.338 | 42.958 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4276.7 | 2411.7 | 23994. | 2571.2 |
| Stddev | 3.0 | 2.3 | 57. | 25.1 |
| %RSD | .07107 | .09336 | .23641 | .97654 |

Sample Name: lcs 240-379583/2-a Acquired: 5/10/2019 4:30:10 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.470 | 1882.2 | 1953.9 | 1036.2 | 1825.3 | 47.714 | 47675. | 49.02 |
| Stddev | .045 | 23.7 | 11.0 | 6.3 | 7.0 | .236 | 191. | .11 |
| %RSD | .09055 | 1.2603 | .56284 | .60588 | .38205 | .49375 | .40009 | .2267 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 470.48 | 194.47 | 245.18 | 993.76 | 47994. | 958.24 | 48654. | 483.34 |
| Stddev | 1.62 | 1.17 | .57 | 8.14 | 224. | 3.74 | 61. | 1.53 |
| %RSD | .34486 | .59948 | .23402 | .81957 | .46732 | .39045 | .12624 | .31651 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 924.76 | 47319. | 470.34 | 461.53 | 515.1 | 2038.1 | 1904.5 | 959.40 |
| Stddev | 2.68 | 158. | 1.50 | 3.84 | 7.3 | 5.9 | 8.4 | 2.12 |
| %RSD | .28940 | .33398 | .31822 | .83273 | 1.412 | .28736 | .44360 | .22058 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-379583/2-a Acquired: 5/10/2019 4:30:10 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1826.5 | 464.60 | 478.35 | 1006.3 | 917.96 |
| Stddev | 12.3 | 4.69 | 1.42 | 14.8 | 7.00 |
| %RSD | .67295 | 1.0097 | .29696 | 1.4693 | .76281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3912.6 | 2336.5 | 23336. | 2557.5 |
| Stddev | 9.8 | 9.1 | 91. | 9.9 |
| %RSD | .24985 | .38946 | .39156 | .38536 |

Sample Name: 240-111897-u-1-a Acquired: 5/10/2019 4:34:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.6767 | 40.267 | 4.6548 | 6020.8 | F 30252. | .67000 |
| Stddev | .3014 | 10.774 | 3.6503 | 8.4 | 249. | .31807 |
| %RSD | 6.4443 | 26.756 | 78.420 | .13897 | .82326 | 47.474 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | 25000. | |
| Low Limit | | | | | -500000. | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1555300. | -1.206 | 1.0235 | 7.9296 | -.72228 | 11792. |
| Stddev | 9483. | .178 | .7528 | .4680 | .31278 | 75. |
| %RSD | .60972 | 14.75 | 73.549 | 5.9023 | 43.304 | .63180 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 89161. | 7590.4 | 166510. | 1315.8 | 2.3877 | F 2972600. |
| Stddev | 469. | 36.5 | 1211. | 6.0 | .8434 | 84814. |
| %RSD | .52563 | .48028 | .72756 | .45595 | 35.324 | 2.8532 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111897-u-1-a Acquired: 5/10/2019 4:34:30 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.3062 | 1.5349 | .5184 | 1.9601 | 1.1250 | -8.8261 |
| Stddev | 1.1523 | .6637 | 2.062 | 2.8188 | 1.0289 | .4513 |
| %RSD | 15.771 | 43.242 | 397.8 | 143.81 | 91.458 | 5.1135 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.6992 | .59844 | 11.637 | 1402.7 | F 205850. |
| Stddev | 2.7183 | 2.2122 | .293 | 9.1 | 1149. |
| %RSD | 35.306 | 369.67 | 2.5146 | .65118 | .55804 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | 50000. |
| Low Limit | | | | | -500000. |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2756.0 | 1897.3 | 19317. | 2361.4 |
| Stddev | 7.3 | 4.7 | 36. | 3.4 |
| %RSD | .26363 | .24667 | .18751 | .14339 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 66.799% | 80.573% | 82.813% | 92.693% |
| Range | | | | |

Sample Name: 240-111831-a-1-b@5 Acquired: 5/10/2019 4:39:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .61645 | F 106800. | .84159 | 42.769 | 46.597 | .13267 |
| Stddev | .18406 | 184. | 1.5701 | 1.586 | .486 | .05135 |
| %RSD | 29.858 | .17183 | 186.56 | 3.7084 | 1.0433 | 38.706 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1260.2 | 13.48 | 116.19 | 1399.4 | 247.09 | 27886. |
| Stddev | 18.5 | .06 | .42 | 5.2 | 1.89 | 53. |
| %RSD | 1.4660 | .4770 | .35972 | .37389 | .76443 | .18929 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 223880. | 16.238 | 399.04 | 773.16 | 480.58 | 5989.8 |
| Stddev | 149. | 1.860 | 21.28 | 3.06 | 2.75 | 73.4 |
| %RSD | .06650 | 11.454 | 5.3319 | .39611 | .57320 | 1.2259 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-1-b@5 Acquired: 5/10/2019 4:39:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5542.0 | 3.3607 | 5.404 | .93885 | 11.072 | 744.76 |
| Stddev | 14.9 | 3.3865 | 2.718 | 3.5378 | .462 | 2.34 |
| %RSD | .26831 | 100.77 | 50.30 | 376.82 | 4.1715 | .31405 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.8852 | 21.770 | F 78697. | 1255.7 | 28.247 |
| Stddev | 3.0023 | 2.079 | 382. | 53.2 | 4.930 |
| %RSD | 159.26 | 9.5507 | .48488 | 4.2404 | 17.455 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3858.8 | 2392.6 | 23603. | 2678.1 |
| Stddev | 2.6 | 4.0 | 66. | 9.0 |
| %RSD | .06830 | .16512 | .28051 | .33510 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.530% | 101.61% | 101.18% | 105.12% |
| Range | | | | |

Sample Name: SD 240-111831-a1b@25 Acquired: 5/10/2019 4:44:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12960 | 21308. | .36057 | 25.856 | 9.0459 | -.07264 | 249.77 |
| Stddev | .03058 | 149. | 1.5882 | .743 | .4047 | .10238 | 4.56 |
| %RSD | 23.593 | .69845 | 440.48 | 2.8747 | 4.4737 | 140.94 | 1.8245 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.692 | 22.184 | 281.47 | 47.759 | 5648.2 | 44414. | 3.7261 |
| Stddev | .056 | .049 | 1.34 | 1.159 | 70.2 | 389. | 1.8618 |
| %RSD | 2.083 | .21957 | .47631 | 2.4270 | 1.2422 | .87537 | 49.965 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 66.020 | 154.62 | 96.288 | 1728.1 | 1081.5 | -.79368 | -.3014 |
| Stddev | 9.908 | .37 | .402 | 17.6 | 1.7 | .46799 | 1.860 |
| %RSD | 15.007 | .24103 | .41731 | 1.0168 | .15978 | 58.965 | 617.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-111831-a1b@25 Acquired: 5/10/2019 4:44:15 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.0255 | 3.1693 | 146.74 | .75902 | 4.9356 | F 16290. | 236.44 |
| Stddev | 1.8992 | .0852 | .78 | 1.6441 | 3.4718 | 9. | 11.81 |
| %RSD | 62.773 | 2.6888 | .53333 | 216.61 | 70.343 | .05594 | 4.9959 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 4000.0 | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 8.2926 |
| Stddev | 4.7909 |
| %RSD | 57.774 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4120.6 | 2403.4 | 23997. | 2648.3 |
| Stddev | 5.4 | 3.2 | 47. | 20.5 |
| %RSD | .13170 | .13364 | .19401 | .77418 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.874% | 102.07% | 102.87% | 103.95% |
| Range | | | | |

Sample Name: 240-111831-a-1c ms@5 Acquired: 5/10/2019 4:48:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.535 | F 89654. | 377.13 | 223.49 | 389.56 | 9.4074 |
| Stddev | .174 | 319. | 3.41 | 1.13 | 1.91 | .0741 |
| %RSD | 1.6472 | .35529 | .90294 | .50644 | .48961 | .78810 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10312. | 20.75 | 177.99 | 1211.9 | 232.89 | 25061. |
| Stddev | 25. | .11 | .40 | 1.6 | 1.97 | 46. |
| %RSD | .24438 | .5168 | .22308 | .13157 | .84704 | .18506 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 208810. | 202.37 | 9455.1 | 879.40 | 543.85 | 13916. |
| Stddev | 966. | .64 | 78.4 | .64 | 1.81 | 80. |
| %RSD | .46274 | .31865 | .82943 | .07237 | .33199 | .57832 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-1c ms@5 Acquired: 5/10/2019 4:48:52 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 4131.2 | 92.418 | 99.07 | 373.16 | 396.14 | 800.14 |
| Stddev | 1.2 | 3.139 | 1.62 | 2.02 | 1.68 | .54 |
| %RSD | .02816 | 3.3960 | 1.632 | .54005 | .42400 | .06749 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 361.38 | 112.80 | F 59757. | 1078.8 | 197.75 |
| Stddev | 1.50 | 1.70 | 39. | 48.3 | 7.92 |
| %RSD | .41448 | 1.5037 | .06520 | 4.4738 | 4.0045 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3864.2 | 2388.4 | 23527. | 2644.3 |
| Stddev | 2.7 | 4.2 | 76. | 10.2 |
| %RSD | .06868 | .17750 | .32147 | .38494 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.659% | 101.43% | 100.86% | 103.80% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 4:53:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 993.99 | 24484. | 490.31 | 5149.2 | 1926.2 | 1960.6 | 49226. | 505.9 |
| Stddev | 6.64 | 63. | 2.85 | 7.8 | 6.0 | 6.1 | 259. | .5 |
| %RSD | .66811 | .25545 | .58110 | .15110 | .31068 | .30962 | .52549 | .0931 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1984.0 | 2003.7 | 1994.8 | 25305. | 48859. | 5062.6 | 49289. | 1980.0 |
| Stddev | 1.1 | 4.8 | 4.3 | 121. | 231. | 17.8 | 419. | 5.8 |
| %RSD | .05383 | .23863 | .21325 | .47774 | .47299 | .35161 | .84960 | .29393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1942.3 | 48108. | 1964.4 | 468.64 | 524.0 | 494.80 | 4990.5 | 5006.0 |
| Stddev | 3.2 | 214. | 3.6 | 4.15 | 7.1 | 1.59 | 6.7 | 15.7 |
| %RSD | .16525 | .44471 | .18466 | .88622 | 1.356 | .32034 | .13517 | .31455 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 4:53:23 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 972.96 | 1949.4 | 1968.7 | 5002.1 | 4839.0 |
| Stddev | 9.54 | 6.5 | .8 | 26.1 | 17.7 |
| %RSD | .98033 | .33584 | .03887 | .52182 | .36615 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3842.3 | 2353.8 | 23477. | 2619.6 |
| Stddev | 2.6 | 1.4 | 95. | 19.1 |
| %RSD | .06827 | .05926 | .40404 | .73073 |

Sample Name: CCB Acquired: 5/10/2019 4:57:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .43305 | 4.6955 | .28924 | 21.721 | -.12730 | .12371 | 12.418 | .0974 |
| Stddev | .91177 | 25.228 | 2.1609 | 1.462 | .16813 | .12018 | 3.869 | .0501 |
| %RSD | 210.55 | 537.29 | 747.10 | 6.7294 | 132.08 | 97.146 | 31.156 | 51.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49305 | .06170 | -.81920 | 1.9454 | 168.85 | .86441 | 26.412 | .31497 |
| Stddev | .14427 | .28079 | .60539 | 3.1069 | 15.16 | 1.2651 | 27.628 | .01254 |
| %RSD | 29.261 | 455.08 | 73.901 | 159.70 | 8.9801 | 146.35 | 104.60 | 3.9820 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .67093 | 367.55 | -.87496 | -1.1701 | .6609 | 2.9080 | .41066 | .38045 |
| Stddev | .29260 | 9.94 | .30754 | .9658 | .9925 | 4.3818 | .73718 | .08315 |
| %RSD | 43.610 | 2.7053 | 35.148 | 82.535 | 150.2 | 150.68 | 179.51 | 21.856 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 4:57:45 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .25394 | -5.5393 | 2.5973 | 6.0150 | 4.6924 |
| Stddev | 1.2043 | 1.5640 | .2539 | 8.9933 | 2.9093 |
| %RSD | 474.23 | 28.234 | 9.7752 | 149.51 | 62.000 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4332.5 | 2443.5 | 24315. | 2657.8 |
| Stddev | 6.2 | 4.3 | 53. | 10.5 |
| %RSD | .14371 | .17605 | .21713 | .39359 |

Sample Name: 240-111831-a1d msd@5 Acquired: 5/10/2019 5:02:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.412 | F 110980. | 382.59 | 226.84 | 419.20 | 9.5293 |
| Stddev | .554 | 633. | 2.07 | 1.90 | 3.80 | .0894 |
| %RSD | 5.3180 | .57067 | .54044 | .83895 | .90723 | .93774 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10768. | 31.06 | 182.24 | 1429.2 | 267.16 | 26412. |
| Stddev | 71. | .08 | .56 | 2.2 | 2.11 | 160. |
| %RSD | .65718 | .2656 | .30627 | .15592 | .79019 | .60486 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 223050. | 210.55 | 9828.8 | 826.69 | 570.45 | 14555. |
| Stddev | 1759. | 1.50 | 44.6 | .79 | 2.58 | 93. |
| %RSD | .78876 | .71241 | .45402 | .09512 | .45206 | .63901 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a1d msd@5 Acquired: 5/10/2019 5:02:29 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 4257.7 | 97.261 | 99.77 | 364.69 | 402.42 | 1173.5 |
| Stddev | 2.1 | .577 | 1.93 | 5.25 | 2.59 | 1.6 |
| %RSD | .05031 | .59326 | 1.932 | 1.4389 | .64296 | .13253 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 361.80 | 123.61 | F 67666. | 3414.2 | 199.58 |
| Stddev | 4.67 | 4.11 | 85. | 60.0 | 7.74 |
| %RSD | 1.2907 | 3.3255 | .12531 | 1.7575 | 3.8806 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3869.5 | 2415.1 | 23853. | 2646.8 |
| Stddev | 8.1 | 6.8 | 89. | 26.1 |
| %RSD | .20985 | .28044 | .37316 | .98654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.789% | 102.57% | 102.25% | 103.89% |
| Range | | | | |

Sample Name: 240-111831-a-2-b@5 Acquired: 5/10/2019 5:06:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05212 | F 91654. | 4.3321 | 23.110 | 35.757 | .19596 |
| Stddev | .25820 | 394. | 4.4697 | .888 | .303 | .07870 |
| %RSD | 495.37 | .43020 | 103.18 | 3.8421 | .84612 | 40.163 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 534.19 | 5.719 | 94.502 | 3026.3 | 229.23 | 30954. |
| Stddev | 2.95 | .094 | .166 | 4.3 | .89 | 25. |
| %RSD | .55281 | 1.643 | .17548 | .14176 | .38891 | .08185 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 244470. | 8.6462 | 126.59 | 883.09 | 470.98 | 2876.0 |
| Stddev | 841. | 2.5784 | 26.68 | 1.61 | .90 | 10.1 |
| %RSD | .34415 | 29.821 | 21.079 | .18183 | .19015 | .35118 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-2-b@5 Acquired: 5/10/2019 5:06:59 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5264.0 | 3.1130 | 1.767 | 2.6841 | 10.719 | 435.36 |
| Stddev | 2.9 | .7729 | 2.514 | 2.3496 | 1.172 | 1.05 |
| %RSD | .05600 | 24.828 | 142.3 | 87.537 | 10.937 | .24066 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.8134 | 25.829 | F 26614. | 430.63 | 8.3608 |
| Stddev | 2.3998 | 6.057 | 30. | 56.83 | 5.3088 |
| %RSD | 62.931 | 23.450 | .11334 | 13.197 | 63.497 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3905.2 | 2413.8 | 23710. | 2699.1 |
| Stddev | 11.1 | 7.4 | 56. | 2.3 |
| %RSD | .28401 | .30727 | .23444 | .08463 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.653% | 102.51% | 101.64% | 105.95% |
| Range | | | | |

Sample Name: 240-111831-a-3-b@20 Acquired: 5/10/2019 5:11:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16934 | 26940. | .01397 | 18.216 | 1.0706 | -.19492 | 113.04 |
| Stddev | .02580 | 127. | 2.5448 | .868 | .1901 | .13918 | 2.94 |
| %RSD | 15.238 | .47297 | 18211. | 4.7627 | 17.758 | 71.404 | 2.6035 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.118 | 72.504 | 2335.9 | 111.25 | 24181. | 68628. | 1.3851 |
| Stddev | .062 | .242 | 3.3 | .50 | 81. | 412. | 2.4322 |
| %RSD | 1.512 | .33442 | .13983 | .44589 | .33502 | .60075 | 175.59 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -25.384 | 551.54 | 443.44 | 1066.0 | 3089.1 | .62854 | 1.229 |
| Stddev | 10.679 | .21 | .58 | 8.8 | 8.0 | 1.8293 | 3.050 |
| %RSD | 42.069 | .03847 | .13163 | .82321 | .26013 | 291.04 | 248.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-a-3-b@20 Acquired: 5/10/2019 5:11:32 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.25287 | 5.1247 | 12.130 | .43219 | 14.894 | F 14635. | 98.838 |
| Stddev | 2.2901 | .6983 | .294 | 1.0870 | .535 | 37. | 11.966 |
| %RSD | 905.65 | 13.625 | 2.4278 | 251.52 | 3.5943 | .25330 | 12.106 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 4000.0 | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 5.2232 |
| Stddev | 3.6098 |
| %RSD | 69.111 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4108.6 | 2438.9 | 24284. | 2658.7 |
| Stddev | 11.5 | 6.4 | 30. | 15.9 |
| %RSD | .28032 | .26068 | .12312 | .59668 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.584% | 103.58% | 104.10% | 104.36% |
| Range | | | | |

Sample Name: 240-111831-a-4-b@10 Acquired: 5/10/2019 5:16:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .41090 | F 70052. | 9.6696 | 18.675 | 10.593 | .08727 |
| Stddev | .25446 | 176. | 1.5290 | 1.255 | .251 | .05270 |
| %RSD | 61.928 | .25146 | 15.812 | 6.7178 | 2.3725 | 60.388 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 521.28 | 17.14 | 493.01 | F 28638. | 688.06 | F 153200. |
| Stddev | .72 | .23 | 1.83 | 9. | 1.89 | 647. |
| %RSD | .13768 | 1.349 | .37200 | .03071 | .27529 | .42251 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 50000. |
| Low Limit | | | | -500000. | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 137240. | 1.9234 | 2.2462 | 3765.2 | F 4100.8 | 1560.1 |
| Stddev | 395. | 1.2139 | 34.787 | 5.5 | 4.8 | 7.0 |
| %RSD | .28782 | 63.111 | 1548.7 | .14571 | .11626 | .44994 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | 100000. | | | | 4000.0 | |
| Low Limit | -500000. | | | | -500000. | |

Sample Name: 240-111831-a-4-b@10 Acquired: 5/10/2019 5:16:04 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 25111. | 2.5337 | 10.60 | 4.5830 | 26.473 | 196.77 |
| Stddev | 17. | 1.7153 | 2.24 | .6517 | .627 | .10 |
| %RSD | .06585 | 67.701 | 21.16 | 14.220 | 2.3684 | .04913 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 16.051 | 153.94 | 1056.9 | 301.05 | 8.8580 |
| Stddev | 3.539 | 2.73 | 1.2 | 50.02 | 10.140 |
| %RSD | 22.050 | 1.7730 | .11394 | 16.616 | 114.47 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3910.5 | 2421.2 | 24010. | 2625.8 |
| Stddev | 3.5 | 2.9 | 42. | 17.8 |
| %RSD | .09005 | .12089 | .17548 | .67767 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.782% | 102.82% | 102.93% | 103.07% |
| Range | | | | |

Sample Name: 240-111831-a-4-b@100 Acquired: 5/10/2019 5:20:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06761 | 7020.1 | 2.0476 | 13.811 | .79450 | -.10875 | 53.877 | 1.777 |
| Stddev | .09473 | 76.8 | 2.2090 | .414 | .15186 | .08321 | .518 | .108 |
| %RSD | 140.10 | 1.0936 | 107.89 | 2.9941 | 19.114 | 76.513 | .96189 | 6.096 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.817 | 2935.1 | 68.600 | 15604. | 13695. | 1.4235 | -6.9325 | 387.26 |
| Stddev | .111 | 8.9 | 1.858 | 56. | 81. | 1.5540 | 23.815 | .97 |
| %RSD | .23270 | .30351 | 2.7080 | .35626 | .59279 | 109.17 | 343.52 | .25138 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 423.38 | 324.24 | 2465.1 | .59141 | 1.240 | 5.1490 | 3.5419 | 19.713 |
| Stddev | 1.50 | 7.15 | 3.0 | 1.8970 | 3.142 | 1.3257 | .6085 | .284 |
| %RSD | .35404 | 2.2064 | .12105 | 320.76 | 253.4 | 25.747 | 17.180 | 1.4413 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111831-a-4-b@100 Acquired: 5/10/2019 5:20:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.61039 | 15.769 | 102.75 | 25.523 | -1.4623 |
| Stddev | 2.5874 | 3.350 | .51 | 17.237 | 6.1806 |
| %RSD | 423.89 | 21.246 | .49669 | 67.535 | 422.67 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4276.6 | 2470.7 | 24636. | 2660.8 |
| Stddev | 6.5 | 4.3 | 102. | 3.7 |
| %RSD | .15301 | .17484 | .41583 | .13911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.66% | 104.93% | 105.61% | 104.45% |
| Range | | | | |

Sample Name: 240-111831-a-5-b@10 Acquired: 5/10/2019 5:25:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39884 | 47735. | -.94432 | 21.562 | 1.2255 | .05308 |
| Stddev | .35881 | 160. | 1.5706 | .470 | .1739 | .14107 |
| %RSD | 89.965 | .33503 | 166.32 | 2.1781 | 14.194 | 265.77 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 156.93 | 64.29 | 23.998 | 1670.9 | 53.117 | 13788. |
| Stddev | 7.91 | .28 | .293 | 1.2 | .687 | 83. |
| %RSD | 5.0431 | .4333 | 1.2210 | .07095 | 1.2936 | .60006 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 110200. | 3.3866 | 2.0485 | 451.31 | 200.40 | 1519.2 |
| Stddev | 442. | .7164 | 26.641 | .40 | .07 | 7.5 |
| %RSD | .40117 | 21.153 | 1300.5 | .08864 | .03640 | .49643 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-5-b@10 Acquired: 5/10/2019 5:25:08 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1496.0 | .63007 | -1.354 | 2.4423 | 6.3220 | 6.9321 |
| Stddev | 4.4 | 2.0668 | 3.167 | 2.0420 | .8818 | .0585 |
| %RSD | .29165 | 328.02 | 233.8 | 83.611 | 13.948 | .84450 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .97524 | 6.4809 | F 81251. | 139.50 | 2.5034 |
| Stddev | .88299 | 7.6068 | 305. | 23.70 | 5.7597 |
| %RSD | 90.541 | 117.37 | .37536 | 16.986 | 230.08 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4045.1 | 2434.0 | 24034. | 2695.5 |
| Stddev | 7.0 | .4 | 35. | 6.4 |
| %RSD | .17221 | .01531 | .14425 | .23827 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.044% | 103.37% | 103.03% | 105.81% |
| Range | | | | |

Sample Name: 240-111831-a-6-b@10 Acquired: 5/10/2019 5:29:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.06020 | F 62950. | 11.028 | 19.876 | 3.0328 | -.03352 |
| Stddev | .27114 | 464. | 2.338 | .244 | .3160 | .12178 |
| %RSD | 450.36 | .73671 | 21.200 | 1.2271 | 10.418 | 363.37 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 249.41 | 46.69 | 375.99 | F 20360. | 514.56 | F 103480. |
| Stddev | 2.37 | .06 | .93 | 93. | 3.54 | 887. |
| %RSD | .95012 | .1281 | .24632 | .45684 | .68857 | .85687 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 50000. |
| Low Limit | | | | -500000. | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 147860. | 2.4419 | -13.938 | 2410.9 | 3272.5 | 1322.8 |
| Stddev | 1011. | 1.9153 | 34.242 | 12.5 | 3.7 | 17.5 |
| %RSD | .68379 | 78.433 | 245.67 | .51661 | .11453 | 1.3210 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-6-b@10 Acquired: 5/10/2019 5:29:49 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 17752. | 2.1757 | 4.533 | 2.5359 | 12.676 | 63.247 |
| Stddev | 18. | 1.3771 | 3.351 | 3.3937 | .744 | .806 |
| %RSD | .10073 | 63.295 | 73.93 | 133.83 | 5.8701 | 1.2737 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.4496 | 78.982 | 2204.8 | 288.27 | .41431 |
| Stddev | 3.0246 | 3.714 | 3.5 | 56.23 | 1.8289 |
| %RSD | 32.008 | 4.7024 | .15916 | 19.506 | 441.44 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3932.9 | 2424.9 | 24040. | 2659.9 |
| Stddev | 4.1 | 5.0 | 165. | 22.2 |
| %RSD | .10338 | .20605 | .68728 | .83563 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.325% | 102.98% | 103.06% | 104.41% |
| Range | | | | |

Sample Name: 240-111831-a-6-b@100 Acquired: 5/10/2019 5:34:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .13551 | 6586.1 | .49218 | 11.754 | .05851 | -.02425 | 24.152 | 4.859 |
| Stddev | .39815 | 59.8 | 1.1266 | .443 | .07781 | .05535 | 4.822 | .094 |
| %RSD | 293.82 | .90834 | 228.90 | 3.7685 | 132.99 | 228.24 | 19.964 | 1.932 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 37.753 | 2119.0 | 52.834 | 10913. | 15289. | .63529 | 13.919 | 250.83 |
| Stddev | .231 | 1.7 | .293 | 108. | 117. | 1.7275 | 19.560 | .16 |
| %RSD | .61105 | .07943 | .55443 | .99295 | .76335 | 271.92 | 140.53 | .06532 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 344.59 | 276.90 | 1770.7 | .08439 | 2.141 | 3.7118 | 2.1174 | 6.2394 |
| Stddev | .48 | 10.96 | 5.0 | .33360 | .977 | 1.2208 | 1.1640 | .1208 |
| %RSD | .13849 | 3.9591 | .28147 | 395.28 | 45.62 | 32.889 | 54.974 | 1.9360 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111831-a-6-b@100 Acquired: 5/10/2019 5:34:20 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .31793 | 11.544 | 218.23 | 30.285 | 2.1247 |
| Stddev | 2.5776 | 6.734 | .54 | 1.911 | 5.9563 |
| %RSD | 810.73 | 58.335 | .24733 | 6.3097 | 280.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4266.5 | 2456.6 | 24592. | 2654.5 |
| Stddev | 3.4 | 4.9 | 44. | 19.2 |
| %RSD | .07896 | .20110 | .17900 | .72317 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 103.41% | 104.33% | 105.42% | 104.20% |
| Range | | | | |

Sample Name: 240-111831-a-7-b@5 Acquired: 5/10/2019 5:38:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .33076 | F 87961. | .84702 | 15.415 | 4.7162 | .07468 |
| Stddev | .20515 | 557. | 2.5986 | .556 | .2257 | .05074 |
| %RSD | 62.023 | .63284 | 306.80 | 3.6046 | 4.7864 | 67.943 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 377.53 | 11.72 | 33.562 | 750.33 | 76.535 | 14670. |
| Stddev | 5.43 | .06 | .128 | 2.10 | .289 | 36. |
| %RSD | 1.4389 | .4893 | .38112 | .28045 | .37723 | .24763 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 224060. | 2.4967 | 47.966 | 403.28 | 185.57 | 3080.8 |
| Stddev | 1101. | 1.0942 | 43.638 | .94 | .67 | 10.2 |
| %RSD | .49144 | 43.828 | 90.977 | .23288 | .36162 | .32951 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-7-b@5 Acquired: 5/10/2019 5:38:54 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1804.4 | -.16974 | 3.397 | 1.4265 | 7.9929 | 82.525 |
| Stddev | 2.1 | 2.3000 | 2.840 | 1.6762 | .5179 | .999 |
| %RSD | .11476 | 1355.0 | 83.58 | 117.50 | 6.4798 | 1.2108 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .57594 | 5.5119 | F 37132. | 434.86 | 8.4699 |
| Stddev | 3.5600 | 4.4146 | 24. | 73.59 | 9.2782 |
| %RSD | 618.12 | 80.093 | .06422 | 16.922 | 109.54 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3942.6 | 2413.7 | 23953. | 2643.7 |
| Stddev | 3.5 | 5.8 | 68. | 7.9 |
| %RSD | .08964 | .24171 | .28572 | .29905 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.560% | 102.50% | 102.68% | 103.77% |
| Range | | | | |

Sample Name: 240-111831-a-8-b@10 Acquired: 5/10/2019 5:43:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.27507 | F 93402. | -.39723 | 16.661 | 12.842 | -.00275 |
| Stddev | .39997 | 5131. | 2.6961 | .308 | 1.011 | .18127 |
| %RSD | 145.40 | 5.4933 | 678.73 | 1.8475 | 7.8742 | 6594.2 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 722.39 | 11.14 | 62.810 | 3378.2 | 122.06 | 26232. |
| Stddev | 41.17 | .17 | .208 | 3.2 | .75 | 1460. |
| %RSD | 5.6993 | 1.525 | .33144 | .09502 | .61523 | 5.5659 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 188790. | 171.06 | 66.991 | 486.58 | 475.15 | 2506.1 |
| Stddev | 10164. | 11.88 | 38.500 | 1.58 | 1.19 | 136.6 |
| %RSD | 5.3836 | 6.9429 | 57.469 | .32372 | .24992 | 5.4498 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-8-b@10 Acquired: 5/10/2019 5:43:28 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3279.8 | .75294 | 1.808 | 3.4766 | 7.4912 | 88.765 |
| Stddev | 4.1 | .27834 | .878 | 4.1146 | .7350 | .159 |
| %RSD | .12537 | 36.968 | 48.58 | 118.35 | 9.8118 | .17909 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.53399 | 21.363 | 373.57 | 440.25 | 6.0037 |
| Stddev | 1.4083 | 2.996 | 1.47 | 53.73 | .9162 |
| %RSD | 263.73 | 14.022 | .39369 | 12.204 | 15.260 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3973.3 | 2433.9 | 24050. | 2611.5 |
| Stddev | 8.6 | 1.7 | 81. | 123.7 |
| %RSD | .21697 | .06980 | .33807 | 4.7371 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.303% | 103.36% | 103.10% | 102.51% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 5:48:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 987.33 | 24473. | 491.15 | 5117.8 | 1930.6 | 1967.9 | 49077. | 501.8 |
| Stddev | 3.92 | 84. | 1.56 | 41.9 | 2.9 | .9 | 63. | 1.0 |
| %RSD | .39687 | .34208 | .31703 | .81805 | .14916 | .04472 | .12937 | .2045 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1978.9 | 1987.4 | 1985.5 | 25036. | 49114. | 5052.3 | 48985. | 1969.4 |
| Stddev | .4 | 6.6 | 5.5 | 37. | 69. | 12.2 | 27. | 8.1 |
| %RSD | .02041 | .33147 | .27608 | .14786 | .14011 | .24245 | .05515 | .41144 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1932.8 | 48922. | 1959.2 | 470.11 | 514.8 | 494.95 | 4969.2 | 4972.6 |
| Stddev | 3.5 | 75. | .3 | 3.31 | 5.2 | 3.04 | 1.5 | 16.5 |
| %RSD | .17987 | .15313 | .01468 | .70332 | 1.011 | .61516 | .02935 | .33114 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 5:48:02 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 968.66 | 1933.4 | 1961.1 | 4976.9 | 4824.7 |
| Stddev | 17.83 | 4.7 | .7 | 40.8 | 17.6 |
| %RSD | 1.8404 | .24530 | .03619 | .81881 | .36434 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3869.0 | 2376.4 | 23752. | 2635.0 |
| Stddev | 6.5 | 6.1 | 118. | 6.6 |
| %RSD | .16884 | .25577 | .49767 | .24937 |

Sample Name: CCB Acquired: 5/10/2019 5:52:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .31316 | -11.902 | 2.3380 | 12.459 | -.22711 | .12973 | 9.9913 | .1765 |
| Stddev | .19378 | 22.566 | .6398 | .922 | .10543 | .10692 | .3201 | .1282 |
| %RSD | 61.880 | 189.60 | 27.366 | 7.4011 | 46.423 | 82.416 | 3.2033 | 72.61 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38530 | .68540 | -.70853 | -.12284 | 109.19 | .85156 | -4.8910 | .26498 |
| Stddev | .02374 | .19291 | .33287 | 1.3325 | 21.06 | 1.1608 | 21.375 | .03693 |
| %RSD | 6.1609 | 28.146 | 46.980 | 1084.8 | 19.284 | 136.32 | 437.03 | 13.938 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .94934 | 125.48 | -.72054 | -.98280 | -1.338 | 3.8064 | .79111 | .22527 |
| Stddev | .38944 | 3.11 | .15456 | .91287 | 5.409 | 1.3560 | .35530 | .17877 |
| %RSD | 41.022 | 2.4821 | 21.451 | 92.884 | 404.2 | 35.625 | 44.912 | 79.357 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 5:52:24 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9008 | 2.6409 | 1.7693 | 16.938 | -.28425 |
| Stddev | 1.0608 | .4628 | .1302 | 6.920 | 7.7743 |
| %RSD | 55.807 | 17.523 | 7.3575 | 40.855 | 2735.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4359.2 | 2462.0 | 24589. | 2650.2 |
| Stddev | 4.6 | 4.2 | 82. | 25.1 |
| %RSD | .10462 | .17255 | .33270 | .94766 |

Sample Name: 240-111831-a-9-b Acquired: 5/10/2019 5:57:09 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28672 | F 713820. | -1.8276 | 123.71 | 9.3733 | .00818 |
| Stddev | .47683 | 6778. | .8535 | 24.23 | .4152 | .10202 |
| %RSD | 166.31 | .94957 | 46.699 | 19.583 | 4.4292 | 1247.6 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1202.9 | 10.85 | 80.349 | 1635.1 | 172.69 | 32479. |
| Stddev | 4.9 | .16 | .299 | 1.4 | .39 | 261. |
| %RSD | .40431 | 1.520 | .37237 | .08564 | .22504 | .80472 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1596800. | 7.8080 | 63.582 | 736.73 | 425.52 | 15811. |
| Stddev | 15514. | .9870 | 36.822 | .99 | 4.07 | 116. |
| %RSD | .97160 | 12.641 | 57.912 | .13456 | .95651 | .73265 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-9-b  Acquired: 5/10/2019 5:57:09  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 4318.9 | -1.9980 | 15.58 | -6.2429 | 35.814 | 138.62 |
| Stddev | 4.4 | 2.5028 | 2.56 | .5645 | 1.851 | .30 |
| %RSD | .10255 | 125.27 | 16.47 | 9.0426 | 5.1692 | .21384 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.8257 | 17.222 | F 49706. | F 25043. | 4.3898 |
| Stddev | 2.6547 | 5.720 | 86. | 2812. | 1.0953 |
| %RSD | 69.393 | 33.214 | .17346 | 11.230 | 24.950 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass |
| High Limit | | | 4000.0 | 10000. | |
| Low Limit | | | -500000. | -500000. | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3384.0 | 2302.7 | 22274. | 2588.2 |
| Stddev | 4.9 | 4.6 | 95. | 29.1 |
| %RSD | .14585 | .20060 | .42724 | 1.1243 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.021% | 97.792% | 95.486% | 101.60% |
| Range | | | | |

Sample Name: 240-111831-a-10-b Acquired: 5/10/2019 6:01:47 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.5057 | F 437210. | 18.275 | 102.56 | 14.689 | .56361 |
| Stddev | .0478 | 1288. | 2.390 | 1.89 | .022 | .18819 |
| %RSD | 1.0613 | .29454 | 13.080 | 1.8455 | .15182 | 33.390 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1357.4 | 3.605 | 659.42 | F 7671.5 | 1209.5 | F 245950. |
| Stddev | 3.6 | .071 | 1.42 | 9.5 | .6 | 690. |
| %RSD | .26287 | 1.961 | .21495 | .12410 | .04657 | .28049 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 50000. |
| Low Limit | | | | -500000. | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 877050. | 18.683 | 128.80 | 2063.4 | 3630.2 | 9510.2 |
| Stddev | 7068. | 1.490 | 22.45 | 4.7 | 10.6 | 47.5 |
| %RSD | .80583 | 7.9775 | 17.434 | .22954 | .29220 | .49927 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-10-b  Acquired: 5/10/2019 6:01:47  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 29453. | -3.5646 | 16.74 | -7.3272 | 29.973 | 97.985 |
| Stddev | 88. | 3.2605 | 3.98 | 1.9870 | 1.317 | .376 |
| %RSD | .30021 | 91.469 | 23.79 | 27.118 | 4.3931 | .38333 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.9048 | 56.740 | F 315680. | 5448.6 | 13.116 |
| Stddev | 2.0611 | .491 | 588. | 43.5 | 8.479 |
| %RSD | 23.146 | .86615 | .18618 | .79816 | 64.647 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3480.8 | 2338.9 | 22572. | 2618.5 |
| Stddev | 9.2 | 9.5 | 35. | 17.5 |
| %RSD | .26498 | .40643 | .15693 | .66804 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.368% | 99.326% | 96.764% | 102.78% |
| Range | | | | |

Sample Name: 240-111831-a-10-b@5 Acquired: 5/10/2019 6:06:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .67205 | F 86218. | 6.0831 | 61.980 | 2.6626 | -.02641 |
| Stddev | .21682 | 247. | 2.5012 | 3.283 | .1778 | .20081 |
| %RSD | 32.262 | .28621 | 41.117 | 5.2975 | 6.6788 | 760.29 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 274.44 | .7198 | 126.09 | 1527.9 | 232.14 | 49468. |
| Stddev | 5.42 | .1552 | .38 | 4.4 | 1.10 | 91. |
| %RSD | 1.9743 | 21.56 | .30424 | .28639 | .47314 | .18340 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 173090. | 2.2655 | 43.374 | 410.02 | 741.83 | 1993.0 |
| Stddev | 395. | .6351 | 57.386 | 1.17 | 2.89 | 13.0 |
| %RSD | .22843 | 28.032 | 132.31 | .28440 | .38988 | .65430 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-10-b@5 Acquired: 5/10/2019 6:06:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 5643.0 | .76973 | 2.164 | 1.4445 | 6.8449 | 19.230 |
| Stddev | 3.5 | .80058 | 1.064 | 1.2087 | .9254 | .272 |
| %RSD | .06287 | 104.01 | 49.16 | 83.672 | 13.519 | 1.4124 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1125 | 7.5173 | F 106100. | 1405.0 | 8.7887 |
| Stddev | 2.7069 | 3.6257 | 221. | 65.1 | 1.2539 |
| %RSD | 243.33 | 48.232 | .20852 | 4.6313 | 14.267 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3952.0 | 2438.2 | 23791. | 2659.1 |
| Stddev | 2.0 | 2.1 | 88. | 7.5 |
| %RSD | .05145 | .08701 | .37023 | .28129 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.788% | 103.55% | 101.99% | 104.38% |
| Range | | | | |

Sample Name: 240-111831-a-11-b  Acquired: 5/10/2019 6:11:15  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.6164 | F 452230. | 1.7675 | 239.07 | 25.048 | .46575 |
| Stddev | .1191 | 5545. | 2.3711 | 8.16 | .455 | .12728 |
| %RSD | 4.5511 | 1.2262 | 134.15 | 3.4117 | 1.8173 | 27.328 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2889.7 | 225.8 | 139.17 | F 4855.2 | 243.58 | F 75100. |
| Stddev | 32.7 | 1.9 | .62 | 139.8 | 7.06 | 910. |
| %RSD | 1.1325 | .8359 | .44895 | 2.8797 | 2.9003 | 1.2118 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 50000. |
| Low Limit | | | | -500000. | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1037500. | 21.687 | 144.09 | 3155.8 | 864.30 | 12614. |
| Stddev | 24664. | .743 | 31.62 | 96.6 | 8.50 | 130. |
| %RSD | 2.3772 | 3.4277 | 21.948 | 3.0625 | .98326 | 1.0320 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-11-b  Acquired: 5/10/2019 6:11:15  Type: Unk
Method: ICP I12 6010 200.7 Methods(v831)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 6756.7 | 3.3668 | 9.366 | -2.8317 | 35.925 | 58.478 |
| Stddev | 27.6 | 1.5374 | 1.406 | 2.6047 | 1.097 | 1.682 |
| %RSD | .40816 | 45.664 | 15.01 | 91.984 | 3.0549 | 2.8769 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.585 | 28.678 | F 236660. | 3923.7 | 21.357 |
| Stddev | 5.443 | 2.928 | 126. | 259.2 | 3.665 |
| %RSD | 43.251 | 10.210 | .05335 | 6.6067 | 17.159 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3550.1 | 2369.6 | 23478. | 2602.4 |
| Stddev | 8.0 | 9.5 | 538. | 33.9 |
| %RSD | .22541 | .40079 | 2.2902 | 1.3037 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.046% | 100.63% | 100.65% | 102.15% |
| Range | | | | |

Sample Name: 240-111831-a-11-b@5 Acquired: 5/10/2019 6:16:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .56275 | F 89958. | .68133 | 99.870 | 4.7621 | .03161 |
| Stddev | .77424 | 289. | 1.8800 | 2.993 | .2803 | .19855 |
| %RSD | 137.58 | .32125 | 275.93 | 2.9967 | 5.8854 | 628.10 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 608.79 | 45.53 | 26.875 | 1004.9 | 48.427 | 15271. |
| Stddev | .57 | .28 | .532 | 3.1 | .863 | 191. |
| %RSD | .09292 | .6174 | 1.9795 | .30949 | 1.7820 | 1.2520 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 206960. | 4.2474 | 32.687 | 655.48 | 178.46 | 2676.3 |
| Stddev | 468. | 1.7647 | 9.738 | 2.06 | .98 | 10.1 |
| %RSD | .22628 | 41.547 | 29.791 | .31374 | .54707 | .37746 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-11-b@5 Acquired: 5/10/2019 6:16:01 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1334.6 | .26807 | 1.365 | 3.0173 | 8.9793 | 11.794 |
| Stddev | 4.9 | 1.9338 | 1.960 | 4.1399 | .3915 | .121 |
| %RSD | .37047 | 721.40 | 143.6 | 137.20 | 4.3597 | 1.0288 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3423 | 4.7056 | F 64877. | 1378.8 | 3.0516 |
| Stddev | 5.2605 | 13.254 | 127. | 48.0 | 1.0635 |
| %RSD | 391.92 | 281.66 | .19535 | 3.4828 | 34.851 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3925.4 | 2416.2 | 23949. | 2631.4 |
| Stddev | 4.3 | 2.9 | 40. | 9.9 |
| %RSD | .10947 | .12021 | .16845 | .37487 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.142% | 102.61% | 102.67% | 103.29% |
| Range | | | | |

Sample Name: 240-111831-a-12-b@50 Acquired: 5/10/2019 6:20:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06430 | 15814. | 2.3197 | 49.686 | 3.3524 | .05218 | 182.54 | 6.598 |
| Stddev | .83426 | 67. | 2.7859 | .968 | .2693 | .08175 | 3.88 | .346 |
| %RSD | 1297.4 | .42662 | 120.09 | 1.9479 | 8.0327 | 156.66 | 2.1242 | 5.241 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.968 | 2707.5 | 84.419 | 15657. | 35315. | 1.6496 | 63.797 | 342.51 |
| Stddev | .907 | 61.7 | 1.732 | 29. | 80. | 3.1429 | 75.731 | 7.98 |
| %RSD | 1.7791 | 2.2784 | 2.0520 | .18645 | .22516 | 190.53 | 118.71 | 2.3310 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 657.66 | 515.95 | 2301.1 | .35758 | 2.109 | 5.4999 | 3.8205 | 31.872 |
| Stddev | 17.10 | 2.27 | 56.0 | 2.5454 | .389 | 2.1659 | .8234 | .753 |
| %RSD | 2.5997 | .43971 | 2.4350 | 711.84 | 18.44 | 39.380 | 21.551 | 2.3624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111831-a-12-b@50 Acquired: 5/10/2019 6:20:34 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.06419 | 16.485 | 619.92 | 352.80 | 7.4837 |
| Stddev | 3.7904 | 3.628 | 10.13 | 19.49 | 5.8544 |
| %RSD | 5905.1 | 22.008 | 1.6348 | 5.5248 | 78.229 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4221.4 | 2478.6 | 24402. | 2633.6 |
| Stddev | 71.5 | 37.8 | 450. | 16.2 |
| %RSD | 1.6934 | 1.5246 | 1.8453 | .61607 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 102.32% | 105.26% | 104.61% | 103.38% |
| Range | | | | |

Sample Name: 240-111831-a-16-b@5 Acquired: 5/10/2019 6:25:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.1125 | F 95538. | .23859 | 316.99 | 8.8745 | .09240 |
| Stddev | .1226 | 503. | .41868 | 3.04 | .0631 | .14830 |
| %RSD | 2.9810 | .52633 | 175.48 | .95759 | .71057 | 160.50 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2575.7 | 212.0 | 58.631 | 1813.2 | 88.165 | 23856. |
| Stddev | 19.2 | 1.2 | .267 | 34.8 | 1.651 | 102. |
| %RSD | .74656 | .5713 | .45515 | 1.9171 | 1.8731 | .42776 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 218770. | 4.7313 | 85.375 | 769.44 | 301.80 | 2775.2 |
| Stddev | 753. | 1.3302 | 12.948 | 14.92 | .83 | 37.4 |
| %RSD | .34416 | 28.115 | 15.166 | 1.9398 | .27459 | 1.3494 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-16-b@5 Acquired: 5/10/2019 6:25:07 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2305.4 | 23.223 | 3.749 | -2.3100 | 27.301 | 87.818 |
| Stddev | 4.9 | 2.212 | 1.995 | 3.5657 | .509 | 1.936 |
| %RSD | .21187 | 9.5257 | 53.20 | 154.36 | 1.8657 | 2.2050 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.3334 | 7.8090 | F 268770. | 935.86 | 27.287 |
| Stddev | .7092 | 6.3021 | 448. | 108.79 | 1.316 |
| %RSD | 7.5981 | 80.704 | .16654 | 11.624 | 4.8210 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3910.0 | 2463.3 | 23629. | 2623.5 |
| Stddev | 8.0 | 5.7 | 406. | 9.1 |
| %RSD | .20430 | .23137 | 1.7162 | .34768 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.771% | 104.61% | 101.30% | 102.98% |
| Range | | | | |

Sample Name: 240-111831-a-17-b@50 Acquired: 5/10/2019 6:29:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .36894 | 13103. | .34680 | 36.554 | 1.7454 | -.10758 | 74.664 |
| Stddev | .60086 | 105. | 3.2607 | 1.857 | .1589 | .07600 | 6.037 |
| %RSD | 162.86 | .80481 | 940.22 | 5.0802 | 9.1031 | 70.641 | 8.0853 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.489 | 62.095 | 2856.7 | 56.240 | 17127. | 26144. | .22943 |
| Stddev | .099 | .615 | 6.6 | .515 | 161. | 140. | 1.1893 |
| %RSD | 1.529 | .99002 | .22939 | .91634 | .93892 | .53610 | 518.40 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 25.803 | 430.99 | 522.35 | 338.01 | 3332.4 | .62646 | .9946 |
| Stddev | 25.526 | .61 | 7.30 | 9.07 | 45.7 | 1.5929 | 3.410 |
| %RSD | 98.929 | .14250 | 1.3982 | 2.6833 | 1.3713 | 254.27 | 342.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111831-a-17-b@50 Acquired: 5/10/2019 6:29:45 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.4516 | 4.0877 | 31.007 | 2.2418 | 11.352 | F 7883.5 | 156.01 |
| Stddev | 2.3812 | .4442 | .220 | .4161 | 3.396 | 103.1 | 32.34 |
| %RSD | 97.130 | 10.866 | .71090 | 18.561 | 29.914 | 1.3074 | 20.727 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 4000.0 | |
| Low Limit | | | | | | -500000. | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2.4683 |
| Stddev | 5.0742 |
| %RSD | 205.58 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4202.5 | 2458.0 | 24513. | 2642.9 |
| Stddev | 38.4 | 24.4 | 71. | 26.6 |
| %RSD | .91282 | .99073 | .28968 | 1.0061 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.86% | 104.38% | 105.08% | 103.74% |
| Range | | | | |

Sample Name: 240-111831-a-18b@2 Acquired: 5/10/2019 6:34:18 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.9354 | F 290640. | 4.0657 | 67.993 | 27.557 | .07161 |
| Stddev | .5991 | 1301. | 3.5556 | 6.047 | .188 | .04102 |
| %RSD | 20.410 | .44777 | 87.455 | 8.8940 | .68058 | 57.290 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 50000. | | | | |
| Low Limit | | -500000. | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1088.4 | 9.165 | 247.62 | 2576.0 | 430.13 | F 55239. |
| Stddev | 6.8 | .087 | 1.86 | 14.8 | .88 | 118. |
| %RSD | .62699 | .9519 | .75153 | .57350 | .20362 | .21281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 50000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 612570. | 9.1625 | 111.20 | 721.66 | 944.19 | 8422.3 |
| Stddev | 2808. | .9186 | 39.38 | 3.86 | 8.12 | 15.8 |
| %RSD | .45836 | 10.026 | 35.412 | .53509 | .85967 | .18796 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100000. | | | | | |
| Low Limit | -500000. | | | | | |

Sample Name: 240-111831-a-18b@2 Acquired: 5/10/2019 6:34:18 Type: Unk
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 11158. | .98830 | 12.10 | 2.8697 | 22.788 | 371.75 |
| Stddev | 79. | 1.6774 | 5.01 | 3.9586 | .962 | 1.81 |
| %RSD | .70741 | 169.73 | 41.43 | 137.94 | 4.2204 | .48758 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 4000.0 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.0099 | 24.524 | F 229080. | 2659.7 | 12.539 |
| Stddev | 2.1428 | 4.631 | 1859. | 245.7 | 1.854 |
| %RSD | 35.654 | 18.882 | .81144 | 9.2392 | 14.787 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 4000.0 | | |
| Low Limit | | | -500000. | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3632.0 | 2373.5 | 22790. | 2574.1 |
| Stddev | 16.6 | 12.3 | 109. | 15.8 |
| %RSD | .45656 | .51728 | .47651 | .61396 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.032% | 100.80% | 97.700% | 101.04% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 6:38:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 956.87 | 23915. | 485.82 | 5134.3 | 1871.2 | 1910.3 | 48345. | 499.6 |
| Stddev | 26.20 | 511. | 3.97 | 38.8 | 40.8 | 46.1 | 1109. | 1.4 |
| %RSD | 2.7383 | 2.1347 | .81797 | .75643 | 2.1826 | 2.4122 | 2.2932 | .2807 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1975.5 | 1939.9 | 1907.7 | 24552. | 48402. | 4930.5 | 48413. | 1916.0 |
| Stddev | 3.7 | 53.7 | 51.9 | 531. | 1097. | 105.3 | 1151. | 51.1 |
| %RSD | .18945 | 2.7676 | 2.7195 | 2.1636 | 2.2659 | 2.1346 | 2.3779 | 2.6662 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1928.9 | 47904. | 1957.3 | 467.08 | 515.5 | 492.53 | 4983.5 | 4812.2 |
| Stddev | 3.6 | 1024. | 1.0 | 3.27 | 3.0 | 3.20 | 3.6 | 128.8 |
| %RSD | .18755 | 2.1376 | .04880 | .69995 | .5908 | .64969 | .07184 | 2.6774 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 6:38:59 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 970.19 | 1889.7 | 1980.5 | 5241.7 | 4753.0 |
| Stddev | 16.84 | 48.4 | 2.8 | 121.9 | 98.6 |
| %RSD | 1.7358 | 2.5591 | .14261 | 2.3248 | 2.0738 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3832.9 | 2359.5 | 23929. | 2580.5 |
| Stddev | 7.6 | 5.0 | 507. | 54.1 |
| %RSD | .19712 | .21218 | 2.1197 | 2.0968 |

Sample Name: CCB Acquired: 5/10/2019 6:43:22 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11257 | -1.8898 | .06249 | 37.763 | -.04885 | .13167 | 7.7266 | .0120 |
| Stddev | .20136 | 12.608 | 2.4833 | 1.378 | .37897 | .11453 | 2.0304 | .0640 |
| %RSD | 178.89 | 667.16 | 3973.9 | 3.6489 | 775.78 | 86.987 | 26.279 | 531.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15658 | .12536 | -.55710 | 1.3879 | 280.57 | .21258 | -1.7326 | .32042 |
| Stddev | .12979 | .27186 | .65983 | 3.7791 | 26.25 | .73689 | 38.348 | .04238 |
| %RSD | 82.890 | 216.86 | 118.44 | 272.28 | 9.3543 | 346.65 | 2213.3 | 13.226 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .92893 | 79.373 | -.70644 | -.14963 | -.2414 | 2.2796 | .52367 | .30169 |
| Stddev | .28251 | 4.234 | .59795 | 4.4869 | 1.701 | 3.8673 | .35673 | .16043 |
| %RSD | 30.412 | 5.3342 | 84.643 | 2998.6 | 704.6 | 169.65 | 68.121 | 53.177 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 6:43:22 Type: QC
Method: ICP I12 6010 200.7 Methods(v831) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4363 | 3.6530 | 2.4616 | 65.056 | 1.5890 |
| Stddev | 3.5683 | 5.9872 | .2633 | 5.466 | 1.3203 |
| %RSD | 248.43 | 163.90 | 10.698 | 8.4025 | 83.086 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4322.3 | 2450.3 | 24550. | 2591.0 |
| Stddev | 7.6 | 2.9 | 67. | 19.1 |
| %RSD | .17600 | .12033 | .27115 | .73612 |

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
|---|---|
| MRC-MW-81B-050619 | 240-112111-2 |
| MRC-NMW-1I-050619 | 240-112111-3 |
| MRC-NMW-3I-050619 | 240-112111-4 |
| MRC-NMW-2I-050619 | 240-112111-5 |

Comments:

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112111-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
|---|---|
| MRC-MW-81B-050619 | 240-112111-2 |
| MRC-NMW-1I-050619 | 240-112111-3 |
| MRC-NMW-3I-050619 | 240-112111-4 |
| MRC-NMW-2I-050619 | 240-112111-5 |

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-MW-81B-050619 Lab Sample ID: 240-112111-2

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 09:29

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| | Alkalinity | 140 | 5.0 | 2.6 | mg/L | | | 1 | 2320B-1997 |
| 14808-79-8 | Sulfate | 12 | 1.0 | 0.35 | mg/L | | | 1 | 300.0 |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 10:53

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| | Alkalinity | 260 | 5.0 | 2.6 | mg/L | | | 1 | 2320B-1997 |
| 14808-79-8 | Sulfate | 77 | 1.0 | 0.35 | mg/L | | | 1 | 300.0 |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 13:32

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| | Alkalinity | 100 | 5.0 | 2.6 | mg/L | | | 1 | 2320B-1997 |
| 14808-79-8 | Sulfate | 11 | 1.0 | 0.35 | mg/L | | | 1 | 300.0 |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 14:57

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| | Alkalinity | 49 | 5.0 | 2.6 | mg/L | | | 1 | 2320B-1997 |
| 14808-79-8 | Sulfate | 5.4 | 1.0 | 0.35 | mg/L | | | 1 | 300.0 |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-MW-81B-050619 Lab Sample ID: 240-112111-2

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 09:29

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-44-0 | Total Organic Carbon | 3.1 | 1.0 | 0.50 | mg/L | | B | 1 | 9060A |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-1I-050619 Lab Sample ID: 240-112111-3

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 10:53

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-44-0 | Total Organic Carbon | 9.1 | 1.0 | 0.50 | mg/L | | B | 1 | 9060A |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-3I-050619 Lab Sample ID: 240-112111-4

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 13:32

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-44-0 | Total Organic Carbon | 8.6 | 1.0 | 0.50 | mg/L | | B | 1 | 9060A |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-2I-050619 Lab Sample ID: 240-112111-5

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112111-1

SDG ID.:

Matrix: Water Date Sampled: 05/06/2019 14:57

Reporting Basis: WET Date Received: 05/07/2019 09:25

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-44-0 | Total Organic Carbon | 2.0 | 1.0 | 0.50 | mg/L | | B | 1 | 9060A |

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Analyst: LKG  Batch Start Date: 08/07/2018

Reporting Units: mg/L  Analytical Batch No.: 339523

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 10 | ICV | 15:20 | Sulfate | 52.9 | 50.0 | 106 | 90-110 | | WCICLCS_00669 |
| 11 | ICB | 15:41 | Sulfate | 0.35 | | | | U | |

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Analyst: JWW  Batch Start Date: 05/17/2019

Reporting Units: mg/L  Analytical Batch No.: 381916

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 1 | CCV | 12:46 | Sulfate | 52.0 | 50.0 | 104 | 90-110 | | WCICCCV_00874 |
| 2 | CCB | 13:07 | Sulfate | 0.35 | | | | U | |
| 13 | CCV | 16:55 | Sulfate | 52.1 | 50.0 | 104 | 90-110 | | WCICCCV_00874 |
| 14 | CCB | 17:16 | Sulfate | 0.35 | | | | U | |
| 25 | CCV | 21:04 | Sulfate | 51.8 | 50.0 | 104 | 90-110 | | WCICCCV_00874 |
| 26 | CCB | 21:24 | Sulfate | 0.35 | | | | U | |
| 37 | CCV | 01:12 | Sulfate | 51.6 | 50.0 | 103 | 90-110 | | WCICCCV_00874 |
| 38 | CCB | 01:33 | Sulfate | 0.35 | | | | U | |

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Analyst: VRP  Batch Start Date: 05/10/2019

Reporting Units: mg/L  Analytical Batch No.: 594412

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 4 | CCV | 13:08 | Total Organic Carbon | 26.3 | 25.0 | 105 | 90-110 | | TOC_CCV@1000_00043 |
| 5 | CCB | 13:31 | Total Organic Carbon | 0.849 | | | | J | |
| 20 | CCV | 21:12 | Total Organic Carbon | 25.4 | 25.0 | 101 | 90-110 | | TOC_CCV@1000_00043 |
| 21 | CCB | 21:35 | Total Organic Carbon | 0.849 | | | | J | |

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

| Method | Lab Sample ID | Analyte | Result | Qual | Units | RL | Dil |
|---|---|---|---|---|---|---|---|
| Batch ID: 381502 | Date: 05/15/2019 13:39 | | | | | | |
| 2320B-1997 | MB 240-381502/30 | Alkalinity | 2.6 | U | mg/L | 5.0 | 1 |
| Batch ID: 381916 | Date: 05/17/2019 13:28 | | | | | | |
| 300.0 | MB 240-381916/3 | Sulfate | 0.35 | U | mg/L | 1.0 | 1 |

FORM III-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

| Method | Lab Sample ID | Analyte | Result | Qual | Units | RL | Dil |
|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 12:44 | | | | | | |
| 9060A | MB 490-594412/3 | Total Organic Carbon | 0.910 | J | mg/L | 1.0 | 1 |

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 381916 Date: 05/17/2019 22:26 | | | | | | | | | | | |
| 300.0 | 240-112111-2 | Sulfate | 12 | | mg/L | | | | | | |
| 300.0 | 240-112111-2 MS | Sulfate | 64.9 | | mg/L | 50.0 | 105 | 80-120 | | | |

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 381916 Date: 05/17/2019 22:47 | | | | | | | | | | | |
| 300.0 | 240-112111-2 MSD | Sulfate | 65.4 | | mg/L | 50.0 | 107 | 80-120 | 1 | 15 | |

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

FORM V-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 Date: 05/10/2019 20:19 | | | | | | | | | | | |
| 9060A | 490-173121-H-2 | Total Organic Carbon | 13 | | mg/L | | | | | | B |
| 9060A | 490-173121-H-2 MS | Total Organic Carbon | 33.1 | | mg/L | 20.0 | 99 | 75-122 | | | |

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 Date: 05/10/2019 20:46 | | | | | | | | | | | |
| 9060A | 490-173121-H-2 MSD | Total Organic Carbon | 33.0 | | mg/L | 20.0 | 99 | 75-122 | 0 | 20 | |

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Client Sample ID | Lab Sample ID | Analyte | Result | Unit | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|
| Batch ID: 381502 Date: 05/15/2019 13:43 | | | | | | | | |
| 2320B-1997 | | 240-112110-P-19 | Alkalinity | 4.4 | mg/L | | | J |
| 2320B-1997 | | 240-112110-P-19 DU | Alkalinity | 4.43 | mg/L | 0.9 | 20 | J |

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 381502 | Date: 05/15/2019 13:35 | | | | | | | | | | |
| | | | | | | LCS Source: WCPHENOMINER_00025 | | | | | |
| 2320B-1997 | LCS 240-381502/29 | Alkalinity | 164 | | mg/L | 168 | 98 | 86-123 | | | |
| Batch ID: 381916 | Date: 05/17/2019 13:49 | | | | | | | | | | |
| | | | | | | LCS Source: WCICLCS_00709 | | | | | |
| 300.0 | LCS 240-381916/4 | Sulfate | 52.2 | | mg/L | 50.0 | 104 | 90-110 | | | |

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 13:56 | | | | | | | | | | |
| | | | | | | LCS Source: TOC_LCS@1000_00023 | | | | | |
| 9060A | LCS 490-594412/6 | Total Organic Carbon | 10.1 | | mg/L | 10.0 | 101 | 90-110 | 0 | 20 | |

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 15:00 | | | | | | | | | | |
| | | | | | | LCSD Source: TOC_LCS@1000_00023 | | | | | |
| 9060A | LCSD 490-594412/7 | Total Organic Carbon | 10.1 | | mg/L | 10.0 | 101 | 90-110 | 0 | 20 | |

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: Severus

Method: 2320B-1997  MDL Date: 08/21/2018 15:58

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Alkalinity | | 5 | 2.6 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: Severus

Method: 2320B-1997  XMDL Date: 04/25/2017 09:53

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Alkalinity | | 5 | 2.6 |

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: THOR

Method: 300.0  MDL Date: 05/02/2017 14:42

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Sulfate | | 1 | 0.348 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: THOR

Method: 300.0  XMDL Date: 05/02/2017 14:43

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Sulfate | | 1 | 0.348 |

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: TOC7

Method: 9060A  MDL Date: 01/16/2012 09:25

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Total Organic Carbon | | 1 | 0.5 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112111-1

SDG Number:

Matrix: Water  Instrument ID: TOC7

Method: 9060A  XMDL Date: 01/16/2012 09:26

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Total Organic Carbon | | 1 | 0.5 |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: Severus  Analysis Method: 2320B-1997

Start Date: 05/15/2019 11:37  End Date: 05/15/2019 14:41

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Alk | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:44 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-381502/29 | 1 | T | 13:35 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-381502/30 | 1 | T | 13:39 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112110-P-19 DU | 1 | T | 13:43 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 | 1 | T | 13:51 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-3 | 1 | T | 13:56 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-4 | 1 | T | 14:01 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-5 | 1 | T | 14:05 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:23 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: Severus  Analysis Method: 2320B-1997

Start Date: 05/15/2019 11:37  End Date: 05/15/2019 14:41

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Alk | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:41 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: THOR  Analysis Method: 300.0

Start Date: 08/07/2018 12:13  End Date: 08/07/2018 15:41

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | |
| STD1 240-339523/1 IC | 1 | | 12:13 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD2 240-339523/2 IC | 1 | | 12:34 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD3 240-339523/3 IC | 1 | | 12:55 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD4 240-339523/4 IC | 1 | | 13:16 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD5 240-339523/5 ICRT | 1 | | 13:36 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD6 240-339523/6 IC | 1 | | 13:57 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD7 240-339523/7 IC | 1 | | 14:18 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD8 240-339523/8 IC | 1 | | 14:39 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD9 240-339523/9 IC | 1 | | 14:59 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV 240-339523/10 | 1 | | 15:20 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICB 240-339523/11 | 1 | | 15:41 | X | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: THOR  Analysis Method: 300.0

Start Date: 05/17/2019 12:46  End Date: 05/18/2019 02:35

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-381916/1 | 1 | | 12:46 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-381916/2 | 1 | | 13:07 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-381916/3 | 1 | T | 13:28 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-381916/4 | 1 | T | 13:49 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-381916/13 | 1 | | 16:55 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-381916/14 | 1 | | 17:16 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-381916/25 | 1 | | 21:04 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-381916/26 | 1 | | 21:24 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 | 1 | T | 22:06 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 MS | 1 | T | 22:26 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 MSD | 1 | T | 22:47 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-3 | 1 | T | 23:08 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-4 | 1 | T | 23:29 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-5 | 1 | T | 23:49 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-381916/37 | 1 | | 01:12 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-381916/38 | 1 | | 01:33 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-381916/40 | | | 02:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-381916/41 | | | 02:35 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Instrument ID: THOR  Analysis Method: 300.0

Start Date: 05/17/2019 12:46  End Date: 05/18/2019 02:35

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112111-1

SDG No.:

Instrument ID: TOC7  Analysis Method: 9060A

Start Date: 05/10/2019 11:58  End Date: 05/11/2019 04:31

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TOC | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 490-594412/3 | 1 | T | 12:44 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/4 | 1 | | 13:08 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/5 | 1 | | 13:31 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 490-594412/6 | 1 | T | 13:56 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCSD 490-594412/7 | 1 | T | 15:00 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-2 | 1 | T | 15:29 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-3 | 1 | T | 15:53 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-4 | 1 | T | 16:19 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112111-5 | 1 | T | 16:45 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 490-173121-H-2 MS | 1 | T | 20:19 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 490-173121-H-2 MSD | 1 | T | 20:46 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/20 | 1 | | 21:12 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/21 | 1 | | 21:35 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/34 | | | 04:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/35 | | | 04:31 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

FORM XIII-IN

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 381502  Batch Start Date: 05/15/19 11:37  Batch Analyst: Moser, Morgan

Batch Method: 2320B-1997  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | CalcMsg | FinalAmount | WCPHENOMINER 00025 | | |
|---|---|---|---|---|---|---|---|---|---|
| LCS 240-381502/29 | | 2320B-1997 | | 10 mL | BuretStart2 is blank | 10 mL | 10 mL | | |
| MB 240-381502/30 | | 2320B-1997 | | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112110-P-19 DU | | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112111-I-2 | MRC-MW-81B-050619 | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112111-I-3 | MRC-NMW-1I-050619 | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112111-I-4 | MRC-NMW-3I-050619 | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112111-I-5 | MRC-NMW-2I-050619 | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |

| Batch Notes | |
|---|---|
| Acid ID | 4131080 |
| pH Buffer 1 ID | 4-4159474 |
| pH Buffer 2 ID | 7-4159477 |
| pH Buffer 3 ID | 10-3892956 |
| pH Buffer 4 ID | 12-4094593 |
| Nominal Amount Used | 10 mL |
| Probe ID | WCP137 |
| Normality of First Titrant | 0.02 N |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 339523  Batch Start Date: 08/07/18 12:13  Batch Analyst: Grossman, Lucas

Batch Method: 300.0  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | WCICCALSOLN 00292 | WCICLCS 00669 | | |
|---|---|---|---|---|---|---|---|---|---|
| STD1 240-339523/1 IC | | 300.0 | | 5 mL | | 0.025 mL | | | |
| STD2 240-339523/2 IC | | 300.0 | | 5 mL | | 0.125 mL | | | |
| STD3 240-339523/3 IC | | 300.0 | | 5 mL | | 0.25 mL | | | |
| STD4 240-339523/4 IC | | 300.0 | | 5 mL | | 0.5 mL | | | |
| STD5 240-339523/5 ICRT | | 300.0 | | 5 mL | | 1.25 mL | | | |
| STD6 240-339523/6 IC | | 300.0 | | 5 mL | | 2 mL | | | |
| STD7 240-339523/7 IC | | 300.0 | | 5 mL | | 2.5 mL | | | |
| STD8 240-339523/8 IC | | 300.0 | | 5 mL | | 3.75 mL | | | |
| STD9 240-339523/9 IC | | 300.0 | | 5 mL | | 5 mL | | | |
| ICV 240-339523/10 | | 300.0 | | 5 mL | 1.0 mL | | 5 mL | | |
| ICB 240-339523/11 | | 300.0 | | 5 mL | | | | | |

| Batch Notes | |
|---|---|
| | |

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112111-1

SDG No.:

Batch Number: 381916  Batch Start Date: 05/17/19 12:46  Batch Analyst: Weimer, Joshua W

Batch Method: 300.0  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | WCICCCV 00874 | WCICLCS 00709 | WCICSOLNA1 00020 | WCICSOLNB1 00021 | |
|---|---|---|---|---|---|---|---|---|---|
| CCV 240-381916/1 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-381916/2 | | 300.0 | | 5 mL | | | | | |
| MB 240-381916/3 | | 300.0 | | 5 mL | | | | | |
| LCS 240-381916/4 | | 300.0 | | 5 mL | | 5 mL | | | |
| CCV 240-381916/13 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-381916/14 | | 300.0 | | 5 mL | | | | | |
| CCV 240-381916/25 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-381916/26 | | 300.0 | | 5 mL | | | | | |
| 240-112111-J-2 | MRC-MW-81B-050619 | 300.0 | T | 5 mL | | | | | |
| 240-112111-J-2 MS | MRC-MW-81B-050619 | 300.0 | T | 5 mL | | | 0.1 mL | 0.1 mL | |
| 240-112111-J-2 MSD | MRC-MW-81B-050619 | 300.0 | T | 5 mL | | | 0.1 mL | 0.1 mL | |
| 240-112111-J-3 | MRC-NMW-1I-050619 | 300.0 | T | 5 mL | | | | | |
| 240-112111-J-4 | MRC-NMW-3I-050619 | 300.0 | T | 5 mL | | | | | |
| 240-112111-I-5 | MRC-NMW-2I-050619 | 300.0 | T | 5 mL | | | | | |
| CCV 240-381916/37 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-381916/38 | | 300.0 | | 5 mL | | | | | |

| Batch Notes | |
|---|---|
| Eluent 1 ID | Water |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Nashvill  Job No.: 240-112111-1

SDG No.:

Batch Number: 594412  Batch Start Date: 05/10/19 11:58  Batch Analyst: Patel, Viren R

Batch Method: 9060A  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | TOC_CCV@1000 00043 | TOC_LCS@1000 00023 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 490-594412/3 | | 9060A | | 50 mL | 50 mL | | | | |
| CCV 490-594412/4 | | 9060A | | 50 mL | 50 mL | 1.25 mL | | | |
| CCB 490-594412/5 | | 9060A | | 50 mL | 50 mL | | | | |
| LCS 490-594412/6 | | 9060A | | 50 mL | 50 mL | | 0.5 mL | | |
| LCSD 490-594412/7 | | 9060A | | 50 mL | 50 mL | | 0.5 mL | | |
| 240-112111-H-2 | MRC-MW-81B-050619 | 9060A | T | 50 mL | 50 mL | | | | |
| 240-112111-G-3 | MRC-NMW-1I-050619 | 9060A | T | 50 mL | 50 mL | | | | |
| 240-112111-G-4 | MRC-NMW-3I-050619 | 9060A | T | 50 mL | 50 mL | | | | |
| 240-112111-G-5 | MRC-NMW-2I-050619 | 9060A | T | 50 mL | 50 mL | | | | |
| 490-173121-H-2 MS | | 9060A | T | 50 mL | 50 mL | | 1 mL | | |
| 490-173121-H-2 MSD | | 9060A | T | 50 mL | 50 mL | | 1 mL | | |
| CCV 490-594412/20 | | 9060A | | 50 mL | 50 mL | 1.25 mL | | | |
| CCB 490-594412/21 | | 9060A | | 50 mL | 50 mL | | | | |

| Batch Notes | |
|---|---|
| Pipette/Syringe/Dispenser ID | 21061149 1011026 |

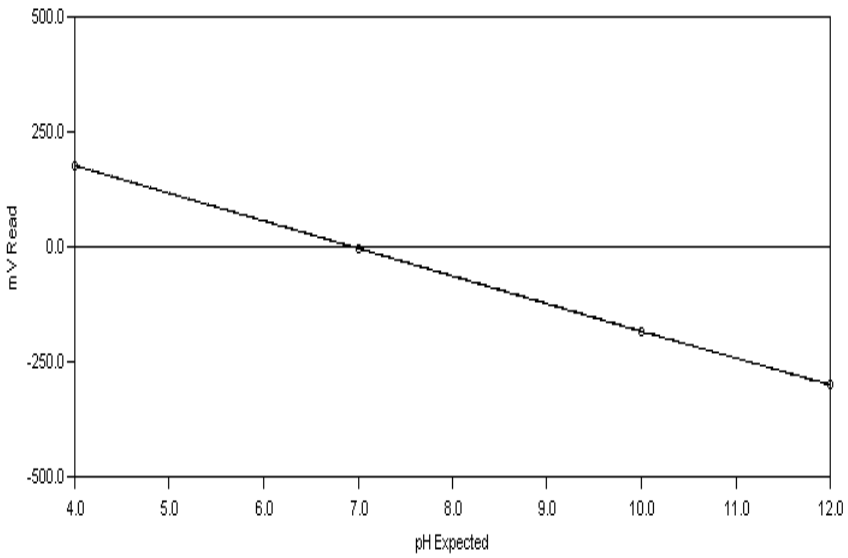
| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Test America-Canton

## Calibration Report

### Calibration Record # 229




**Calibration Settings**

| | | | |
|---|---|---|---|
| Calibration ID | PH | Date | 5/15/2019 |
| Channel | 1 | Time | 11:46 AM |
| Probe Type | pH | Temperature | 301.57 K 28.42 C |
| Probe ID | PH ELECTRODE | Analysis Type | Single Line Fit |

**Calibration Results**

| | | | |
|---|---|---|---|
| Slope | -59.931 | CorrCoeff | 1.0000 |
| Intercept | -2.106 | Equation: | Y = (-59.931) X + ( -2.106 ) |

**Calibration Validity** **True** Operator

| | Result | Minimum | Maximum |
|---|---|---|---|
| **Slope** | -59.931 | -65.00 | -54.00 |
| **Intercept** | -2.106 | -100.00 | 100.00 |
| **Correlation Coefficient** | 1.0000 | 0.99 | 1.00 |

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

| Calibration Data | Standard | Reading |
|---|---|---|
| | 4.00 | 178.10 |
| | 7.00 | -2.19 |
| | 10.00 | -183.34 |
| | 12.00 | -300.65 |

Severus

# TestAmerica Canton
# Alkalinity 2320B

**Run Number** 505 **Order Number** 20190515-1

| SampleID | Schedule Name | RunDate | RunTime | Temp | pH | palk-ppm | talk-ppm | bcarb-ppm | carb-ppm | hydr-ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| Tap Water | PH-ALK | 5/15/2019 | 11:37 AM | 29.05 | 5.50 | .00 | 2.83 | 2.83 | .00 | .00 |
| pH 7 | PH | 5/15/2019 | 11:49 AM | 28.36 | 6.98 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| LCS | PH-ALK | 5/15/2019 | 11:54 AM | 28.44 | 8.44 | 3.37 | 166.76 | 160.02 | 6.74 | .00 |
| MB | PH-ALK | 5/15/2019 | 11:58 AM | 28.32 | 5.45 | .00 | .48 | .48 | .00 | .00 |
| du | PH-ALK | 5/15/2019 | 12:02 PM | 28.05 | 7.80 | .00 | 358.52 | 358.52 | .00 | .00 |
| 240-111958-N-3 | PH-ALK | 5/15/2019 | 12:07 PM | 28.34 | 7.81 | .00 | 362.65 | 362.65 | .00 | .00 |
| 180-89845-C-2 | PH-ALK | 5/15/2019 | 12:12 PM | 28.17 | 7.88 | .00 | 201.78 | 201.78 | .00 | .00 |
| 180-89845-C-1 | PH-ALK | 5/15/2019 | 12:16 PM | 27.93 | 7.76 | .00 | 234.22 | 234.22 | .00 | .00 |
| 240-112110-O-2 | PH-ALK | 5/15/2019 | 12:21 PM | 27.91 | 6.90 | .00 | 485.85 | 485.85 | .00 | .00 |
| 240-112110-P-3 | PH-ALK | 5/15/2019 | 12:25 PM | 28.01 | 6.01 | .00 | 35.38 | 35.38 | .00 | .00 |
| 240-112110-O-4 | PH-ALK | 5/15/2019 | 12:31 PM | 27.99 | 7.04 | .00 | 766.48 | 766.48 | .00 | .00 |
| 240-112110-O-5 | PH-ALK | 5/15/2019 | 12:34 PM | 28.38 | 5.34 | .00 | 4.90 | 4.90 | .00 | .00 |
| pH 7-2 | PH | 5/15/2019 | 12:36 PM | 28.11 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 240-112110-P-6 | PH-ALK | 5/15/2019 | 12:41 PM | 28.30 | 7.62 | .00 | 304.37 | 304.37 | .00 | .00 |
| 240-112110-O-7 | PH-ALK | 5/15/2019 | 12:44 PM | 28.74 | 4.60 | .00 | -1.54 | -1.54 | .00 | .00 |
| 240-112110-P-8 | PH-ALK | 5/15/2019 | 12:48 PM | 28.86 | 5.04 | .00 | 1.18 | 1.18 | .00 | .00 |
| du | PH-ALK | 5/15/2019 | 12:52 PM | 28.78 | 5.97 | .00 | 55.13 | 55.13 | .00 | .00 |
| 240-112110-P-9 | PH-ALK | 5/15/2019 | 12:56 PM | 28.52 | 5.99 | .00 | 54.80 | 54.80 | .00 | .00 |
| 240-112110-P-10 | PH-ALK | 5/15/2019 | 1:00 PM | 28.40 | 4.82 | .00 | .42 | .42 | .00 | .00 |
| 240-112110-P-11 | PH-ALK | 5/15/2019 | 1:04 PM | 28.60 | 6.97 | .00 | 194.21 | 194.21 | .00 | .00 |
| 240-112110-O-12 | PH-ALK | 5/15/2019 | 1:07 PM | 28.54 | 4.27 | .00 | -1.11 | -1.11 | .00 | .00 |
| 240-112110-O-13 | PH-ALK | 5/15/2019 | 1:11 PM | 28.50 | 4.89 | .00 | .34 | .34 | .00 | .00 |
| 240-112110-O-14 | PH-ALK | 5/15/2019 | 1:13 PM | 28.44 | 3.97 | .00 | .00 | .00 | .00 | .00 |
| pH 7-3 | PH | 5/15/2019 | 1:15 PM | 28.15 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 240-112110-O-15 | PH-ALK | 5/15/2019 | 1:18 PM | 28.66 | 4.81 | .00 | -.33 | -.33 | .00 | .00 |
| 240-112110-P-16 | PH-ALK | 5/15/2019 | 1:23 PM | 29.22 | 6.53 | .00 | 177.59 | 177.59 | .00 | .00 |
| 240-112110-P-17 | PH-ALK | 5/15/2019 | 1:26 PM | 29.30 | 4.22 | .00 | -.61 | -.61 | .00 | .00 |

**Run Number** 505 **Order Number** 20190515-1

| SampleID | Schedule Name | RunDate | RunTime | Temp | pH | palk-ppm | talk-ppm | bcarb-ppm | carb-ppm | hydr-ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| 240-112110-P-18 | PH-ALK | 5/15/2019 | 1:30 PM | 29.37 | 6.09 | .00 | 36.53 | 36.53 | .00 | .00 |
| LCS | PH-ALK | 5/15/2019 | 1:35 PM | 29.47 | 8.37 | 1.30 | 164.08 | 161.48 | 2.60 | .00 |
| MB | PH-ALK | 5/15/2019 | 1:39 PM | 29.37 | 5.75 | .00 | .48 | .48 | .00 | .00 |
| du | PH-ALK | 5/15/2019 | 1:43 PM | 29.15 | 5.39 | .00 | 4.43 | 4.43 | .00 | .00 |
| 240-112110-P-19 | PH-ALK | 5/15/2019 | 1:47 PM | 29.35 | 5.40 | .00 | 4.39 | 4.39 | .00 | .00 |
| 240-112111-I-2 | PH-ALK | 5/15/2019 | 1:51 PM | 29.50 | 6.93 | .00 | 141.40 | 141.40 | .00 | .00 |
| 240-112111-I-3 | PH-ALK | 5/15/2019 | 1:56 PM | 29.43 | 6.69 | .00 | 258.49 | 258.49 | .00 | .00 |
| pH 7-4 | PH | 5/15/2019 | 1:57 PM | 29.52 | 7.03 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 240-112111-I-4 | PH-ALK | 5/15/2019 | 2:01 PM | 29.56 | 6.54 | .00 | 103.26 | 103.26 | .00 | .00 |
| 240-112111-I-5 | PH-ALK | 5/15/2019 | 2:05 PM | 30.32 | 6.36 | .00 | 49.09 | 49.09 | .00 | .00 |
| 240-112121-D-2 | PH-ALK | 5/15/2019 | 2:09 PM | 30.12 | 6.36 | .00 | 26.55 | 26.55 | .00 | .00 |
| 240-112121-D-3 | PH-ALK | 5/15/2019 | 2:14 PM | 30.23 | 6.83 | .00 | 223.39 | 223.39 | .00 | .00 |
| 240-112121-D-4 | PH-ALK | 5/15/2019 | 2:18 PM | 30.14 | 5.69 | .00 | .85 | .85 | .00 | .00 |
| 240-112120-L-2 | PH-ALK | 5/15/2019 | 2:23 PM | 30.03 | 7.96 | .00 | 177.64 | 177.64 | .00 | .00 |
| 240-112120-L-3 | PH-ALK | 5/15/2019 | 2:27 PM | 30.43 | 8.41 | 2.82 | 141.03 | 135.39 | 5.64 | .00 |
| du | PH-ALK | 5/15/2019 | 2:31 PM | 30.45 | 8.43 | 3.43 | 142.62 | 135.76 | 6.86 | .00 |
| 240-112120-L-4 | PH-ALK | 5/15/2019 | 2:35 PM | 30.27 | 8.44 | 3.65 | 143.04 | 135.75 | 7.29 | .00 |
| 240-112120-L-5 | PH-ALK | 5/15/2019 | 2:39 PM | 30.38 | 7.93 | .00 | 352.97 | 352.97 | .00 | .00 |
| pH 7-5 | PH | 5/15/2019 | 2:41 PM | 30.27 | 7.03 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |

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TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-001_02_CD.d
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Aug-2018 12:13:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-001
Misc. Info.: STD1
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:27 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

First Level Reviewer: grossmanl Date: 09-Aug-2018 08:19:42

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.747 | 3.760 | -0.013 | 2367573 | 0.0500 | 0.0434 | M |
| 2 | Chloride | 5.870 | 5.873 | -0.003 | 34976555 | 1.00 | 1.01 | |
| 3 | Nitrite as N | 7.230 | 7.233 | -0.003 | 3752413 | 0.0500 | 0.0470 | |
| 4 | Bromide | 9.007 | 8.990 | 0.017 | 2559715 | 0.2000 | 0.1739 | |
| 5 | Nitrate as N | 10.307 | 10.260 | 0.047 | 4075605 | 0.0500 | 0.0483 | |
| 6 | Sulfate | 12.657 | 12.397 | 0.260 | 22693088 | 1.00 | 0.9010 | |
| S 7 | Nitrate Nitrite as N | | | | | | 0.0953 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

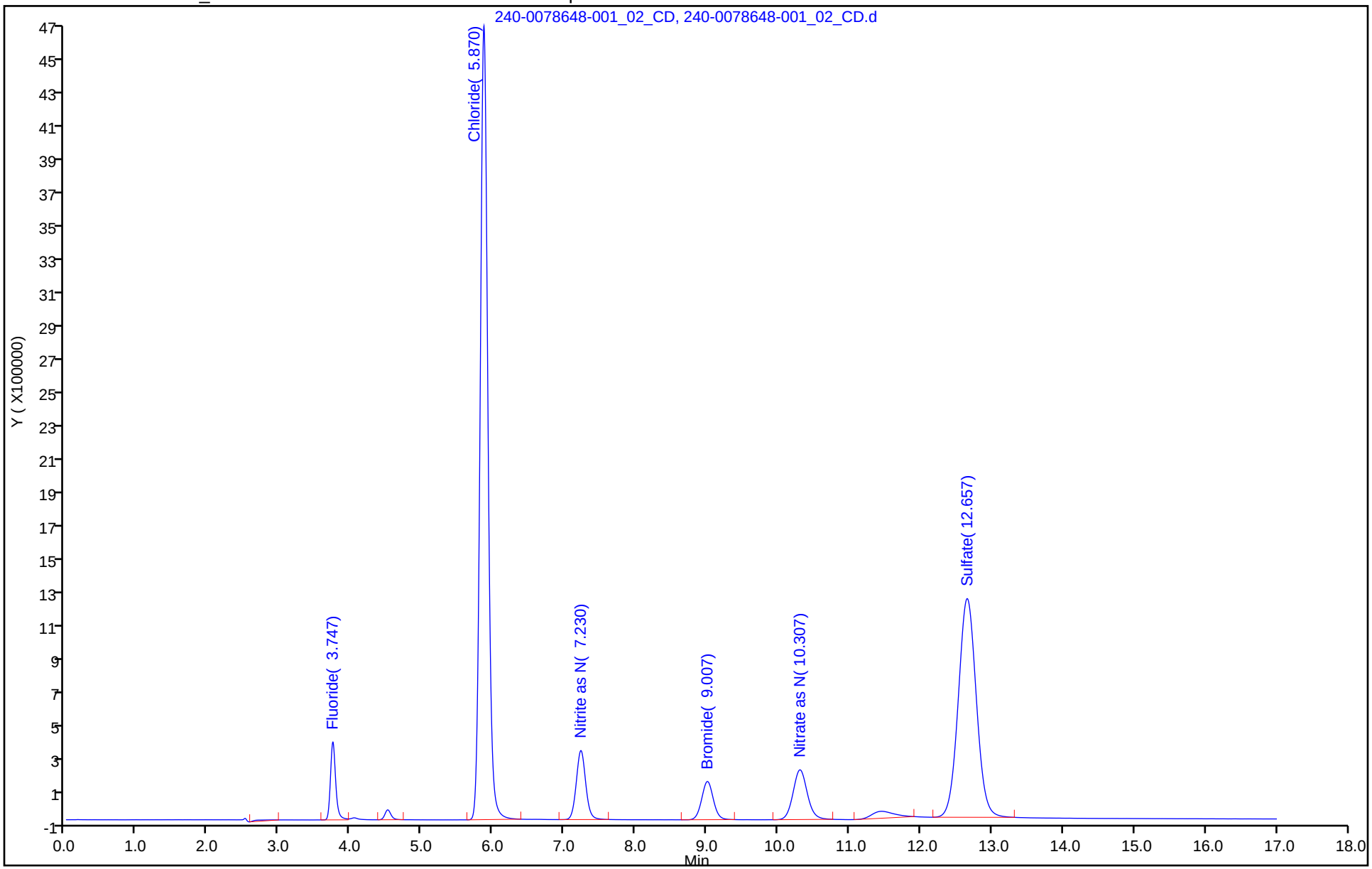
WCICCALSOLN_00292 Amount Added: 0.03 Units: mL

Report Date: 09-Aug-2018 08:21:27 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-001_02_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 12:13:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD1 | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

TestAmerica Canton

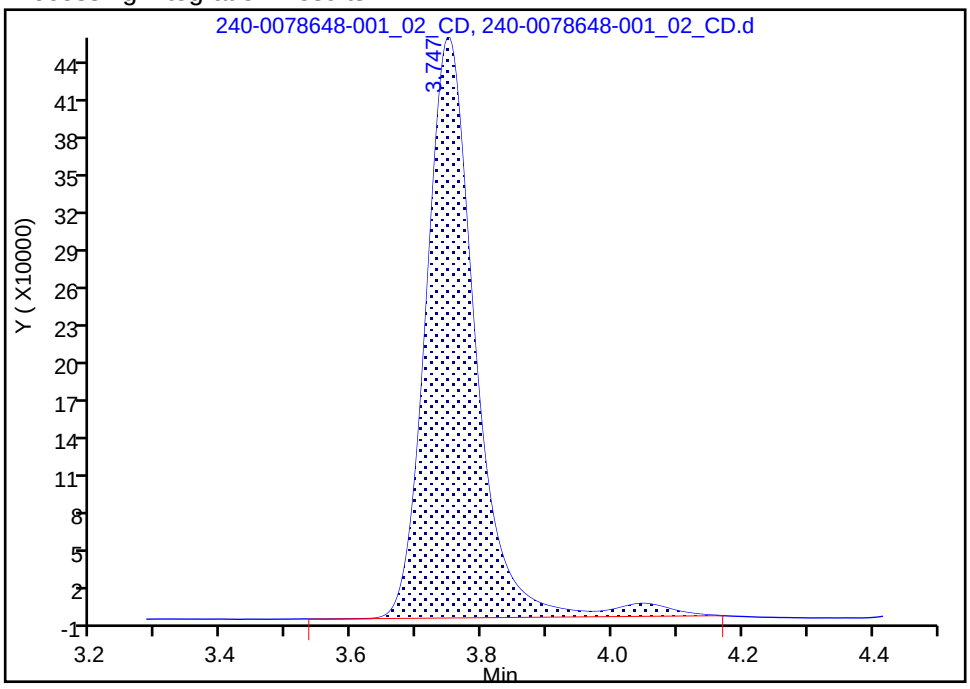
Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-001_02_CD.d
Injection Date: 07-Aug-2018 12:13:00 Instrument ID: THOR
Lims ID: STD1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_Thor Limit Group: WET IC ICAL
Column: Detector IC 0001

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

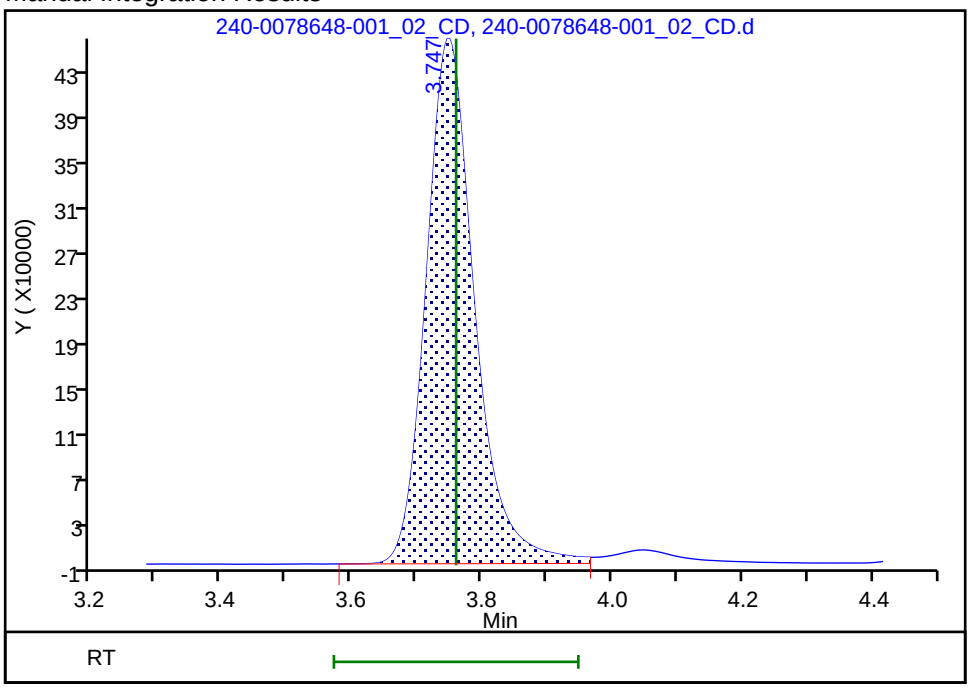
Processing Integration Results

RT: 3.75
Area: 2417029
Amount: 0.044143
Amount Units: ug/ml




Manual Integration Results

RT: 3.75
Area: 2367573
Amount: 0.043412
Amount Units: ug/ml




Reviewer: grossmanl, 09-Aug-2018 08:19:41
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-002_03_CD.d
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Aug-2018 12:34:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-002
Misc. Info.: STD2
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:28 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

First Level Reviewer: grossmanl Date: 09-Aug-2018 08:19:55

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.750 | 3.760 | -0.010 | 13706127 | 0.2500 | 0.2513 | M |
| 2 | Chloride | 5.870 | 5.873 | -0.003 | 175718277 | 5.00 | 5.08 | |
| 3 | Nitrite as N | 7.233 | 7.233 | 0.000 | 20662470 | 0.2500 | 0.2586 | |
| 4 | Bromide | 9.007 | 8.990 | 0.017 | 14355529 | 1.00 | 0.9753 | |
| 5 | Nitrate as N | 10.303 | 10.260 | 0.043 | 20800448 | 0.2500 | 0.2467 | |
| 6 | Sulfate | 12.630 | 12.397 | 0.233 | 125756659 | 5.00 | 4.99 | |
| S 7 | Nitrate Nitrite as N | | | | | | 0.5053 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

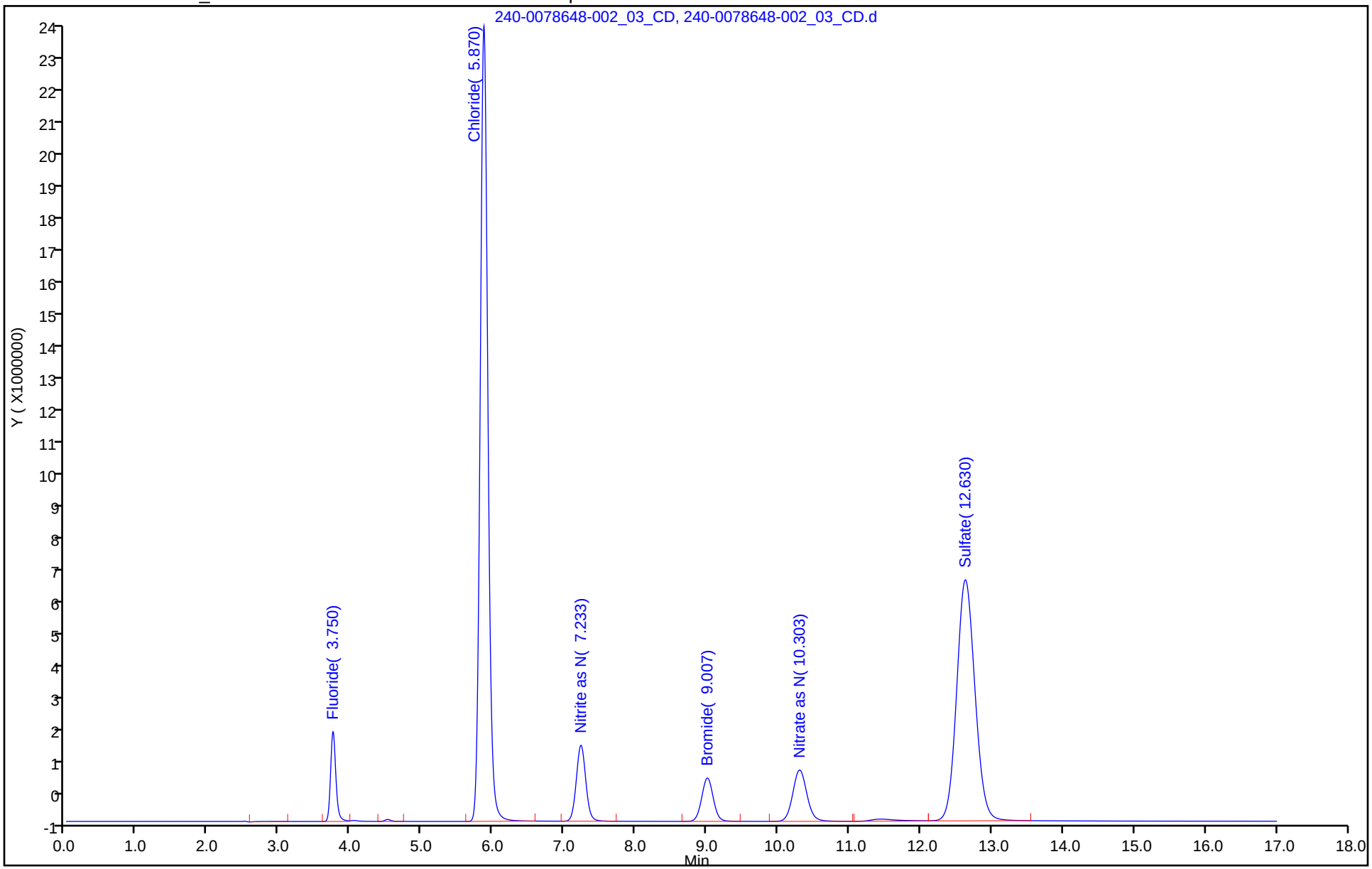
WCICCALSOLN_00292 Amount Added: 0.13 Units: mL

Report Date: 09-Aug-2018 08:21:28 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-002_03_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 12:34:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD2 | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

TestAmerica Canton

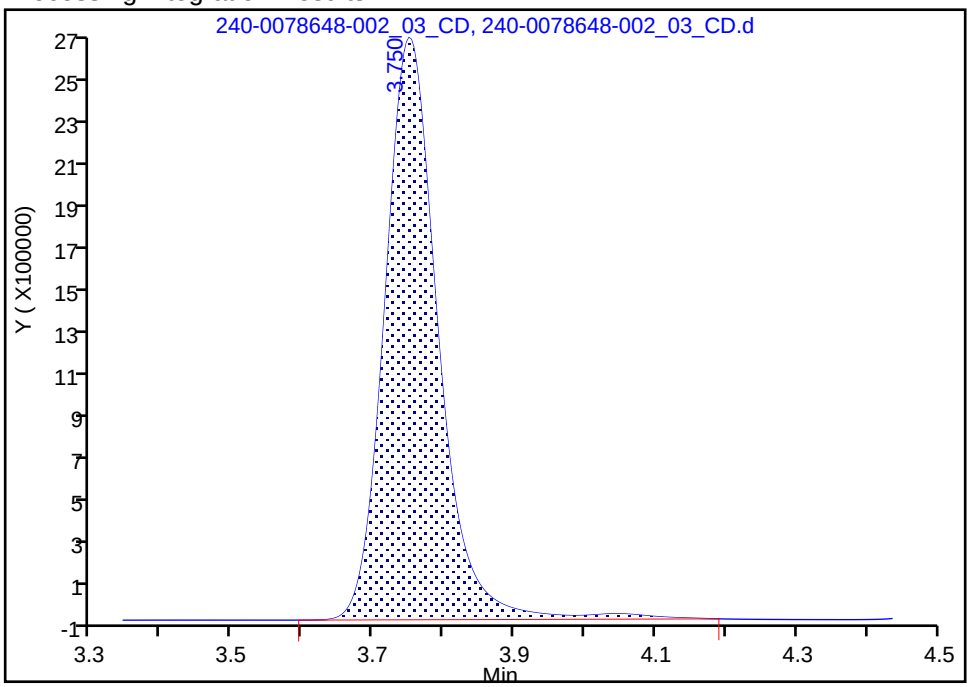
Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-002_03_CD.d
Injection Date: 07-Aug-2018 12:34:00 Instrument ID: THOR
Lims ID: STD2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_Thor Limit Group: WET IC ICAL
Column: Detector IC 0001

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

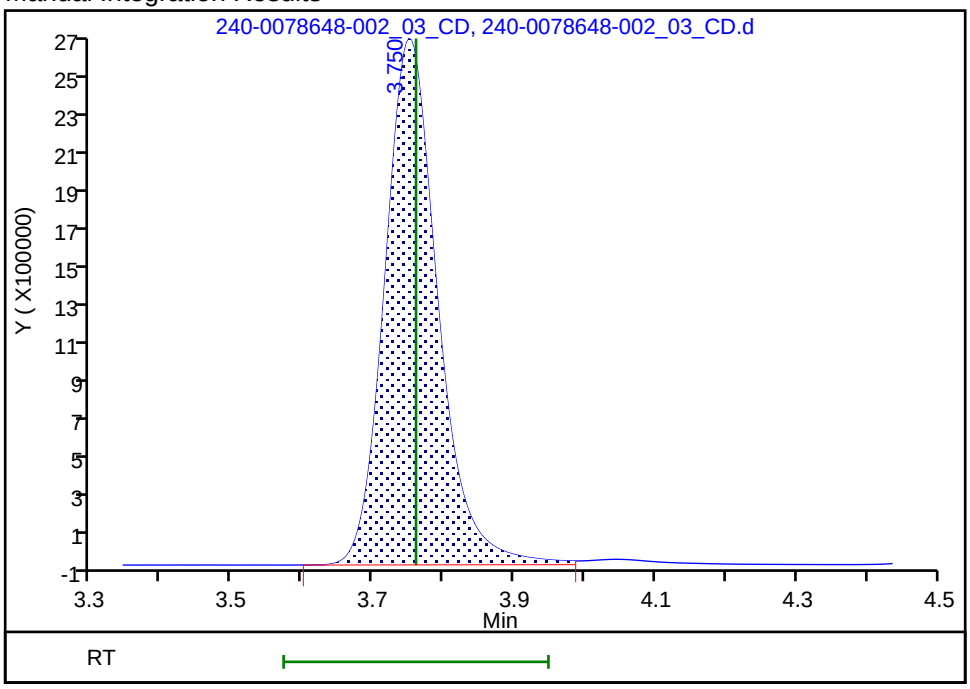
Processing Integration Results

RT: 3.75
Area: 13838621
Amount: 0.253245
Amount Units: ug/ml




Manual Integration Results

RT: 3.75
Area: 13706127
Amount: 0.251315
Amount Units: ug/ml




Reviewer: grossmanl, 09-Aug-2018 08:19:53
Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-003_04_CD.d
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Aug-2018 12:55:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-003
Misc. Info.: STD3
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:28 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.753 | 3.760 | -0.007 | 27937694 | 0.5000 | 0.5123 | |
| 2 | Chloride | 5.870 | 5.873 | -0.003 | 346880918 | 10.0 | 10.0 | |
| 3 | Nitrite as N | 7.233 | 7.233 | 0.000 | 41474615 | 0.5000 | 0.5190 | |
| 4 | Bromide | 9.003 | 8.990 | 0.013 | 29163316 | 2.00 | 1.98 | |
| 5 | Nitrate as N | 10.297 | 10.260 | 0.037 | 41624010 | 0.5000 | 0.4936 | |
| 6 | Sulfate | 12.593 | 12.397 | 0.196 | 253245917 | 10.0 | 10.1 | |
| S 7 | Nitrate Nitrite as N | | | | | | 1.01 | |

## Reagents:

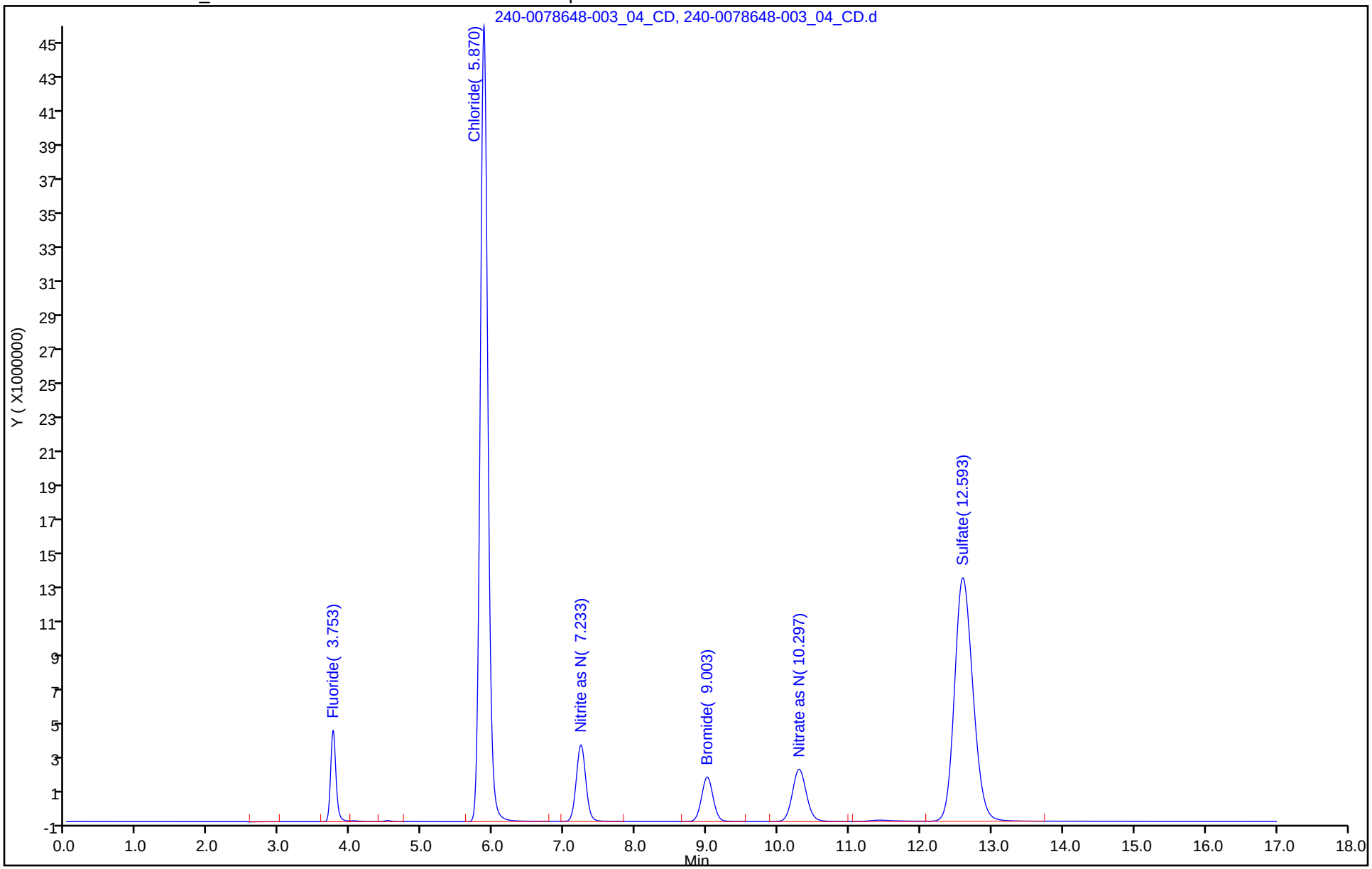
WCICCALSOLN_00292 Amount Added: 0.25 Units: mL

Report Date: 09-Aug-2018 08:21:29 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-003_04_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 12:55:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD3 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-004_05_CD.d
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Aug-2018 13:16:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-004
Misc. Info.: STD4
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:29 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

First Level Reviewer: grossmanl Date: 09-Aug-2018 08:20:24

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.753 | 3.760 | -0.007 | 56595459 | 1.00 | 1.04 | M |
| 2 | Chloride | 5.870 | 5.873 | -0.003 | 692664421 | 20.0 | 20.0 | |
| 3 | Nitrite as N | 7.233 | 7.233 | 0.000 | 83034222 | 1.00 | 1.04 | |
| 4 | Bromide | 9.000 | 8.990 | 0.010 | 59396089 | 4.00 | 4.04 | |
| 5 | Nitrate as N | 10.287 | 10.260 | 0.027 | 85500384 | 1.00 | 1.01 | |
| 6 | Sulfate | 12.533 | 12.397 | 0.136 | 511603473 | 20.0 | 20.3 | |
| S 7 | Nitrate Nitrite as N | | | | | | 2.05 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

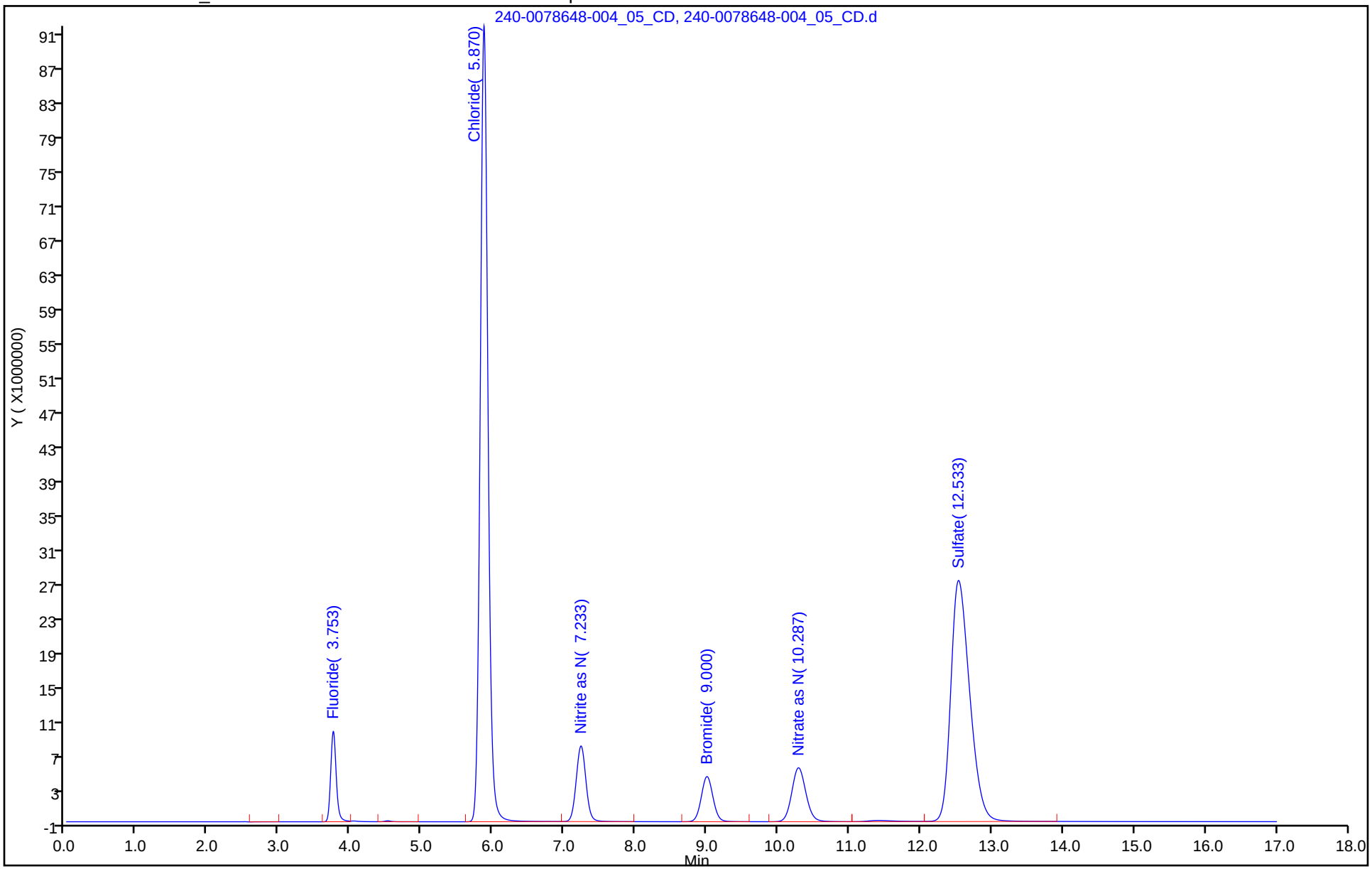
WCICCALSOLN_00292 Amount Added: 0.50 Units: mL

Report Date: 09-Aug-2018 08:21:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-004_05_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 13:16:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD4 | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

TestAmerica Canton

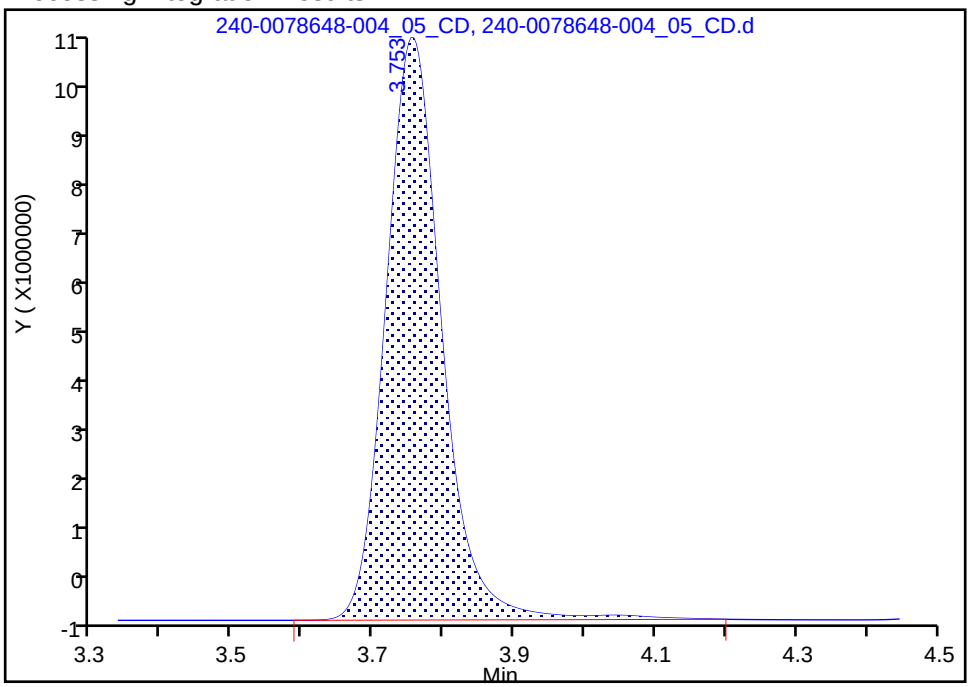
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-004_05_CD.d | | | | |
| Injection Date: | 07-Aug-2018 13:16:00 | Instrument ID: | THOR | | |
| Lims ID: | STD4 | | | | |
| Client ID: | | | | | |
| Operator ID: | | ALS Bottle#: | 0 | Worklist Smp#: | 4 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |
| Column: | | Detector | IC 0001 | | |

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

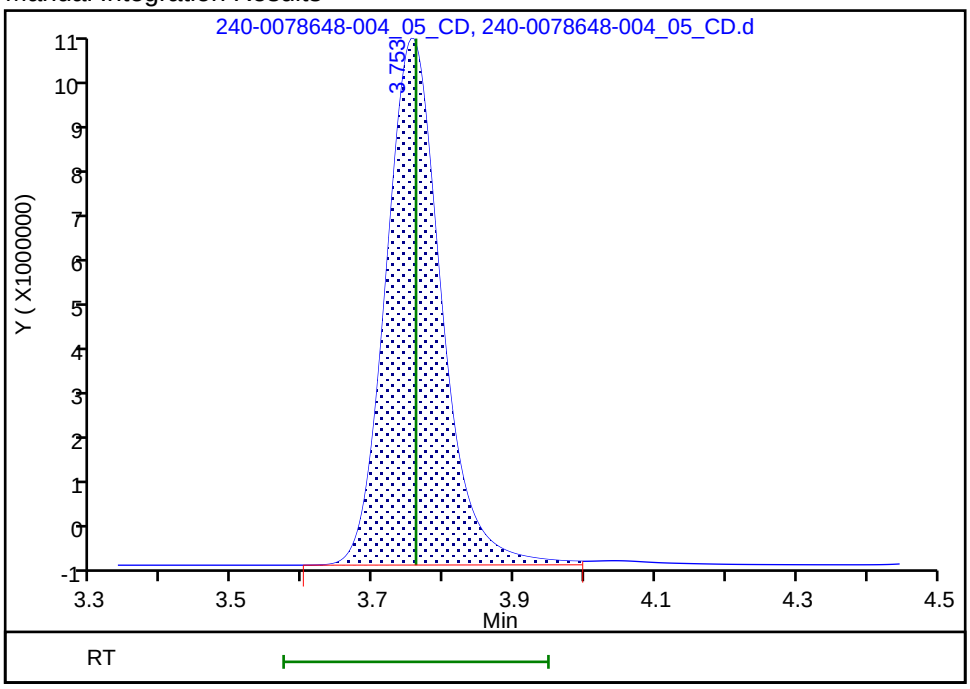
Processing Integration Results

RT: 3.75
Area: 57032707
Amount: 1.044817
Amount Units: ug/ml




Manual Integration Results

RT: 3.75
Area: 56595459
Amount: 1.037731
Amount Units: ug/ml




Reviewer: grossmanl, 09-Aug-2018 08:20:22

Audit Action: Manually Integrated Audit Reason: Peak not integrated

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-005_06_CD.d
Lims ID: STD5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 07-Aug-2018 13:36:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-005
Misc. Info.: STD5
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:30 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

First Level Reviewer: grossmanl Date: 09-Aug-2018 08:20:11

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.760 | 3.760 | 0.000 | 142333453 | 2.50 | 2.61 | |
| 2 Chloride | 5.873 | 5.873 | 0.000 | 1719190254 | 50.0 | 49.7 | |
| 3 Nitrite as N | 7.233 | 7.233 | 0.000 | 204105102 | 2.50 | 2.55 | |
| 4 Bromide | 8.990 | 8.990 | 0.000 | 150559028 | 10.0 | 10.2 | |
| 5 Nitrate as N | 10.260 | 10.260 | 0.000 | 211402516 | 2.50 | 2.51 | |
| 6 Sulfate | 12.397 | 12.397 | 0.000 | 1279230787 | 50.0 | 50.8 | |

## Reagents:

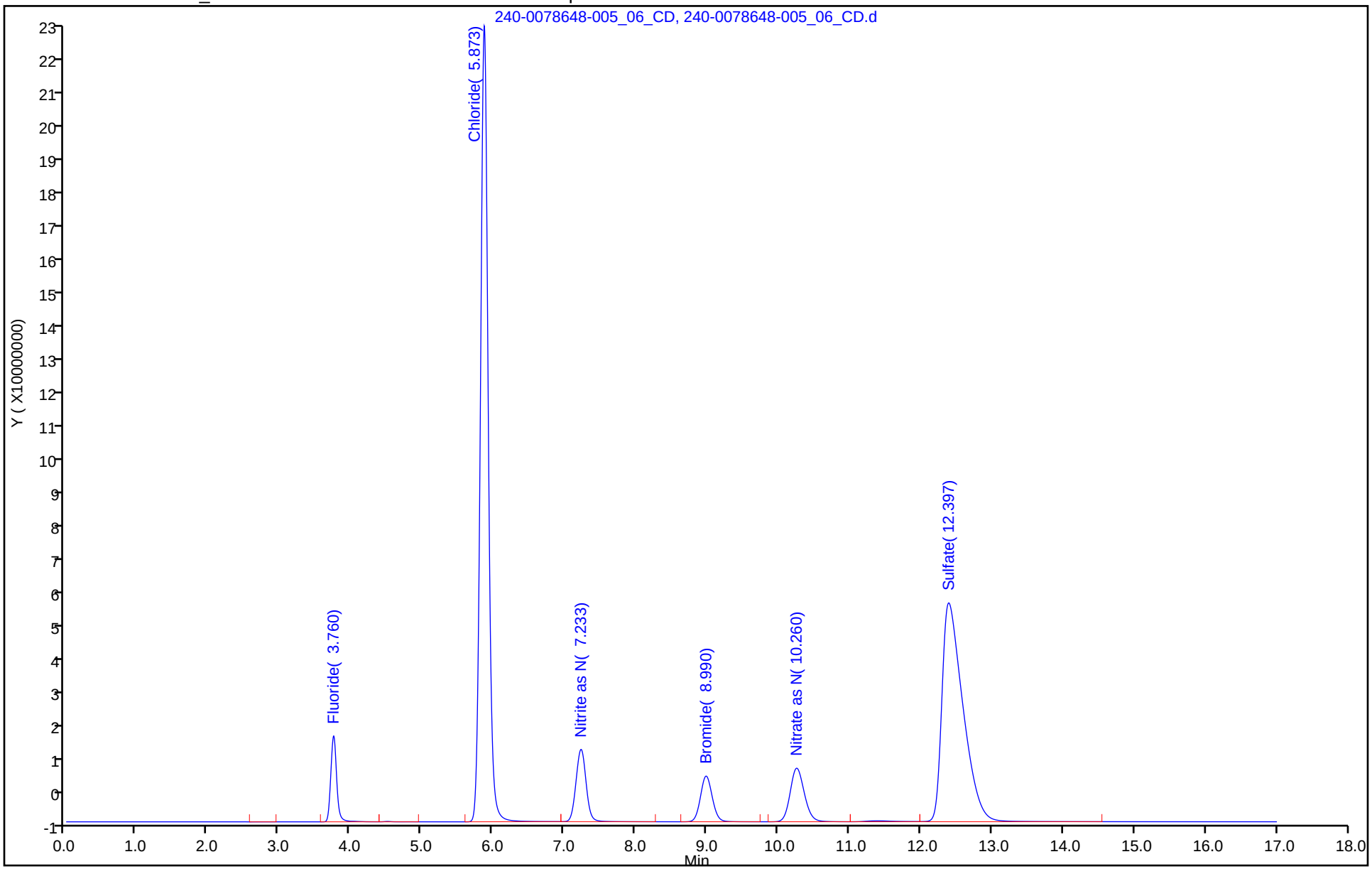
WCICCALSOLN_00292 Amount Added: 1.25 Units: mL

Report Date: 09-Aug-2018 08:21:30 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-005_06_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 13:36:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD5 | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-006_07_CD.d
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Aug-2018 13:57:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-006
Misc. Info.: STD6
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:31 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.763 | 3.760 | 0.003 | 224293341 | 4.00 | 4.11 | |
| 2 | Chloride | 5.877 | 5.873 | 0.004 | 2744120723 | 80.0 | 79.4 | |
| 3 | Nitrite as N | 7.233 | 7.233 | 0.000 | 321037934 | 4.00 | 4.02 | |
| 4 | Bromide | 8.980 | 8.990 | -0.010 | 241981281 | 16.0 | 16.4 | |
| 5 | Nitrate as N | 10.237 | 10.260 | -0.023 | 339128187 | 4.00 | 4.02 | |
| 6 | Sulfate | 12.287 | 12.397 | -0.110 | 2044104332 | 80.0 | 81.2 | |
| S 7 | Nitrate Nitrite as N | | | | | | 8.04 | |

## Reagents:

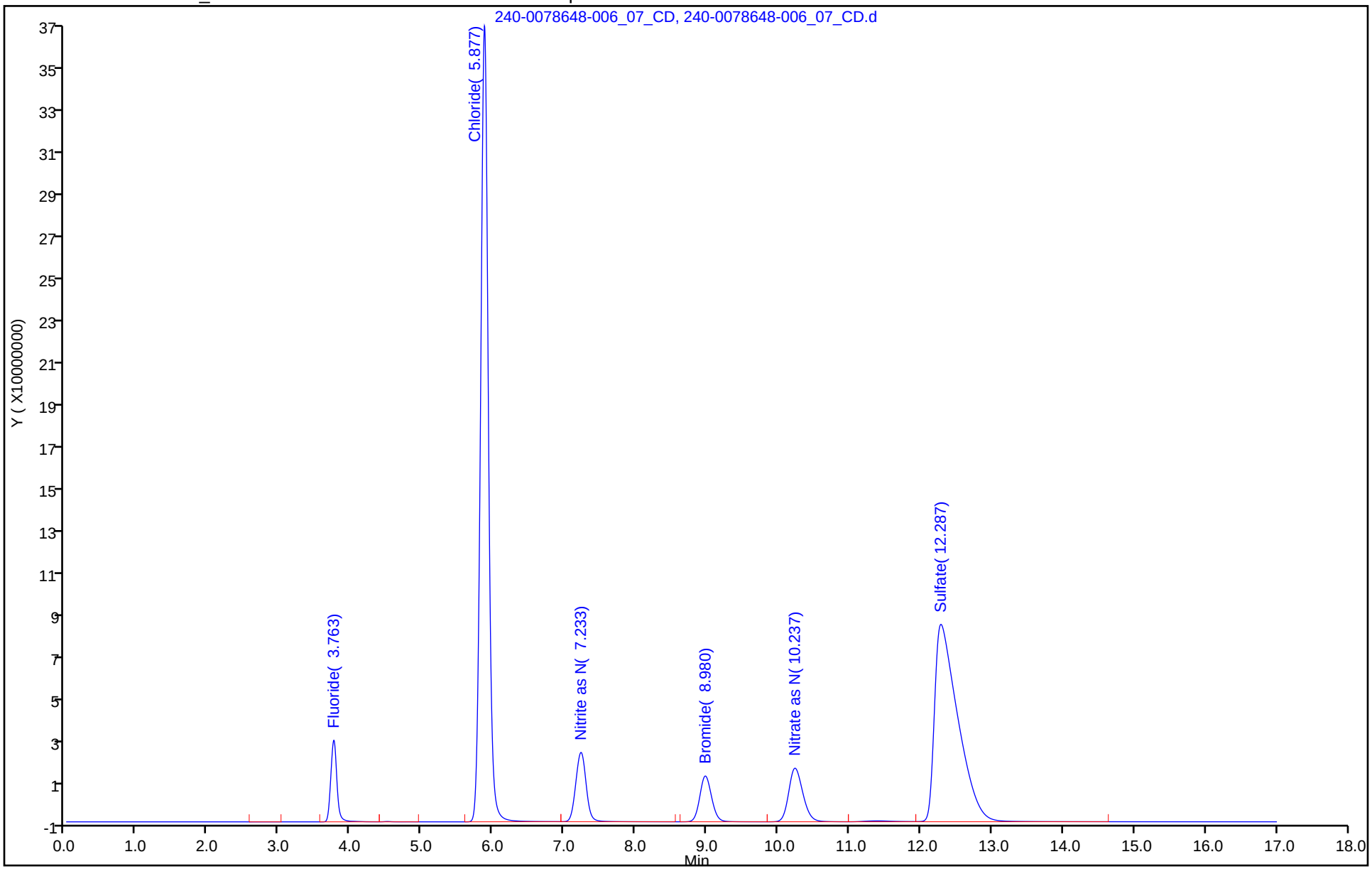
WCICCALSOLN_00292 Amount Added: 2.00 Units: mL

Report Date: 09-Aug-2018 08:21:31 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-006_07_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 13:57:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD6 | | | Worklist Smp#: | 6 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-007_08_CD.d
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 07-Aug-2018 14:18:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-007
Misc. Info.: STD7
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:32 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.763 | 3.760 | 0.003 | 278265365 | 5.00 | 5.10 | |
| 2 | Chloride | 5.880 | 5.873 | 0.007 | 3439073201 | 100.0 | 99.5 | |
| 3 | Nitrite as N | 7.233 | 7.233 | 0.000 | 398011528 | 5.00 | 4.98 | |
| 4 | Bromide | 8.970 | 8.990 | -0.020 | 303958447 | 20.0 | 20.7 | |
| 5 | Nitrate as N | 10.223 | 10.260 | -0.037 | 425737485 | 5.00 | 5.05 | |
| 6 | Sulfate | 12.227 | 12.397 | -0.170 | 2562400189 | 100.0 | 101.7 | |
| S 7 | Nitrate Nitrite as N | | | | | | 10.0 | |

## Reagents:

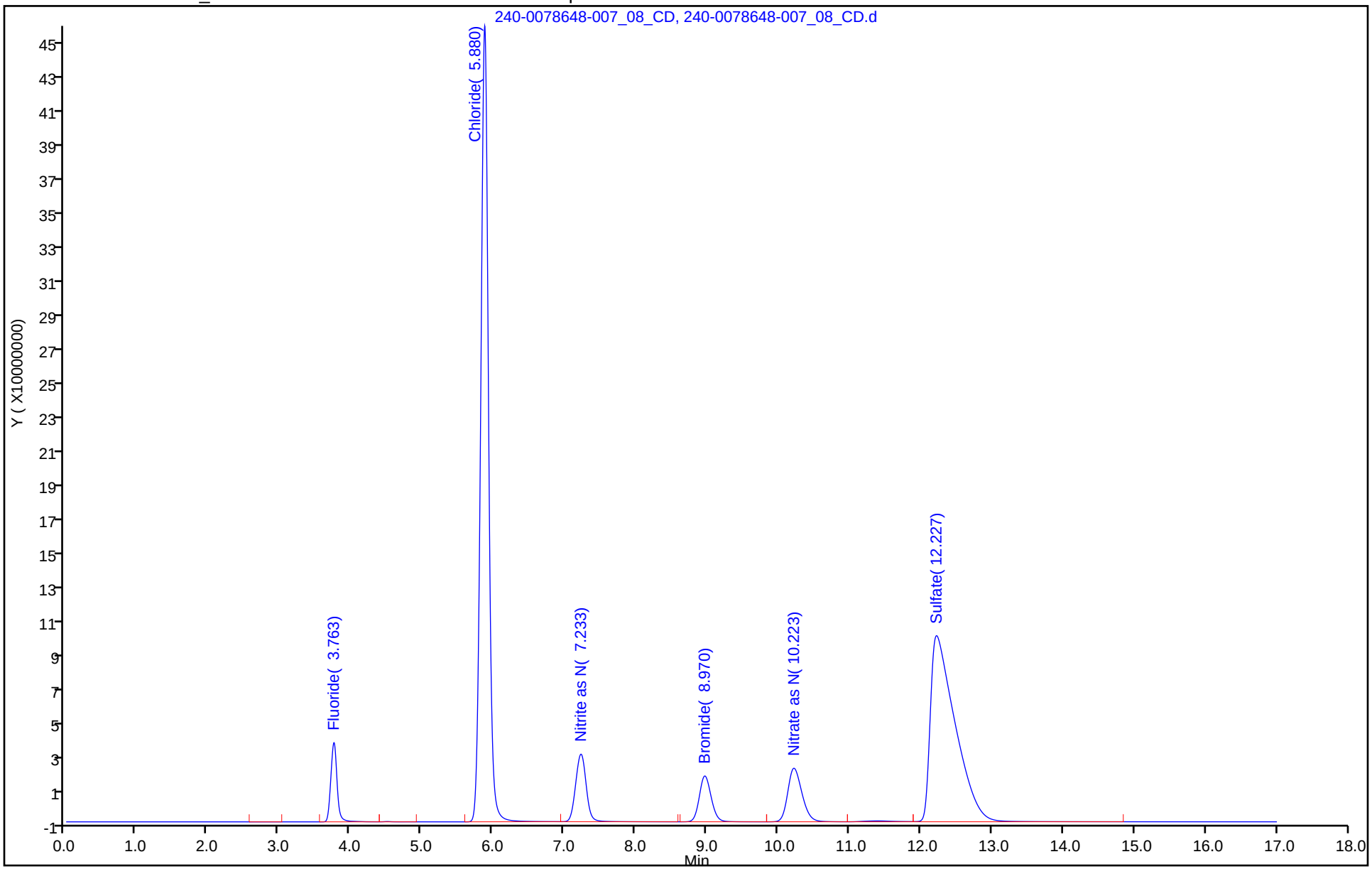
WCICCALSOLN_00292 Amount Added: 2.50 Units: mL

Report Date: 09-Aug-2018 08:21:32 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-007_08_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 14:18:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD7 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-008_09_CD.d
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 07-Aug-2018 14:39:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-008
Misc. Info.: STD8
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:33 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.767 | 3.760 | 0.007 | 407859748 | 7.50 | 7.48 | |
| 2 | Chloride | 5.890 | 5.873 | 0.017 | 5150605252 | 150.0 | 149.0 | |
| 3 | Nitrite as N | 7.230 | 7.233 | -0.003 | 583927168 | 7.50 | 7.31 | |
| 4 | Bromide | 8.953 | 8.990 | -0.037 | 457314579 | 30.0 | 31.1 | |
| 5 | Nitrate as N | 10.187 | 10.260 | -0.073 | 640669148 | 7.50 | 7.60 | |
| 6 | Sulfate | 12.097 | 12.397 | -0.300 | 3841100743 | 150.0 | 152.5 | |
| S 7 | Nitrate Nitrite as N | | | | | | 14.9 | |

## Reagents:

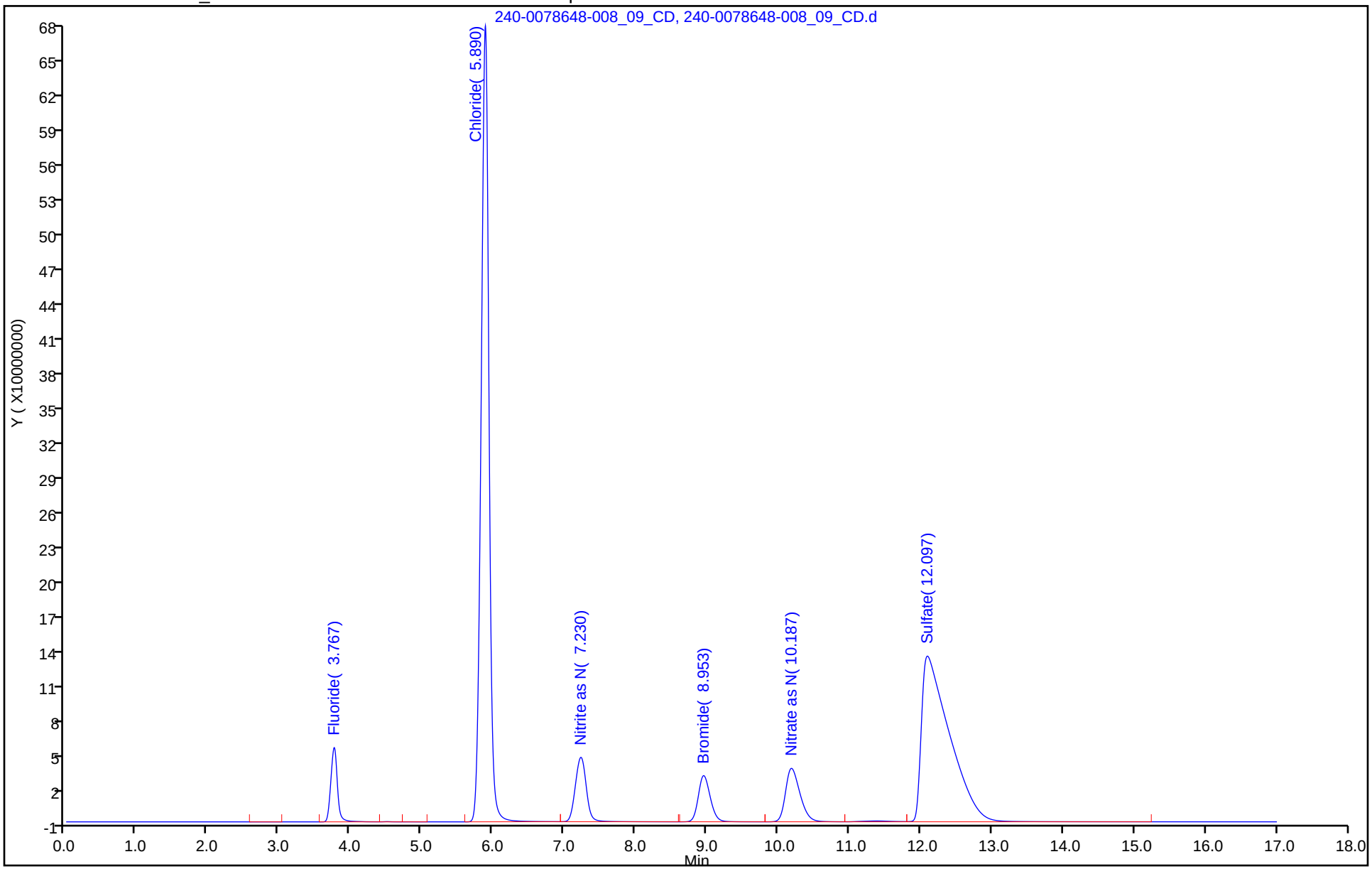
WCICCALSOLN_00292 Amount Added: 3.75 Units: mL

Report Date: 09-Aug-2018 08:21:33 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-008_09_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 14:39:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD8 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d
Lims ID: STD9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 07-Aug-2018 14:59:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-009
Misc. Info.: STD9
Operator ID: Instrument ID: THOR
Sublist: chrom-300_Thor*sub2

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:34 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.770 | 3.760 | 0.010 | 531515466 | 10.0 | 9.75 | |
| 2 Chloride | 5.900 | 5.873 | 0.027 | 6864109687 | 200.0 | 198.5 | |
| 3 Nitrite as N | 7.230 | 7.233 | -0.003 | 761262435 | 10.0 | 9.53 | |
| 4 Bromide | 8.940 | 8.990 | -0.050 | 610636830 | 40.0 | 41.5 | |
| 5 Nitrate as N | 10.153 | 10.260 | -0.107 | 855145791 | 10.0 | 10.1 | |
| 6 Sulfate | 11.990 | 12.397 | -0.407 | 5111707239 | 200.0 | 203.0 | |
| S 7 Nitrate Nitrite as N | | | | | | 19.7 | |

## Reagents:

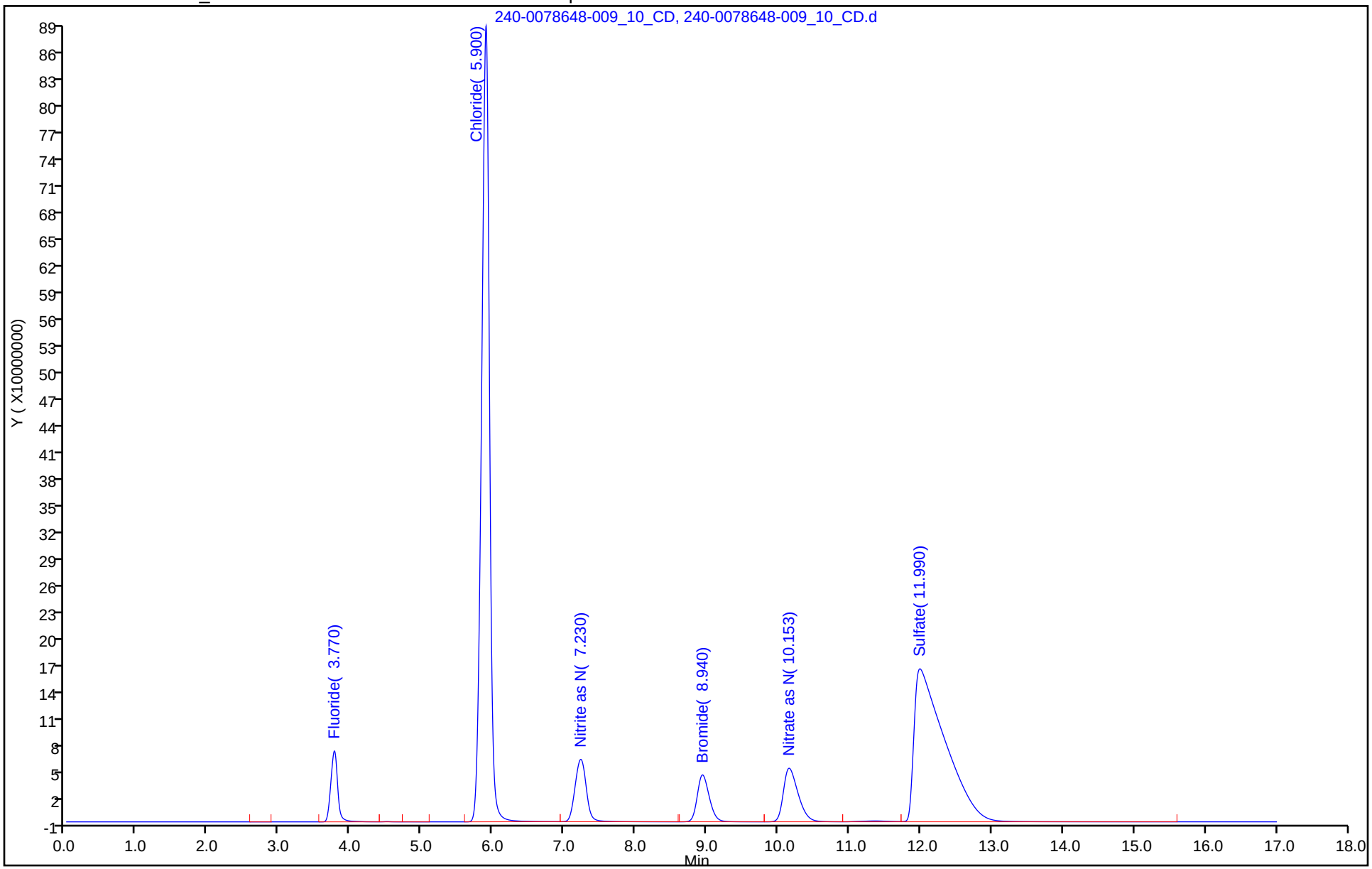
WCICCALSOLN_00292 Amount Added: 5.00 Units: mL

Report Date: 09-Aug-2018 08:21:34 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 14:59:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | STD9 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Laboratories
Initial Calibration RF Report

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Instrument: THOR
Lock State: Unlocked
Integrator: Falcon
No.Compounds:9
Lims Location: 240
Cpnd Order: Retention Time
Last Modified: 09-Aug-2018 08:20:24

## Initial Calibration Batches

Ical Batch: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b
Inj Date : 07-Aug-2018 12:13:00, Sublist: chrom-300_Thor*sub2

Limit Group: WET IC ICAL

Column 1 : Det: IC 0001

| Compound | Level 1 RF/%Drift | Level 2 RF/%Drift | Level 3 RF/%Drift | Level 4 RF/%Drift | Level 5 RF/%Drift | Level 6 RF/%Drift | Level 7 RF/%Drift | Level 8 RF/%Drift | Level 9 RF/%Drift | Avg RF | Curve | Rse/ Rsd | R^2/ COD | Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Fluoride | 47351460 | 54824508 | 55875388 | 56595459 | 56933381 | 56073335 | 55653073 | 54381300 | 53151547 | 54537717 | WAvg | 5.4 | | |
| | -13.2 | 0.5 | 2.5 | 3.8 | 4.4 | 2.8 | 2.0 | -0.3 | -2.5 | | | | | |
| 2 Chloride | 34976555 | 35143655 | 34688092 | 34633221 | 34383805 | 34301509 | 34390732 | 34337368 | 34320548 | 34575054 | WAvg | 0.9 | | |
| | 1.2 | 1.6 | 0.3 | 0.2 | -0.6 | -0.8 | -0.5 | -0.7 | -0.7 | | | | | |
| 3 Nitrite as N | 75048260 | 82649880 | 82949230 | 83034222 | 81642041 | 80259484 | 79602306 | 77856956 | 76126244 | 79907625 | WAvg | 3.8 | | |
| | -6.1 | 3.4 | 3.8 | 3.9 | 2.2 | 0.4 | -0.4 | -2.6 | -4.7 | | | | | |
| 4 Bromide | 12798575 | 14355529 | 14581658 | 14849022 | 15055903 | 15123830 | 15197922 | 15243819 | 15265921 | 14719131 | WAvg | 5.3 | | |
| | -13.0 | -2.5 | -0.9 | 0.9 | 2.3 | 2.7 | 3.3 | 3.6 | 3.7 | | | | | |
| 5 Nitrate as N | 81512100 | 83201792 | 83248020 | 85500384 | 84561006 | 84782047 | 85147497 | 85422553 | 85514579 | 84321109 | WAvg | 1.6 | | |
| | -3.3 | -1.3 | -1.3 | 1.4 | 0.3 | 0.5 | 1.0 | 1.3 | 1.4 | | | | | |
| 6 Sulfate | 22693088 | 25151332 | 25324592 | 25580174 | 25584616 | 25551304 | 25624002 | 25607338 | 25558536 | 25186109 | WAvg | 3.8 | | |
| | -9.9 | -0.1 | 0.5 | 1.6 | 1.6 | 1.4 | 1.7 | 1.7 | 1.5 | | | | | |

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-010_11_CD.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Aug-2018 15:20:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0078648-010
Misc. Info.: ICV
Operator ID: Instrument ID: THOR
Sublist:

Method: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 09-Aug-2018 08:21:34 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: XAWRK036

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.760 | 3.760 | 0.000 | 148487371 | 2.50 | 2.72 | |
| 2 Chloride | 5.873 | 5.873 | 0.000 | 1798335176 | 50.0 | 52.0 | |
| 3 Nitrite as N | 7.233 | 7.233 | 0.000 | 190227574 | 2.50 | 2.38 | |
| 4 Bromide | 8.990 | 8.990 | 0.000 | 156818238 | 10.0 | 10.7 | |
| 5 Nitrate as N | 10.260 | 10.260 | 0.000 | 216933145 | 2.50 | 2.57 | |
| 6 Sulfate | 12.387 | 12.397 | -0.010 | 1333062081 | 50.0 | 52.9 | |

## Reagents:

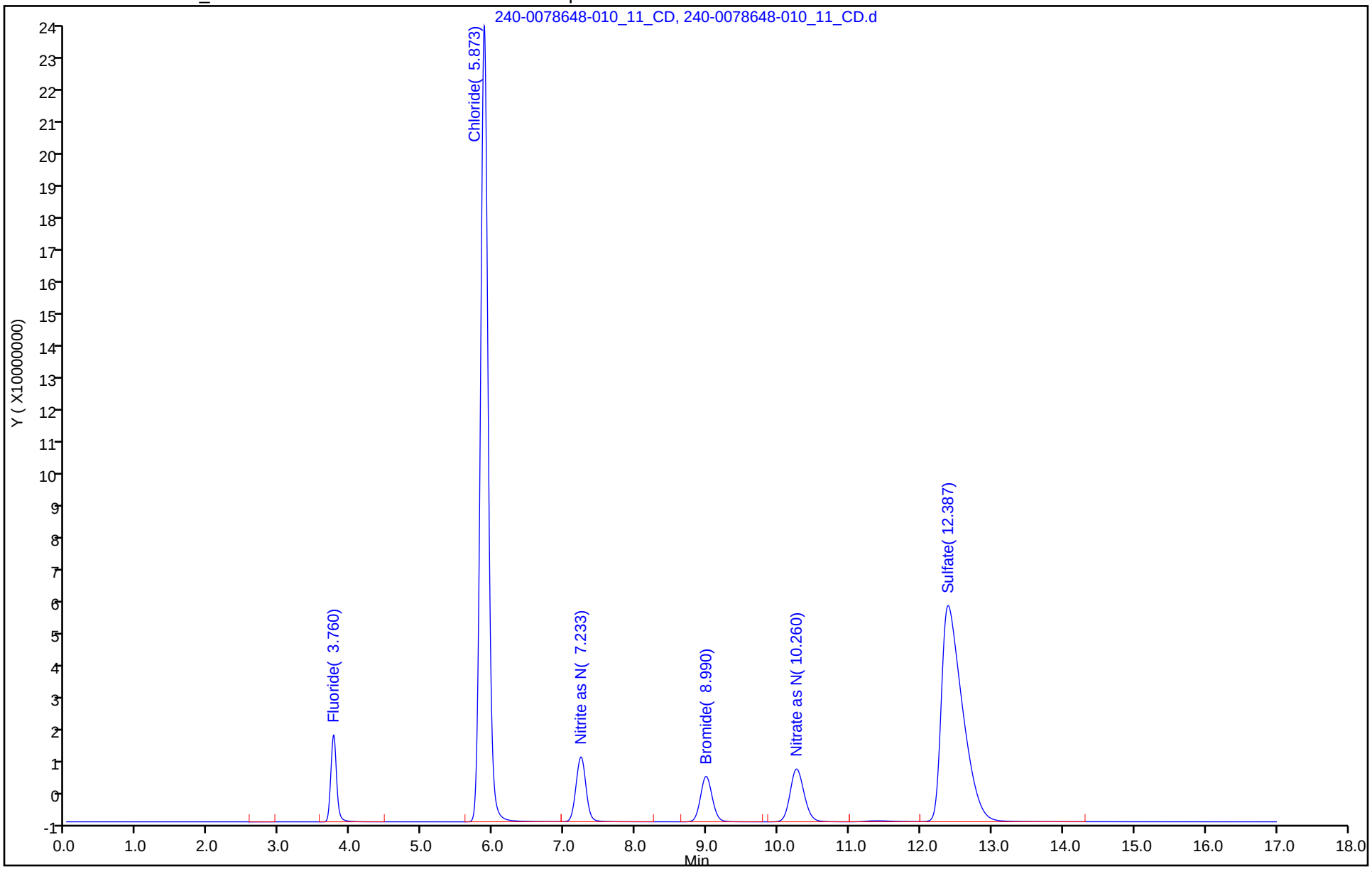
WCICLCS_00669 Amount Added: 5.00 Units: mL

Report Date: 09-Aug-2018 11:27:19 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-010_11_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 15:20:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



TestAmerica Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-011_12_CD.d | | | | |
| Lims ID: | ICB | | | | |
| Client ID: | | | | | |
| Sample Type: | ICB | | | | |
| Inject. Date: | 07-Aug-2018 15:41:00 | ALS Bottle#: | 0 | Worklist Smp#: | 11 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0078648-011 | | | | |
| Misc. Info.: | ICB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 09-Aug-2018 08:21:34 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | XAWRK036 | | | | |

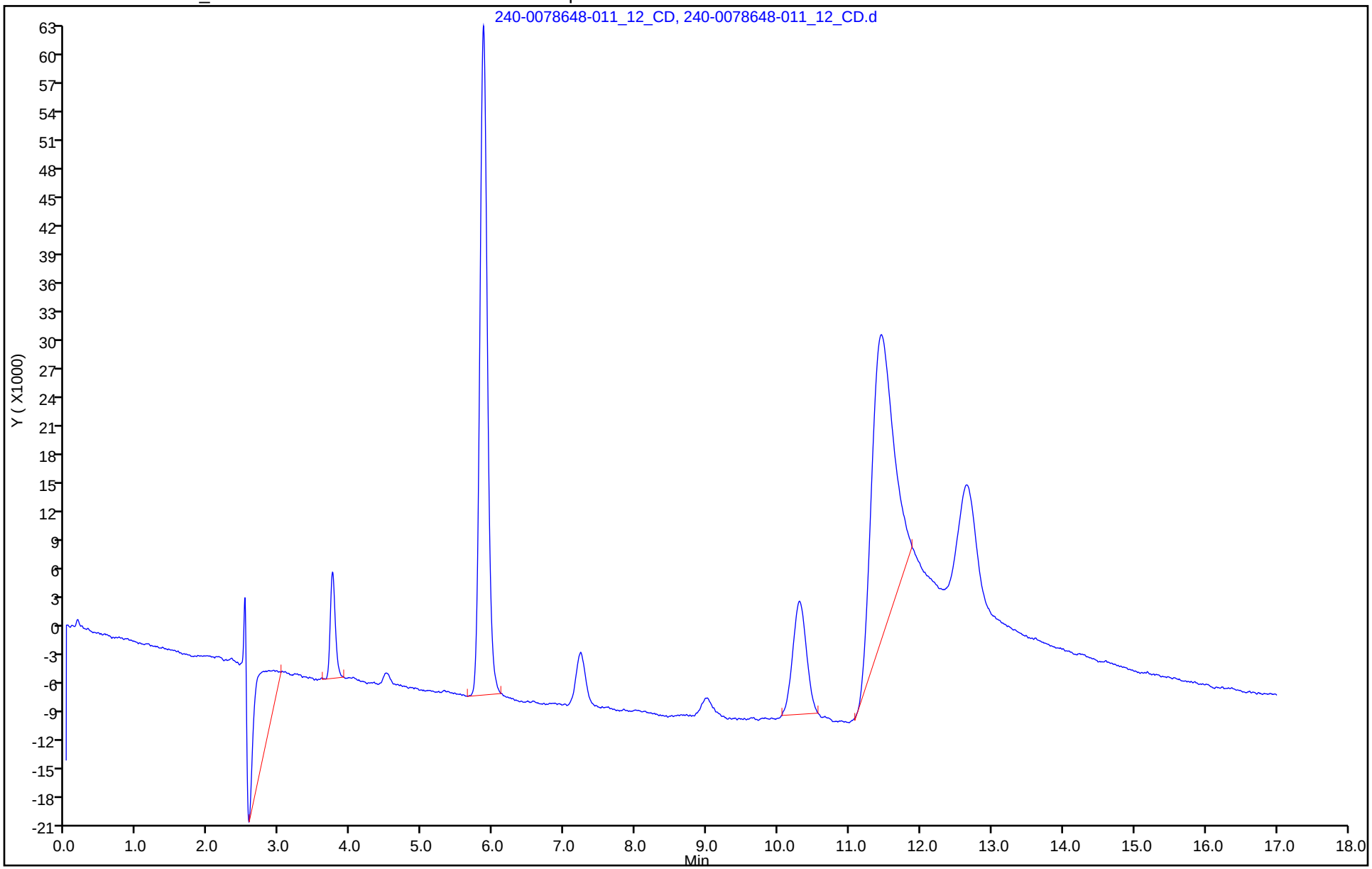
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| | 1 Fluoride | | 3.760 | | | | ND | |
| | 2 Chloride | | 5.873 | | | | ND | |
| | 3 Nitrite as N | | 7.233 | | | | ND | |
| | 4 Bromide | | 8.990 | | | | ND | |
| | 5 Nitrate as N | | 10.260 | | | | ND | |
| | 6 Sulfate | | 12.397 | | | | ND | |
| | 11 Nitrate as NO3 | | 0.000 | | | | ND | |
| | 10 Nitrite as NO2 | | 0.000 | | | | ND | |
| S | 7 Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 09-Aug-2018 08:21:36 Chrom Revision: 2.3 19-Jul-2018 15:14:50

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-011_12_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 07-Aug-2018 15:41:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | ICB | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-001_02_CD.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 17-May-2019 12:46:00 | ALS Bottle#: | 0 | Worklist Smp#: | 1 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-001 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Sublist: | chrom-300_Thor*sub2 | | | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:51:39 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.633 | 3.633 | 0.000 | 140049687 | 2.50 | 2.56 | |
| 2 Chloride | 5.297 | 5.297 | 0.000 | 1762073058 | 50.0 | 51.0 | |
| 3 Nitrite as N | 6.363 | 6.363 | 0.000 | 205008738 | 2.50 | 2.57 | |
| 4 Bromide | 7.653 | 7.653 | 0.000 | 152895615 | 10.0 | 10.4 | |
| 5 Nitrate as N | 8.623 | 8.623 | 0.000 | 218670060 | 2.50 | 2.59 | |
| 6 Sulfate | 9.967 | 9.967 | 0.000 | 1309873581 | 50.0 | 52.0 | |

## Reagents:

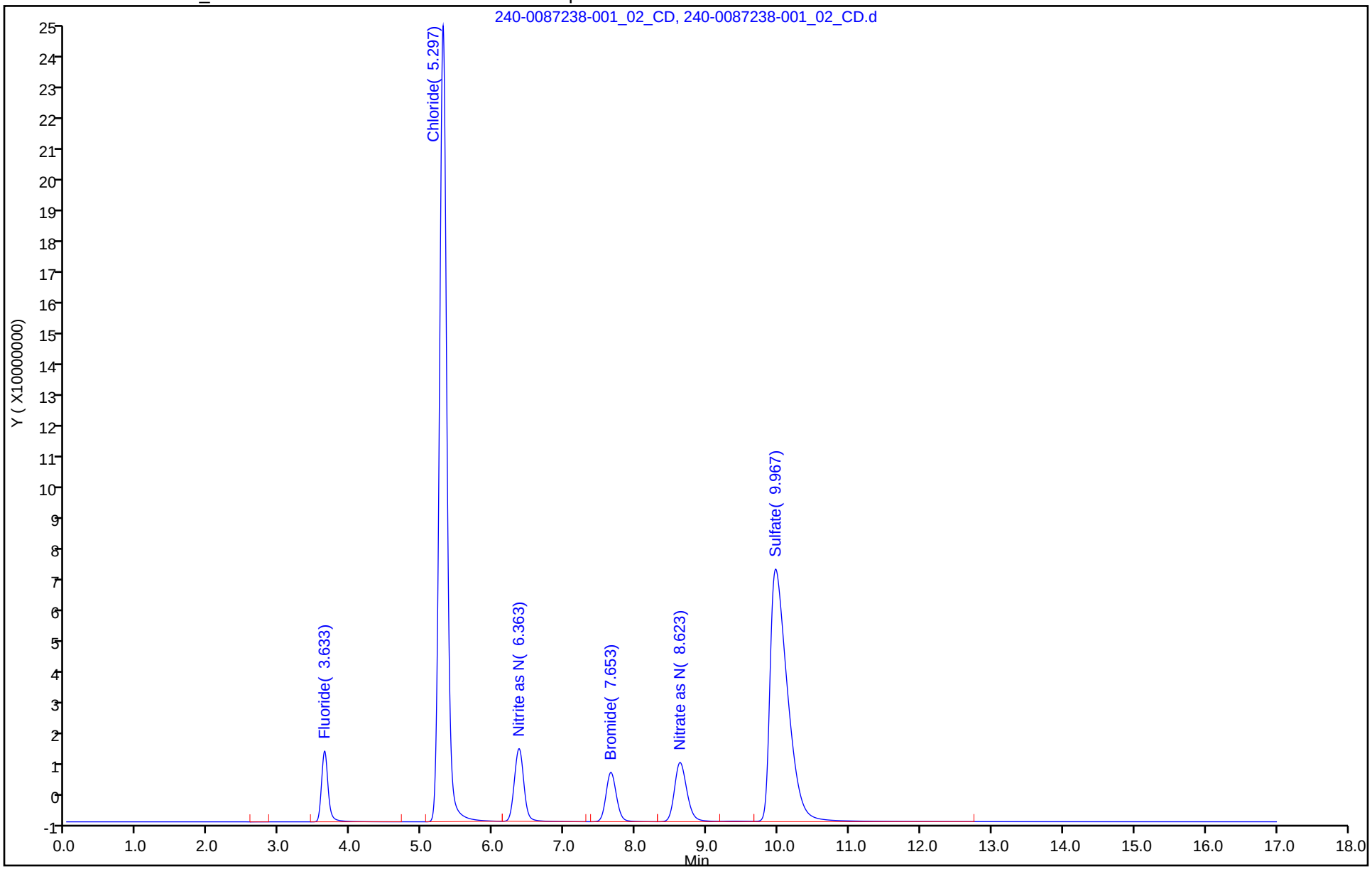
WCICCCV_00874 Amount Added: 5.00 Units: mL

Report Date: 20-May-2019 22:51:39 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-001_02_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 12:46:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-002_03_CD.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 17-May-2019 13:07:00 | ALS Bottle#: | 0 | Worklist Smp#: | 2 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-002 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:51:39 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

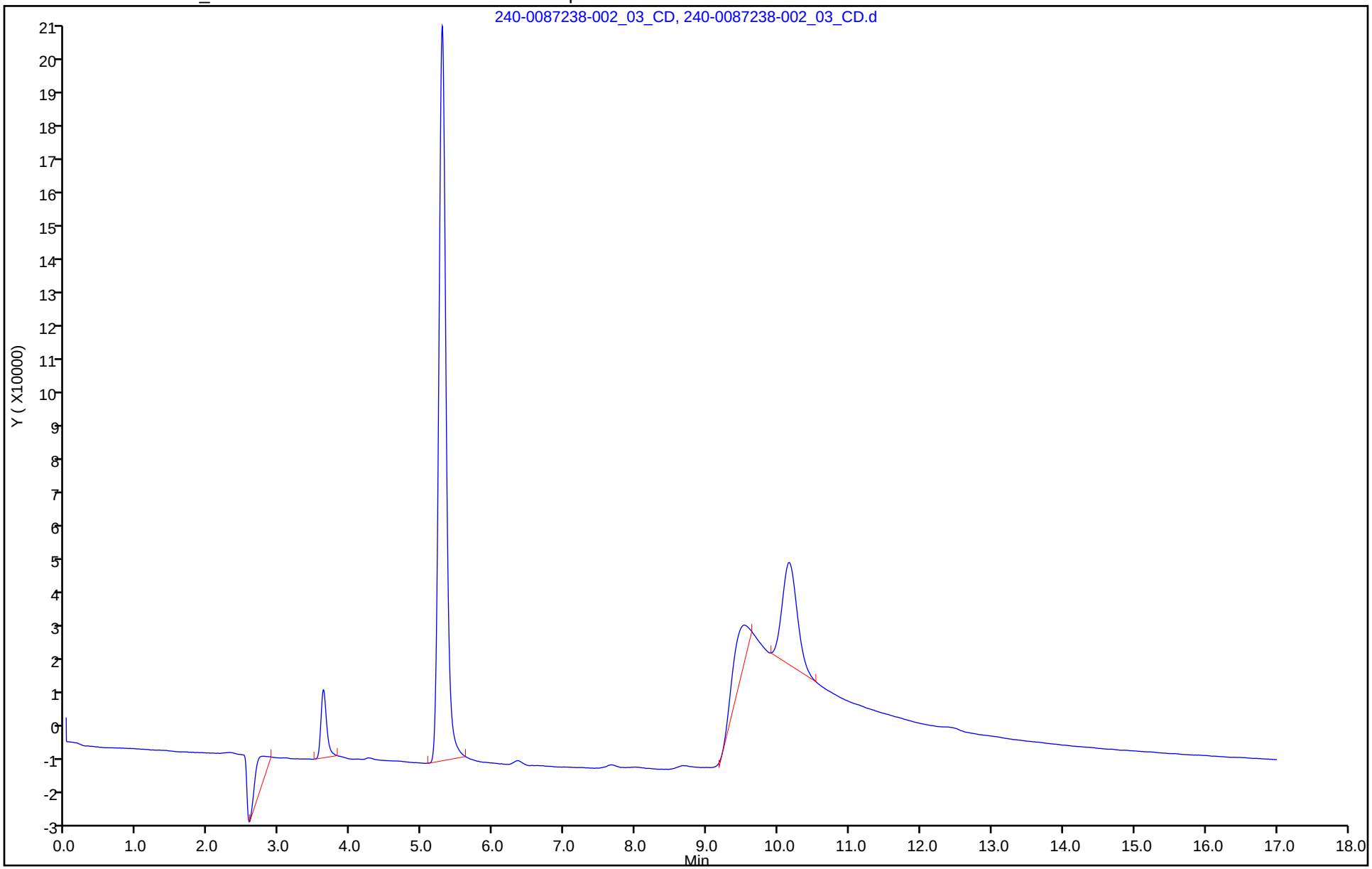
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.633 | | | | ND | |
| 2 | Chloride | | 5.297 | | | | ND | |
| 3 | Nitrite as N | | 6.363 | | | | ND | |
| 4 | Bromide | | 7.653 | | | | ND | |
| 5 | Nitrate as N | | 8.623 | | | | ND | |
| 6 | Sulfate | | 9.967 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 20-May-2019 22:51:41 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-002_03_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 13:07:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-003_04_CD.d | | | | |
| Lims ID: | MB | | | | |
| Client ID: | | | | | |
| Sample Type: | MB | | | | |
| Inject. Date: | 17-May-2019 13:28:00 | ALS Bottle#: | 0 | Worklist Smp#: | 3 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-003 | | | | |
| Misc. Info.: | MB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:51:39 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

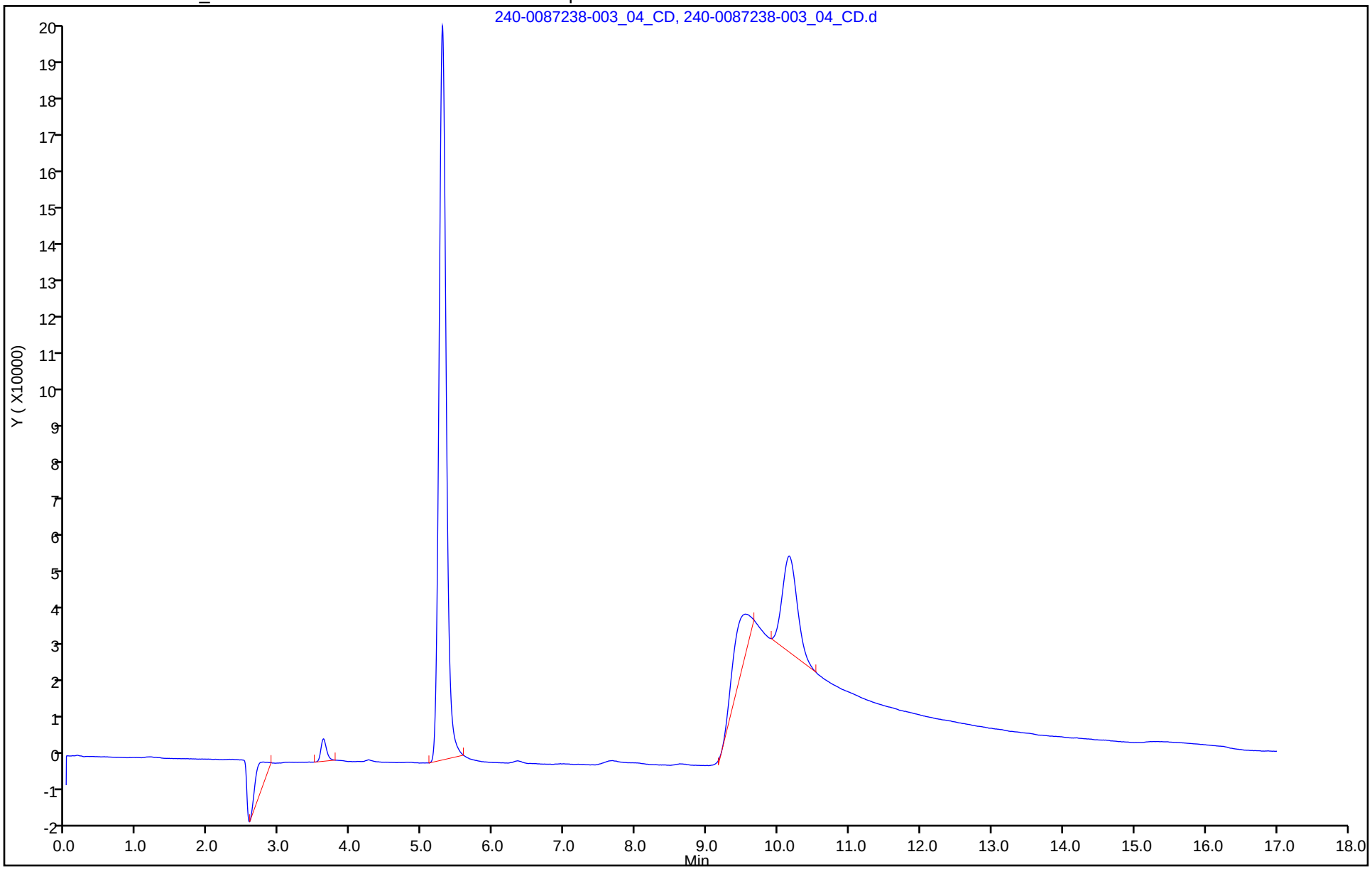
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.633 | | | | ND | |
| 2 | Chloride | | 5.297 | | | | ND | |
| 3 | Nitrite as N | | 6.363 | | | | ND | |
| 4 | Bromide | | 7.653 | | | | ND | |
| 5 | Nitrate as N | | 8.623 | | | | ND | |
| 6 | Sulfate | | 9.967 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 20-May-2019 22:51:42 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-003_04_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 13:28:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-004_05_CD.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2019 13:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087238-004
Misc. Info.: LCS
Operator ID: Instrument ID: THOR

Method: \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 20-May-2019 22:51:39 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: CTX0306

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.637 | 3.633 | 0.004 | 140170394 | 2.50 | 2.56 | |
| 2 Chloride | 5.297 | 5.297 | 0.000 | 1760488345 | 50.0 | 50.9 | |
| 3 Nitrite as N | 6.360 | 6.363 | -0.003 | 202890081 | 2.50 | 2.54 | |
| 4 Bromide | 7.650 | 7.653 | -0.003 | 147186463 | 10.0 | 10.0 | |
| 5 Nitrate as N | 8.620 | 8.623 | -0.003 | 222976734 | 2.50 | 2.64 | |
| 6 Sulfate | 9.967 | 9.967 | 0.000 | 1315163627 | 50.0 | 52.2 | |

## Reagents:

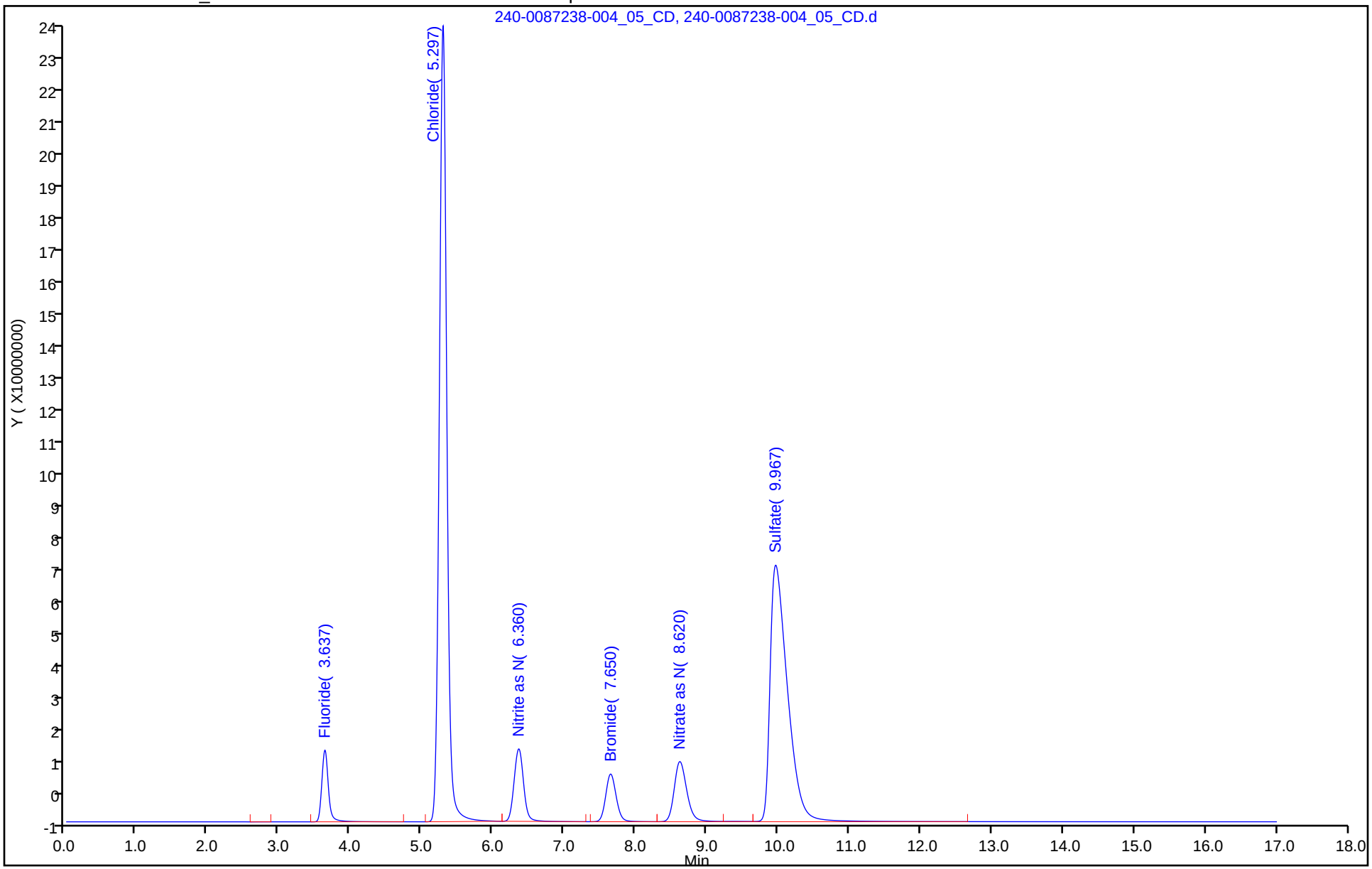
WCICLCS_00709 Amount Added: 5.00 Units: mL

Report Date: 20-May-2019 22:51:43 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-004_05_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 13:49:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-013_14_CD.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 17-May-2019 16:55:00 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-013 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Sublist: | chrom-300_Thor*sub2 | | | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:51:55 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.633 | 3.633 | 0.000 | 142020228 | 2.50 | 2.59 | |
| 2 | Chloride | 5.297 | 5.297 | 0.000 | 1758855511 | 50.0 | 50.9 | |
| 3 | Nitrite as N | 6.360 | 6.363 | -0.003 | 203652854 | 2.50 | 2.55 | |
| 4 | Bromide | 7.653 | 7.653 | 0.000 | 152365526 | 10.0 | 10.4 | |
| 5 | Nitrate as N | 8.620 | 8.623 | -0.003 | 218275757 | 2.50 | 2.59 | |
| 6 | Sulfate | 9.960 | 9.967 | -0.007 | 1312246737 | 50.0 | 52.1 | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.14 | |

## Reagents:

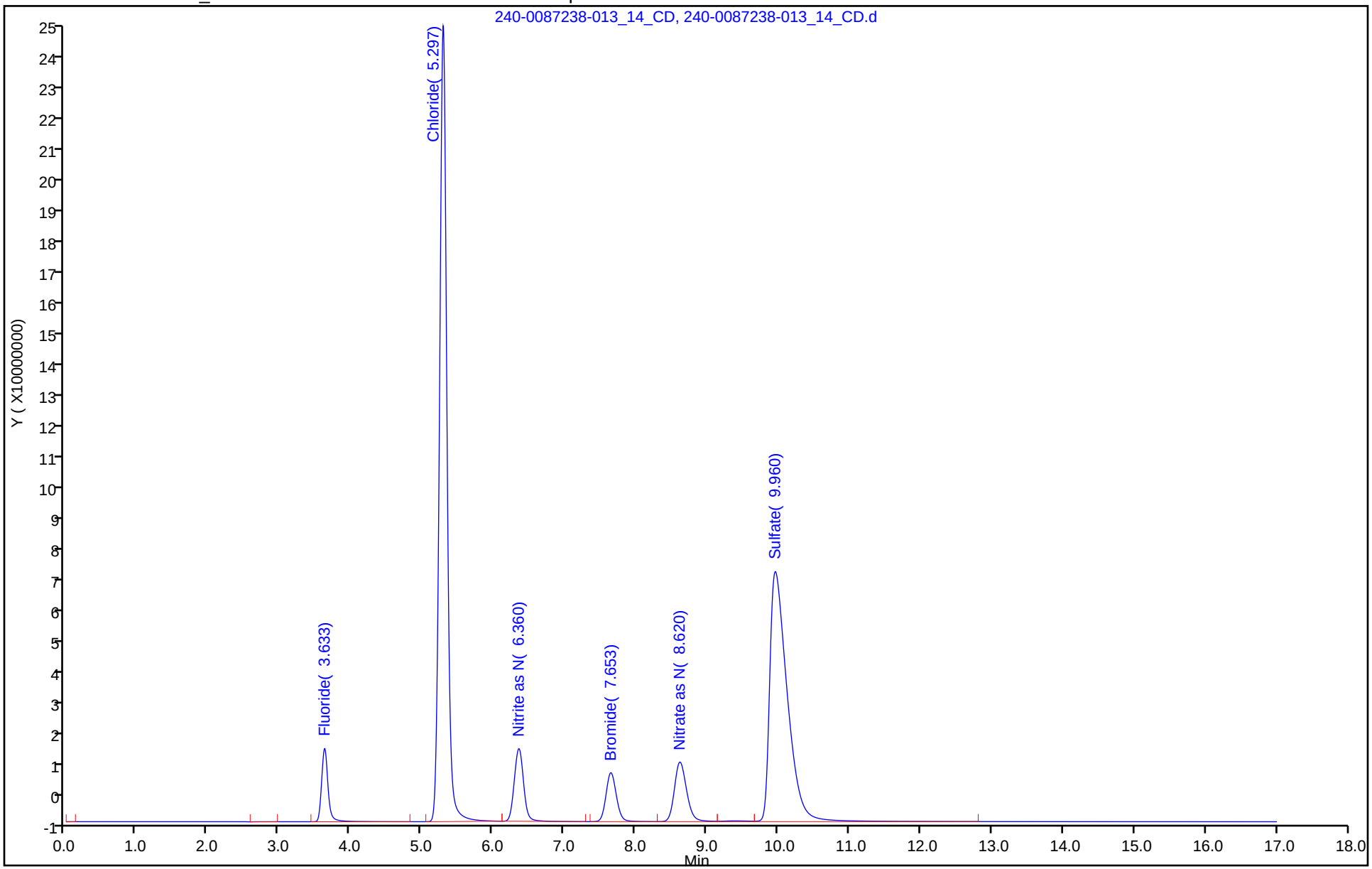
WCICCCV_00874 Amount Added: 5.00 Units: mL

Report Date: 20-May-2019 22:51:55 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-013_14_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 16:55:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-014_15_CD.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 17-May-2019 17:16:00 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-014 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:51:55 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

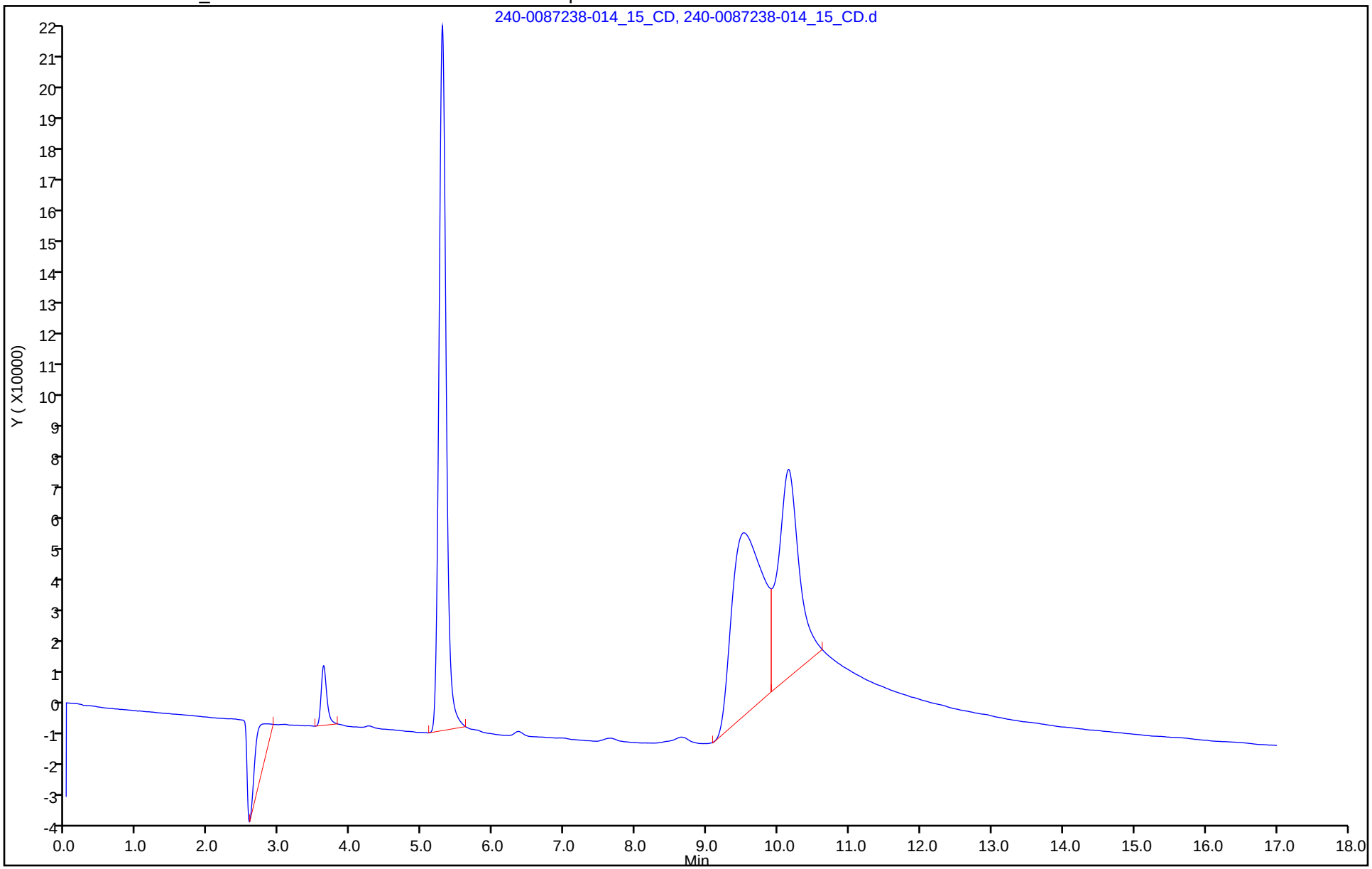
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.633 | | | | ND | |
| 2 | Chloride | | 5.297 | | | | ND | |
| 3 | Nitrite as N | | 6.363 | | | | ND | |
| 4 | Bromide | | 7.653 | | | | ND | |
| 5 | Nitrate as N | | 8.623 | | | | ND | |
| 6 | Sulfate | | 9.967 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 20-May-2019 22:51:57 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-014_15_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 17:16:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-025_26_CD.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 17-May-2019 21:04:00 | ALS Bottle#: | 0 | Worklist Smp#: | 25 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-025 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Sublist: | chrom-300_Thor*sub2 | | | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:13 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.637 | 3.633 | 0.004 | 142849736 | 2.50 | 2.61 | |
| 2 | Chloride | 5.300 | 5.297 | 0.003 | 1757664997 | 50.0 | 50.8 | |
| 3 | Nitrite as N | 6.363 | 6.363 | 0.000 | 203340389 | 2.50 | 2.54 | |
| 4 | Bromide | 7.657 | 7.653 | 0.004 | 151290547 | 10.0 | 10.3 | |
| 5 | Nitrate as N | 8.630 | 8.623 | 0.007 | 216186784 | 2.50 | 2.56 | |
| 6 | Sulfate | 10.010 | 9.967 | 0.043 | 1303428308 | 50.0 | 51.8 | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.11 | |

## Reagents:

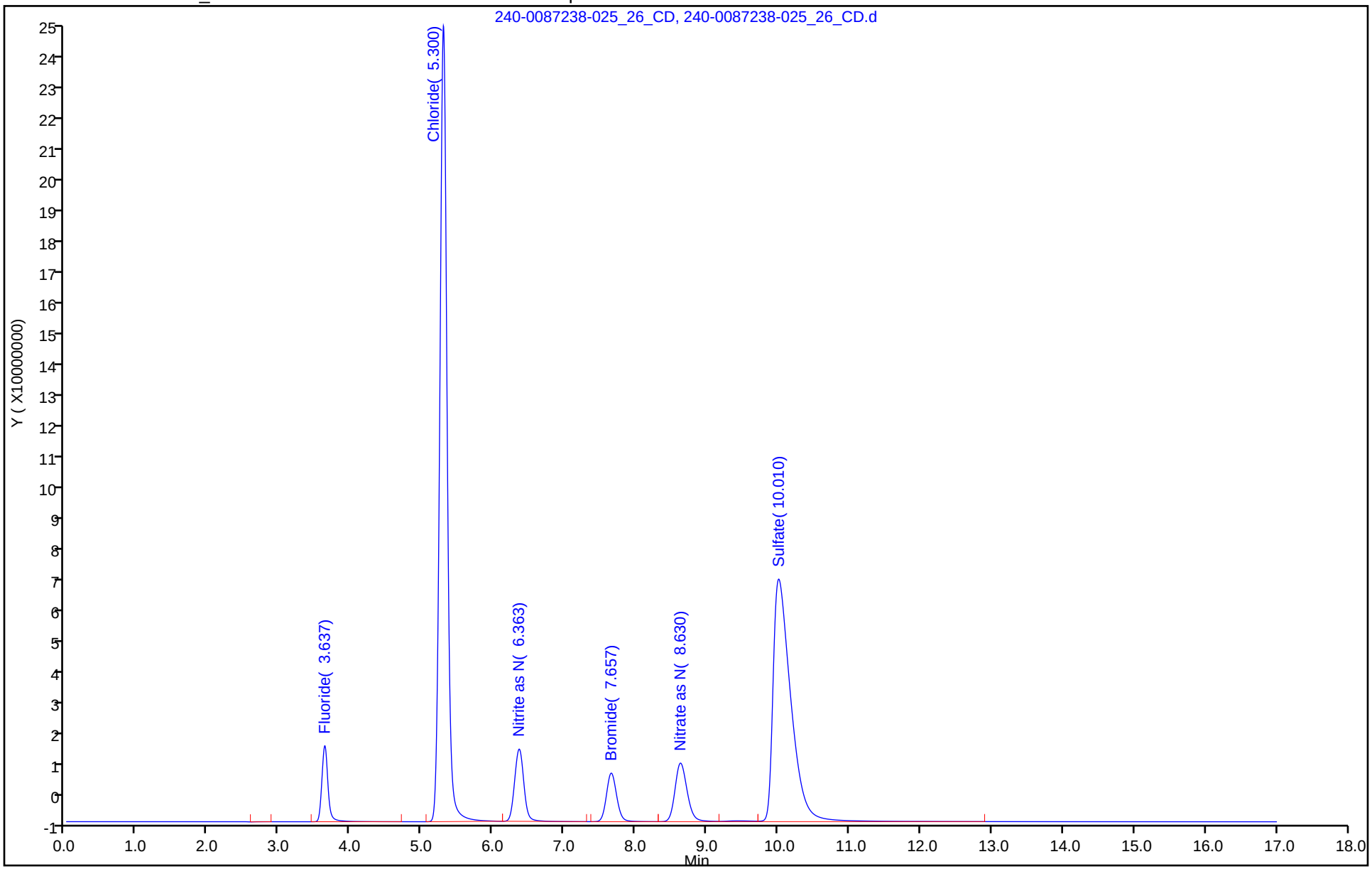
WCICCCV_00874 Amount Added: 5.00 Units: mL

Report Date: 20-May-2019 22:52:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-025_26_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 21:04:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 25 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-026_27_CD.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 17-May-2019 21:24:00 | ALS Bottle#: | 0 | Worklist Smp#: | 26 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-026 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:13 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

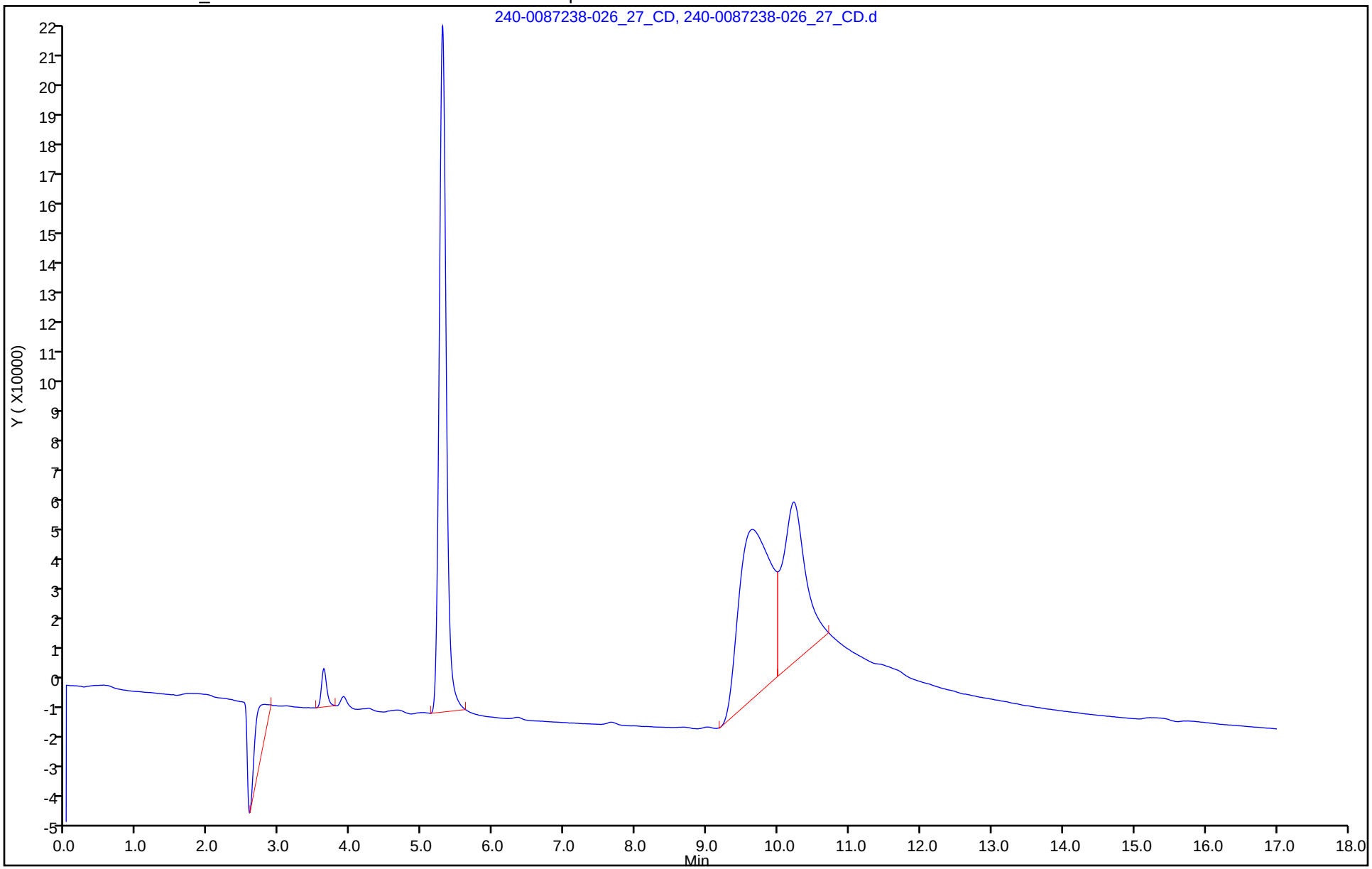
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.633 | | | | ND | |
| 2 | Chloride | | 5.297 | | | | ND | |
| 3 | Nitrite as N | | 6.363 | | | | ND | |
| 4 | Bromide | | 7.653 | | | | ND | |
| 5 | Nitrate as N | | 8.623 | | | | ND | |
| 6 | Sulfate | | 9.967 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 20-May-2019 22:52:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-026_27_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 21:24:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 26 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-028_29_CD.d
Lims ID: 240-112111-J-2
Client ID: MRC-MW-81B-050619
Sample Type: Client
Inject. Date: 17-May-2019 22:06:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087238-028
Misc. Info.: 240-112111-J-2
Operator ID: Instrument ID: THOR

Method: \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 20-May-2019 22:52:13 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: CTX0306

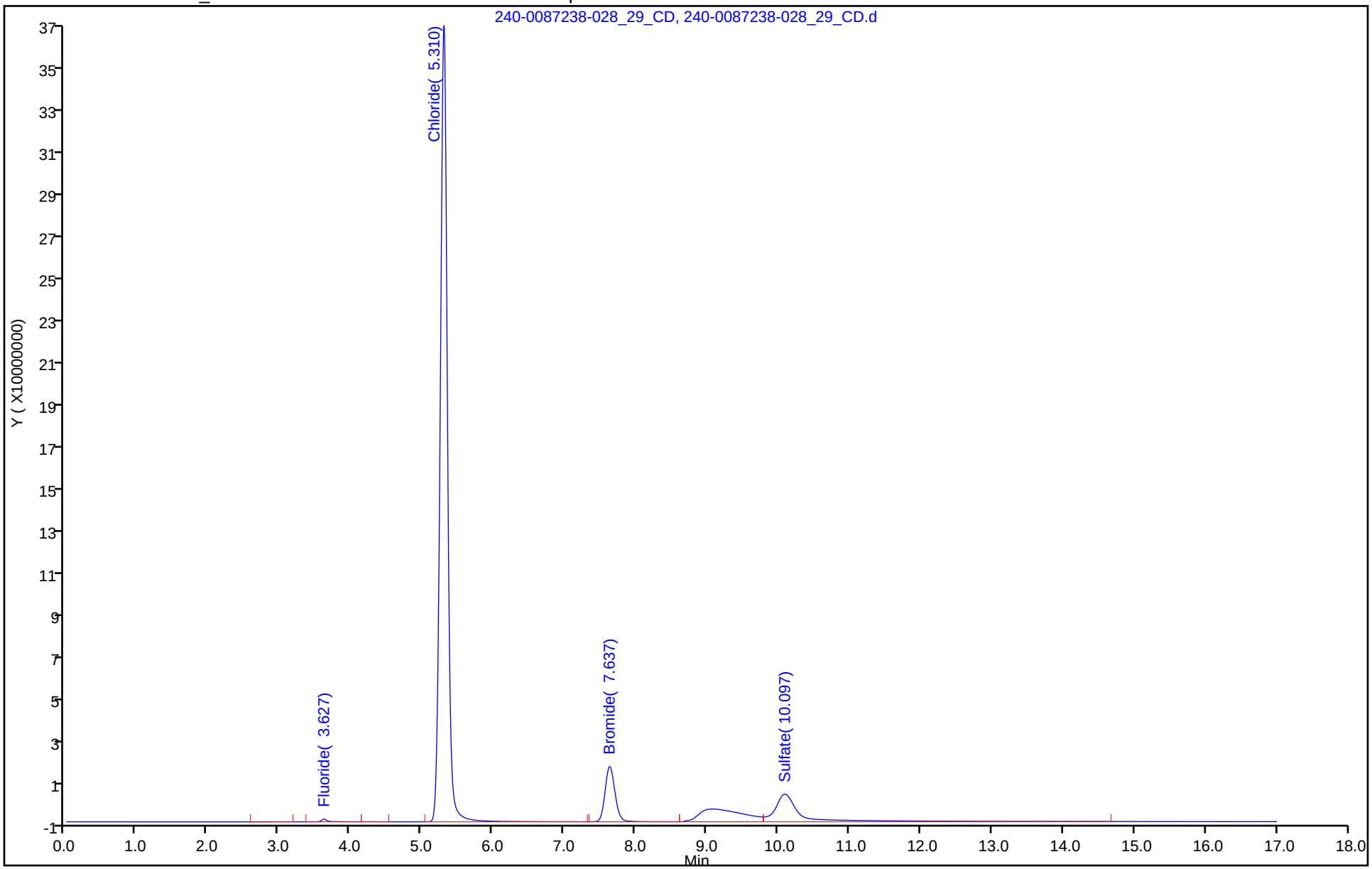
First Level Reviewer: weimerj Date: 20-May-2019 22:49:30

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Fluoride | 3.627 | 3.633 | -0.006 | 7212002 | 0.1317 | |
| | 2 Chloride | 5.310 | 5.297 | 0.013 | 2563727671 | 74.1 | |
| | 3 Nitrite as N | | 6.363 | | | ND | |
| | 4 Bromide | 7.637 | 7.653 | -0.016 | 246008341 | 16.7 | |
| | 5 Nitrate as N | | 8.623 | | | ND | |
| | 6 Sulfate | 10.097 | 9.967 | 0.130 | 305636542 | 12.1 | |
| | 11 Nitrate as NO3 | | 0.000 | | | ND | |
| | 10 Nitrite as NO2 | | 0.000 | | | ND | |
| S | 7 Nitrate Nitrite as N | | 0.000 | | | ND | |

Report Date: 20-May-2019 22:52:18 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-028_29_CD.d | | | | |
| Injection Date: | 17-May-2019 22:06:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-J-2 | Lab Sample ID: | 240-112111-2 | Worklist Smp#: | 28 |
| Client ID: | MRC-MW-81B-050619 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-029_30_CD.d
Lims ID: 240-112111-J-2 MS
Client ID:
Sample Type: MS
Inject. Date: 17-May-2019 22:26:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087238-029
Misc. Info.: 240-112111-J-2 MS
Operator ID: Instrument ID: THOR

Method: \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 20-May-2019 22:52:13 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: CTX0306

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.637 | 3.633 | 0.004 | 151039718 | 2.50 | 2.76 | |
| 2 | Chloride | 5.320 | 5.297 | 0.023 | 4281281085 | 50.0 | 123.8 | |
| 3 | Nitrite as N | 6.363 | 6.363 | 0.000 | 222972997 | 2.50 | 2.79 | |
| 4 | Bromide | 7.627 | 7.653 | -0.026 | 396357243 | 10.0 | 26.9 | |
| 5 | Nitrate as N | 8.537 | 8.623 | -0.086 | 221245159 | 2.50 | 2.62 | |
| 6 | Sulfate | 9.937 | 9.967 | -0.030 | 1634050238 | 50.0 | 64.9 | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.41 | |

## Reagents:

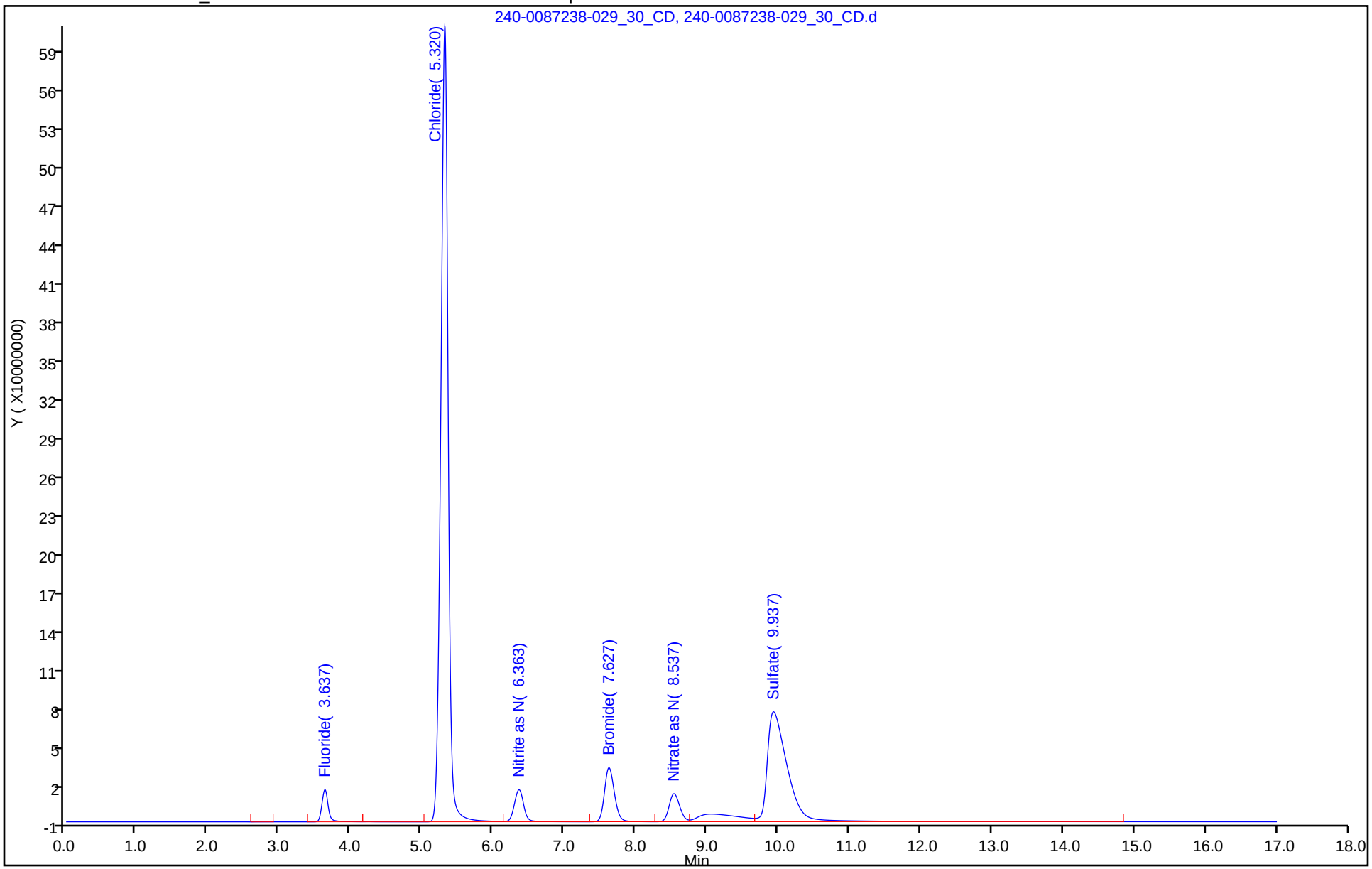
WCICSOLNB1_00021 Amount Added: 0.10 Units: mL
WCICSOLNA1_00020 Amount Added: 0.10 Units: mL

Report Date: 20-May-2019 22:52:19 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-029_30_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 22:26:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-J-2 MS | | | Worklist Smp#: | 29 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-030_31_CD.d
Lims ID: 240-112111-J-2 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-May-2019 22:47:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087238-030
Misc. Info.: 240-112111-J-2 MSD
Operator ID: Instrument ID: THOR

Method: \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m
Limit Group: WET IC ICAL
Last Update: 20-May-2019 22:52:13 Calib Date: 07-Aug-2018 14:59:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d

Column 1 : Det: IC 0001
Process Host: CTX0306

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.633 | 3.633 | 0.000 | 153501188 | 2.50 | 2.80 | |
| 2 Chloride | 5.320 | 5.297 | 0.023 | 4316760293 | 50.0 | 124.9 | |
| 3 Nitrite as N | 6.363 | 6.363 | 0.000 | 222261871 | 2.50 | 2.78 | |
| 4 Bromide | 7.627 | 7.653 | -0.026 | 398015818 | 10.0 | 27.0 | |
| 5 Nitrate as N | 8.537 | 8.623 | -0.086 | 224480027 | 2.50 | 2.66 | |
| 6 Sulfate | 9.937 | 9.967 | -0.030 | 1647631947 | 50.0 | 65.4 | |
| 11 Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 Nitrate Nitrite as N | | | | | | 5.44 | |

## Reagents:

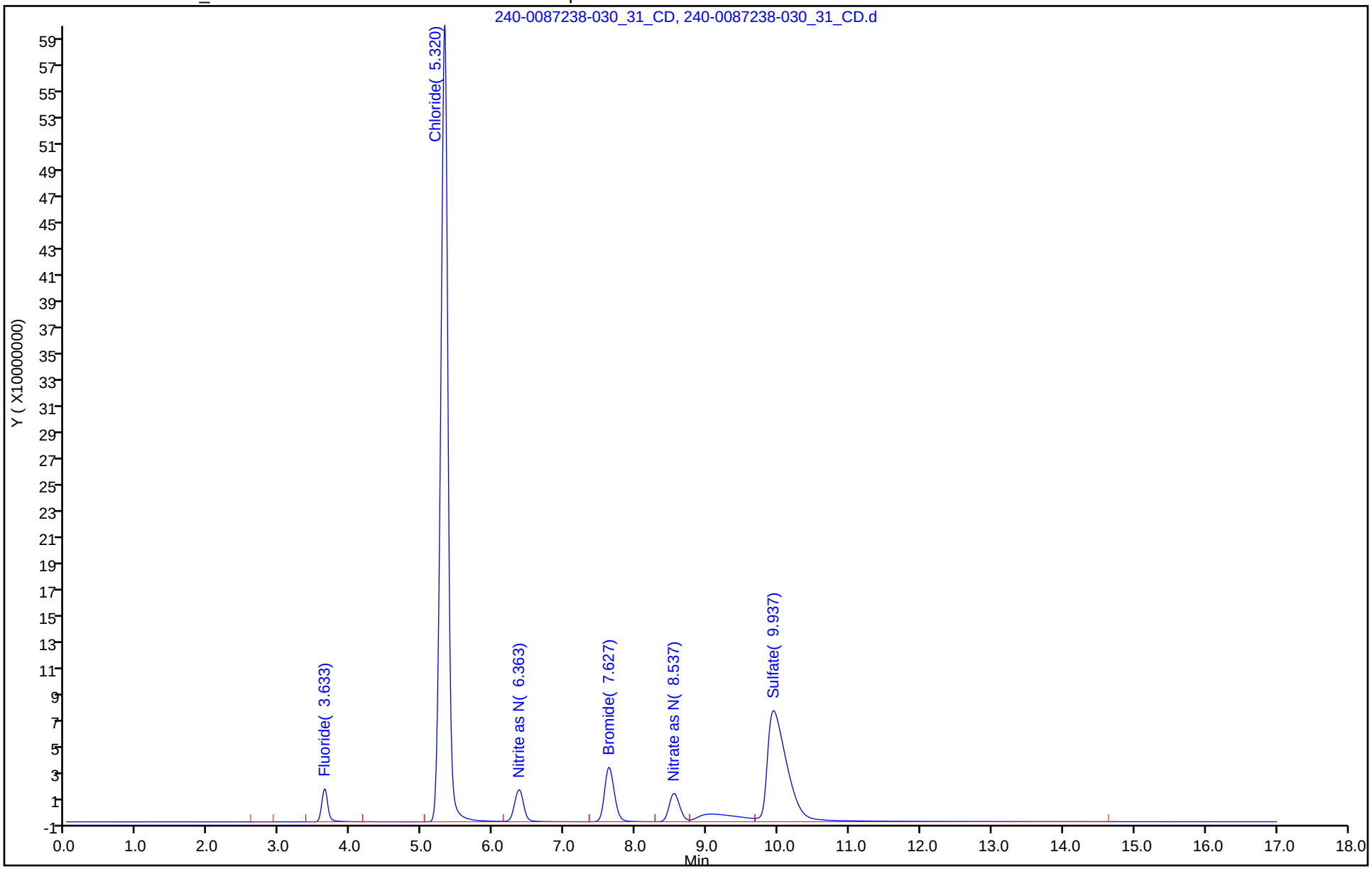
WCICSOLNB1_00021 Amount Added: 0.10 Units: mL
WCICSOLNA1_00020 Amount Added: 0.10 Units: mL

Report Date: 20-May-2019 22:52:20 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-030_31_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 22:47:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-J-2 MSD | | | Worklist Smp#: | 30 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-031_32_CD.d | | | | |
| Lims ID: | 240-112111-J-3 | | | | |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 17-May-2019 23:08:00 | ALS Bottle#: | 0 | Worklist Smp#: | 31 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-031 | | | | |
| Misc. Info.: | 240-112111-J-3 | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:13 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |
| First Level Reviewer: weimerj | | Date: | 20-May-2019 22:49:53 | | |

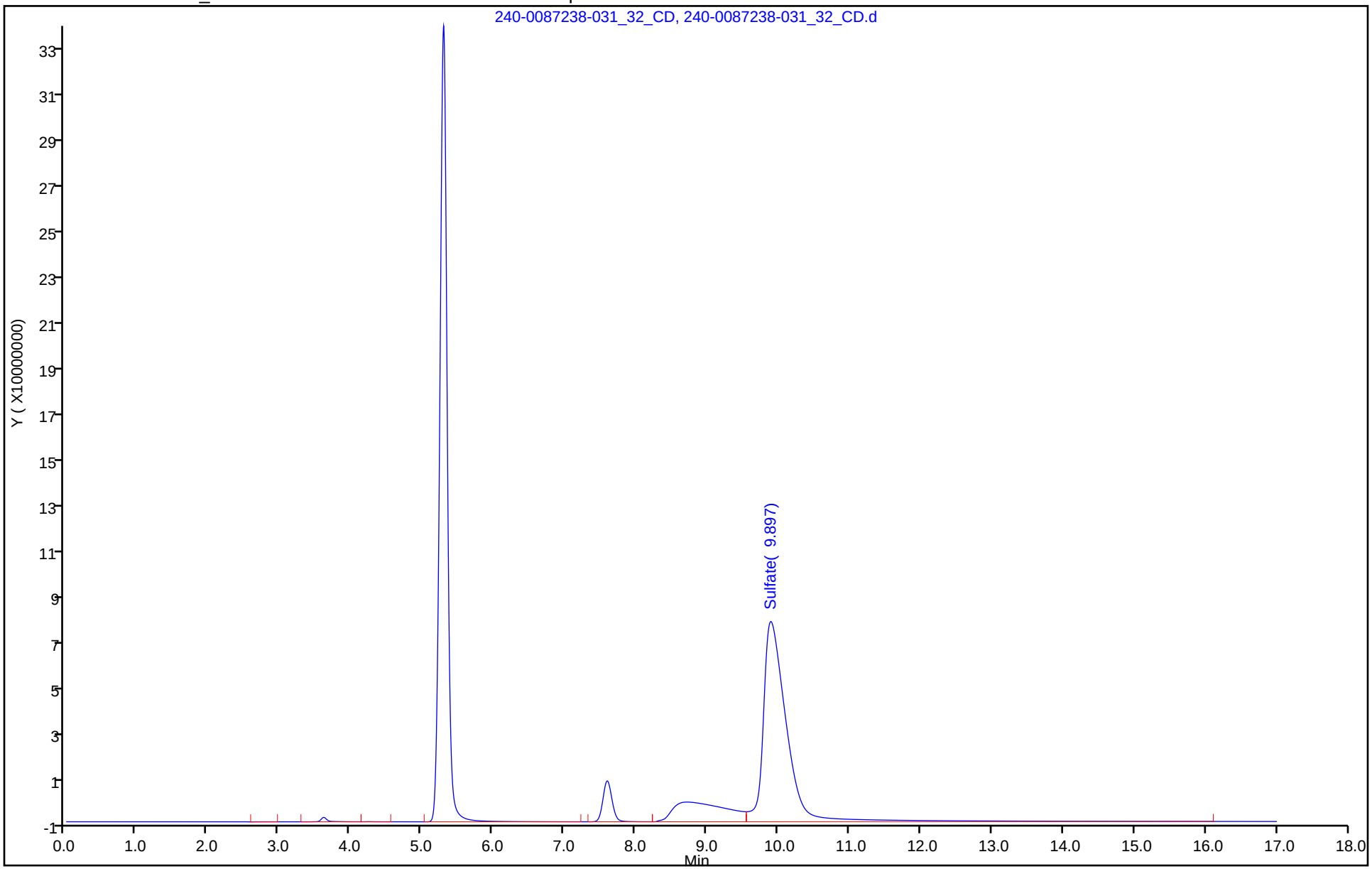
| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|
| 6 Sulfate | 9.897 | 9.967 | -0.070 | 1929124110 | 76.6 | |

Report Date: 20-May-2019 22:52:22 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-031_32_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 23:08:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-J-3 | Lab Sample ID: | 240-112111-3 | Worklist Smp#: | 31 |
| Client ID: | MRC-NMW-1I-050619 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

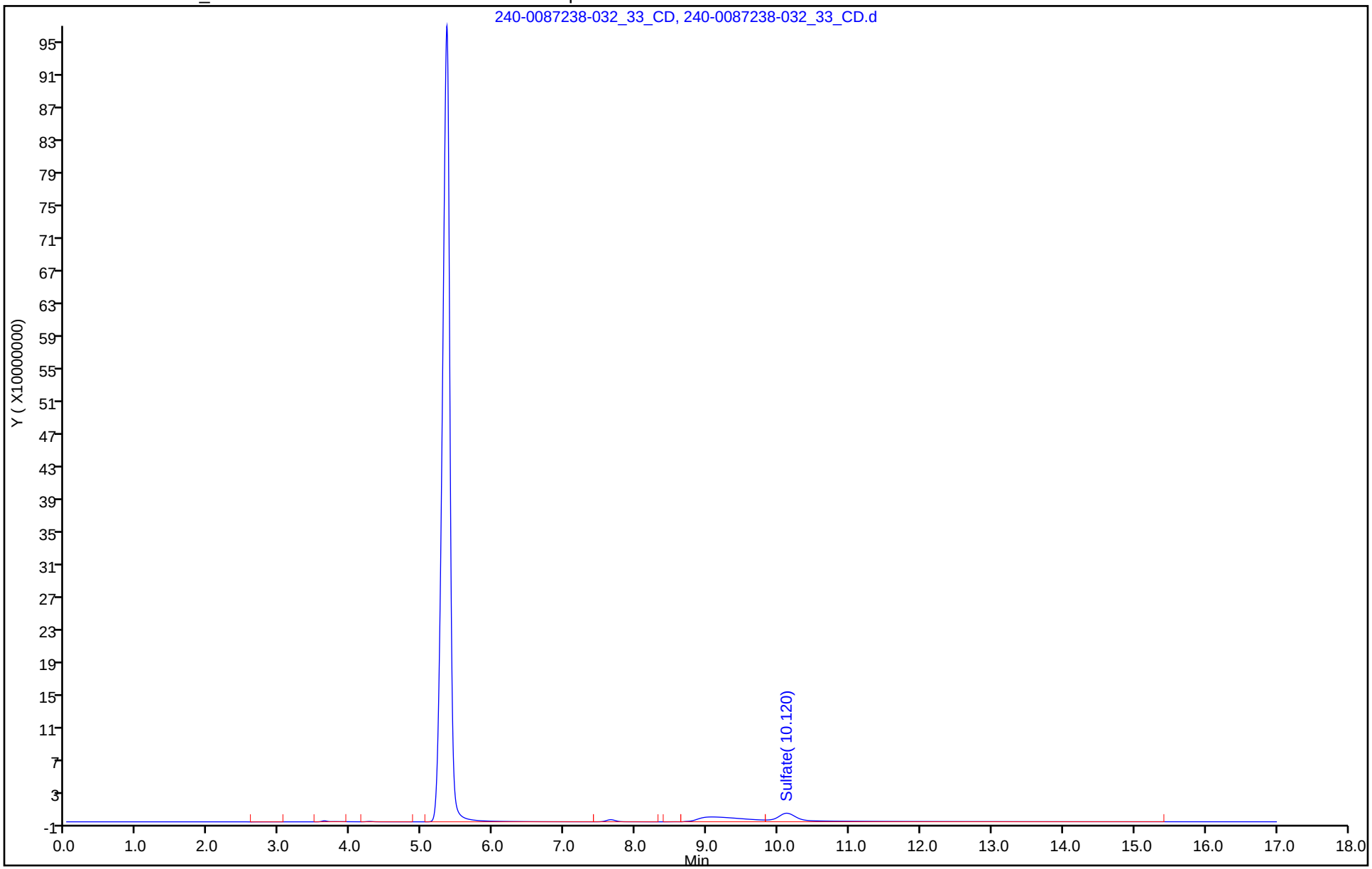
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-032_33_CD.d | | | | |
| Lims ID: | 240-112111-J-4 | | | | |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 17-May-2019 23:29:00 | ALS Bottle#: | 0 | Worklist Smp#: | 32 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-032 | | | | |
| Misc. Info.: | 240-112111-J-4 | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:13 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|
| 6 Sulfate | 10.120 | 9.967 | 0.153 | 271036775 | 10.8 | |

Report Date: 20-May-2019 22:52:24 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-032_33_CD.d | | | | |
| Injection Date: | 17-May-2019 23:29:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-J-4 | Lab Sample ID: | 240-112111-4 | Worklist Smp#: | 32 |
| Client ID: | MRC-NMW-3I-050619 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

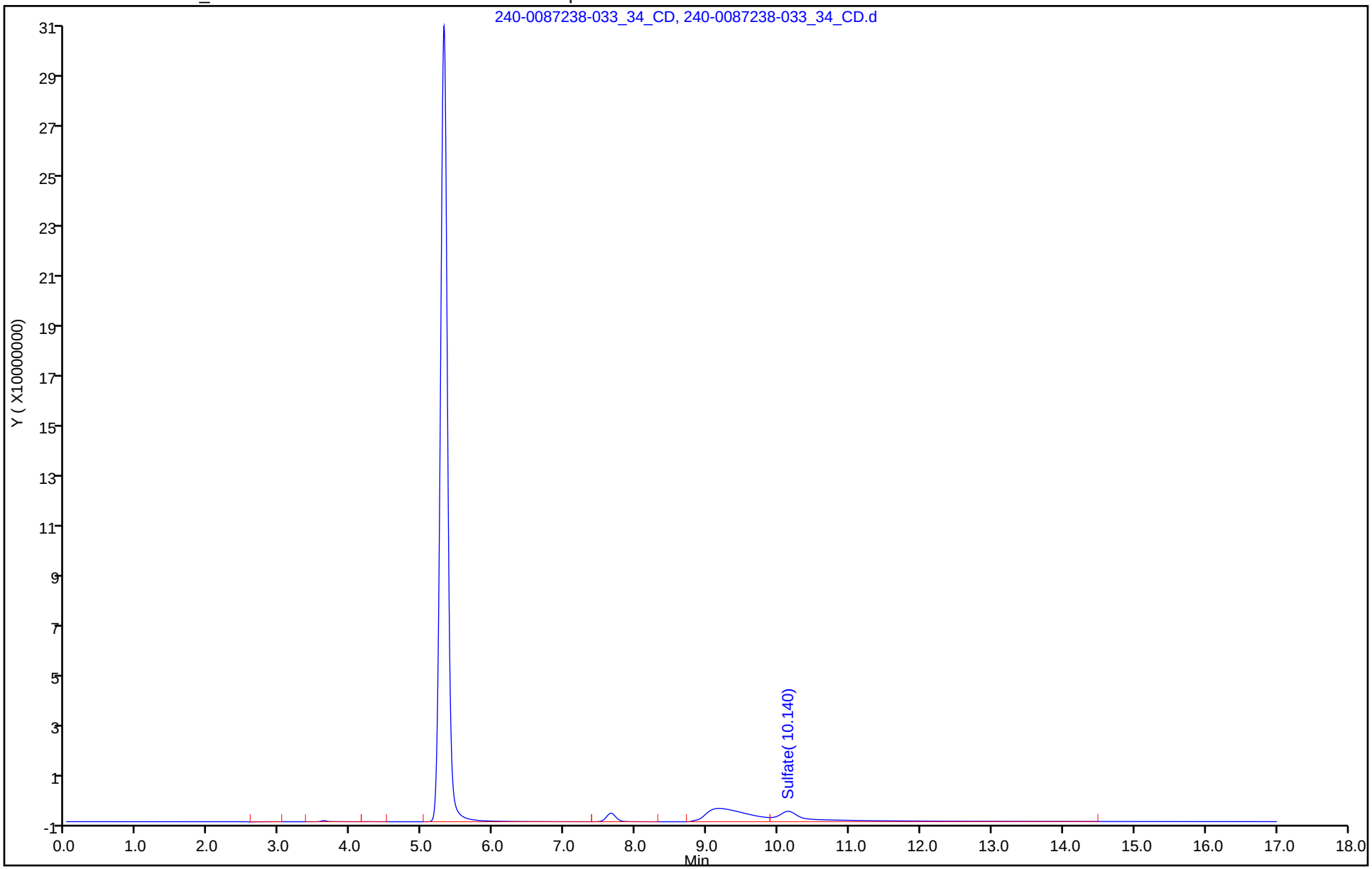
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-033_34_CD.d | | | | |
| Lims ID: | 240-112111-I-5 | | | | |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 17-May-2019 23:49:00 | ALS Bottle#: | 0 | Worklist Smp#: | 33 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-033 | | | | |
| Misc. Info.: | 240-112111-I-5 | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:13 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|
| 6 Sulfate | 10.140 | 9.967 | 0.173 | 137159524 | 5.45 | |

Report Date: 20-May-2019 22:52:25 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-033_34_CD.d | | | | |
| Injection Date: | 17-May-2019 23:49:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | 240-112111-I-5 | Lab Sample ID: | 240-112111-5 | Worklist Smp#: | 33 |
| Client ID: | MRC-NMW-2I-050619 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-037_38_CD.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 18-May-2019 01:12:00 | ALS Bottle#: | 0 | Worklist Smp#: | 37 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-037 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Sublist: | chrom-300_Thor*sub2 | | | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:29 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.637 | 3.633 | 0.004 | 144097896 | 2.50 | 2.63 | |
| 2 | Chloride | 5.303 | 5.297 | 0.006 | 1745929021 | 50.0 | 50.5 | |
| 3 | Nitrite as N | 6.367 | 6.363 | 0.004 | 202936821 | 2.50 | 2.54 | |
| 4 | Bromide | 7.663 | 7.653 | 0.010 | 151375814 | 10.0 | 10.3 | |
| 5 | Nitrate as N | 8.640 | 8.623 | 0.017 | 215679143 | 2.50 | 2.56 | |
| 6 | Sulfate | 10.033 | 9.967 | 0.066 | 1299960783 | 50.0 | 51.6 | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.10 | |

## Reagents:

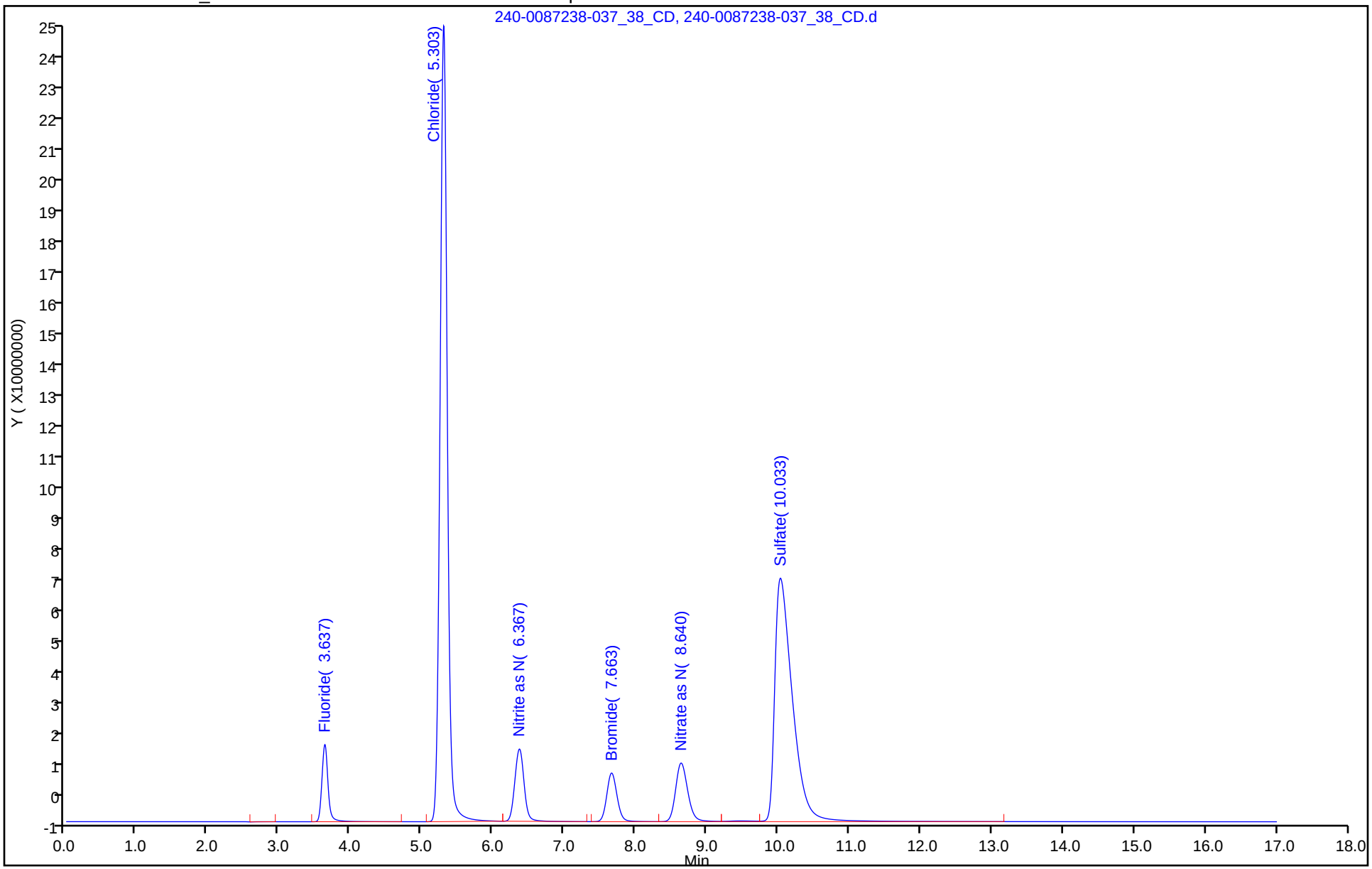
WCICCCV_00874 Amount Added: 5.00 Units: mL

Report Date: 20-May-2019 22:52:30 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-037_38_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 18-May-2019 01:12:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 37 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-038_39_CD.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 18-May-2019 01:33:00 | ALS Bottle#: | 0 | Worklist Smp#: | 38 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087238-038 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | THOR | | |
| Method: | \\chromna\Canton\ChromData\THOR\20190517-87238.b\300_Thor.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 20-May-2019 22:52:29 | Calib Date: | 07-Aug-2018 14:59:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\ChromNA\Canton\ChromData\THOR\20180806-78648.b\240-0078648-009_10_CD.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0306 | | | | |

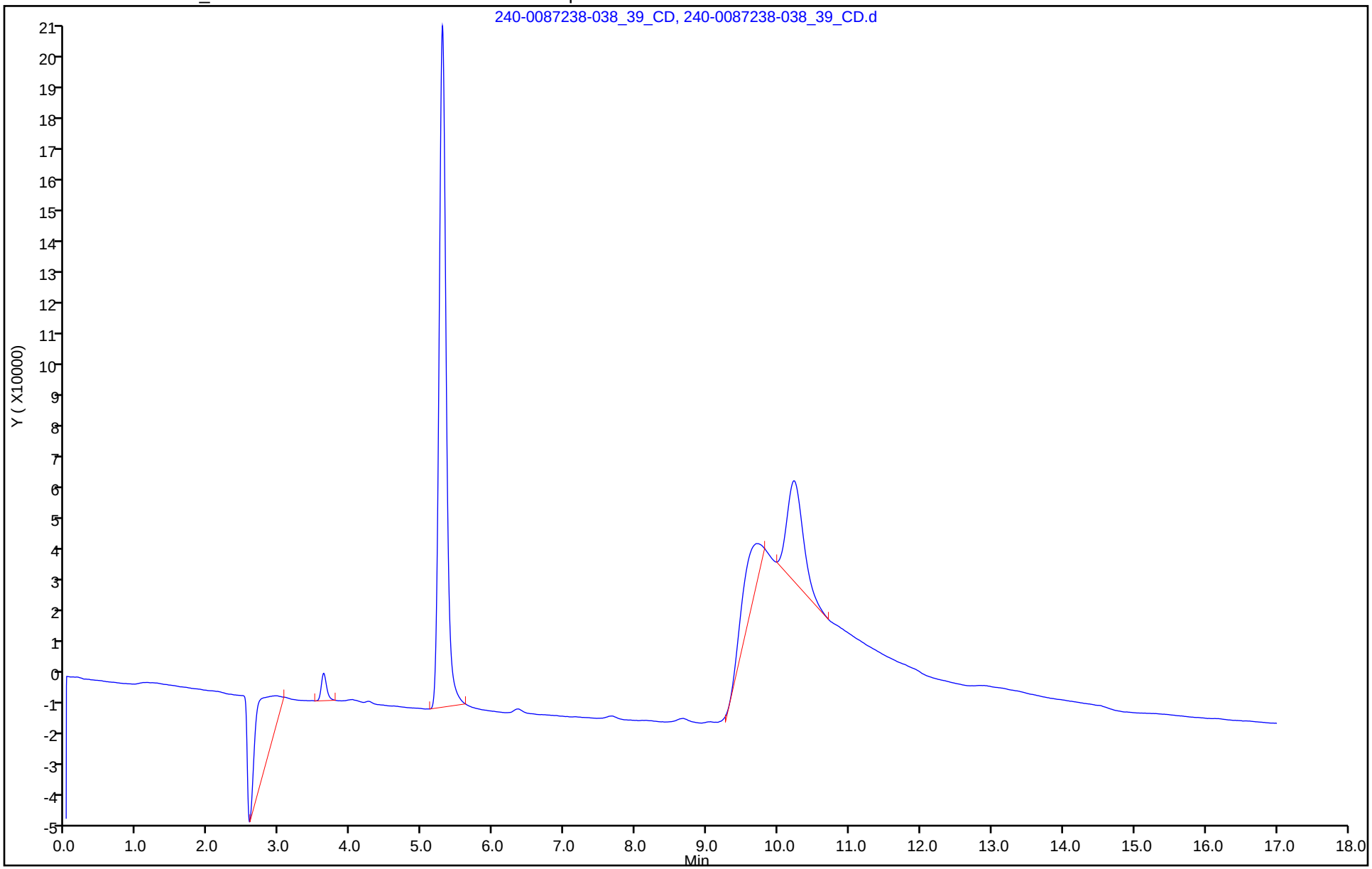
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.633 | | | | ND | |
| 2 | Chloride | | 5.297 | | | | ND | |
| 3 | Nitrite as N | | 6.363 | | | | ND | |
| 4 | Bromide | | 7.653 | | | | ND | |
| 5 | Nitrate as N | | 8.623 | | | | ND | |
| 6 | Sulfate | | 9.967 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 20-May-2019 22:52:31 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\THOR\20190517-87238.b\240-0087238-038_39_CD.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 18-May-2019 01:33:00 | Instrument ID: | THOR | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 38 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Thor | Limit Group: | WET IC ICAL | | |



| | Analysis | Sample Name | Manual Dilution | Result | Date / Time | Vial |
|---|---|---|---|---|---|---|
| 1 | NPOC | ADC 4728624 | 1.000 | NPOC:105.7mg/L | 5/10/2019 12:09:06 PM | 1 |
| 2 | NPOC | IPCS 4853971 | 1.000 | NPOC:0.8872mg/L | 5/10/2019 12:31:11 PM | 2 |
| 3 | NPOC | MB | 1.000 | NPOC:0.9098mg/L | 5/10/2019 12:52:47 PM | 3 |
| 4 | NPOC | CCV 4728624 | 1.000 | NPOC:26.34mg/L | 5/10/2019 1:20:02 PM | 4 |
| 5 | NPOC | CCB | 1.000 | NPOC:0.8490mg/L | 5/10/2019 1:41:38 PM | 5 |
| 6 | NPOC | LCS 4728655 | 1.000 | NPOC:10.06mg/L | 5/10/2019 2:07:54 PM | 6 |
| 7 | NPOC | LCSD 4728655 | 1.000 | NPOC:10.06mg/L | 5/10/2019 3:12:13 PM | 7 |
| 8 | NPOC | 240-112111-h-2 | 1.000 | NPOC:3.079mg/L | 5/10/2019 3:38:46 PM | 8 |
| 9 | NPOC | 240-112111-g-3 | 1.000 | NPOC:9.135mg/L | 5/10/2019 4:05:11 PM | 9 |
| 10 | NPOC | 240-112111-g-4 | 1.000 | NPOC:8.617mg/L | 5/10/2019 4:30:51 PM | 10 |
| 11 | NPOC | 240-112111-g-5 | 1.000 | NPOC:1.991mg/L | 5/10/2019 4:53:18 PM | 11 |
| 12 | NPOC | 240-112234-h-2 | 1.000 | NPOC:8.774mg/L | 5/10/2019 5:19:30 PM | 12 |
| 13 | NPOC | 490-173086-d-5 | 1.000 | NPOC:32.64mg/L | 5/10/2019 6:11:55 PM | 13 |
| 14 | NPOC | 490-173086-d-10 | 1.000 | NPOC:15.02mg/L | 5/10/2019 6:39:46 PM | 14 |
| 15 | NPOC | 490-173086-d-11 | 1.000 | NPOC:11.88mg/L | 5/10/2019 7:09:34 PM | 15 |
| 16 | NPOC | 490-173086-g-12 | 1.000 | NPOC:12.83mg/L | 5/10/2019 7:38:06 PM | 16 |
| 17 | NPOC | 490-173121-h-2 | 1.000 | NPOC:13.23mg/L | 5/10/2019 8:04:00 PM | 17 |
| 18 | NPOC | MS 490-173121-h-2 | 1.000 | NPOC:33.12mg/L | 5/10/2019 8:31:02 PM | 18 |
| 19 | NPOC | MSD 490-173121-h-2 | 1.000 | NPOC:32.95mg/L | 5/10/2019 8:57:57 PM | 19 |
| 20 | NPOC | CCV | 1.000 | NPOC:25.35mg/L | 5/10/2019 9:24:40 PM | 20 |
| 21 | NPOC | CCB | 1.000 | NPOC:0.8494mg/L | 5/10/2019 9:47:07 PM | 21 |
| 22 | NPOC | 490-173086-d-13 | 1.000 | NPOC:12.70mg/L | 5/10/2019 10:15:05 PM | 22 |
| 23 | NPOC | 490-173086-d-24 | 1.000 | NPOC:12.86mg/L | 5/10/2019 10:43:28 PM | 23 |
| 24 | NPOC | 490-173307-d-7 | 1.000 | NPOC:255.5mg/L | 5/10/2019 11:24:38 PM | 24 |
| 25 | NPOC | 490-173364-j-1 | 1.000 | NPOC:73.20mg/L | 5/10/2019 11:59:56 PM | 25 |
| 26 | NPOC | 490-173364-j-2 | 1.000 | NPOC:40.52mg/L | 5/11/2019 12:28:19 AM | 26 |
| 27 | NPOC | 490-173364-j-3 | 1.000 | NPOC:4.580mg/L | 5/11/2019 12:54:59 AM | 27 |
| 28 | NPOC | 490-173364-j-4 | 1.000 | NPOC:97.52mg/L | 5/11/2019 1:44:15 AM | 28 |
| 29 | NPOC | 490-173408-i-1 | 1.000 | NPOC:2.821mg/L | 5/11/2019 2:09:08 AM | 29 |
| 30 | NPOC | 490-173408-g-2 | 1.000 | NPOC:3.147mg/L | 5/11/2019 2:31:39 AM | 30 |
| 31 | NPOC | 490-173121-h-3 | 1.000 | NPOC:8.187mg/L | 5/11/2019 2:56:47 AM | 31 |
| 32 | NPOC | MS 490-173121-h-3 | 1.000 | NPOC:26.85mg/L | 5/11/2019 3:26:53 AM | 32 |
| 33 | NPOC | MSD 490-173121-h-3 | 1.000 | NPOC:27.61mg/L | 5/11/2019 3:53:38 AM | 33 |
| 34 | NPOC | CCV | 1.000 | NPOC:25.60mg/L | 5/11/2019 4:20:13 AM | 34 |
| 35 | NPOC | CCB | 1.000 | NPOC:0.9067mg/L | 5/11/2019 4:42:21 AM | 35 |

TOC 7
9060A
Batch #594412
VP 5111119

Instr.Information

| | |
|---|---|
| System | TOC V |
| Instrument Options | TOC/ASI/ |
| Catalyst | Regular Sensitivity |

Sample

| | |
|---|---|
| Sample Name: | ADC 4728624 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

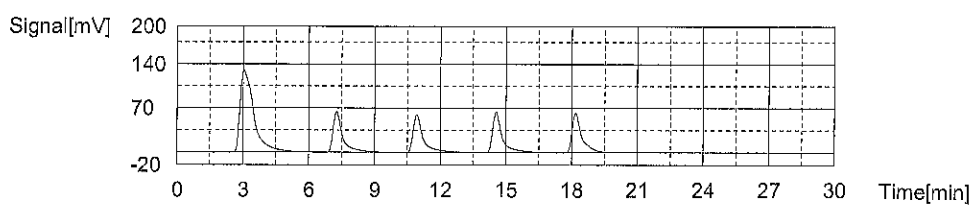
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:105.7mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.5340 | 0.8773mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:49:54 AM |
| 2 | 561.1 | 108.9mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:54:20 AM |
| 3 | 199.3 | 107.5mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:58:09 AM |
| 4 | 189.7 | 102.3mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:01:56 PM |
| 5 | 198.8 | 107.2mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:05:43 PM |
| 6 | 196.1 | 105.7mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:09:06 PM |

Mean Area 196.0
Mean Conc. 105.7mg/L




Sample

| | |
|---|---|
| Sample Name: | IPCS 4853971 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

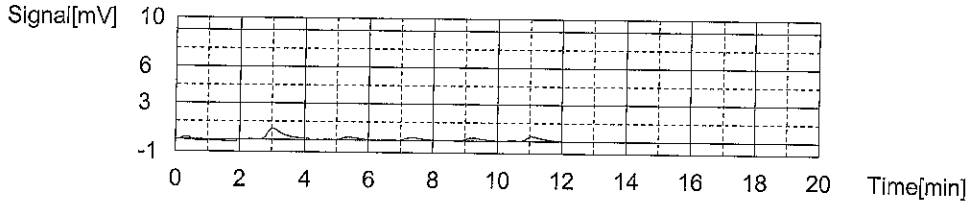
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8872mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3626 | 0.8442mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:20:20 PM |
| 2 | 2.712 | 1.297mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:22:45 PM |
| 3 | 0.6309 | 0.8959mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:24:52 PM |
| 4 | 0.7018 | 0.9096mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:26:55 PM |
| 5 | 0.6464 | 0.8989mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:28:58 PM |
| 6 | 1.103 | 0.9869mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:31:11 PM |

Mean Area 0.5854
Mean Conc. 0.8872mg/L




Sample

Sample Name: MB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

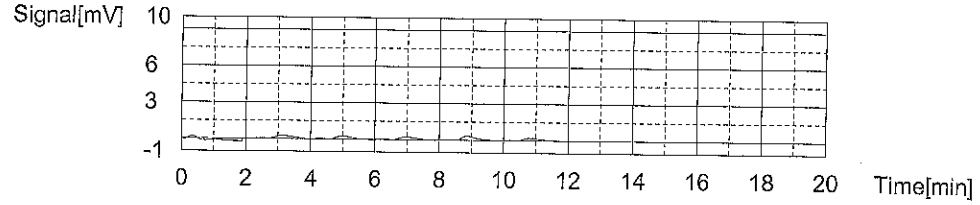
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9098mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4419 | 0.8595mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:42:26 PM |
| 2 | 0.6418 | 0.8980mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:44:29 PM |
| 3 | 0.8020 | 0.9289mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:46:36 PM |
| 4 | 0.7212 | 0.9133mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:48:39 PM |
| 5 | 0.9070 | 0.9491mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:50:42 PM |
| 6 | 0.6473 | 0.8991mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:52:47 PM |

Mean Area 0.7031
Mean Conc. 0.9098mg/L




Sample

Sample Name: CCV 4728624
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

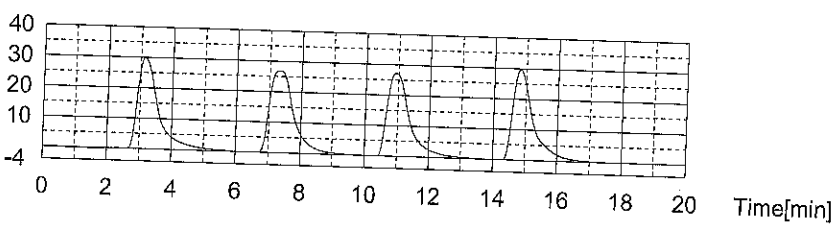
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:26.34mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3137 | 0.8348mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:04:02 PM |
| 2 | 132.5 | 26.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:08:11 PM |
| 3 | 138.4 | 27.45mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:12:02 PM |
| 4 | 130.2 | 25.87mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:16:05 PM |
| 5 | 129.6 | 25.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:20:02 PM |

Mean Area 132.7
Mean Conc. 26.34mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

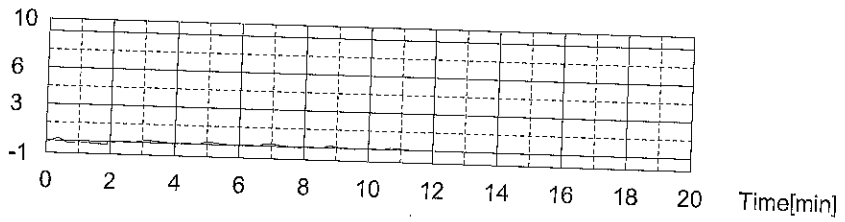
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8490mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3385 | 0.8396mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:31:23 PM |
| 2 | 0.4026 | 0.8519mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:33:25 PM |
| 3 | 0.5783 | 0.8858mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:35:28 PM |
| 4 | 0.5873 | 0.8875mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:37:31 PM |
| 5 | 0.4100 | 0.8534mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:39:34 PM |
| 6 | 0.3981 | 0.8511mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:41:38 PM |

Mean Area 0.3873
Mean Conc. 0.8490mg/L




Sample

Sample Name: LCS 4728655
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

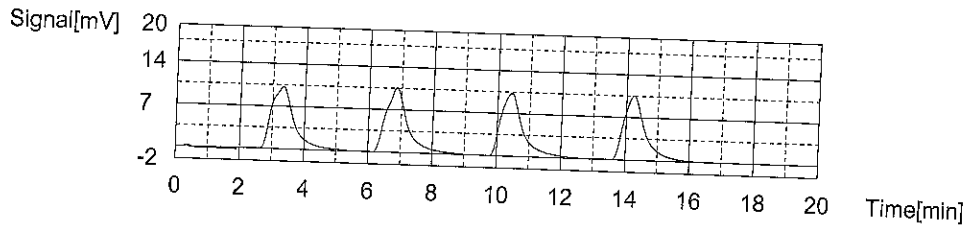
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.06mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3000 | 0.8322mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:52:53 PM |
| 2 | 48.16 | 10.06mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:56:28 PM |
| 3 | 48.52 | 10.12mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:00:14 PM |
| 4 | 48.17 | 10.06mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:04:11 PM |
| 5 | 47.89 | 10.00mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:07:54 PM |

Mean Area 48.19
Mean Conc. 10.06mg/L




Sample

Sample Name: LCSD 4728655
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

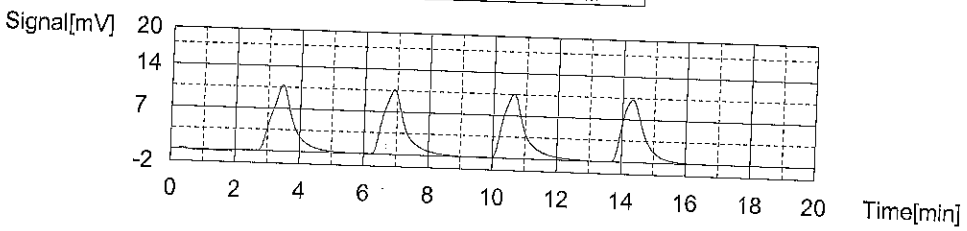
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.06mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3311 | 0.8382mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:57:09 PM |
| 2 | 48.75 | 10.17mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:00:49 PM |
| 3 | 48.51 | 10.12mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:04:41 PM |
| 4 | 48.30 | 10.08mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:08:34 PM |
| 5 | 47.28 | 9.886mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:12:13 PM |

Mean Area 48.21
Mean Conc. 10.06mg/L




Sample

Sample Name: 240-112111-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

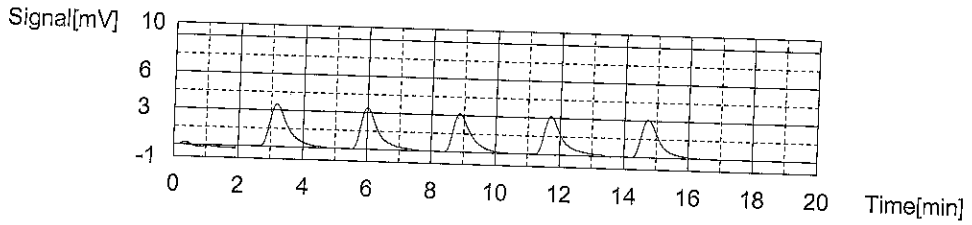
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:3.079mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3882 | 0.8492mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:23:34 PM |
| 2 | 13.16 | 3.310mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:26:32 PM |
| 3 | 12.51 | 3.185mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:29:33 PM |
| 4 | 11.93 | 3.073mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:32:31 PM |
| 5 | 11.67 | 3.023mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:35:40 PM |
| 6 | 11.73 | 3.035mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:38:46 PM |

Mean Area 11.96
Mean Conc. 3.079mg/L




Sample

Sample Name:
Sample ID: 240-112111-g-3
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

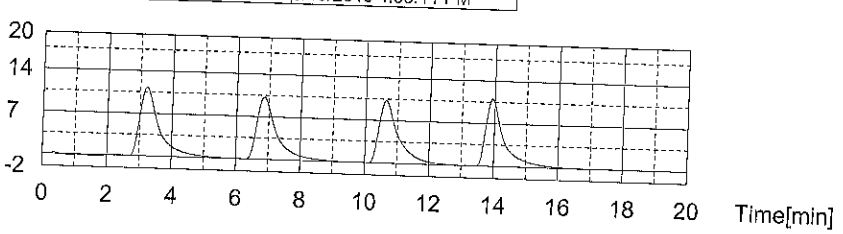
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:9.135mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3212 | 0.8362mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:50:01 PM |
| 2 | 45.75 | 9.591mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:53:46 PM |
| 3 | 43.36 | 9.130mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:57:42 PM |
| 4 | 41.78 | 8.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:01:12 PM |
| 5 | 42.64 | 8.992mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:05:11 PM |

Mean Area 43.38
Mean Conc. 9.135mg/L




Sample

Sample Name:
Sample ID: 240-112111-g-4
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

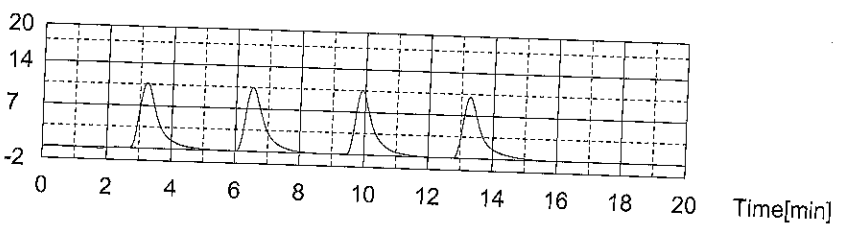
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.617mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4756 | 0.8660mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:16:31 PM |
| 2 | 42.14 | 8.895mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:19:58 PM |
| 3 | 41.30 | 8.733mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:23:33 PM |
| 4 | 39.36 | 8.359mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:26:59 PM |
| 5 | 39.99 | 8.481mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:30:51 PM |

Mean Area 40.70
Mean Conc. 8.617mg/L




Sample

Sample Name:
Sample ID: 240-112111-g-5
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

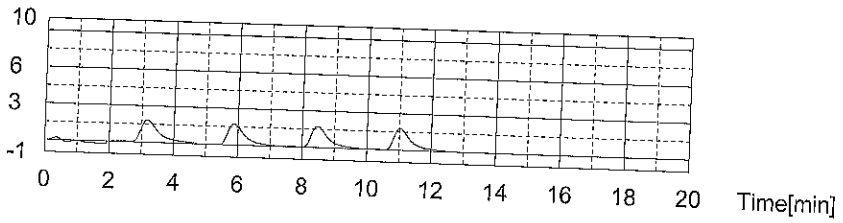
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.991mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4390 | 0.8589mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:42:11 PM |
| 2 | 6.583 | 2.043mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:45:03 PM |
| 3 | 6.245 | 1.978mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:47:47 PM |
| 4 | 6.151 | 1.960mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:50:30 PM |
| 5 | 6.269 | 1.982mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:53:18 PM |

Mean Area 6.312
Mean Conc. 1.991mg/L




Sample

Sample Name:
Sample ID: 240-112234-h-2
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

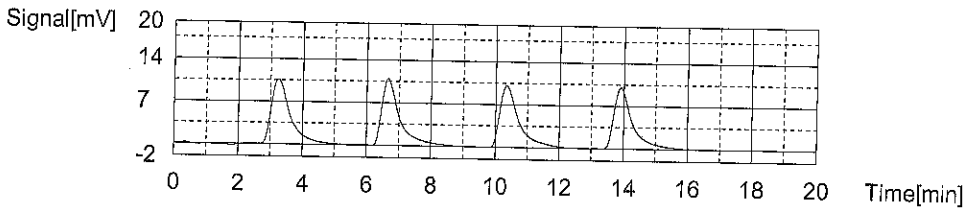
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.774mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4093 | 0.8532mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:04:39 PM |
| 2 | 42.60 | 8.984mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:08:16 PM |
| 3 | 41.78 | 8.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:12:03 PM |
| 4 | 41.65 | 8.801mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:15:45 PM |
| 5 | 40.02 | 8.487mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:19:30 PM |

Mean Area 41.51
Mean Conc. 8.774mg/L




Sample

Sample Name: 490-173086-d-5
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

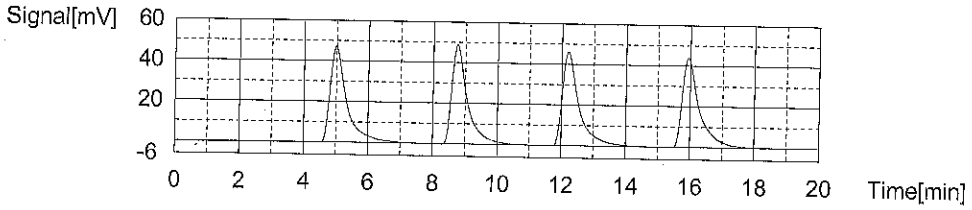
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:32.64mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2965 | 0.8315mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:54:41 PM |
| 2 | 0.1345 | 0.8003mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:56:44 PM |
| 3 | 168.2 | 33.19mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:00:39 PM |
| 4 | 163.2 | 32.22mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:04:12 PM |
| 5 | 166.3 | 32.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:08:06 PM |
| 6 | 163.7 | 32.32mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:11:55 PM |

Mean Area 165.4
Mean Conc. 32.64mg/L




Sample

Sample Name: 490-173086-d-10
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

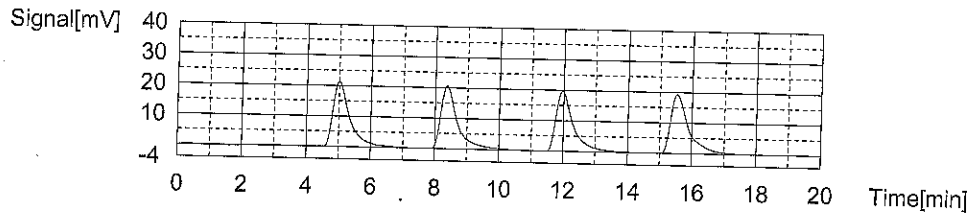
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:15.02mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3873 | 0.8490mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:23:10 PM |
| 2 | 0.1917 | 0.8113mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:25:12 PM |
| 3 | 75.81 | 15.38mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:28:42 PM |
| 4 | 72.99 | 14.84mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:32:25 PM |
| 5 | 73.41 | 14.92mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:36:07 PM |
| 6 | 73.47 | 14.93mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:39:46 PM |

Mean Area 73.92
Mean Conc. 15.02mg/L




Sample

Sample Name: 490-173086-d-11
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

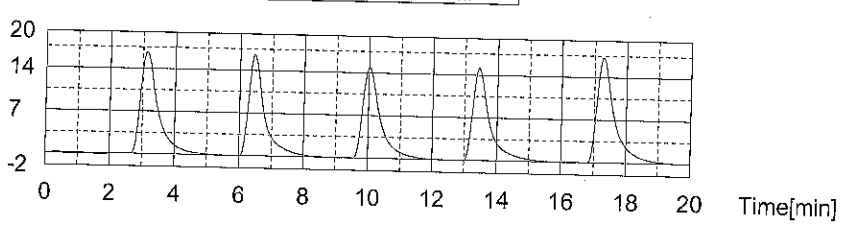
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:11.88mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.5004 | 0.8708mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:51:01 PM |
| 2 | 62.14 | 12.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:54:29 PM |
| 3 | 56.98 | 11.76mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:58:10 PM |
| 4 | 56.03 | 11.57mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:01:46 PM |
| 5 | 55.40 | 11.45mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:05:43 PM |
| 6 | 65.25 | 13.35mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:09:34 PM |

Mean Area 57.64
Mean Conc. 11.88mg/L




Sample

Sample Name: 490-173086-g-12
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

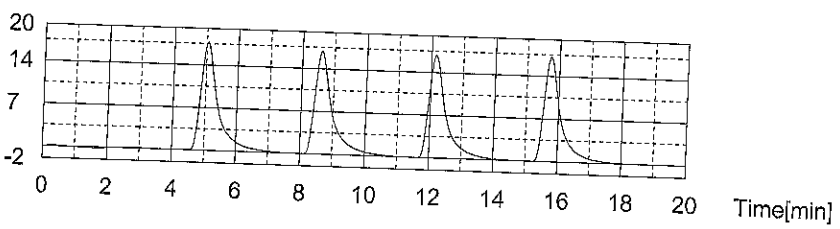
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.83mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3027 | 0.8327mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:20:48 PM |
| 2 | 0.2376 | 0.8201mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:22:51 PM |
| 3 | 64.25 | 13.16mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:26:34 PM |
| 4 | 62.50 | 12.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:30:15 PM |
| 5 | 61.68 | 12.66mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:34:10 PM |
| 6 | 61.83 | 12.69mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:38:06 PM |

Mean Area 62.57
Mean Conc. 12.83mg/L




Sample

Sample Name: 490-173121-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

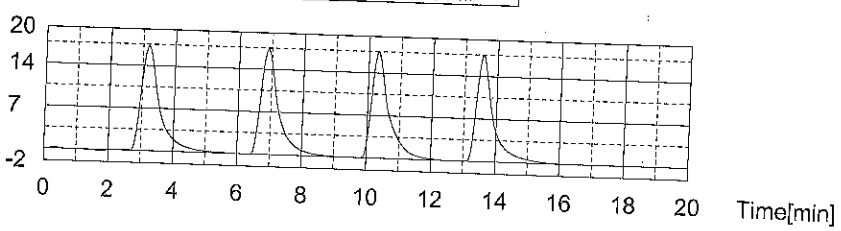
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:13.23mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4572 | 0.8625mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:49:21 PM |
| 2 | 67.18 | 13.72mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:53:11 PM |
| 3 | 65.54 | 13.40mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:56:50 PM |
| 4 | 63.28 | 12.97mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:00:13 PM |
| 5 | 62.49 | 12.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:04:00 PM |

Mean Area 64.62
Mean Conc. 13.23mg/L




Sample

Sample Name: MS 490-173121-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

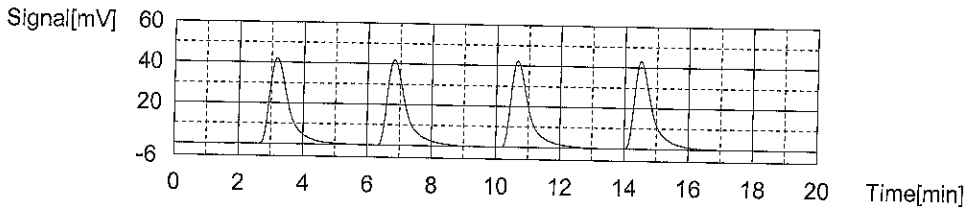
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:33.12mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2810 | 0.8285mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:15:19 PM |
| 2 | 171.1 | 33.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:19:08 PM |
| 3 | 169.0 | 33.34mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:23:09 PM |
| 4 | 164.9 | 32.55mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:27:07 PM |
| 5 | 166.4 | 32.84mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:31:02 PM |

Mean Area 167.8
Mean Conc. 33.12mg/L




Sample

Sample Name: MSD 490-173121-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

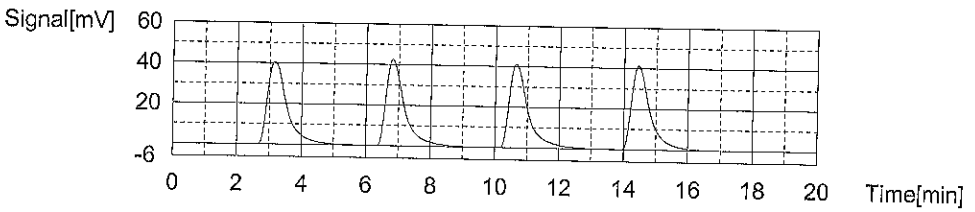
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:32.95mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3486 | 0.8415mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:42:22 PM |
| 2 | 169.7 | 33.48mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:46:11 PM |
| 3 | 168.4 | 33.23mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:50:08 PM |
| 4 | 165.9 | 32.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:54:05 PM |
| 5 | 163.9 | 32.36mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:57:57 PM |

Mean Area 167.0
Mean Conc. 32.95mg/L




Sample

Sample Name: CCV
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

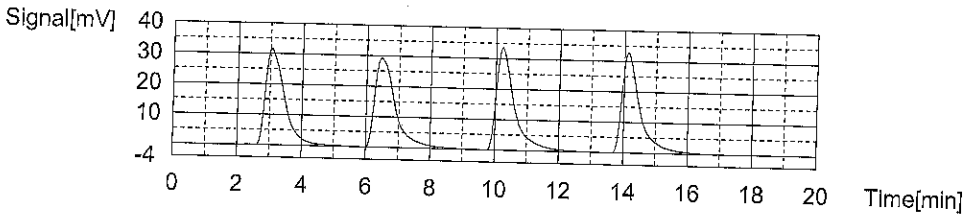
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:25.35mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3105 | 0.8342mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:09:17 PM |
| 2 | 125.6 | 24.98mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:12:46 PM |
| 3 | 127.8 | 25.40mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:16:41 PM |
| 4 | 129.5 | 25.73mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:20:45 PM |
| 5 | 127.2 | 25.29mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:24:40 PM |

Mean Area 127.5
Mean Conc. 25.35mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

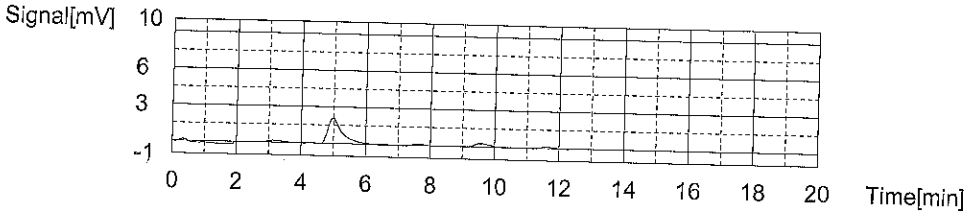
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8494mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3326 | 0.8384mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:35:59 PM |
| 2 | 0.4490 | 0.8609mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:38:03 PM |
| 3 | 6.550 | 2.037mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:40:47 PM |
| 4 | 0.4018 | 0.8518mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:42:50 PM |
| 5 | 0.9783 | 0.9629mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:45:04 PM |
| 6 | 0.3749 | 0.8466mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:47:07 PM |

Mean Area 0.3896
Mean Conc. 0.8494mg/L




Sample

Sample Name: 490-173086-d-13
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

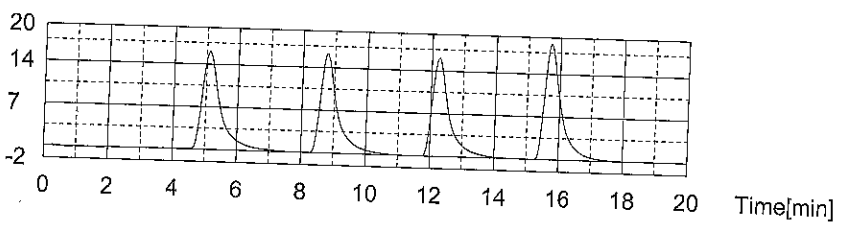
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.70mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3427 | 0.8404mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:58:22 PM |
| 2 | 0.000 | 0.7743mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:00:24 PM |
| 3 | 62.56 | 12.83mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:04:16 PM |
| 4 | 59.50 | 12.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:07:54 PM |
| 5 | 58.44 | 12.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:11:33 PM |
| 6 | 67.08 | 13.70mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:15:05 PM |

Mean Area 61.89
Mean Conc. 12.70mg/L




Sample

Sample Name: 490-173086-d-24
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

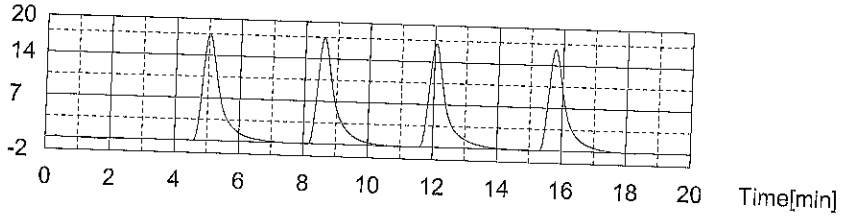
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.86mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4017 | 0.8518mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:26:19 PM |
| 2 | 0.1366 | 0.8007mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:28:22 PM |
| 3 | 65.10 | 13.32mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:32:05 PM |
| 4 | 62.71 | 12.86mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:35:39 PM |
| 5 | 62.00 | 12.72mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:39:33 PM |
| 6 | 61.07 | 12.54mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:43:28 PM |

Mean Area 62.72
Mean Conc. 12.86mg/L




Sample

Sample Name: 490-173307-d-7
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

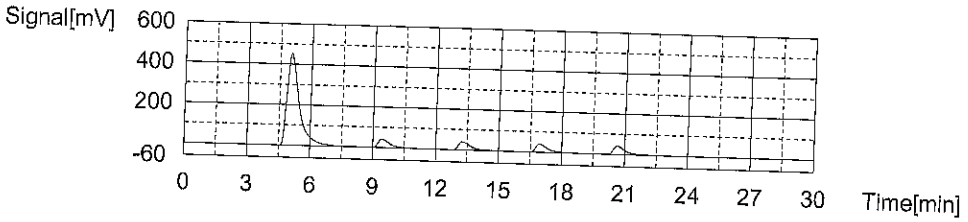
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:255.5mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3533 | 0.8424mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:54:43 PM |
| 2 | 0.6967 | 0.9086mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:56:45 PM |
| 3 | 1825 | 352.5mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:01:21 PM |
| 4 | 164.5 | 259.8mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:13:10 PM |
| 5 | 163.9 | 258.9mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:17:00 PM |
| 6 | 161.2 | 254.7mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:20:52 PM |
| 7 | 157.3 | 248.7mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:24:38 PM |

Mean Area 161.7
Mean Conc. 255.5mg/L




Sample

Sample Name: 490-173364-j-1
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

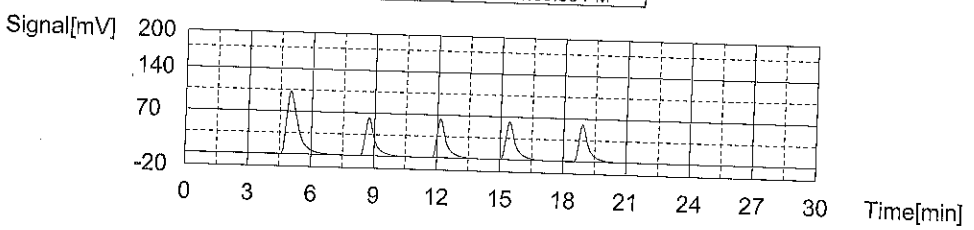
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:73.20mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3752 | 0.8467mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:36:00 PM |
| 2 | 0.2869 | 0.8296mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:38:03 PM |
| 3 | 386.5 | 75.26mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:42:02 PM |
| 4 | 197.5 | 73.97mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:45:37 PM |
| 5 | 195.8 | 73.34mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:49:01 PM |
| 6 | 200.2 | 74.97mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:52:40 PM |
| 7 | 188.2 | 70.52mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:59:56 PM |

Mean Area 195.4
Mean Conc. 73.20mg/L




Sample

Sample Name: 490-173364-j-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

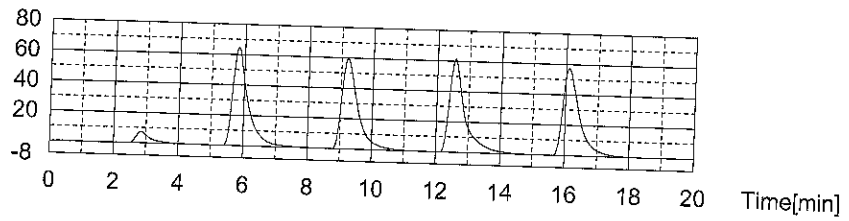
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:40.52mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4033 | 0.8521mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:11:11 AM |
| 2 | 22.83 | 5.174mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:14:08 AM |
| 3 | 210.0 | 41.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:17:37 AM |
| 4 | 207.8 | 40.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:21:08 AM |
| 5 | 204.4 | 40.16mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:24:48 AM |
| 6 | 202.8 | 39.86mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:28:19 AM |

Mean Area 206.3
Mean Conc. 40.52mg/L




Sample

Sample Name: 490-173364-j-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

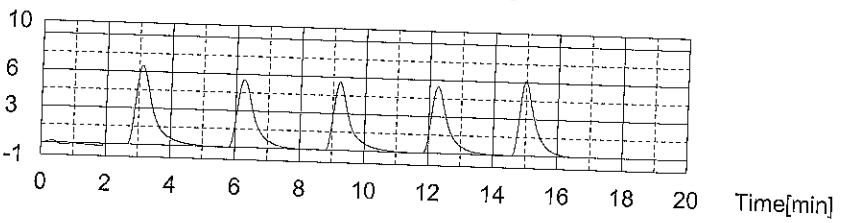
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:4.580mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3661 | 0.8449mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:39:35 AM |
| 2 | 23.79 | 5.359mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:42:50 AM |
| 3 | 20.53 | 4.731mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:46:00 AM |
| 4 | 19.43 | 4.519mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:49:11 AM |
| 5 | 19.05 | 4.445mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:52:08 AM |
| 6 | 19.98 | 4.625mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:54:59 AM |

Mean Area 19.75
Mean Conc. 4.580mg/L




Sample

Sample Name: 490-173364-j-4
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

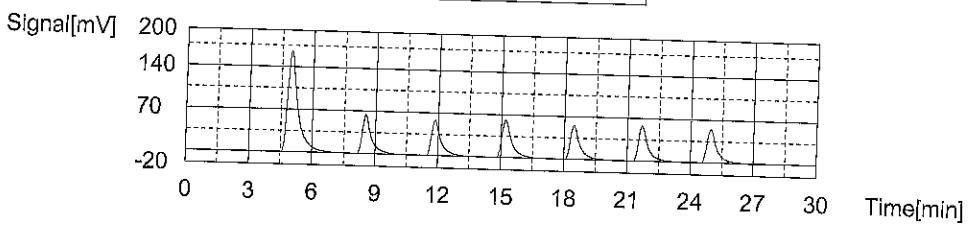
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:97.52mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2579 | 0.8240mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:06:15 AM |
| 2 | 0.000 | 0.7743mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:08:18 AM |
| 3 | 567.7 | 110.2mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:12:08 AM |
| 4 | 199.8 | 107.7mg/L | 18uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:15:39 AM |
| 5 | 184.5 | 99.54mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:19:08 AM |
| 6 | 200.3 | 108.0mg/L | 18uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:22:34 AM |
| 7 | 176.9 | 95.47mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:29:46 AM |
| 8 | 180.5 | 97.40mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:36:59 AM |
| 9 | 181.0 | 97.67mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:44:15 AM |

Mean Area 180.7
Mean Conc. 97.52mg/L




Sample

Sample Name: 490-173408-i-1
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

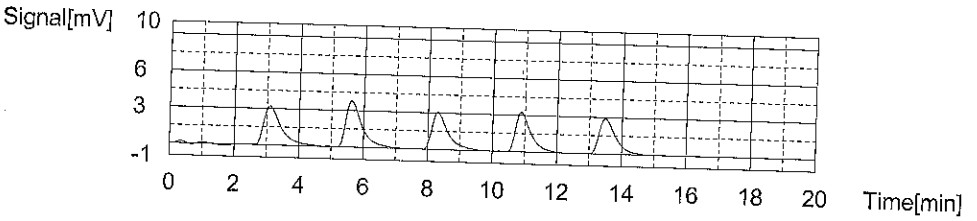
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:2.821mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.6383 | 0.8974mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:55:31 AM |
| 2 | 11.40 | 2.971mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:58:15 AM |
| 3 | 12.96 | 3.272mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:01:03 AM |
| 4 | 10.38 | 2.775mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:03:49 AM |
| 5 | 10.71 | 2.838mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:06:29 AM |
| 6 | 9.986 | 2.699mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:09:08 AM |

Mean Area 10.62
Mean Conc. 2.821mg/L




Sample

Sample Name: 490-173408-g-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

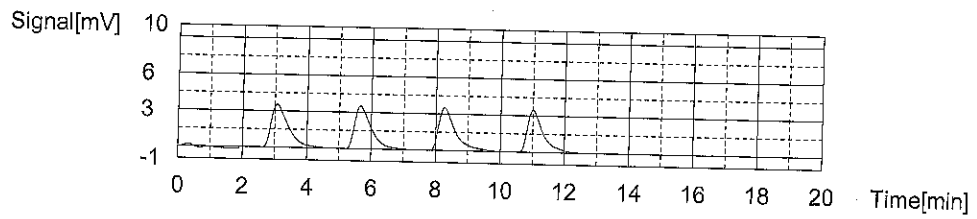
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:3.147mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2947 | 0.8311mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:20:24 AM |
| 2 | 12.68 | 3.218mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:23:09 AM |
| 3 | 12.47 | 3.177mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:25:54 AM |
| 4 | 12.37 | 3.158mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:28:47 AM |
| 5 | 11.72 | 3.033mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:31:39 AM |

Mean Area 12.31
Mean Conc. 3.147mg/L




Sample

Sample Name: 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

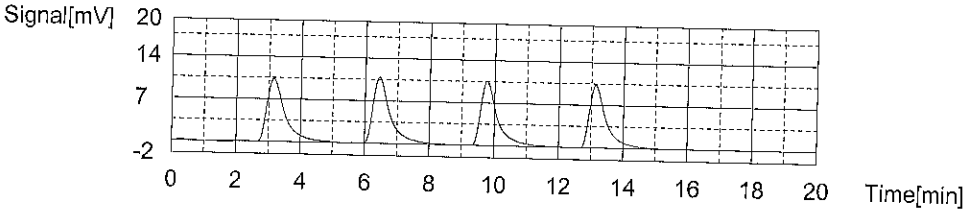
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.187mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3127 | 0.8346mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:43:00 AM |
| 2 | 39.70 | 8.425mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:46:25 AM |
| 3 | 39.92 | 8.467mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:49:56 AM |
| 4 | 37.66 | 8.032mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:53:27 AM |
| 5 | 36.59 | 7.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:56:47 AM |

Mean Area 38.47
Mean Conc. 8.187mg/L




Sample

Sample Name: MS 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

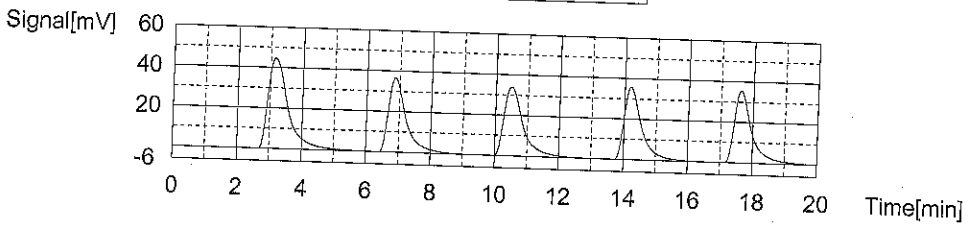
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:26.85mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3496 | 0.8417mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:08:08 AM |
| 2 | 188.1 | 37.02mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:12:03 AM |
| 3 | 138.6 | 27.48mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:15:46 AM |
| 4 | 139.0 | 27.56mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:19:42 AM |
| 5 | 132.5 | 26.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:23:17 AM |
| 6 | 131.1 | 26.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:26:53 AM |

Mean Area 135.3
Mean Conc. 26.85mg/L




Sample

Sample Name: MSD 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

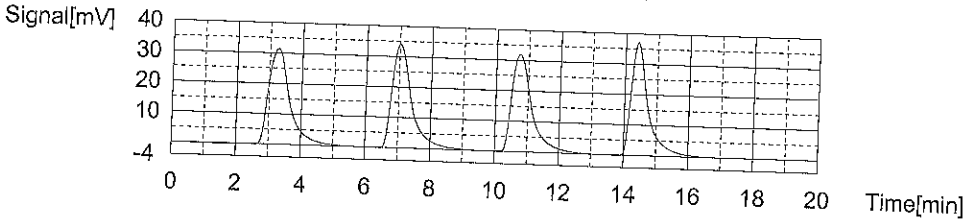
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:27.61mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3683 | 0.8453mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:38:10 AM |
| 2 | 142.2 | 28.18mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:42:09 AM |
| 3 | 142.0 | 28.14mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:46:01 AM |
| 4 | 138.1 | 27.39mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:49:55 AM |
| 5 | 134.7 | 26.73mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:53:38 AM |

Mean Area 139.3
Mean Conc. 27.61mg/L




Sample

Sample Name: CCV
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

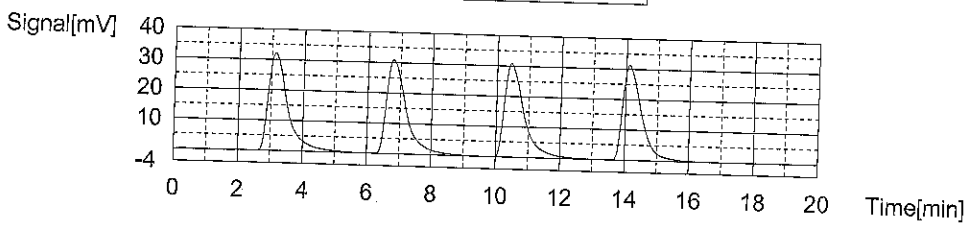
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:25.60mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3417 | 0.8402mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:04:59 AM |
| 2 | 130.9 | 26.00mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:08:47 AM |
| 3 | 130.6 | 25.94mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:12:37 AM |
| 4 | 127.9 | 25.42mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:16:27 AM |
| 5 | 125.9 | 25.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:20:13 AM |

Mean Area 128.8
Mean Conc. 25.60mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

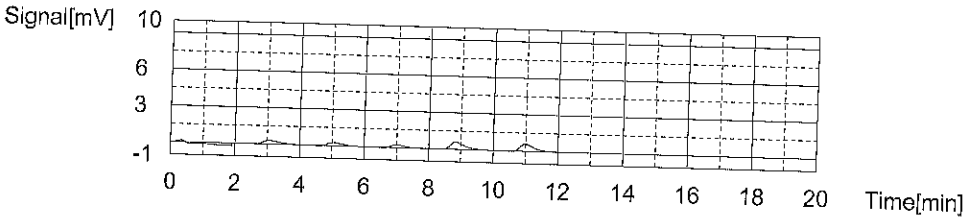
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9067mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2679 | 0.8260mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:31:33 AM |
| 2 | 0.9242 | 0.9524mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:33:39 AM |
| 3 | 0.8676 | 0.9415mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:35:46 AM |
| 4 | 0.6876 | 0.9069mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:37:49 AM |
| 5 | 1.863 | 1.133mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:40:03 AM |
| 6 | 1.816 | 1.124mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:42:21 AM |

Mean Area 0.6868
Mean Conc. 0.9067mg/L



REM

toc 5/3/2019 11:07:02 AM 2019_05_03_002.r32

Instr.Information

System: TOC V
Instrument Options: TOC/ASI/
Catalyst: Regular Sensitivity

TOC 7
Calibration Curve
9060A SM5310B
of 5-3-19

Cal. Curve

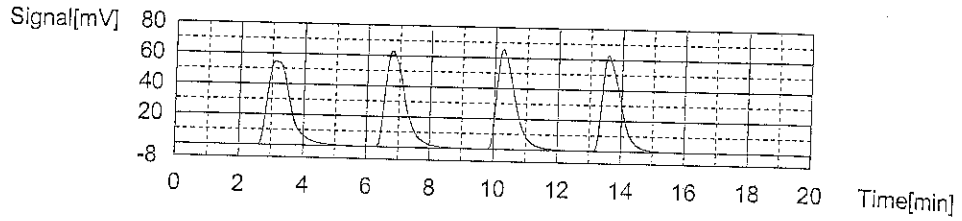
Sample Name: CCV 50PPM 4728624
Sample ID: 50PPM
Cal. Curve: NPOC.2019_05_03_08_16_51.cal
Status: Completed

| Type | Anal. |
|---|---|
| Standard | NPOC |

Conc: 50.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 0.4406 | 50uL | 1 | ******* | E | 5/3/2019 8:27:14 AM |
| 2 | 263.4 | 50uL | 1 | ******* | | 5/3/2019 8:31:04 AM |
| 3 | 267.0 | 50uL | 1 | ******* | | 5/3/2019 8:34:47 AM |
| 4 | 254.6 | 50uL | 1 | ******* | | 5/3/2019 8:38:14 AM |
| 5 | 248.7 | 50uL | 1 | ******* | | 5/3/2019 8:41:40 AM |

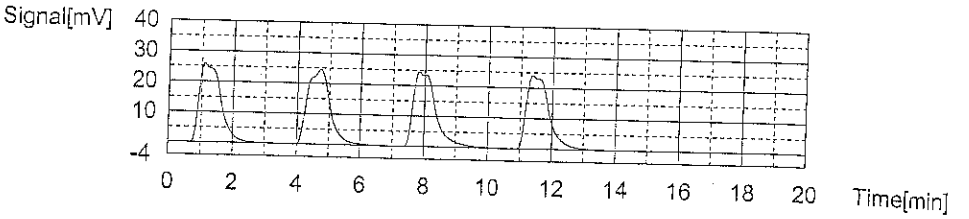
Acid Add. 0.000%
Sp. Time 180.0sec
Mean Area 258.4




Conc: 25.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 123.4 | 50uL | 2 | ******* | | 5/3/2019 8:52:57 AM |
| 2 | 120.1 | 50uL | 2 | ******* | | 5/3/2019 8:56:31 AM |
| 3 | 120.4 | 50uL | 2 | ******* | | 5/3/2019 9:00:12 AM |
| 4 | 117.1 | 50uL | 2 | ******* | | 5/3/2019 9:03:50 AM |

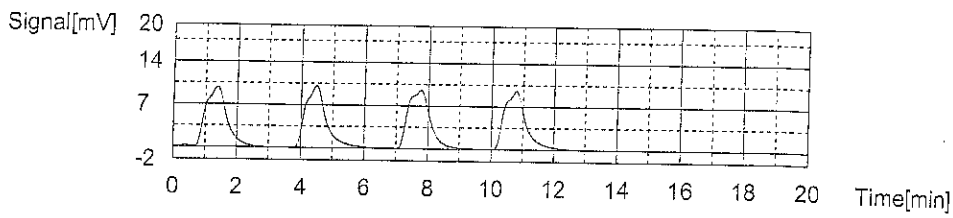
Acid Add. 0.000%
Sp. Time 180.0sec
Mean Area 120.3




Conc: 10.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 45.61 | 50uL | 5 | ******* | | 5/3/2019 9:14:59 AM |
| 2 | 45.73 | 50uL | 5 | ******* | | 5/3/2019 9:18:21 AM |
| 3 | 46.25 | 50uL | 5 | ******* | | 5/3/2019 9:21:33 AM |
| 4 | 45.42 | 50uL | 5 | ******* | | 5/3/2019 9:25:07 AM |

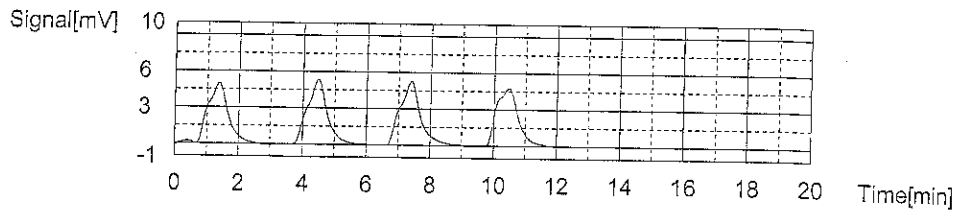
| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 45.75 |




Conc: 5.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 22.75 | 50uL | 10 | ******* | | 5/3/2019 9:36:08 AM |
| 2 | 23.09 | 50uL | 10 | ******* | | 5/3/2019 9:39:14 AM |
| 3 | 23.14 | 50uL | 10 | ******* | | 5/3/2019 9:42:29 AM |
| 4 | 22.45 | 50uL | 10 | ******* | | 5/3/2019 9:45:28 AM |

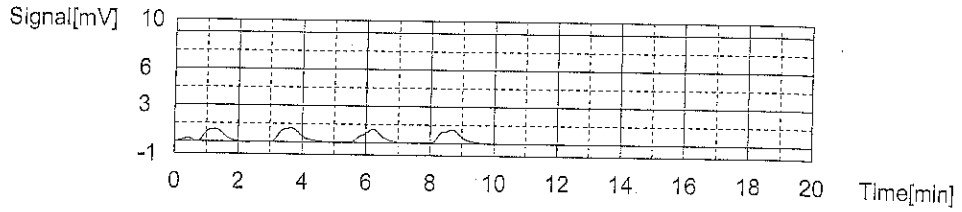
| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 22.86 |



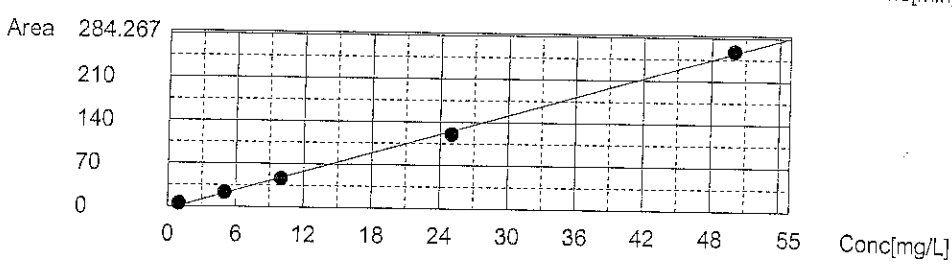

Conc: 1.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 4.880 | 50uL | 50 | ******* | | 5/3/2019 9:55:48 AM |
| 2 | 5.019 | 50uL | 50 | ******* | | 5/3/2019 9:58:21 AM |
| 3 | 4.542 | 50uL | 50 | ******* | | 5/3/2019 10:01:05 AM |
| 4 | 4.892 | 50uL | 50 | ******* | | 5/3/2019 10:03:37 AM |

| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 4.833 |




| | |
|---|---|
| Slope: | 5.189 |
| Intercept | -4.018 |
| r^2 | 0.9987 |
| r | 0.9993 |
| Zero Shift | No |




Sample

| | |
|---|---|
| Sample Name: | ICV 4728655 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.57mg/L |

1. Det

Anal.: NPOC

toc

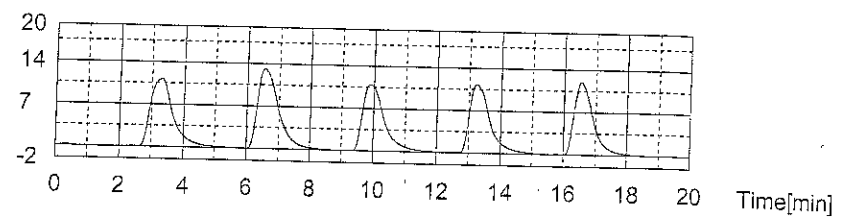
5/3/2019 11:07:02 AM

2019_05_03_002.t32

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3175 | 0.8355mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:14:58 AM |
| 2 | 53.74 | 11.13mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:18:32 AM |
| 3 | 59.52 | 12.24mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:22:01 AM |
| 4 | 51.02 | 10.61mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:25:32 AM |
| 5 | 49.46 | 10.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:29:00 AM |
| 6 | 49.10 | 10.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:32:14 AM |

Mean Area 50.83
Mean Conc. 10.57mg/L

1062.



# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| 240-112111-G-2 | MRC-MW-81B-050619 | 240-4156145 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-3 | MRC-NMW-1I-050619 | 240-4156156 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-4 | MRC-NMW-3I-050619 | 240-4156167 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-5 | MRC-NMW-2I-050619 | 240-4156178 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112234-H-2 | MRC-NMW-2S-050719 | 240-4159352 | 9060A | 9060A | 06/04 23:59 | 05/20/19 | JWM | MD | TOC5 | Unconfirmed |
| 490-173086-D-5 | THAND-SA19-TW03-010 | 490-4961736 | 9060A | 9060A | 05/27 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-10 | THAND-SA19-MW10-010 | 490-4961752 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-11 | THAND-SA19-MW17-010 | 490-4961756 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-G-12 | THAND-SA19-MW20-010 | 490-4961763 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-13 | THAND-SA19-MW20-011 | 490-4961767 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |

# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| **490-173086-D-24** | THAND-SA19 -MW23-010 | 490-4961802 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| **490-173121-H-2** | SL-2A | 490-4962799 | 9060A | 9060A | 05/28 23:59 | 05/14/19 | LRK | WY | W332 | Unconfirmed |
| M MS/MSD Required | | | | | | | | | | |
| **490-173121-H-3** | SL-3A | 490-4962813 | 9060A | 9060A | 05/28 23:59 | 05/14/19 | LRK | WY | W332 | Unconfirmed |
| M MS/MSD Required | | | | | | | | | | |
| **490-173307-D-7** | THAND-SA19-MW 12-010 | 490-4967773 | 9060A | 9060A | 05/30 23:59 | 05/15/19 | GAL | TX | TOC4 | Unconfirmed |
| **490-173364-J-1** | WG-2660-PZ03D(3 00419) | 490-4969350 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-2** | WG-2660-PZ02D(3 00419) | 490-4969360 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-3** | WG-2660-PZ04S(3 00419) | 490-4969370 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-4** | WG-2660-PZ04D(3 00419) | 490-4969380 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173408-I-1** | Z1-120 | 490-4971072 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | TWW | KY | TOC4 | Unconfirmed |

# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| 490-173408-G-2 | Z1-121 | 490-4971044 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | TWW | KY | TOC4 | Unconfirmed |

# Subcontract Data

# Shipping and Receiving Documents

# Chain of Custody Record

321364

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Baltimore #201

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

| Client Contact | Project Manager: Tony Apanavage | Site Contact: Walt Payton | Date: | COC No: |
|---|---|---|---|---|
| Company Name: Tetra Tech INC | Tel/Fax: 301 528-3021 | Lab Contact: John McFadden | Carrier: Fed Ex | 1 of 1 COCs |
| Address: 20251 Century Blvd | Analysis Turnaround Time | | | Sampler: |
| City/State/Zip: Germantown, MD 20874 | ☐ CALENDAR DAYS ☐ WORKING DAYS | | | For Lab Use Only: |
| Phone: 301 528-3021 | TAT if different from Below _____ | | | Walk-in Client: |
| Fax: 3000 | ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — Standard | | | Lab Sampling: |
| Project Name: Middle River Center | | | | Job / SDG No.: |
| Site: Block I GW Sampling | | | | |
| PO # | | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS / MSD (Y/N) | VOCs | MEE | TOC | Cations | Anions | Alkalinity | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-050619 | 5/6/19 | — | G | QC | 2 | | | 2 | - | - | - | - | 1 | |
| MRC-MW-81B-050619 | ↓ | 0929 | ↓ | GW | 11 | | | 3 | 3 | 2 | 1 | 1 | 1 | |
| MRC-NMW-1I-050619 | | 1053 | | ↓ | 11 | | | 3 | 3 | 2 | 1 | 1 | 1 | |
| MRC-NMW-3I-050619 | | 1332 | | | 11 | | | 3 | 3 | 2 | 1 | 1 | 1 | |
| MRC-NMW-2I-050619 | ↓ | 1457 | ↓ | ↓ | 11 | | | 3 | 3 | 2 | 1 | 1 | 1 | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ | | | | | | | | 2 | 2 | 3 | 4 | 1 | 1 | |

240-112111 Chain of Custody

**Possible Hazard Identification:**
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____ |
|---|---|---|---|

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| Walt Payton | TT ENC | 5/6/19 1630 | | TA | 5/6/19 1630 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | TA 5/6/19 | 1700 | | TAC | 05/07/19 925 |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |

**TestAmerica Canton Sample Receipt Form/Narrative** **Login # : 112111**
**Canton Facility**

Client Tetra Tech Site Name _____ Cooler unpacked by: DsD
Cooler Received on 05/07/19 Opened on 05/07/19
FedEx: 1st Grd ~~Exp~~ UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____
**Receipt After-hours**: Drop-off Date/Time _____ Storage Location _____
TestAmerica Cooler # 1A Foam Box Client Cooler Box Other _____
Packing material used: ~~Bubble Wrap~~ Foam ~~Plastic Bag~~ None Other _____
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 0.6 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# **HC984738**
13. Were VOAs on the COC? (Yes) No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes (No) NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # N/A Yes (No)
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

**Tests that are not checked for pH by Receiving:**
**VOAs**
**Oil and Grease**
**TOC**

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by: RC

_____
_____
_____
_____
_____

**18. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**19. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

# Login Container Summary Report



Temperature readings: _____

| Client Sample ID | Lab ID | Container Type | Container pH | Preservative Added (mls) | Lot # |
|---|---|---|---|---|---|
| MRC-MW-81B-050619 | 240-112111-K-2 | Plastic 500ml - with Nitric Acid | <2 | _____ | _____ |
| MRC-NMW-1I-050619 | 240-112111-K-3 | Plastic 500ml - with Nitric Acid | <2 | _____ | _____ |
| MRC-NMW-3I-050619 | 240-112111-K-4 | Plastic 500ml - with Nitric Acid | <2 | _____ | _____ |
| MRC-NMW-2I-050619 | 240-112111-K-5 | Plastic 500ml - with Nitric Acid | <2 | _____ | _____ |

eurofins | Environment Testing TestAmerica

# ANALYTICAL REPORT

Job Number: 240-112234-1

Job Description: MRC Block I GW Sampling

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Mike Martin



Approved for release.
John McFadden
Project Manager I
5/23/2019 2:02 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
john.mcfadden@testamericainc.com
05/23/2019

cc: Tony Apanavage
Samantha Brenner
Final Data Tracking

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

### GC VOA

| Qualifier | Qualifier Description |
|---|---|
| U | Indicates the analyte was analyzed for but not detected. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| U | Indicates the analyte was analyzed for but not detected. |

## Glossary

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

# CASE NARRATIVE

## Client: Tetra Tech, Inc.

## Project: MRC Block I GW Sampling

## Report Number: 240-112234-1

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

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

The 9060A Total Organic Carbon analysis was performed at the Eurofins TestAmerica, Nashville laboratory.

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

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

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

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

**RECEIPT**
The samples were received on 5/8/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0° C.

**VOLATILE ORGANIC COMPOUNDS (GCMS)**
Samples TB-050719 (240-112234-1) and MRC-NMW-2S-050719 (240-112234-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 05/15/2019.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-381514.

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

**DISSOLVED GASES**
Sample MRC-NMW-2S-050719 (240-112234-2) was analyzed for dissolved gases in accordance with RSK_175. The sample was analyzed on 05/17/2019 and 05/21/2019.

Sample MRC-NMW-2S-050719 (240-112234-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following volatile sample was analyzed with significant headspace in the sample container: MRC-NMW-2S-050719 (240-112234-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

**TOTAL RECOVERABLE METALS (ICP)**
Sample MRC-NMW-2S-050719 (240-112234-2) was analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The sample was prepared on 05/09/2019 and analyzed on 05/10/2019.

Manganese was detected in method blank MB 240-380430/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

**ALKALINITY**
Sample MRC-NMW-2S-050719 (240-112234-2) was analyzed for alkalinity in accordance with SM 2320B. The sample was analyzed on 05/17/2019.

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

**ANIONS**
Sample MRC-NMW-2S-050719 (240-112234-2) was analyzed for anions in accordance with EPA Method 300.0. The sample was analyzed on 05/21/2019.

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

**TOTAL ORGANIC CARBON**
Sample MRC-NMW-2S-050719 (240-112234-2) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The sample was analyzed on 05/10/2019.

Total Organic Carbon was detected in method blank MB 490-594412/3 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The method blank for analytical batch 490-594412 contained Total Organic Carbon above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

# Detection Summary

Client: Tetra Tech, Inc.
Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Client Sample ID: TB-050719
## Lab Sample ID: 240-112234-1

No Detections.

## Client Sample ID: MRC-NMW-2S-050719
## Lab Sample ID: 240-112234-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 0.49 | J | 1.0 | 0.17 | ug/L | 1 | | 8260C | Total/NA |
| 1,1-Dichloroethene | 0.94 | J | 1.0 | 0.19 | ug/L | 1 | | 8260C | Total/NA |
| 2-Butanone (MEK) | 2.8 | J | 10 | 1.2 | ug/L | 1 | | 8260C | Total/NA |
| Acetone | 5.6 | J | 10 | 5.4 | ug/L | 1 | | 8260C | Total/NA |
| Benzene | 0.26 | J | 1.0 | 0.13 | ug/L | 1 | | 8260C | Total/NA |
| cis-1,2-Dichloroethene | 30 | | 1.0 | 0.16 | ug/L | 1 | | 8260C | Total/NA |
| trans-1,2-Dichloroethene | 1.7 | | 1.0 | 0.19 | ug/L | 1 | | 8260C | Total/NA |
| Trichloroethene | 23 | | 1.0 | 0.10 | ug/L | 1 | | 8260C | Total/NA |
| Vinyl chloride | 13 | | 1.0 | 0.20 | ug/L | 1 | | 8260C | Total/NA |
| Ethene | 17 | | 1.0 | 0.11 | ug/L | 1 | | RSK-175 | Total/NA |
| Ethane | 75 | | 1.0 | 0.10 | ug/L | 1 | | RSK-175 | Total/NA |
| Methane | 10000 | | 10 | 1.7 | ug/L | 10 | | RSK-175 | Total/NA |
| Iron | 51000 | | 200 | 26 | ug/L | 1 | | 6010C | Total Recoverable |
| Manganese | 3700 | B | 15 | 2.1 | ug/L | 1 | | 6010C | Total Recoverable |
| Alkalinity | 67 | | 5.0 | 2.6 | mg/L | 1 | | 2320B-1997 | Total/NA |
| Sulfate | 17 | | 1.0 | 0.35 | mg/L | 1 | | 300.0 | Total/NA |
| Total Organic Carbon | 8.8 | B | 1.0 | 0.50 | mg/L | 1 | | 9060A | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: TB-050719 Lab Sample ID: 240-112234-1

**Date Collected: 05/07/19 00:00** **Matrix: Water**
**Date Received: 05/08/19 09:20**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/15/19 23:10 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:10 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/15/19 23:10 | 1 |
| 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 | ug/L | | | 05/15/19 23:10 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/15/19 23:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/15/19 23:10 | 1 |
| Acetone | 5.4 | U | 10 | 5.4 | ug/L | | | 05/15/19 23:10 | 1 |
| Benzene | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 23:10 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/15/19 23:10 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/15/19 23:10 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/15/19 23:10 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/15/19 23:10 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 23:10 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 23:10 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/15/19 23:10 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 23:10 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/15/19 23:10 | 1 |
| cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/15/19 23:10 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/15/19 23:10 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 23:10 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/15/19 23:10 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/15/19 23:10 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/15/19 23:10 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 23:10 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/15/19 23:10 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/15/19 23:10 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/15/19 23:10 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/15/19 23:10 | 1 |
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/15/19 23:10 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:10 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 23:10 | 1 |
| trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/15/19 23:10 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/15/19 23:10 | 1 |
| Trichloroethene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/15/19 23:10 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/15/19 23:10 | 1 |
| Vinyl chloride | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/15/19 23:10 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/15/19 23:10 | 1 |

## Client Sample ID: TB-050719 — Lab Sample ID: 240-112234-1

**Date Collected: 05/07/19 00:00** — **Matrix: Water**
**Date Received: 05/08/19 09:20**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *88* | | *70 - 123* | | *05/15/19 23:10* | *1* |
| *Dibromofluoromethane (Surr)* | *86* | | *75 - 128* | | *05/15/19 23:10* | *1* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *59 - 120* | | *05/15/19 23:10* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *86* | | *70 - 121* | | *05/15/19 23:10* | *1* |

## Client Sample ID: MRC-NMW-2S-050719 — Lab Sample ID: 240-112234-2

**Date Collected: 05/07/19 12:00** — **Matrix: Water**
**Date Received: 05/08/19 09:20**

### Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 23:32 | 1 |
| **1,1-Dichloroethane** | **0.49** | **J** | 1.0 | 0.17 | ug/L | | | 05/15/19 23:32 | 1 |
| **1,1-Dichloroethene** | **0.94** | **J** | 1.0 | 0.19 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/15/19 23:32 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:32 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/15/19 23:32 | 1 |
| **2-Butanone (MEK)** | **2.8** | **J** | 10 | 1.2 | ug/L | | | 05/15/19 23:32 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/15/19 23:32 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/15/19 23:32 | 1 |
| **Acetone** | **5.6** | **J** | 10 | 5.4 | ug/L | | | 05/15/19 23:32 | 1 |
| **Benzene** | **0.26** | **J** | 1.0 | 0.13 | ug/L | | | 05/15/19 23:32 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/15/19 23:32 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/15/19 23:32 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/15/19 23:32 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/15/19 23:32 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 23:32 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 23:32 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/15/19 23:32 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 23:32 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/15/19 23:32 | 1 |
| **cis-1,2-Dichloroethene** | **30** | | 1.0 | 0.16 | ug/L | | | 05/15/19 23:32 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/15/19 23:32 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 23:32 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/15/19 23:32 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/15/19 23:32 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/15/19 23:32 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 23:32 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/15/19 23:32 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/15/19 23:32 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/15/19 23:32 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/15/19 23:32 | 1 |

## Client Sample ID: MRC-NMW-2S-050719 Lab Sample ID: 240-112234-2

**Date Collected: 05/07/19 12:00** **Matrix: Water**
**Date Received: 05/08/19 09:20**

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/15/19 23:32 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 23:32 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 23:32 | 1 |
| **trans-1,2-Dichloroethene** | **1.7** | | 1.0 | 0.19 | ug/L | | | 05/15/19 23:32 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/15/19 23:32 | 1 |
| **Trichloroethene** | **23** | | 1.0 | 0.10 | ug/L | | | 05/15/19 23:32 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/15/19 23:32 | 1 |
| **Vinyl chloride** | **13** | | 1.0 | 0.20 | ug/L | | | 05/15/19 23:32 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/15/19 23:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *92* | | *70 - 123* | | *05/15/19 23:32* | *1* |
| *Dibromofluoromethane (Surr)* | *91* | | *75 - 128* | | *05/15/19 23:32* | *1* |
| *4-Bromofluorobenzene (Surr)* | *91* | | *59 - 120* | | *05/15/19 23:32* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *70 - 121* | | *05/15/19 23:32* | *1* |

### Method: RSK-175 - Dissolved Gases (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Ethene** | **17** | | 1.0 | 0.11 | ug/L | | | 05/17/19 21:05 | 1 |
| **Ethane** | **75** | | 1.0 | 0.10 | ug/L | | | 05/17/19 21:05 | 1 |
| **Methane** | **10000** | | 10 | 1.7 | ug/L | | | 05/21/19 15:53 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *80* | | *60 - 140* | | *05/17/19 21:05* | *1* |
| *1,1,1-Trifluoroethane* | *83* | | *60 - 140* | | *05/21/19 15:53* | *10* |

### Method: 6010C - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Iron** | **51000** | | 200 | 26 | ug/L | | 05/09/19 14:00 | 05/10/19 20:04 | 1 |
| **Manganese** | **3700** | **B** | 15 | 2.1 | ug/L | | 05/09/19 14:00 | 05/10/19 20:04 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity** | **67** | | 5.0 | 2.6 | mg/L | | | 05/17/19 18:25 | 1 |
| **Sulfate** | **17** | | 1.0 | 0.35 | mg/L | | | 05/21/19 23:57 | 1 |
| **Total Organic Carbon** | **8.8** | **B** | 1.0 | 0.50 | mg/L | | | 05/10/19 17:08 | 1 |

# Default Detection Limits

Client: Tetra Tech, Inc.
Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Method: 8260C - Volatile Organic Compounds by GC/MS

| Analyte | RL | MDL | Units |
|---|---|---|---|
| 1,1,1-Trichloroethane | 1.0 | 0.24 | ug/L |
| 1,1,2,2-Tetrachloroethane | 1.0 | 0.13 | ug/L |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.0 | 0.41 | ug/L |
| 1,1,2-Trichloroethane | 1.0 | 0.090 | ug/L |
| 1,1-Dichloroethane | 1.0 | 0.17 | ug/L |
| 1,1-Dichloroethene | 1.0 | 0.19 | ug/L |
| 1,2,4-Trichlorobenzene | 1.0 | 0.26 | ug/L |
| 1,2-Dibromo-3-Chloropropane | 2.0 | 0.91 | ug/L |
| 1,2-Dichlorobenzene | 1.0 | 0.15 | ug/L |
| 1,2-Dichloroethane | 1.0 | 0.21 | ug/L |
| 1,2-Dichloropropane | 1.0 | 0.15 | ug/L |
| 1,3-Dichlorobenzene | 1.0 | 0.15 | ug/L |
| 1,4-Dichlorobenzene | 1.0 | 0.16 | ug/L |
| 2-Butanone (MEK) | 10 | 1.2 | ug/L |
| 2-Hexanone | 10 | 0.54 | ug/L |
| 4-Methyl-2-pentanone (MIBK) | 10 | 0.42 | ug/L |
| Acetone | 10 | 5.4 | ug/L |
| Benzene | 1.0 | 0.13 | ug/L |
| Bromoform | 1.0 | 0.76 | ug/L |
| Bromomethane | 1.0 | 0.42 | ug/L |
| Carbon disulfide | 1.0 | 0.28 | ug/L |
| Carbon tetrachloride | 1.0 | 0.26 | ug/L |
| Chlorobenzene | 1.0 | 0.14 | ug/L |
| Chlorodibromomethane | 1.0 | 0.39 | ug/L |
| Chloroethane | 1.0 | 0.83 | ug/L |
| Chloroform | 1.0 | 0.13 | ug/L |
| Chloromethane | 1.0 | 0.20 | ug/L |
| cis-1,2-Dichloroethene | 1.0 | 0.16 | ug/L |
| cis-1,3-Dichloropropene | 1.0 | 0.61 | ug/L |
| Cyclohexane | 1.0 | 0.24 | ug/L |
| Dichlorobromomethane | 1.0 | 0.17 | ug/L |
| Dichlorodifluoromethane | 1.0 | 0.35 | ug/L |
| Ethylbenzene | 1.0 | 0.11 | ug/L |
| Ethylene Dibromide | 1.0 | 0.12 | ug/L |
| Isopropylbenzene | 1.0 | 0.090 | ug/L |
| Methyl acetate | 10 | 1.7 | ug/L |
| Methyl tert-butyl ether | 1.0 | 0.070 | ug/L |
| Methylcyclohexane | 1.0 | 0.33 | ug/L |
| Methylene Chloride | 5.0 | 2.6 | ug/L |
| Styrene | 1.0 | 0.10 | ug/L |
| Tetrachloroethene | 1.0 | 0.15 | ug/L |
| Toluene | 1.0 | 0.14 | ug/L |
| trans-1,2-Dichloroethene | 1.0 | 0.19 | ug/L |
| trans-1,3-Dichloropropene | 1.0 | 0.67 | ug/L |
| Trichloroethene | 1.0 | 0.10 | ug/L |
| Trichlorofluoromethane | 1.0 | 0.45 | ug/L |
| Vinyl chloride | 1.0 | 0.20 | ug/L |
| Xylenes, Total | 2.0 | 0.15 | ug/L |

## Method: RSK-175 - Dissolved Gases (GC)

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Ethane | 1.0 | 0.10 | ug/L |

# Default Detection Limits

Client: Tetra Tech, Inc. Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Ethene | 1.0 | 0.11 | ug/L |
| Methane | 1.0 | 0.17 | ug/L |

## Method: 6010C - Metals (ICP) - Total Recoverable

### Prep: 3005A

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Iron | 200 | 26 | ug/L |
| Manganese | 15 | 2.1 | ug/L |

## General Chemistry

| Analyte | RL | MDL | Units |
|---|---|---|---|
| Alkalinity | 5.0 | 2.6 | mg/L |
| Sulfate | 1.0 | 0.35 | mg/L |
| Total Organic Carbon | 1.0 | 0.50 | mg/L |

# Surrogate Summary

Client: Tetra Tech, Inc.
Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Method: 8260C - Volatile Organic Compounds by GC/MS

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

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | TOL | DBFM | BFB | DCA |
| Lab Sample ID | Client Sample ID | (70-123) | (75-128) | (59-120) | (70-121) |
| 240-112234-1 | TB-050719 | 88 | 86 | 86 | 86 |
| 240-112234-2 | MRC-NMW-2S-050719 | 92 | 91 | 91 | 89 |
| LCS 240-381514/5 | Lab Control Sample | 93 | 92 | 91 | 89 |
| MB 240-381514/7 | Method Blank | 93 | 88 | 86 | 88 |

**Surrogate Legend**

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

## Method: RSK-175 - Dissolved Gases (GC)

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

| | | Percent Surrogate Recovery (Acceptance Limits) |
|---|---|---|
| | | TFE2 |
| Lab Sample ID | Client Sample ID | (60-140) |
| 240-112111-D-5 MS | Matrix Spike | 86 |
| 240-112111-D-5 MSD | Matrix Spike Duplicate | 87 |
| 240-112234-2 | MRC-NMW-2S-050719 | 80 |
| 240-112234-2 | MRC-NMW-2S-050719 | 83 |
| 240-112371-P-3 MS | Matrix Spike | 79 |
| 240-112371-T-3 MSD | Matrix Spike Duplicate | 78 |
| LCS 240-381892/5 | Lab Control Sample | 87 |
| LCS 240-382383/5 | Lab Control Sample | 82 |
| MB 240-381892/4 | Method Blank | 86 |
| MB 240-382383/4 | Method Blank | 82 |

**Surrogate Legend**

TFE = 1,1,1-Trifluoroethane

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 240-381514/7** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381514**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 | ug/L | | | 05/15/19 19:49 | 1 |
| Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 19:49 | 1 |
| 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/15/19 19:49 | 1 |
| 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 | ug/L | | | 05/15/19 19:49 | 1 |
| 2-Hexanone | 0.54 | U | 10 | 0.54 | ug/L | | | 05/15/19 19:49 | 1 |
| 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 | ug/L | | | 05/15/19 19:49 | 1 |
| Acetone | 5.4 | U | 10 | 5.4 | ug/L | | | 05/15/19 19:49 | 1 |
| Benzene | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 19:49 | 1 |
| Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/15/19 19:49 | 1 |
| Bromoform | 0.76 | U | 1.0 | 0.76 | ug/L | | | 05/15/19 19:49 | 1 |
| Bromomethane | 0.42 | U | 1.0 | 0.42 | ug/L | | | 05/15/19 19:49 | 1 |
| Carbon disulfide | 0.28 | U | 1.0 | 0.28 | ug/L | | | 05/15/19 19:49 | 1 |
| Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 | ug/L | | | 05/15/19 19:49 | 1 |
| Chlorobenzene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 19:49 | 1 |
| Chloroethane | 0.83 | U | 1.0 | 0.83 | ug/L | | | 05/15/19 19:49 | 1 |
| Chloroform | 0.13 | U | 1.0 | 0.13 | ug/L | | | 05/15/19 19:49 | 1 |
| Chloromethane | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/15/19 19:49 | 1 |
| cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 | ug/L | | | 05/15/19 19:49 | 1 |
| cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 | ug/L | | | 05/15/19 19:49 | 1 |
| Cyclohexane | 0.24 | U | 1.0 | 0.24 | ug/L | | | 05/15/19 19:49 | 1 |
| Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 | ug/L | | | 05/15/19 19:49 | 1 |
| Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 | ug/L | | | 05/15/19 19:49 | 1 |
| Ethylbenzene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/15/19 19:49 | 1 |
| Isopropylbenzene | 0.090 | U | 1.0 | 0.090 | ug/L | | | 05/15/19 19:49 | 1 |
| Methyl acetate | 1.7 | U | 10 | 1.7 | ug/L | | | 05/15/19 19:49 | 1 |
| Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 | ug/L | | | 05/15/19 19:49 | 1 |
| Methylcyclohexane | 0.33 | U | 1.0 | 0.33 | ug/L | | | 05/15/19 19:49 | 1 |
| Methylene Chloride | 2.6 | U | 5.0 | 2.6 | ug/L | | | 05/15/19 19:49 | 1 |
| Styrene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/15/19 19:49 | 1 |
| Tetrachloroethene | 0.15 | U | 1.0 | 0.15 | ug/L | | | 05/15/19 19:49 | 1 |
| Toluene | 0.14 | U | 1.0 | 0.14 | ug/L | | | 05/15/19 19:49 | 1 |
| trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 | ug/L | | | 05/15/19 19:49 | 1 |
| trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 | ug/L | | | 05/15/19 19:49 | 1 |
| Trichloroethene | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/15/19 19:49 | 1 |
| Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 | ug/L | | | 05/15/19 19:49 | 1 |
| Vinyl chloride | 0.20 | U | 1.0 | 0.20 | ug/L | | | 05/15/19 19:49 | 1 |
| Xylenes, Total | 0.15 | U | 2.0 | 0.15 | ug/L | | | 05/15/19 19:49 | 1 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 240-381514/7**
**Matrix: Water**
**Analysis Batch: 381514**

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

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *93* | | *70 - 123* | | *05/15/19 19:49* | *1* |
| *Dibromofluoromethane (Surr)* | *88* | | *75 - 128* | | *05/15/19 19:49* | *1* |
| *4-Bromofluorobenzene (Surr)* | *86* | | *59 - 120* | | *05/15/19 19:49* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *88* | | *70 - 121* | | *05/15/19 19:49* | *1* |

**Lab Sample ID: LCS 240-381514/5**
**Matrix: Water**
**Analysis Batch: 381514**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 19.1 | | ug/L | | 95 | 69 - 134 |
| 1,1,2,2-Tetrachloroethane | 20.0 | 20.5 | | ug/L | | 102 | 65 - 139 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 19.8 | | ug/L | | 99 | 50 - 156 |
| 1,1,2-Trichloroethane | 20.0 | 19.5 | | ug/L | | 97 | 78 - 133 |
| 1,1-Dichloroethane | 20.0 | 19.2 | | ug/L | | 96 | 75 - 133 |
| 1,1-Dichloroethene | 20.0 | 19.0 | | ug/L | | 95 | 65 - 139 |
| 1,2,4-Trichlorobenzene | 20.0 | 16.7 | | ug/L | | 83 | 42 - 133 |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 18.2 | | ug/L | | 91 | 46 - 132 |
| Ethylene Dibromide | 20.0 | 18.9 | | ug/L | | 95 | 77 - 123 |
| 1,2-Dichlorobenzene | 20.0 | 18.8 | | ug/L | | 94 | 78 - 120 |
| 1,2-Dichloroethane | 20.0 | 17.7 | | ug/L | | 88 | 71 - 135 |
| 1,2-Dichloropropane | 20.0 | 20.6 | | ug/L | | 103 | 78 - 133 |
| 1,3-Dichlorobenzene | 20.0 | 19.0 | | ug/L | | 95 | 78 - 120 |
| 1,4-Dichlorobenzene | 20.0 | 18.8 | | ug/L | | 94 | 78 - 120 |
| 2-Butanone (MEK) | 40.0 | 36.2 | | ug/L | | 91 | 39 - 163 |
| 2-Hexanone | 40.0 | 35.5 | | ug/L | | 89 | 43 - 148 |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 36.7 | | ug/L | | 92 | 49 - 143 |
| Acetone | 40.0 | 30.2 | | ug/L | | 76 | 21 - 162 |
| Benzene | 20.0 | 20.0 | | ug/L | | 100 | 80 - 123 |
| Dichlorobromomethane | 20.0 | 19.2 | | ug/L | | 96 | 77 - 125 |
| Bromoform | 20.0 | 18.3 | | ug/L | | 92 | 49 - 141 |
| Bromomethane | 20.0 | 19.6 | | ug/L | | 98 | 41 - 175 |
| Carbon disulfide | 20.0 | 17.9 | | ug/L | | 90 | 60 - 138 |
| Carbon tetrachloride | 20.0 | 18.7 | | ug/L | | 93 | 63 - 140 |
| Chlorobenzene | 20.0 | 19.0 | | ug/L | | 95 | 80 - 121 |
| Chloroethane | 20.0 | 19.1 | | ug/L | | 96 | 33 - 173 |
| Chloroform | 20.0 | 19.0 | | ug/L | | 95 | 79 - 127 |
| Chloromethane | 20.0 | 17.9 | | ug/L | | 90 | 54 - 143 |
| cis-1,2-Dichloroethene | 20.0 | 19.4 | | ug/L | | 97 | 76 - 128 |
| cis-1,3-Dichloropropene | 20.0 | 20.5 | | ug/L | | 103 | 64 - 132 |
| Cyclohexane | 20.0 | 20.1 | | ug/L | | 100 | 58 - 145 |
| Chlorodibromomethane | 20.0 | 18.7 | | ug/L | | 93 | 70 - 132 |
| Dichlorodifluoromethane | 20.0 | 17.2 | | ug/L | | 86 | 29 - 148 |
| Ethylbenzene | 20.0 | 19.3 | | ug/L | | 97 | 80 - 120 |
| Isopropylbenzene | 20.0 | 19.6 | | ug/L | | 98 | 74 - 120 |
| Methyl acetate | 40.0 | 33.4 | | ug/L | | 83 | 52 - 145 |
| Methyl tert-butyl ether | 20.0 | 19.2 | | ug/L | | 96 | 51 - 133 |
| Methylcyclohexane | 20.0 | 20.1 | | ug/L | | 100 | 60 - 125 |

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 240-381514/5** **Client Sample ID: Lab Control Sample**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381514**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methylene Chloride | 20.0 | 17.2 | | ug/L | | 86 | 70 - 134 |
| Styrene | 20.0 | 18.6 | | ug/L | | 93 | 79 - 120 |
| Tetrachloroethene | 20.0 | 19.1 | | ug/L | | 95 | 74 - 130 |
| Toluene | 20.0 | 19.4 | | ug/L | | 97 | 78 - 129 |
| trans-1,2-Dichloroethene | 20.0 | 19.1 | | ug/L | | 95 | 78 - 133 |
| trans-1,3-Dichloropropene | 20.0 | 18.7 | | ug/L | | 94 | 55 - 128 |
| Trichloroethene | 20.0 | 19.5 | | ug/L | | 97 | 76 - 125 |
| Trichlorofluoromethane | 20.0 | 19.8 | | ug/L | | 99 | 51 - 164 |
| Vinyl chloride | 20.0 | 20.0 | | ug/L | | 100 | 58 - 143 |
| Xylenes, Total | 40.0 | 39.1 | | ug/L | | 98 | 80 - 120 |
| m-Xylene & p-Xylene | 20.0 | 19.8 | | ug/L | | 99 | 80 - 120 |
| o-Xylene | 20.0 | 19.3 | | ug/L | | 96 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *93* | | *70 - 123* |
| *Dibromofluoromethane (Surr)* | *92* | | *75 - 128* |
| *4-Bromofluorobenzene (Surr)* | *91* | | *59 - 120* |
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *70 - 121* |

## Method: RSK-175 - Dissolved Gases (GC)

**Lab Sample ID: MB 240-381892/4** **Client Sample ID: Method Blank**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/17/19 15:00 | 1 |
| Ethane | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/17/19 15:00 | 1 |
| Methane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/17/19 15:00 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *86* | | *60 - 140* | | *05/17/19 15:00* | *1* |

**Lab Sample ID: LCS 240-381892/5** **Client Sample ID: Lab Control Sample**
**Matrix: Water** **Prep Type: Total/NA**
**Analysis Batch: 381892**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Ethene | 387 | 338 | | ug/L | | 87 | 80 - 120 |
| Ethane | 475 | 387 | | ug/L | | 81 | 80 - 120 |
| Methane | 480 | 399 | | ug/L | | 83 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *87* | | *60 - 140* |

## Method: RSK-175 - Dissolved Gases (GC) (Continued)

**Lab Sample ID: MB 240-382383/4** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382383**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethene | 0.11 | U | 1.0 | 0.11 | ug/L | | | 05/21/19 15:02 | 1 |
| Ethane | 0.10 | U | 1.0 | 0.10 | ug/L | | | 05/21/19 15:02 | 1 |
| Methane | 0.17 | U | 1.0 | 0.17 | ug/L | | | 05/21/19 15:02 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,1,1-Trifluoroethane* | *82* | | *60 - 140* | | *05/21/19 15:02* | *1* |

**Lab Sample ID: LCS 240-382383/5** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382383**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Ethene | 387 | 336 | | ug/L | | 87 | 80 - 120 |
| Ethane | 475 | 385 | | ug/L | | 81 | 80 - 120 |
| Methane | 480 | 384 | | ug/L | | 80 | 80 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,1,1-Trifluoroethane* | *82* | | *60 - 140* |

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 240-380430/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 380720** — **Prep Batch: 380430**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 26 | U | 200 | 26 | ug/L | | 05/09/19 14:00 | 05/10/19 18:48 | 1 |
| Manganese | 10.4 | J | 15 | 2.1 | ug/L | | 05/09/19 14:00 | 05/10/19 18:48 | 1 |

**Lab Sample ID: LCS 240-380430/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 380720** — **Prep Batch: 380430**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Iron | 1000 | 1040 | | ug/L | | 104 | 80 - 120 |
| Manganese | 500 | 511 | | ug/L | | 102 | 80 - 120 |

## Method: 2320B-1997 - Alkalinity, Total

**Lab Sample ID: MB 240-382067/30** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382067**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity | 2.6 | U | 5.0 | 2.6 | mg/L | | | 05/17/19 17:09 | 1 |

## Method: 2320B-1997 - Alkalinity, Total (Continued)

**Lab Sample ID: LCS 240-382067/29** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382067**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Alkalinity | 168 | 164 | | mg/L | | 97 | 86 - 123 |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 240-382420/3** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382420**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfate | 0.35 | U | 1.0 | 0.35 | mg/L | | | 05/21/19 17:34 | 1 |

**Lab Sample ID: LCS 240-382420/4** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 382420**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Sulfate | 50.0 | 51.6 | | mg/L | | 103 | 90 - 110 |

## Method: 9060A - Organic Carbon, Total (TOC)

**Lab Sample ID: MB 490-594412/3** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 594412**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | 0.910 | J | 1.0 | 0.50 | mg/L | | | 05/10/19 12:44 | 1 |

**Lab Sample ID: LCS 490-594412/6** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 594412**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 |

**Lab Sample ID: LCSD 490-594412/7** — **Client Sample ID: Lab Control Sample Dup**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 594412**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | 10.0 | 10.1 | | mg/L | | 101 | 90 - 110 | 0 | 20 |

## GC/MS VOA

### Analysis Batch: 381514

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-1 | TB-050719 | Total/NA | Water | 8260C | |
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | 8260C | |
| MB 240-381514/7 | Method Blank | Total/NA | Water | 8260C | |
| LCS 240-381514/5 | Lab Control Sample | Total/NA | Water | 8260C | |

## GC VOA

### Analysis Batch: 381892

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | RSK-175 | |
| MB 240-381892/4 | Method Blank | Total/NA | Water | RSK-175 | |
| LCS 240-381892/5 | Lab Control Sample | Total/NA | Water | RSK-175 | |

### Analysis Batch: 382383

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | RSK-175 | |
| MB 240-382383/4 | Method Blank | Total/NA | Water | RSK-175 | |
| LCS 240-382383/5 | Lab Control Sample | Total/NA | Water | RSK-175 | |

## Metals

### Prep Batch: 380430

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total Recoverable | Water | 3005A | |
| MB 240-380430/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 240-380430/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |

### Analysis Batch: 380720

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total Recoverable | Water | 6010C | 380430 |
| MB 240-380430/1-A | Method Blank | Total Recoverable | Water | 6010C | 380430 |
| LCS 240-380430/2-A | Lab Control Sample | Total Recoverable | Water | 6010C | 380430 |

## General Chemistry

### Analysis Batch: 382067

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | 2320B-1997 | |
| MB 240-382067/30 | Method Blank | Total/NA | Water | 2320B-1997 | |
| LCS 240-382067/29 | Lab Control Sample | Total/NA | Water | 2320B-1997 | |

### Analysis Batch: 382420

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | 300.0 | |
| MB 240-382420/3 | Method Blank | Total/NA | Water | 300.0 | |
| LCS 240-382420/4 | Lab Control Sample | Total/NA | Water | 300.0 | |

### Analysis Batch: 594412

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-112234-2 | MRC-NMW-2S-050719 | Total/NA | Water | 9060A | |
| MB 490-594412/3 | Method Blank | Total/NA | Water | 9060A | |
| LCS 490-594412/6 | Lab Control Sample | Total/NA | Water | 9060A | |

## General Chemistry (Continued)

### Analysis Batch: 594412 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 490-594412/7 | Lab Control Sample Dup | Total/NA | Water | 9060A | |

# Lab Chronicle

Client: Tetra Tech, Inc. Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Client Sample ID: TB-050719 Lab Sample ID: 240-112234-1

**Date Collected: 05/07/19 00:00** **Matrix: Water**
**Date Received: 05/08/19 09:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 381514 | 05/15/19 23:10 | TJL1 | TAL CAN |

## Client Sample ID: MRC-NMW-2S-050719 Lab Sample ID: 240-112234-2

**Date Collected: 05/07/19 12:00** **Matrix: Water**
**Date Received: 05/08/19 09:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260C | | 1 | 381514 | 05/15/19 23:32 | TJL1 | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 1 | 381892 | 05/17/19 21:05 | BPM | TAL CAN |
| Total/NA | Analysis | RSK-175 | | 10 | 382383 | 05/21/19 15:53 | BPM | TAL CAN |
| Total Recoverable | Prep | 3005A | | | 380430 | 05/09/19 14:00 | SLD | TAL CAN |
| Total Recoverable | Analysis | 6010C | | 1 | 380720 | 05/10/19 20:04 | WKD | TAL CAN |
| Total/NA | Analysis | 2320B-1997 | | 1 | 382067 | 05/17/19 18:25 | MMM | TAL CAN |
| Total/NA | Analysis | 300.0 | | 1 | 382420 | 05/21/19 23:57 | JWW | TAL CAN |
| Total/NA | Analysis | 9060A | | 1 | 594412 | 05/10/19 17:08 | VRP | TAL NSH |

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Accreditation/Certification Summary

Client: Tetra Tech, Inc. Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

## Laboratory: Eurofins TestAmerica, Canton

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| California | State Program | 9 | 2927 | 02-23-20 |
| Connecticut | State Program | 1 | PH-0590 | 12-31-19 |
| Florida | NELAP | 4 | E87225 | 06-30-19 * |
| Illinois | NELAP | 5 | 200004 | 07-31-19 * |
| Kansas | NELAP | 7 | E-10336 | 04-30-20 |
| Kentucky (UST) | State Program | 4 | 58 | 02-23-20 |
| Kentucky (WW) | State Program | 4 | 98016 | 12-31-19 |
| Minnesota | NELAP | 5 | 039-999-348 | 12-31-19 * |
| Minnesota (Petrofund) | State Program | 1 | 3506 | 07-31-19 * |
| Nevada | State Program | 9 | OH00048 | 07-31-19 |
| New Jersey | NELAP | 2 | OH001 | 06-30-19 * |
| New York | NELAP | 2 | 10975 | 03-31-20 |
| Ohio VAP | State Program | 5 | CL0024 | 09-06-19 |
| Oregon | NELAP | 10 | 4062 | 02-23-20 |
| Pennsylvania | NELAP | 3 | 68-00340 | 08-31-19 * |
| Texas | NELAP | 6 | T104704517-18-10 | 08-31-19 |
| USDA | Federal | | P330-16-00404 | 12-28-19 |
| Virginia | NELAP | 3 | 460175 | 09-14-19 |
| Washington | State Program | 10 | C971 | 01-12-20 * |
| West Virginia DEP | State Program | 3 | 210 | 12-31-19 |

## Laboratory: Eurofins TestAmerica, Nashville

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-19 |
| Alaska (UST) | State Program | 10 | UST-087 | 06-30-19 |
| Arizona | State Program | 9 | AZ0473 | 05-05-20 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-20 |
| California | State Program | 9 | 2938 | 06-30-19 |
| Connecticut | State Program | 1 | PH-0220 | 12-31-19 |
| Florida | NELAP | 4 | E87358 | 06-30-19 |
| Georgia | State Program | 4 | NA: NELAP & A2LA | 12-31-19 |
| Illinois | NELAP | 5 | 200010 | 12-09-19 |
| Iowa | State Program | 7 | 131 | 04-01-20 |
| Kansas | NELAP | 7 | E-10229 | 10-31-19 |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-19 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-19 |
| Louisiana | NELAP | 6 | 30613 | 06-30-19 |
| Maine | State Program | 1 | TN00032 | 11-03-19 |
| Maryland | State Program | 3 | 316 | 03-31-20 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-19 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-19 |
| Mississippi | State Program | 4 | N/A | 06-30-19 |
| Nevada | State Program | 9 | TN00032 | 07-31-19 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-19 |
| New Jersey | NELAP | 2 | TN965 | 06-30-19 |
| New York | NELAP | 2 | 11342 | 03-31-20 |
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-19 |
| North Dakota | State Program | 8 | R-146 | 06-30-19 |

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

## Laboratory: Eurofins TestAmerica, Nashville (Continued)

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| Oklahoma | State Program | 6 | 9412 | 08-31-19 |
| Oregon | NELAP | 10 | TN200001 | 04-26-19 * |
| Pennsylvania | NELAP | 3 | 68-00585 | 07-31-19 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-19 |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-19 * |
| Tennessee | State Program | 4 | 2008 | 02-23-20 |
| Texas | NELAP | 6 | T104704077 | 08-31-19 |
| USDA | Federal | | P330-13-00306 | 04-10-20 |
| Utah | NELAP | 8 | TN00032 | 07-31-19 |
| Virginia | NELAP | 3 | 460152 | 06-14-19 |
| Washington | State Program | 10 | C789 | 07-19-19 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-20 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-19 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-19 |

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

# Method Summary

Client: Tetra Tech, Inc. Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260C | Volatile Organic Compounds by GC/MS | SW846 | TAL CAN |
| RSK-175 | Dissolved Gases (GC) | RSK | TAL CAN |
| 6010C | Metals (ICP) | SW846 | TAL CAN |
| 2320B-1997 | Alkalinity, Total | SM | TAL CAN |
| 300.0 | Anions, Ion Chromatography | MCAWW | TAL CAN |
| 9060A | Organic Carbon, Total (TOC) | SW846 | TAL NSH |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | SW846 | TAL CAN |
| 5030C | Purge and Trap | SW846 | TAL CAN |

**Protocol References:**

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

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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

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

**Laboratory References:**

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: Tetra Tech, Inc.
Job ID: 240-112234-1
Project/Site: MRC Block I GW Sampling

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received | Asset ID |
|---|---|---|---|---|---|
| 240-112234-1 | TB-050719 | Water | 05/07/19 00:00 | 05/08/19 09:20 | |
| 240-112234-2 | MRC-NMW-2S-050719 | Water | 05/07/19 12:00 | 05/08/19 09:20 | |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Instrument ID: A3UX12 Analysis Batch Number: 378870

Lab Sample ID: STD8260 240-378870/8 IC Client Sample ID:

Date Analyzed: 04/30/19 14:10 Lab File ID: U1269795.D GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,2,3-Trichloropropane | | Invalid Compound ID | laveyt | 04/30/19 15:28 |
| 1,2-Dibromo-3-Chloropropane | | Invalid Compound ID | laveyt | 04/30/19 15:29 |
| 2-Butanone (MEK) | | Invalid Compound ID | laveyt | 04/30/19 15:25 |
| 2-Hexanone | | Invalid Compound ID | laveyt | 04/30/19 15:27 |
| 2-Methyl-2-propanol | | Invalid Compound ID | laveyt | 04/30/19 15:24 |
| 4-Methyl-2-pentanone (MIBK) | | Invalid Compound ID | laveyt | 04/30/19 15:26 |
| Acetone | | Invalid Compound ID | laveyt | 04/30/19 15:23 |
| Acrolein | | Invalid Compound ID | laveyt | 04/30/19 15:23 |
| Acrylonitrile | | Invalid Compound ID | laveyt | 04/30/19 15:24 |
| Isobutyl alcohol | | Invalid Compound ID | laveyt | 04/30/19 15:25 |
| Methyl acetate | | Invalid Compound ID | laveyt | 04/30/19 15:24 |
| Tetrahydrofuran | | Invalid Compound ID | laveyt | 04/30/19 15:25 |
| trans-1,4-Dichloro-2-butene | | Invalid Compound ID | laveyt | 04/30/19 15:28 |
| Vinyl acetate | | Invalid Compound ID | laveyt | 04/30/19 15:25 |

Lab Sample ID: STD8260 240-378870/13 I Client Sample ID:

Date Analyzed: 04/30/19 16:02 Lab File ID: U1269800.D GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chloromethane | 1.58 | Split Peak | laveyt | 04/30/19 16:22 |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Instrument ID: A3UX12 Analysis Batch Number: 378870

Lab Sample ID: STD8260 240-378870/14 I Client Sample ID:

Date Analyzed: 04/30/19 16:24 Lab File ID: U1269801.D GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,2-Dichloroethane-d4 (Surr) | | Invalid Compound ID | laveyt | 04/30/19 16:51 |
| 4-Bromofluorobenzene (Surr) | | Invalid Compound ID | laveyt | 04/30/19 16:52 |
| Acetone | | Invalid Compound ID | laveyt | 04/30/19 16:45 |
| Chloromethane | | Invalid Compound ID | laveyt | 04/30/19 16:44 |
| Dibromofluoromethane (Surr) | | Invalid Compound ID | laveyt | 04/30/19 16:51 |
| Methylene Chloride | | Invalid Compound ID | laveyt | 04/30/19 16:46 |
| n-Heptane | | Invalid Compound ID | laveyt | 04/30/19 16:54 |
| Toluene-d8 (Surr) | | Invalid Compound ID | laveyt | 04/30/19 16:52 |

Lab Sample ID: ICV 240-378870/15 Client Sample ID:

Date Analyzed: 04/30/19 16:46 Lab File ID: U1269802.D GC Column: DB-624 ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chloromethane | 1.59 | Split Peak | laveyt | 04/30/19 17:05 |

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: A3UX12  Analysis Batch Number: 381514

Lab Sample ID: CCVIS 240-381514/4  Client Sample ID:

Date Analyzed: 05/15/19 18:42  Lab File ID: U1270187.D  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chloromethane | 1.59 | Split Peak | laveyt | 05/15/19 19:02 |

Lab Sample ID: LCS 240-381514/5  Client Sample ID:

Date Analyzed: 05/15/19 19:04  Lab File ID: U1270188.D  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Chloromethane | 1.59 | Split Peak | laveyt | 05/15/19 19:33 |

Lab Sample ID: 240-112234-2  Client Sample ID: MRC-NMW-2S-050719

Date Analyzed: 05/15/19 23:32  Lab File ID: U1270200.D  GC Column: DB-624  ID: 0.18(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 2-Hexanone | | Invalid Compound ID | laveyt | 05/16/19 14:33 |
| 4-Methyl-2-pentanone (MIBK) | | Invalid Compound ID | laveyt | 05/16/19 14:33 |
| Methyl acetate | | Invalid Compound ID | laveyt | 05/16/19 14:32 |

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 373146

Lab Sample ID: STD 240-373146/3 IC  Client Sample ID:

Date Analyzed: 03/25/19 14:32  Lab File ID: Z0325003.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Methane | 1.18 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Acetylene | 2.00 | Incomplete Integration | matthewsb | 03/26/19 07:52 |
| Ethane | 2.20 | Incomplete Integration | matthewsb | 03/26/19 07:47 |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:47 |

Lab Sample ID: STD 240-373146/4 IC  Client Sample ID:

Date Analyzed: 03/25/19 14:49  Lab File ID: Z0325004.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Acetylene | 2.00 | Incomplete Integration | matthewsb | 03/26/19 07:48 |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

Lab Sample ID: STD 240-373146/5 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:06  Lab File ID: Z0325005.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

Lab Sample ID: STD 240-373146/6 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:23  Lab File ID: Z0325006.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.55 | Incomplete Integration | matthewsb | 03/26/19 07:48 |

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 373146

Lab Sample ID: STD 240-373146/7 IC  Client Sample ID:

Date Analyzed: 03/25/19 15:40  Lab File ID: Z0325007.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Propane | 4.54 | Split Peak | matthewsb | 03/26/19 07:49 |

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID  Analysis Batch Number: 381892

Lab Sample ID: 240-112234-2  Client Sample ID: MRC-NMW-2S-050719

Date Analyzed: 05/17/19 21:05  Lab File ID: Z0517025.D  GC Column: HP-PLOT/Q  ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Ethene | 1.88 | Incomplete Integration | matthewsb | 05/20/19 10:13 |

RSK-175

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: VERONICA  Analysis Batch Number: 376335

Lab Sample ID: STD2 240-376335/2 IC  Client Sample ID:

Date Analyzed: 04/13/19 02:37  Lab File ID: 240-0086122-002_03_ECD_1.  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 4.06 | Peak not integrated | weimerj | 04/15/19 12:59 |

Lab Sample ID: STD5 240-376335/5 ICRT  Client Sample ID:

Date Analyzed: 04/13/19 03:37  Lab File ID: 240-0086122-005_06_ECD_1.  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 4.07 | Peak not integrated | weimerj | 04/15/19 13:00 |

Lab Sample ID: STD7 240-376335/7 IC  Client Sample ID:

Date Analyzed: 04/13/19 04:18  Lab File ID: 240-0086122-007_08_ECD_1.  GC Column: IC AS19  ID: 4(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Fluoride | 4.08 | Peak not integrated | weimerj | 04/15/19 13:01 |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **MEEP LCS_00026** | 05/22/19 | 05/08/19 | DIWATER, Lot 1 | 43 mL | MEEP_00013 | 4 mL | Ethane | 475.349 ug/L |
| | | | | | | | Ethene | 386.977 ug/L |
| | | | | | | | Methane | 480 ug/L |
| .MEEP_00013 | 06/26/19 | | LGC, Lot 1005981 | | (Purchased Reagent) | | Ethane | 5.11 mg/L |
| | | | | | | | Ethene | 4.16 mg/L |
| | | | | | | | Methane | 5.16 mg/L |
| **MT6500ICV_00053** | 06/20/19 | 03/01/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRICV1_00009 | 5 mL | Iron | 12500 ug/L |
| | | | | | MTTRICV3_00011 | 6 mL | Manganese | 1500 ug/L |
| .MTTRICV1_00009 | 06/20/19 | | CPI, Lot 10072207-1 | | (Purchased Reagent) | | Iron | 2500 mg/L |
| .MTTRICV3_00011 | 11/30/19 | | CPI, Lot 10075909-3 | | (Purchased Reagent) | | Manganese | 250 mg/L |
| **MTAGSPIKEW_00091** | 10/16/19 | 04/16/19 | DIWATER, Lot DIWATER | 1000 mL | MTAG_00008 | 2.5 mL | Ag | 2500 ug/L |
| | | | | | MTTMHNO3_00186 | 50 mL | Nitric acid | 50000000 ug/L |
| .MTAG_00008 | 02/28/20 | | HIGH PURITY STANDARDS, Lot 1817921 | | (Purchased Reagent) | | Ag | 1000 ug/mL |
| .MTTMHNO3_00186 | 04/08/21 | | Macron, Lot 0000216908 | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTICP1_00084** | 11/02/19 | 05/02/19 | DIWATER, Lot DI WATER | 1000 mL | MTICPSPIKE1A_00014 | 50 mL | Al | 100000 ug/L |
| | | | | | | | As | 100000 ug/L |
| | | | | | | | B | 50000 ug/L |
| | | | | | | | Ba | 100000 ug/L |
| | | | | | | | Be | 2500 ug/L |
| | | | | | | | Cd | 2500 ug/L |
| | | | | | | | Co | 25000 ug/L |
| | | | | | | | Cr | 10000 ug/L |
| | | | | | | | Cu | 12500 ug/L |
| | | | | | | | Iron | 50000 ug/L |
| | | | | | | | Manganese | 25000 ug/L |
| | | | | | | | Ni | 25000 ug/L |
| | | | | | | | Pb | 25000 ug/L |
| | | | | | | | Se | 100000 ug/L |
| | | | | | | | Tl | 100000 ug/L |
| | | | | | | | V | 25000 ug/L |
| | | | | | | | Zn | 25000 ug/L |
| | | | | | MTICPSPIKEB_00013 | 50 mL | Mo | 50000 ug/L |
| | | | | | | | Sb | 25000 ug/L |
| | | | | | | | Sn | 100000 ug/L |
| | | | | | | | Ti | 50000 ug/L |
| | | | | | MTICPSpikeOdd_00010 | 50 mL | Li | 50000 ug/L |
| | | | | | | | Si | 50000 ug/L |
| | | | | | | | SiO2 | 107000 ug/L |
| | | | | | | | Sr | 50000 ug/L |
| | | | | | MTTMHNO3_00188 | 50 mL | Nitric acid | 50000000 ug/L |
| .MTICPSPIKE1A_00014 | 11/30/19 | | High Purity Standards, Lot 1831255 | | (Purchased Reagent) | | Al | 2000 ug/mL |
| | | | | | | | As | 2000 ug/mL |
| | | | | | | | B | 1000 ug/mL |
| | | | | | | | Ba | 2000 ug/mL |
| | | | | | | | Be | 50 ug/mL |
| | | | | | | | Cd | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Co | 500 ug/mL |
| | | | | | | | Cr | 200 ug/mL |
| | | | | | | | Cu | 250 ug/mL |
| | | | | | | | Iron | 1000 ug/mL |
| | | | | | | | Manganese | 500 ug/mL |
| | | | | | | | Ni | 500 ug/mL |
| | | | | | | | Pb | 500 ug/mL |
| | | | | | | | Se | 2000 ug/mL |
| | | | | | | | Tl | 2000 ug/mL |
| | | | | | | | V | 500 ug/mL |
| | | | | | | | Zn | 500 ug/mL |
| .MTICPSPIKEB_00013 | 11/30/19 | High Purity Standards, Lot 1831330 | | | (Purchased Reagent) | | Mo | 1000 ug/mL |
| | | | | | | | Sb | 500 ug/mL |
| | | | | | | | Sn | 2000 ug/mL |
| | | | | | | | Ti | 1000 ug/mL |
| .MTICPSpikeOdd_00010 | 11/30/19 | High Purity Standards, Lot 1831608 | | | (Purchased Reagent) | | Li | 1000 ug/mL |
| | | | | | | | Si | 1000 ug/mL |
| | | | | | | | SiO2 | 2140 ug/mL |
| | | | | | | | Sr | 1000 ug/mL |
| .MTTMHNO3_00188 | 04/25/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTICP2A_00092** | 10/16/19 | 04/16/19 | DIWATER, Lot NONE | 1000 mL | MTTMHNO3_00186 | 50 mL | Nitric acid | 50000 mg/L |
| | | | | | MTTRCAL2_00021 | 250 mL | Ca | 2500 mg/L |
| | | | | | | | K | 2500 mg/L |
| | | | | | | | Mg | 2500 mg/L |
| | | | | | | | Na | 2500 mg/L |
| .MTTMHNO3_00186 | 04/08/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| .MTTRCAL2_00021 | 10/31/19 | HIGH PURITY STANDARDS, Lot 1812740 | | | (Purchased Reagent) | | Ca | 10000 ug/mL |
| | | | | | | | K | 10000 ug/mL |
| | | | | | | | Mg | 10000 ug/mL |
| | | | | | | | Na | 10000 ug/mL |
| **MTICPCCV_00153** | 10/29/19 | 04/29/19 | DIWATER, Lot DIWATER | 2000 mL | MTICPCCV1_00029 | 200 mL | Iron | 25000 ug/L |
| | | | | | | | Manganese | 2000 ug/L |
| .MTICPCCV1_00029 | 03/19/20 | INORGANIC VENTURES, Lot K2-MEB632080 | | | (Purchased Reagent) | | Iron | 250000 ug/L |
| | | | | | | | Manganese | 20000 ug/L |
| **MTICPICSABW_00021** | 08/28/19 | 04/04/19 | DIWATER, Lot DIWATER | 1000 mL | MTICPICSAB1_00008 | 100 mL | Al | 500000 ug/L |
| | | | | | | | As | 1000 ug/L |
| | | | | | | | B | 500 ug/L |
| | | | | | | | Ba | 500 ug/L |
| | | | | | | | Be | 500 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Cd | 1000 ug/L |
| | | | | | | | Co | 500 ug/L |
| | | | | | | | Cr | 500 ug/L |
| | | | | | | | Cu | 500 ug/L |
| | | | | | | | Iron | 200000 ug/L |
| | | | | | | | K | 10000 ug/L |
| | | | | | | | Li | 500 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Manganese | 500 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| | | | | | | | Na | 10000 ug/L |
| | | | | | | | Ni | 1000 ug/L |
| | | | | | | | Pb | 1000 ug/L |
| | | | | | | | Se | 1000 ug/L |
| | | | | | | | Sr | 1500 ug/L |
| | | | | | | | Tl | 1000 ug/L |
| | | | | | | | V | 500 ug/L |
| | | | | | | | Zn | 1000 ug/L |
| | | | | | MTICPICSAB2_00008 | 100 mL | Ag | 1000 ug/L |
| | | | | | | | Mo | 1000 ug/L |
| | | | | | | | Sb | 1000 ug/L |
| | | | | | | | Si | 10000 ug/L |
| | | | | | | | Sn | 500 ug/L |
| | | | | | | | Ti | 500 ug/L |
| .MTICPICSAB1_00008 | 08/28/19 | INORGANIC VENTURES, Lot N2-MEB669101 | | | (Purchased Reagent) | | Al | 5000000 ug/L |
| | | | | | | | As | 10000 ug/L |
| | | | | | | | B | 5000 ug/L |
| | | | | | | | Ba | 5000 ug/L |
| | | | | | | | Be | 5000 ug/L |
| | | | | | | | Ca | 5000000 ug/L |
| | | | | | | | Cd | 10000 ug/L |
| | | | | | | | Co | 5000 ug/L |
| | | | | | | | Cr | 5000 ug/L |
| | | | | | | | Cu | 5000 ug/L |
| | | | | | | | Iron | 2000000 ug/L |
| | | | | | | | K | 100000 ug/L |
| | | | | | | | Li | 5000 ug/L |
| | | | | | | | Manganese | 5000 ug/L |
| | | | | | | | Mg | 5000000 ug/L |
| | | | | | | | Na | 100000 ug/L |
| | | | | | | | Ni | 10000 ug/L |
| | | | | | | | Pb | 10000 ug/L |
| | | | | | | | Se | 10000 ug/L |
| | | | | | | | Sr | 15000 ug/L |
| | | | | | | | Tl | 10000 ug/L |
| | | | | | | | V | 5000 ug/L |
| | | | | | | | Zn | 10000 ug/L |
| .MTICPICSAB2_00008 | 08/28/19 | INORGANIC VENTURES, Lot N2-MEB669102 | | | (Purchased Reagent) | | Ag | 10000 ug/L |
| | | | | | | | Mo | 10000 ug/L |
| | | | | | | | Sb | 10000 ug/L |
| | | | | | | | Si | 100000 ug/L |
| | | | | | | | Sn | 5000 ug/L |
| | | | | | | | Ti | 5000 ug/L |
| **MTTMHCL_00246** | 04/30/21 | JT Baker(Avantor), Lot 0000221681 | | | (Purchased Reagent) | | Hydrogen Chloride | 100 % |
| **MTTMHNO3_00189** | 05/06/21 | Macron, Lot 0000216908 | | | (Purchased Reagent) | | Nitric acid | 100 % |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **MTTRCRIC_00069** | 10/04/19 | 04/04/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRCRI6010C_00020 | 50 mL | Iron | 200 ug/L |
| | | | | | | | Manganese | 15 ug/L |
| .MTTRCRI6010C_00020 | 11/12/19 | Inorganic Ventures, Lot N2-MEB664971 | | | (Purchased Reagent) | | Iron | 4000 ug/L |
| | | | | | | | Manganese | 300 ug/L |
| **MTTRICSAW_00045** | 08/14/19 | 02/14/19 | DIWATER, Lot DIWATER | 1000 mL | MTTRICSA_00018 | 100 mL | Al | 500000 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Iron | 200000 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| .MTTRICSA_00018 | 02/14/20 | INORGANIC VENTURES, Lot K2-MEB643109 | | | (Purchased Reagent) | | Al | 5000 ug/mL |
| | | | | | | | Ca | 5000 ug/mL |
| | | | | | | | Iron | 2000 ug/mL |
| | | | | | | | Mg | 5000 ug/mL |
| **SAICALSURR_00015** | 07/13/20 | SynQuest Laboratories, Inc., Lot 469800 | | | (Purchased Reagent) | | 1,1,1-Trifluoroethane | 11190 ug/L |
| **SARSK2ndSourc_00001** | 12/26/22 | Matheson Trigas, Lot 109-84-03769-E2 | | | (Purchased Reagent) | | Ethane | 12338 ug/L |
| | | | | | | | Ethene | 11518 ug/L |
| | | | | | | | Methane | 6558 ug/L |
| **SARSKHighCal_00006** | 02/08/23 | Airgas, Lot CBJ-510-1 | | | (Purchased Reagent) | | Acetylene | 10657 ug/L |
| | | | | | | | Ethane | 12338 ug/L |
| | | | | | | | Ethene | 11518 ug/L |
| | | | | | | | Methane | 6558 ug/L |
| | | | | | | | Propane | 18077 ug/L |
| **SARSKLOWCAL_00013** | 03/13/22 | AirGas, Lot 160-401444112-1 | | | (Purchased Reagent) | | Acetylene | 1087 ug/L |
| | | | | | | | Ethane | 1252 ug/L |
| | | | | | | | Ethene | 1176 ug/L |
| | | | | | | | Methane | 667 ug/L |
| | | | | | | | Propane | 1835 ug/L |
| **SARSKSURR_00012** | 05/22/19 | Matheson Trigas, Lot 9302603973 | | | (Purchased Reagent) | | 1,1,1-Trifluoroethane | 11190 ug/L |
| **vm50is_stk_A_00003** | 05/19/19 | 11/19/18 | MEOH, Lot 196628 | 50 mL | vm30241_00007 | 1 mL | 1,4-Dichlorobenzene-d4 | 50 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 50 ug/mL |
| | | | | | | | Fluorobenzene | 50 ug/mL |
| .vm30241_00007 | 01/31/23 | restek, Lot A0134242 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2500 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 2500 ug/mL |
| | | | | | | | Fluorobenzene | 2500 ug/mL |
| **vm50ss_00362** | 04/30/19 | 04/23/19 | MEOH, Lot na | 4 mL | vm50ss_stk_00080 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .vm50ss_stk_00080 | 08/20/19 | 02/20/19 | MEOH, Lot 0000196628 | 200 mL | VM567650_00030 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| ..VM567650_00030 | 01/31/22 | Restek, Lot A0124069 | | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **vm50ss_stk_00080** | 08/20/19 | 02/20/19 | MEOH, Lot 0000196628 | 200 mL | VM567650_00030 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .VM567650_00030 | 01/31/22 | | Restek, Lot A0124069 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vmarolistdw_00294** | 04/30/19 | 04/25/19 | MEOH, Lot na | 5 mL | VMACROLSTD_00070 | 5 mL | Acrolein | 250 ug/mL |
| .VMACROLSTD_00070 | 04/30/19 | 03/31/19 | MEOH, Lot 0000196628 | 20 mL | VM568720_00032 | 0.25 mL | Acrolein | 250 ug/mL |
| ..VM568720_00032 | 05/31/19 | | restek, Lot A0143013 | | (Purchased Reagent) | | Acrolein | 20000 ug/mL |
| **vmbfb_00021** | | | | | | | 1,2-Dichloroethene, Total | |
| | | | | | | | 1,3-Dichloropropene, Total | |
| | | | | | | | Tentatively Identified Compound | |
| | | | | | | | Total BTEX | |
| | | | | | | | Trihalomethanes, Total | |
| | | | | | | | Xylenes, Total | |
| | | | | | vm30026_00002 | 1.25 mL | BFB | 50 ug/mL |
| .vm30026_00002 | 07/31/21 | | restek, Lot A0120567 | | (Purchased Reagent) | | BFB | 2000 ug/mL |
| **VMFASGW_00307** | 05/06/19 | 04/29/19 | MEOH, Lot NA | 5 mL | VMFASG_00082 | 5 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00082 | 05/21/19 | 04/21/19 | MEOH, Lot 0000196628 | 100 mL | vm569722S_00005 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..vm569722S_00005 | 01/31/20 | | Restek, Lot A0124116 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMFASGW_00309** | 05/21/19 | 05/15/19 | MEOH, Lot NA | 5 mL | VMFASG_00082 | 5 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00082 | 05/21/19 | 04/21/19 | MEOH, Lot 0000196628 | 100 mL | vm569722S_00005 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..vm569722S_00005 | 01/31/20 | | Restek, Lot A0124116 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMFASPW_00297** | 05/01/19 | 04/24/19 | MEOH, Lot n/a | 5 mL | VMRFASP_00055 | 5 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRFASP_00055 | 06/30/19 | 03/31/19 | MEOH, Lot 0000196628 | 100 mL | VM569721S_00005 | 0.8 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992S_00004 | 2 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721S_00005 | 12/31/20 | | Restek, Lot A0133078 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992S_00004 | 06/30/19 | | Restek, Lot A0123775 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **VMFASPW_00299** | 05/17/19 | 05/10/19 | MEOH, Lot n/a | 5 mL | VMRFASP_00055 | 5 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRFASP_00055 | 06/30/19 | 03/31/19 | MEOH, Lot 0000196628 | 100 mL | VM569721S_00005 | 0.8 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992S_00004 | 2 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721S_00005 | 12/31/20 | | Restek, Lot A0133078 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992S_00004 | 06/30/19 | | Restek, Lot A0123775 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **vmrgas_00291** | 05/07/19 | 04/30/19 | MEOH, Lot 0000198123 | 10 mL | vm569722_00012 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Butadiene | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Dichlorofluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00012 | 11/30/21 | Restek, Lot A0143158 | | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Butadiene | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Dichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMRGAS_00292** | 05/15/19 | 05/08/19 | MEOH, Lot 0000198123 | 10 mL | vm569722_00012 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00012 | 11/30/21 | | Restek, Lot A0143158 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **vmrprimw_00331** | 05/01/19 | 04/24/19 | MEOH, Lot NA | 4 mL | VMRPRIM_00035 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | | | Vinyl acetate | 50 ug/mL |
| | | | | | | | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| .VMRPRIM_00035 | 06/30/19 | 03/01/19 | MEOH, Lot 0000196628 | 50 mL | VM569721_00005 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM569723_00007 | 2 mL | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | VM569724_00018 | 0.5 mL | Vinyl acetate | 50 ug/mL |
| | | | | | VM571992_00002 | 1 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 500 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorobromomethane | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| ..VM569721_00005 | 04/30/21 | | Restek, Lot A0137509 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM569723_00007 | 12/31/20 | | restek, Lot A0133302 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2500 ug/mL |
| ..VM569724_00018 | 07/31/19 | | Restek, Lot A0144661 | | (Purchased Reagent) | | Vinyl acetate | 5000 ug/mL |
| ..VM571992_00002 | 06/30/19 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2500 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2500 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2,3-Trichloropropane | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dioxane | 50000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 2-Methyl-2-propanol | 25000 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 2500 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2500 ug/mL |
| | | | | | | | 4-Isopropyltoluene | 2500 ug/mL |
| | | | | | | | Acrylonitrile | 25000 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromobenzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorobromomethane | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dibromomethane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethyl ether | 2500 ug/mL |
| | | | | | | | Ethyl methacrylate | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2500 ug/mL |
| | | | | | | | Hexane | 2500 ug/mL |
| | | | | | | | Iodomethane | 2500 ug/mL |
| | | | | | | | Isobutyl alcohol | 62500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | n-Butylbenzene | 2500 ug/mL |

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Heptane | 2500 ug/mL |
| | | | | | | | N-Propylbenzene | 2500 ug/mL |
| | | | | | | | Naphthalene | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | sec-Butylbenzene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | tert-Butylbenzene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |
| | | | | | | | Tetrahydrofuran | 5000 ug/mL |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| **VMRPRIMW_00333** | 05/15/19 | 05/08/19 | MEOH, Lot NA | 4 mL | VMRPRIM_00035 | 4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| .VMRPRIM_00035 | 06/30/19 | 03/01/19 | MEOH, Lot 0000196628 | 50 mL | VM569721_00005 | 0.4 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM571992_00002 | 1 mL | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chlorodibromomethane | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dichlorobromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Ethylene Dibromide | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 100 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| ..VM569721_00005 | 04/30/21 | | Restek, Lot A0137509 | | (Purchased Reagent) | | 2-Butanone (MEK) | 12500 ug/mL |
| | | | | | | | 2-Hexanone | 12500 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 12500 ug/mL |
| | | | | | | | Acetone | 12500 ug/mL |
| ..VM571992_00002 | 06/30/19 | | Restek, Lot A0123711 | | (Purchased Reagent) | | 1,1,1-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2500 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2500 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2500 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2500 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2500 ug/mL |
| | | | | | | | Benzene | 2500 ug/mL |
| | | | | | | | Bromoform | 2500 ug/mL |
| | | | | | | | Carbon disulfide | 2500 ug/mL |
| | | | | | | | Carbon tetrachloride | 2500 ug/mL |
| | | | | | | | Chlorobenzene | 2500 ug/mL |
| | | | | | | | Chlorodibromomethane | 2500 ug/mL |
| | | | | | | | Chloroform | 2500 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Cyclohexane | 2500 ug/mL |
| | | | | | | | Dichlorobromomethane | 2500 ug/mL |
| | | | | | | | Ethylbenzene | 2500 ug/mL |
| | | | | | | | Ethylene Dibromide | 2500 ug/mL |
| | | | | | | | Isopropylbenzene | 2500 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2500 ug/mL |
| | | | | | | | Methyl acetate | 5000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2500 ug/mL |
| | | | | | | | Methylcyclohexane | 2500 ug/mL |
| | | | | | | | Methylene Chloride | 2500 ug/mL |
| | | | | | | | o-Xylene | 2500 ug/mL |
| | | | | | | | Styrene | 2500 ug/mL |
| | | | | | | | Tetrachloroethene | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Toluene | 2500 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2500 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2500 ug/mL |
| | | | | | | | Trichloroethene | 2500 ug/mL |
| | | | | | | | Xylenes, Total | 5000 ug/mL |
| **WCICCALSOLN_00296** | 05/09/19 | 04/09/19 | ELUENT, Lot 1847588 | 20 mL | WCICSOLNA1_00020 | 1.6 mL | Bromide | 40 mg/L |
| | | | | | | | Chloride | 200 mg/L |
| | | | | | | | Fluoride | 10 mg/L |
| | | | | | | | Sulfate | 200 mg/L |
| .WCICSOLNA1_00020 | 04/02/20 | Inorganic Ventures, Lot P2-MEB677588 | | | (Purchased Reagent) | | Bromide | 500 ug/mL |
| | | | | | | | Chloride | 2500 ug/mL |
| | | | | | | | Fluoride | 125 ug/mL |
| | | | | | | | Sulfate | 2500 ug/mL |
| **WCICCCV_00875** | 05/28/19 | 05/21/19 | MOHMWATER, Lot 050619 | 50 mL | WCICSOLNA1_00020 | 1 mL | Sulfate | 50 mg/L |
| .WCICSOLNA1_00020 | 04/02/20 | Inorganic Ventures, Lot P2-MEB677588 | | | (Purchased Reagent) | | Sulfate | 2500 ug/mL |
| **WCICLCS_00704** | 04/15/19 | 04/08/19 | MOHMWATER, Lot 032519 | 50 mL | WCICSOLNA2_00020 | 5 mL | Sulfate | 50 mg/L |
| .WCICSOLNA2_00020 | 12/31/19 | High Purity Standards, Lot 1833341 | | | (Purchased Reagent) | | Sulfate | 500 mg/L |
| **WCICLCS_00710** | 05/28/19 | 05/21/19 | MOHMWATER, Lot 050619 | 50 mL | WCICSOLNA2_00020 | 5 mL | Sulfate | 50 mg/L |
| .WCICSOLNA2_00020 | 12/31/19 | High Purity Standards, Lot 1833341 | | | (Purchased Reagent) | | Sulfate | 500 mg/L |
| **WCICSOLNA1_00020** | 04/02/20 | Inorganic Ventures, Lot P2-MEB677588 | | | (Purchased Reagent) | | Sulfate | 2500 ug/mL |
| **WCPHENOMINER_00025** | 04/30/20 | PHENOVA-WIBBY, Lot 8177--08 | | | (Purchased Reagent) | | Alkalinity | 168 mg/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112234-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **TOC_CCV@1000_00043** | 07/29/19 | RICCA, Lot 2808628 | | | (Purchased Reagent) | | TOC Result 1 | 1000 mg/L |
| | | | | | | | TOC Result 2 | 1000 mg/L |
| | | | | | | | TOC Result 3 | 1000 mg/L |
| | | | | | | | TOC Result 4 | 1000 mg/L |
| | | | | | | | Total Organic Carbon | 1000 mg/L |
| **TOC_LCS@1000_00023** | 10/24/22 | Inorganic Ventures, Lot N2-C672223 | | | (Purchased Reagent) | | Total Organic Carbon | 1000 mg/L |

# Reagent

# MEEP_00013

0.8/0.6 RCVD 4/30/19

VHG Labs, Inc [A LGC Standards Company]
276 Abby Road | Manchester, NH 03103 | USA
Tel:+1-603-206-0759 | Fax: 1-603-622-5180
www.lgcstandards.com

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ISO 17034 Accredited
Reference Material Producer
Cert. No. 3031.02

Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

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| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

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It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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Cert. No. 3031.02

Date manufactured: 26-Feb-2019
Original issue date: 26-Feb-2019

# Certificate of Analysis

Date Received: _____



| Catalog No. | Lot No. | Storage | Solvent | Expiration Date | Description |
|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

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|---|---|---|---|---|---|
| VHG-MEEP-CV | 1005981 | 2°C - 8°C | Water | 26-Jun-2019 | MEEP CV Standard (Second Source for Methane, Ethane, Ethene, Propane) 3-6 µg/mL in Water |

## Certified Values

Analytical concentration is based on gravimetric and volumetric preparation of this CRM. This CRM is certified by gas chromatography (GC). The uncertainty value is calculated for a 95% confidence interval with a *k* value of 2.

| Compound | CAS No. | Purity (%) | Neat Material Lot No. | Concentration, mg/L |
|---|---|---|---|---|
| methane | 74-82-8 | 99.5 | 2457.1.1S | 5.16 +/-.5 |
| ethene | 74-85-1 | 99 | 2459.152.2S | 4.16 +/-.3 |
| ethane (C2) | 74-84-0 | 99 | 2458.152.2S | 5.11 +/-.3 |
| n-propane | 74-98-6 | 100 | 4643.152.1S | 4.95 +/-.5 |

## Intended Uses

This Certified Reference material (CRM) is intended for use as a laboratory control sample (LCS); but can be used as a calibration standard. Appropriate techniques for measurement include chromatographic instrumentation with appropriate detection systems; such as gas chromatography (GC/FID and GC/MS) or other techniques suitable for these analytes and matrix.

This CRM is intended to be used at the time of analysis by aliquot collection using the lined rubber septum vial. It is not recommend that the CRM be stored or left open for an extended period of time after cap removal.

It may be used for various EN, ISO, EPA, and ASTM methods.

## Method of Preparation

All weights are traceable through N. I. S. T. test method 822/264157-00.

## Packaging and Storage

The solution should be stored according to the following storage requirements: 2 °C - 8 °C, unopened non-pierced septum. If uncapped, the expiration is determined by user specification.

## Glassware Calibration

Volumetric glassware required for the manufacture or certification of this CRM were Class A grade and calibrated using NIST calibrated weights.

## Weights and Balance Calibration

Weights used to perform daily checks on balances are calibrated annually within a calibration laboratory recognized by NIST as Echelon I. Balances are checked daily in accordance to in house procedures. Balances are calibrated annually by an ISO/IEC 17025:2005 and ISO 17034:2016 accredited metrology service.

# Reagent

# MTAG_00008

Recd 8-7-18 KL

HIGH-PURITY STANDARDS
www.highpuritystandards.com

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

Silver

Product Number: **100051-1**
Lot Number: **1817921**
Matrix: 2% (v/v) $HNO_3$

**Certified Value:**

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Ag | 1000 ± 3 | 3151 | 160729 |

The Certified value is based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Density:** 1.016 g/mL ± 0.002 g/mL @ 20.0°C ± 0.3°C

**Uncertified Values:**

**Trace Metal Impurity Scan:** The data reported are based upon a scan of this specific lot via ICP-OES/ICP-MS analysis. The values are reported in µg/L.

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ag | | M | Cu | < | 0.02 | Li | < | 0.5 | Rb | < | 0.02 | Th | < | 0.02 |
| Al | < | 0.05 | Dy | < | 0.02 | Lu | < | 0.02 | Re | < | 0.02 | Ti | < | 0.1 |
| As | < | 0.05 | Er | < | 0.02 | Mg | < | 0.5 | Rh | < | 0.02 | Tl | < | 0.02 |
| Au | < | 0.02 | Eu | < | 0.02 | Mn | < | 0.05 | Ru | < | 0.02 | Tm | < | 0.02 |
| B | < | 1 | Fe | < | 1 | Mo | < | 0.02 | Sb | < | 0.02 | U | < | 0.05 |
| Ba | < | 0.02 | Ga | < | 0.02 | Na | < | 3 | Sc | < | 0.02 | V | < | 0.05 |
| Be | < | 0.02 | Gd | < | 0.02 | Nb | < | 0.02 | Se | < | 0.1 | W | < | 0.02 |
| Bi | < | 0.02 | Ge | < | 0.02 | Nd | < | 0.02 | Si | | 35 | Y | < | 0.02 |
| Ca | < | 1 | Hf | < | 0.02 | Ni | < | 0.02 | Sm | < | 0.02 | Yb | < | 0.02 |
| Cd | < | 0.02 | Ho | < | 0.02 | Os | < | 0.02 | Sn | < | 0.5 | Zn | < | 0.02 |
| Ce | < | 0.02 | In | < | 0.02 | Pb | < | 0.05 | Sr | < | 0.02 | Zr | < | 0.02 |
| Co | < | 0.05 | Ir | < | 0.2 | Pd | < | 0.02 | Ta | < | 0.02 | | | |
| Cr | < | 0.05 | K | < | 1 | Pr | < | 0.02 | Tb | < | 0.02 | | | |
| Cs | | 5 | La | < | 0.02 | Pt | < | 0.02 | Te | < | 0.02 | | | |

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for **eighteen** months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **August 2018**

**Certificate Issue Date:** **July 10, 2018**

Moven Mututuvari

Moven Mututuvari, Ph. D, Laboratory Manager

**Preparation Information:**

This standard is prepared using **99.992%** pure **silver metal** which was purchased from a qualified vendor per ISO 9001:2008 guidelines and assayed by analytical methods for conformity prior to use. This standard was manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
   The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
   The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
   The calibration of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
   The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards:**
   The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If an SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High-Purity Standards.

# Reagent

# MTICPCCV1_00029

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 12-7-13 KL

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-CCV1 |
| Lot Number: | N2-MEB674250 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 500 000 µg/L ea: Calcium, Potassium, Magnesium, Sodium, 250 000 µg/L ea: Aluminum, Iron, 50 000 µg/L ea: Strontium, Boron, Lithium, 20 000 µg/L ea: Manganese, Nickel, Barium, Beryllium, Cobalt, Chromium, Copper, Vanadium, Zinc, 10 000 µg/L ea: Thallium, 5 000 µg/L ea: Cadmium, Arsenic, Lead, Selenium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 250 000.00 ± 900.00 µg/L | Arsenic, As | 5 002 ± 34 µg/L |
| Barium, Ba | 20 000.0 ± 100.0 µg/L | Beryllium, Be | 20 000.0 ± 120.0 µg/L |
| Boron, B | 50 010.0 ± 350.0 µg/L | Cadmium, Cd | 4 997 ± 30 µg/L |
| Calcium, Ca | 499 900.00 ± 2 000.00 µg/L | Chromium, Cr | 20 000.0 ± 100.0 µg/L |
| Cobalt, Co | 20 000.0 ± 90.0 µg/L | Copper, Cu | 20 000.0 ± 120.0 µg/L |
| Iron, Fe | 250 100.00 ± 1 000.00 µg/L | Lead, Pb | 5 001 ± 26 µg/L |
| Lithium, Li | 50 030.0 ± 180.0 µg/L | Magnesium, Mg | 500 100.00 ± 2 100.00 µg/L |
| Manganese, Mn | 20 000.0 ± 100.0 µg/L | Nickel, Ni | 20 000.0 ± 120.0 µg/L |
| Potassium, K | 500 100.00 ± 1 800.00 µg/L | Selenium, Se | 5 002 ± 26 µg/L |
| Sodium, Na | 499 600.00 ± 1 800.00 µg/L | Strontium, Sr | 50 020.0 ± 200.0 µg/L |
| Thallium, Tl | 10 000.0 ± 70.0 µg/L | Vanadium, V | 20 000.0 ± 120.0 µg/L |
| Zinc, Zn | 20 000.0 ± 120.0 µg/L | | |

**Density:** 1.038 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 110830 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 030730Cr3 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 100714 |
| Li | Gravimetric | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 140110 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Tl | ICP Assay | 3158 | 993012 |
| Tl | Calculated | | See Sec. 4.2 |
| V | ICP Assay | 3165 | 160906 |
| V | EDTA | 928 | 928 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

December 05, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- December 05, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 3-19-19 KD

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPICSAB1_00008

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Recd 6.27.18 ku

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-ICSAB1 |
| Lot Number: | N2-MEB669101 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 000 µg/L ea: Aluminum, Calcium, Magnesium, 2 000 000 µg/L ea: Iron, 100 000 µg/L ea: Potassium, Sodium, 15 000 µg/L ea: Strontium, 10 000 µg/L ea: Thallium, Zinc, Nickel, Lead, Selenium, Cadmium, Arsenic, 5 000 µg/L ea: Boron, Barium, Beryllium, Cobalt, Chromium, Copper, Lithium, Manganese, Vanadium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 5 000 000.000 ± 18 000.000 µg/L | Arsenic, As | 10 000.0 ± 60.0 µg/L |
| Barium, Ba | 5 000 ± 26 µg/L | Beryllium, Be | 5 000 ± 29 µg/L |
| Boron, B | 5 000 ± 30 µg/L | Cadmium, Cd | 10 000.0 ± 60.0 µg/L |
| Calcium, Ca | 5 000 000.000 ± 20 000.000 µg/L | Chromium, Cr | 5 000 ± 26 µg/L |
| Cobalt, Co | 5 000 ± 26 µg/L | Copper, Cu | 5 001 ± 30 µg/L |
| Iron, Fe | 2 000 000.000 ± 8 000.000 µg/L | Lead, Pb | 10 000.0 ± 40.0 µg/L |
| Lithium, Li | 5 000 ± 26 µg/L | Magnesium, Mg | 5 000 000.000 ± 20 000.000 µg/L |
| Manganese, Mn | 5 001 ± 26 µg/L | Nickel, Ni | 10 000.0 ± 60.0 µg/L |
| Potassium, K | 100 100.00 ± 400.00 µg/L | Selenium, Se | 10 000.0 ± 50.0 µg/L |
| Sodium, Na | 100 000.00 ± 400.00 µg/L | Strontium, Sr | 15 000.0 ± 90.0 µg/L |
| Thallium, Tl | 10 000.0 ± 60.0 µg/L | Vanadium, V | 5 000 ± 30 µg/L |
| Zinc, Zn | 10 000.0 ± 60.0 µg/L | | |

**Density:** 1.100 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 110830 |
| B | Calculated | | See Sec. 4.2 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 030730Cr3 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 100714 |
| Li | Gravimetric | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Tl | ICP Assay | 3158 | 993012 |
| Tl | Calculated | | See Sec. 4.2 |
| V | ICP Assay | 3165 | 160906 |
| V | EDTA | 928 | 928 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 25, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **June 25, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 8.28.18 KW

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPICSAB2_00008

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Recd 6.27.18 kw

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED - Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | TA-ICSAB2 |
| Lot Number: | N2-MEB669102 |
| Matrix: | 5% (v/v) HNO3<br>tr. HF |
| Value / Analyte(s): | 100 000 µg/L ea:<br>Silicon,<br>10 000 µg/L ea:<br>Silver, Molybdenum, Antimony,<br>5 000 µg/L ea:<br>Tin, Titanium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Antimony, Sb | 10 000.0 ± 70.0 µg/L | Molybdenum, Mo | 10 000.0 ± 70.0 µg/L |
| Silicon, Si | 100 000.00 ± 600.00 µg/L | Silver, Ag | 10 000.0 ± 70.0 µg/L |
| Tin, Sn | 5 000 ± 38 µg/L | Titanium, Ti | 5 000 ± 30 µg/L |

**Density:** 1.024 g/mL (measured at 20 ± 4 °C)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 992212 |
| Ag | Volhard | 999c | 999c |
| Mo | ICP Assay | 3134 | 130418 |
| Mo | Calculated | | See Sec. 4.2 |
| Sb | ICP Assay | 3102a | 140911 |
| Sb | Calculated | | See Sec. 4.2 |
| Si | ICP Assay | 3150 | 130912 |
| Si | Calculated | | See Sec. 4.2 |
| Sn | ICP Assay | 3161a | 140917 |
| Ti | ICP Assay | 3162a | 130925 |
| Ti | Calculated | | See Sec. 4.2 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

**HF Note:** This standard should not be prepared or stored in glass.

**Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 25, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- June 25, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 8.28.18 KW

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTICPSPIKE1A_00014

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Rec'd 11-15-18ku

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike 1 |
| Part Number: | **SM-606-101 Solution A** |
| Lot Number: | **1831255** |
| Matrix: | 5% $HNO_3$ |
| Purity: | 99.99% - 99.9999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# | Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|---|---|---|---|
| Al | 2000 ± 12 | 3101a | 140903 | Fe | 1000 ± 6 | 3126a | 140812 |
| As | 2000 ± 20 | 3103a | 100818 | Pb | 500 ± 5 | 3128 | 101026 |
| Ba | 2000 ± 12 | 3104a | 140909 | Mn | 500.0 ± 7.5 | * | |
| Be | 50.0 ± 0.5 | 3105a | 090514 | Ni | 500 ± 3 | 3136 | 120619 |
| B | 1000 ± 10 | 3107 | 110830 | Se | 2000 ± 20 | 3149 | 100901 |
| Cd | 50.00 ± 0.03 | 3108 | 130116 | Tl | 2000 ± 12 | 3158 | 151215 |
| Cr | 200.0 ± 1.2 | 3112a | 170630 | V | 500 ± 5 | 3165 | 160906 |
| Co | 500 ± 3 | * | | Zn | 500 ± 3 | 3168a | 120629 |
| Cu | 250.00 ± 1.5 | 3114 | 121207 | | | | |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mututuvari
Moven Mututuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTICPSPIKEB_00013

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Recd 11-15-18 KM

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation
Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike 1 |
| Part Number: | **SM-606-101 Solution B** |
| Lot Number: | **1831330** |
| Matrix: | 5% $HNO_3$ + 0.5% HF |
| Purity: | 99.98% - 99.9999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Sb | 500 ± 5 | 3102a | 140911 |
| Mo | 1000 ± 10 | 3134 | 130418 |
| Sn | 2000 ± 20 | 3161a | 140917 |
| Ti | 1000 ± 10 | 3162a | 130925 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTICPSpikeOdd_00010

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Recd 11-15-18 KW

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Spike Odds |
| Part Number: | **SM-606-121** |
| Lot Number: | **1831608** |
| Matrix: | 2% $HNO_3$ |
| Purity: | 99.999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|
| Li | 1000 ± 10 | 3129a | 100714 |
| Si | 1000 ± 10 | 3150 | 130912 |
| Sr | 1000 ± 6 | * | |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **November 2018**
**Certificate Issue Date:** November 12, 2018

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTTRCAL2_00021

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Rec'd 10-10-18 KL

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | ICP Analytical Mixture 15 |
| Part Number: | **ICP-AM-15** |
| Lot Number: | **1812740** |
| Matrix: | 5% $HNO_3$ |
| Purity: | 99.98% - 99.999% |

**Certified Values**:

| Element | (µg/mL) | SRM ID | SRM Lot# | Element | (µg/mL) | SRM ID | SRM Lot# |
|---|---|---|---|---|---|---|---|
| Ca | 10000 ± 60 | 3109a | 130213 | K | 10000 ± 100 | 3141a | 140813 |
| Mg | 10000 ± 60 | 3131a | 140110 | Na | 10000 ± 60 | 3152a | 120715 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Density:** 1.126 g/mL ± 0.002 g/mL @ 20.0°C ± 0.3 °C

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **October 2018**

**Certificate Issue Date:** May 9, 2018

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods. The standard is confirmed homogeneous; therefore, the minimum sample size should be consistent with the end user's measurement capabilities.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

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The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibrations of volumetric vessels are verified using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# MTTRCRI6010C_00020

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 9-3-19

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CRIC-REV3 |
| Lot Number: | N2-MEB670185 |
| Matrix: | 5% (v/v) HNO3<br>tr. HF |
| Value / Analyte(s): | 100 000 µg/L ea:<br>Calcium, Potassium, Magnesium,<br>Sodium,<br>10 000 µg/L ea:<br>Silicon,<br>4 000 µg/L ea:<br>Iron, Barium, Aluminum,<br>2 000 µg/L ea:<br>Boron, Tin,<br>1 000 µg/L ea:<br>Strontium, Titanium, Vanadium,<br>Zinc, Lithium,<br>800 µg/L ea:<br>Molybdenum, Nickel,<br>500 µg/L ea:<br>Copper,<br>400 µg/L ea:<br>Antimony, Selenium, Thallium,<br>300 µg/L ea:<br>Manganese, Arsenic,<br>200 µg/L ea:<br>Silver, Cobalt, Chromium,<br>Lead,<br>100 µg/L ea:<br>Beryllium, Cadmium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 4 002 ± 20 µg/L | Antimony, Sb | 400.2 ± 2.7 µg/L |
| Arsenic, As | 300.0 ± 2.3 µg/L | Barium, Ba | 4 001 ± 20 µg/L |
| Beryllium, Be | 100.0 ± 0.6 µg/L | Boron, B | 2 000 ± 19 µg/L |
| Cadmium, Cd | 100.0 ± 0.7 µg/L | Calcium, Ca | 100 000.00 ± 500.00 µg/L |
| Chromium, Cr | 200.0 ± 1.2 µg/L | Cobalt, Co | 200.0 ± 1.4 µg/L |
| Copper, Cu | 500.2 ± 2.2 µg/L | Iron, Fe | 4 000 ± 20 µg/L |
| Lead, Pb | 200.0 ± 1.4 µg/L | Lithium, Li | 1 000 ± 6 µg/L |
| Magnesium, Mg | 100 000.00 ± 500.00 µg/L | Manganese, Mn | 300.3 ± 1.4 µg/L |
| Molybdenum, Mo | 800 ± 5 µg/L | Nickel, Ni | 801 ± 4 µg/L |
| Potassium, K | 100 000.00 ± 500.00 µg/L | Selenium, Se | 400.2 ± 3.0 µg/L |
| Silicon, Si | 10 010.0 ± 70.0 µg/L | Silver, Ag | 200.0 ± 1.7 µg/L |
| Sodium, Na | 100 000.00 ± 500.00 µg/L | Strontium, Sr | 1 001 ± 6 µg/L |
| Thallium, Tl | 400.0 ± 3.2 µg/L | Tin, Sn | 2 001 ± 11 µg/L |
| Titanium, Ti | 1 000 ± 7 µg/L | Vanadium, V | 1 000 ± 6 µg/L |
| Zinc, Zn | 1 001 ± 6 µg/L | | |

**Density:** 1.027 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 992212 |
| Ag | Volhard | 999b | 999b |
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| As | Calculated | | See Sec. 4.2 |
| B | ICP Assay | 3107 | 110830 |
| Ba | ICP Assay | 3104a | 140909 |
| Ba | Gravimetric | | See Sec. 4.2 |
| Be | ICP Assay | 3105a | 090514 |
| Be | Calculated | | See Sec. 4.2 |
| Ca | ICP Assay | 3109a | 130213 |
| Ca | EDTA | 928 | 928 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 000630 Co |
| Co | EDTA | 928 | 928 |
| Cr | Calculated | | See Sec. 4.2 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| K | ICP Assay | 3141a | 140813 |
| K | Gravimetric | | See Sec. 4.2 |
| Li | ICP Assay | 3129a | 000505 |
| Li | Calculated | | See Sec. 4.2 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |
| Mn | ICP Assay | 3132 | 050429 |
| Mn | EDTA | 928 | 928 |
| Mo | ICP Assay | 3134 | 130418 |
| Mo | Calculated | | See Sec. 4.2 |
| Na | ICP Assay | 3152a | 120715 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Sb | Calculated | | See Sec. 4.2 |
| Se | ICP Assay | 3149 | 100901 |
| Se | Calculated | | See Sec. 4.2 |
| Si | ICP Assay | 3150 | 130912 |
| Si | Calculated | | See Sec. 4.2 |
| Sn | Calculated | | See Sec. 4.2 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | 3153a | 990906 |
| Ti | ICP Assay | 3162a | 130925 |
| Ti | Calculated | | See Sec. 4.2 |
| Tl | Calculated | | See Sec. 4.2 |

| | | | |
|---|---|---|---|
| V | EDTA | 928 | 928 |
| V | ICP Assay | 3165 | 992706 |
| Zn | ICP Assay | 3168a | 120629 |
| Zn | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

**HF Note:** This standard should not be prepared or stored in glass.

**Low Silver Note:** This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 31, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- July 31, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

**11.3 Period of Validity**

KD

- Sealed TCT Bag Open Date: 11-12-18

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control

Michael J Booth

**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

# Reagent

# MTTRICSA_00018

INORGANIC VENTURES
309 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

toll: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

Rec'd 11-13-18 KL

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CLPP-ICS-A |
| Lot Number: | K2-MEB643109 |
| Matrix: | 2% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 µg/mL ea: Aluminum, Calcium, Magnesium, 2 000 µg/mL ea: Iron |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Aluminum, Al** | **5 000 ± 22 µg/mL** | **Calcium, Ca** | **5 000 ± 20 µg/mL** |
| **Iron, Fe** | **2 000 ± 8 µg/mL** | **Magnesium, Mg** | **5 000 ± 20 µg/mL** |

**Certified Density:** 1.085 g/mL (measured at 20 ± 1 °C)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Al | ICP Assay | 3101a | 060502 |
| Al | EDTA | 928 | 928 |
| Ca | ICP Assay | 3109a | 050825 |
| Ca | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 051031 |
| Fe | EDTA | 928 | 928 |
| Mg | ICP Assay | 3131a | 050302 |
| Mg | EDTA | 928 | 928 |

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | Ag | < 0.000400 | M | Eu | < 0.000100 | O | Na | 0.027559 | M | Se | < 0.002091 | M | Zn | 0.008219 | | | |
| s | Al | < | s | Fe | < | M | Nb | < 0.000100 | O | Si | 0.217000 | M | Zr | < 0.001002 | | | |
| M | As | < 0.005613 | M | Ga | < 0.000100 | M | Nd | < 0.000601 | M | Sm | < 0.000100 | | | | | | |
| M | Au | < 0.000199 | M | Gd | < 0.000100 | M | Ni | < 0.005613 | M | Sn | < 0.000200 | | | | | | |
| M | B | < 0.008420 | M | Ge | < 0.000400 | M | Os | < 0.000099 | M | Sr | 0.043302 | | | | | | |
| M | Ba | < 0.001603 | M | Hf | < 0.000100 | O | P | < 0.108500 | M | Ta | < 0.000100 | | | | | | |
| O | Be | < 0.000217 | M | Hg | < 0.000597 | M | Pb | 0.003408 | M | Tb | < 0.000100 | | | | | | |
| M | Bi | < 0.000400 | M | Ho | < 0.000100 | M | Pd | < 0.000100 | M | Te | < 0.003107 | | | | | | |
| s | Ca | < | M | In | < 0.000400 | M | Pr | < 0.000200 | M | Th | < 0.000100 | | | | | | |
| M | Cd | < 0.000100 | M | Ir | < 0.000099 | M | Pt | < 0.000100 | M | Ti | < 0.000801 | | | | | | |
| M | Ce | < 0.002004 | O | K | 0.011718 | M | Rb | < 0.000100 | M | Tl | < 0.000100 | | | | | | |
| M | Co | < 0.003207 | M | La | < 0.000801 | M | Re | < 0.000100 | M | Tm | < 0.000100 | | | | | | |
| M | Cr | 0.024658 | O | Li | 0.005425 | M | Rh | < 0.000100 | M | U | < 0.000100 | | | | | | |
| M | Cs | < 0.000601 | M | Lu | < 0.000100 | M | Ru | < 0.000099 | M | V | < 0.000400 | | | | | | |
| M | Cu | < 0.004610 | s | Mg | < | O | S | 0.422173 | M | W | < 0.000100 | | | | | | |
| M | Dy | < 0.000100 | M | Mn | 0.002606 | M | Sb | < 0.000200 | M | Y | < 0.000100 | | | | | | |
| M | Er | < 0.000100 | M | Mo | < 0.000400 | M | Sc | < 0.001403 | M | Yb | < 0.000100 | | | | | | |

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

### 10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

### 10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

### 11.1 Certification Issue Date

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

**- July 01, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: 2-14-19 (LD)

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

### 11.4 Revision Status

- Revision 1 - Wednesday, Apr 26, 2017. Added TMI data

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

**Certificate Prepared By:**

Joseph Burns
Technical Support Technician



**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control



**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director



# Reagent

# MTTRICV1_00009

# CERTIFICATE OF ANALYSIS

Rec'd 12-26-17 KL

Multi-Element Aqueous CRM

Product #: G34-4400-080925JC01

## ISO Guide 34 Custom Standard

Lot #: 10072207-1

Matrix: 2% $HNO_3$

| Element | Certified Concentration & Uncertainty | Element | Certified Concentration & Uncertainty | Element | Certified Concentration & Uncertainty |
|---|---|---|---|---|---|
| Al | 2500 ± 13 µg/mL | Fe | 2506 ± 13 µg/mL | Mg | 5003 ± 25 µg/mL |
| Ca | 5000 ± 25 µg/mL | K | 5000 ± 25 µg/mL | Na | 5004 ± 25 µg/mL |

**Intended Use:** This solution is intended for use as a certified reference material (CRM) or calibration standard for inductively coupled plasma optical emission spectroscopy (ICP-OES), inductively coupled plasma mass spectrometry (ICP-MS), flame or furnace atomic absorption spectroscopy (AA or GFAA), and other techniques for elemental analysis.

**Certification & Traceability:** This CRM was manufactured, processed, and certified under a quality management system that is registered/accredited to **ISO 9001**, **ISO Guide 34**, and **ISO/IEC 17025**. This CRM was prepared to the certified concentrations shown above by gravimetric methods, using single-element concentrates that were certified using the "High Performance ICP-OES" protocol developed by NIST and are directly traceable to **NIST SRMs (see reverse side)**. The solution was stabilized using high purity nitric acid ($HNO_3$) and diluted with filtered (0.22 µm), 18 M-ohm deionized water. The balances used in the preparation of this CRM are calibrated regularly with traceability to NIST, using a calibration provider that is accredited to ISO/IEC 17025 by a mutually recognized accreditation body. All volumetric dilutions are performed in Class A calibrated glassware. The certified concentrations were determined based upon gravimetric procedures. Secondary verification of the certified concentrations was performed using ICP-OES that was calibrated and/or referenced against **NIST SRMs (see reverse side)**. The uncertainty associated with each certified concentration represents the expanded uncertainty at the 95% confidence level using a coverage factor of k=2.

**Instructions for Use:** We recommend that the solution be thoroughly mixed by repeated shaking or swirling of the bottle immediately prior to use. To achieve the highest accuracy, the analyst should: (1) use only pre-cleaned containers and transferware, (2) not pipette directly from the CRM's original container, (3) never pour used product back into the original container, (4) make dilutions using calibrated balances or certified class A volumetric flasks and pipettes, (5) use a minimum sub-sample size of 500 µL, and (6) dilute with the same matrix as the original CRM or other chemically suitable matrix. The solution should be kept tightly capped and stored under normal laboratory conditions. Do not freeze, heat, or immerse the bottle or its contents, and avoid exposure to direct sunlight or moisture.

**Period of Validity:** CPI International ensures the accuracy of this solution for **18 months** from the certification date shown below, provided the instructions for use are followed. During the period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution.

Chuck Goudreau

**Chuck Goudreau, Certifying Officer**

December 20, 2017

**Certification Date**

CPI International waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Europe
Nieuwe Hemweg 7P P: +31 20 638 05 97
1013BG Amsterdam F: +31 20 420 28 36
The Netherlands

www.cpiinternational.com

**Health and Safety Information:** Refer to the Safety Data Sheet (SDS).

**Homogeneity:** This solution was determined to be homogeneous by procedures consistent with the requirements of ISO Guide 34 and ISO Guide 35. Replicate samples of the finished solution were analyzed to confirm its homogeneity, in accordance with QSP 6-13 Assessment of Homogeneity and Stability. To ensure homogeneity, users should not take a smaller sub-sample than specified in the Instructions for Use, as doing so will invalidate the certified values and uncertainties.

**Quality Manual Rev:** No. 5, 03/01/2013

**Further Information:** Please contact CPI International for further information about this CRM.

**Quality Certifications:** This CRM was prepared under a quality management system that is registered/accredited to the following:

- ISO 9001 – Quality Management Systems – Requirements (TUV NORD Cert. No. 44 100 16560231)
- ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories (A2LA Cert. No. 2848.01)
- ISO Guide 34 – General Requirements for the Competence of Reference Material Producers (A2LA Cert. No. 2848.02)
    - ISO Guide 34 references additional requirements specified in ISO Guide 31 and ISO Guide 35.

**This CRM is traceable to the following NIST SRMs:**

| Analyte | Aq. SRM | MO SRM | | Analyte | Aq. SRM | MO SRM | | Analyte | Aq. SRM | MO SRM |
|---|---|---|---|---|---|---|---|---|---|---|
| Ag | 3151 | 1077a | | Hf | 3122 | — | | S | 3154 | 2770 |
| Al | 3101a | 1075a | | Hg | 3133 | 3133 | | Sb | 3102a | 3102a |
| As | 3103a | 3103a | | Ho | 3123a | — | | Sc | 3148a | 3148a |
| Au | 3121 | — | | In | 3124a | 3124a | | Se | 3149 | 3149 |
| B | 3107 | 3107 | | K | 3141a | 3141a | | Si | 3150 | 1066a |
| Ba | 3104a | 1051b | | La | 3127a | 3127a | | Sm | 3147a | — |
| Be | 3105a | 3105a | | Li | 3129a | 3129a | | Sn | 3161a | 1057b |
| Bi | 3106 | 3106 | | Lu | 3130a | — | | $SO_4^{-2}$ | 3181 | — |
| $Br^-$ | 3184 | — | | Mg | 3131a | 3131a | | Sr | 3153a | 3153a |
| Ca | 3109a | 3109a | | Mn | 3132 | 3132 | | Ta | 3155 | — |
| Cd | 3108 | 1053a | | Mo | 3134 | 3134 | | Tb | 3157a | — |
| Ce | 3110 | 3110 | | Na | 3152a | 3152a | | Te | 3156 | — |
| $Cl^-$ | 3182 | 1818a | | Nb | 3137 | — | | Th | 3159 | — |
| Co | 3113 | 3113 | | Nd | 3135a | — | | Ti | 3162a | 3162a |
| Cr | 3112a | 1078b | | Ni | 3136 | 1065b | | Tl | 3158 | 3158 |
| Cs | 3111a | — | | $NO_3^-$ | 3185 | — | | Tm | 3160a | — |
| Cu | 3114 | 1080a | | P | 3139a | 3139a | | U | 3164 | — |
| Dy | 3115a | — | | Pb | 3128 | 3128 | | V | 3165 | 1052b |
| Er | 3116a | — | | Pd | 3138 | — | | W | 3163 | 3163 |
| Eu | 3117a | — | | $PO_4^{-3}$ | 3186 | — | | Y | 3167a | 3167a |
| $F^-$ | 3183 | — | | Pr | 3142a | — | | Yb | 3166a | — |
| Fe | 3126a | 1079b | | Pt | 3140 | 3140 | | Zn | 3168a | 3168a |
| Ga | 3119a | — | | Rb | 3145a | — | | Zr | 3169 | 3169 |
| Gd | 3118a | — | | Re | 3143 | — | | | | |
| Ge | 3120a | — | | Rh | 3144 | 3144 | | | | |

# Reagent

# SARSK2ndSourc_00001

RCVD 1/22/19

**MATHESON TRI-GAS INC**
**1650 Enterprise Pkwy**
**Twinsburg, OH 44087**
**1-215-648-4000**

# CERTIFICATE OF ANALYSIS

Severn Trent Lab
4101 SHUFFEL DR
NORTH CANTON, OH 44720

Ref Po# 3015289

## 17 LITER DISPOSABLE

**LOT NUMBER:** 109-84-03769-E2

| COMPONENT | CONCENTRATION | |
|---|---|---|
| ethane | 0.991 | % |
| propane | 1.007 | % |
| ethylene | 1.009 | % |
| acetylene | 0.998 | % |
| methane | 1.007 | % |
| helium | BAL | |

**ITEM NUMBER:** GMT2690244TB

**CGA:** 600

**PSIG:** 240

**FILL DATE:** 12/25/18

**EXPIRATION DATE:** 12/26/22

Above are the results of the analysis you requested, as reported by our laboratory. Results are in mole percent, unless otherwise indicated. Mixture accuracy is ± 2%. NIST traceable by weights or gaseous standards.

Judith M Zadravec

Judy Zadravec, Chemist

1/14/2019

DATE

# Reagent

---

# SARSKHighCal_00006

Airgas

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Customer:** | Airgas Specialty Gases | **Cylinder Size:** | 0.6 Cu. Ft. |
| **PO Number:** | 5800098394 | **Cylinder Volume:** | 17 Liter |
| **Part Number:** | X06HE95CP170000 / 17L-510 | **Cylinder Pressure:** | 240 psig |
| **Lot Number:** | CBJ-510-1 | **Valve Outlet:** | CGA 600 |
| **Analysis Date:** | 02/08/2019 | **Blend Tolerance:** | +/-5% |

**Use Before: 02/08/2023**

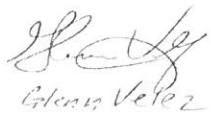
## ANALYTICAL RESULTS

| Component | Requested Concentration | Actual Concentration (Mole %) | Analytical Uncertainty |
|---|---|---|---|
| Acetylene | 1% vol. | 0.998% vol. | +/- 2% |
| Ethylene | 1% vol. | 1.009% vol. | +/- 2% |
| Ethane | 1% vol. | 0.991% vol. | +/- 2% |
| Methane | 1% vol. | 1.007% vol. | +/- 2% |
| Propane | 1% vol. | 1.007% vol. | +/- 2% |
| Helium | Balance | Balance | |

**NIST Weight Certificate Number(s):** S1106, MS001, MS002, A031

The calibration gas prepared by Airgas is considered a certified standard. It is prepared by gravimetric, or partial pressure techniques. The calibration standard provided is prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

**Analyst:**



# Reagent

# SARSKLOWCAL_00013

Scott

RCVD 3/22/19

**Airgas Specialty Gases**
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

4080707
ID: SARSKLOWCAL_00013
Exp: 03/13/22 Prpd: BPM
1000 PPM VARIOUS ANALYTES

# CERTIFICATE OF ANALYSIS

## Grade of Product: CERTIFIED STANDARD-SPEC

| | | | |
|---|---|---|---|
| Customer: | TESTAMERICA ANALYTICAL TESTING | | |
| Part Number: | X06HE99CP170003 | Reference Number: | 160-401444112-1 |
| Cylinder Number: | ST0000194219 | Cylinder Volume: | 1.2 CF |
| Laboratory: | 124 - Plumsteadville - PA | Cylinder Pressure: | 240 PSIG |
| Analysis Date: | Mar 13, 2019 | Valve Outlet: | 600 |
| Lot Number: | 160-401444112-1 | | |

**Expiration Date: Mar 13, 2022**

Product composition verified by direct comparison to calibration standards traceable to N.I.S.T. weights and/or N.I.S.T. Gas Mixture reference materials.

## ANALYTICAL RESULTS

| Component | Req Conc | Actual Concentration (Mole %) | Analytical Uncertainty |
|---|---|---|---|
| ACETYLENE | 1000 PPM | 1020 PPM | +/- 5% |
| ETHANE | 1000 PPM | 1015 PPM | +/- 5% |
| ETHYLENE | 1000 PPM | 1021 PPM | +/- 5% |
| METHANE | 1000 PPM | 1017 PPM | +/- 5% |
| PROPANE | 1000 PPM | 1015 PPM | +/- 5% |
| HELIUM | Balance | | |

**Permanent Notes:**-NA-

Approved for Release

# Reagent

# SARSKSURR_00012

MATHESON
ask. . .The Gas Professionals™

# Analysis Report

**To:** MATHESON VALLEY
151 S OLIVE ST
ELYRIA, OH 44036

**MTG Customer No:** 131676

**Manufacturing Location**
1700 SCEPTER ROAD
WAVERLY, TN 37185

**Product:** Multi-Component Mixture

**Grade:** CERTIFIED
**MTG Part No:** G2683694

**Cylinder Size:** 1L
**Valve:** CGA 350 BR

**Contents:**
**Net:** 237 ft³; 6.72 m³

**Pressure:** 2000 psig @ 70°F; 13891 kPa @ 21°C

**CYLINDER NUMBER(S)**
AX047506

| | Requested Concentration | Certified Concentration | Units | Blend Tolerance | Certified Accuracy |
|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | 0.325 | 0.325 | % | ±2% | ±2% |
| Helium | Balance | Balance | | | |

**TRACEABILITY**

**COMMENTS**

**Lot No:** 9303607373
**Fill Date:** 11/05/2013
**Expiration Date:** 11/05/2016

**Analysis Date:** 11/07/2013

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Ashley Ellis - Analyst — 11/07/2013 (Date)

Ashley Ellis - QA Approval — 11/07/2013 (Date)

# Reagent

# vm30026_00002

Rec: 4/11/17 (5)

VM30026-00002

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30026 **Lot No.:** A0120567

**Description :** 4-Bromofluorobenzene Mixture

4-Bromofluorobenzene 2000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 1-Bromo-4-fluorobenzene (BFB) | 2,019.3 µg/mL | +/- 11.8506 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 (Lot 20401KOV) | | +/- 113.2335 | µg/mL | Unstressed |
| | **Purity** 99% | | +/- 115.8825 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# vm30241_00007

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 30241 **Lot No.:** A0134242

**Description :** 8260A Internal Standard Mix

8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2023 **Storage:** 0°C or colder

**CERTIFIED VALUES**

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Fluorobenzene | | 2,503.6 µg/mL | +/- 14.5561 µg/mL | | Gravimetric |
| | **CAS #** 462-06-6 | (Lot BCBK8171V) | | +/- 140.3744 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 143.6590 µg/mL | | Stressed |
| 2 | Chlorobenzene-d5 | | 2,506.4 µg/mL | +/- 14.5724 µg/mL | | Gravimetric |
| | **CAS #** 3114-55-4 | (Lot PR-22736) | | +/- 140.5314 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 143.8196 µg/mL | | Stressed |
| 3 | 1,4-Dichlorobenzene-d4 | | 2,513.4 µg/mL | +/- 14.6131 µg/mL | | Gravimetric |
| | **CAS #** 3855-82-1 | (Lot PR-18488) | | +/- 140.9238 µg/mL | | Unstressed |
| | **Purity** 99% | | | +/- 144.2213 µg/mL | | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

VM30241-00007

REC'D 5-4-18

# Reagent

# VM567650_00030

Rec: 11/8/17
VM567650-00050

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0124069

**Description :** 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2022 **Storage:** 0°C or colder

**CERTIFIED VALUES**

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Dibromofluoromethane | | 2,521.2 µg/mL | +/- 14.6582 | µg/mL | Gravimetric |
| | **CAS #** 1868-53-7 | (Lot 0012016) | | +/- 141.3584 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.6660 | µg/mL | Stressed |
| 2 | 1,2-Dichloroethane-d4 | | 2,513.8 µg/mL | +/- 14.6157 | µg/mL | Gravimetric |
| | **CAS #** 17060-07-0 | (Lot PR-25433) | | +/- 140.9489 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 144.2469 | µg/mL | Stressed |
| 3 | Toluene-d8 | | 2,519.4 µg/mL | +/- 14.6480 | µg/mL | Gravimetric |
| | **CAS #** 2037-26-5 | (Lot PR-27311) | | +/- 141.2603 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.5656 | µg/mL | Stressed |
| 4 | 1-Bromo-4-fluorobenzene (BFB) | | 2,520.8 µg/mL | +/- 14.6559 | µg/mL | Gravimetric |
| | **CAS #** 460-00-4 | (Lot 20401KOV) | | +/- 141.3360 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 144.6430 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

# Reagent

# VM568720_00032

Rec: 3/13/19

VM568720_00032

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 568720 **Lot No.:** A0143013

**Description :** 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750µg/mL, Water, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2019 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | | Expanded Uncertainty (95% C.L.; K=2) | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | Acrolein | | 19,750.0 | µg/mL | +/- 115.6406 | µg/mL | Gravimetric |
| | **CAS #** 107-02-8 | (Lot 180823JACG) | | | +/- 633.2471 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- 736.0805 | µg/mL | Stressed |

**Solvent:** Water
**CAS #** 7732-18-5
**Purity** 99%

# Reagent

# VM569721_00005

VM569721_00005 Rec: 11/30/18

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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0137509

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|---|
| 1 | Acetone | | 12,619.0 µg/mL | +/- 73.8870 | µg/mL | Gravimetric |
| | **CAS #** 67-64-1 | (Lot SHBH6933) | | +/- 761.4104 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 763.2179 | µg/mL | Stressed |
| 2 | 2-Butanone (MEK) | | 12,602.0 µg/mL | +/- 73.7875 | µg/mL | Gravimetric |
| | **CAS #** 78-93-3 | (Lot SHBF2461V) | | +/- 760.3846 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 762.1897 | µg/mL | Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK) | | 12,531.0 µg/mL | +/- 73.3718 | µg/mL | Gravimetric |
| | **CAS #** 108-10-1 | (Lot SHBH7006) | | +/- 756.1006 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 757.8955 | µg/mL | Stressed |
| 4 | 2-Hexanone | | 12,606.0 µg/mL | +/- 73.8109 | µg/mL | Gravimetric |
| | **CAS #** 591-78-6 | (Lot MKBW0198V) | | +/- 760.6260 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 762.4316 | µg/mL | Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# VM569721S_00005

Rec: 6/15/18 20 vials

VM569721S-00005

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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721.SEC **Lot No.:** A0133078

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Acetone<br>**CAS #** 67-64-1.SEC (Lot P14A572)<br>**Purity** 99% | 12,504.8 µg/mL | +/- 73.2184 µg/mL<br>+/- 754.5197 µg/mL<br>+/- 756.3109 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 2-Butanone (MEK)<br>**CAS #** 78-93-3.SEC (Lot RA58J)<br>**Purity** 99% | 12,504.0 µg/mL | +/- 73.2137 µg/mL<br>+/- 754.4715 µg/mL<br>+/- 756.2625 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 4-Methyl-2-pentanone (MIBK)<br>**CAS #** 108-10-1.SEC (Lot E29T040)<br>**Purity** 99% | 12,500.8 µg/mL | +/- 73.1949 µg/mL<br>+/- 754.2784 µg/mL<br>+/- 756.0689 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 2-Hexanone<br>**CAS #** 591-78-6.SEC (Lot V3NRA)<br>**Purity** 99% | 12,503.6 µg/mL | +/- 73.2113 µg/mL<br>+/- 754.4473 µg/mL<br>+/- 756.2383 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** P&T Methanol/Water (90:10)
**CAS #** 67-56-1/7732-18-5
**Purity** 99%

# Reagent

# vm569722_00012

Acc: 1/23/19

VM569722-00012

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722 **Lot No.:** A0143158

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** November 30, 2021 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8 (Lot 00012554)<br>**Purity** 99% | 2,500.9 µg/mL | +/- 17.2023 µg/mL<br>+/- 140.5234 µg/mL<br>+/- 143.7976 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3 (Lot SHBJ6334)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 17.0791 µg/mL<br>+/- 140.4796 µg/mL<br>+/- 143.7534 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4 (Lot 00012557)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 16.5693 µg/mL<br>+/- 140.4224 µg/mL<br>+/- 143.6977 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0 (Lot SHBK2299)<br>**Purity** 99% | 2,500.1 µg/mL | +/- 17.0785 µg/mL<br>+/- 140.4623 µg/mL<br>+/- 143.7357 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9 (Lot 101604)<br>**Purity** 99% | 2,500.9 µg/mL | +/- 16.5511 µg/mL<br>+/- 140.4457 µg/mL<br>+/- 143.7217 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3 (Lot 107-401039114-1)<br>**Purity** 99% | 2,502.0 µg/mL | +/- 16.0409 µg/mL<br>+/- 140.4480 µg/mL<br>+/- 143.7268 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4 (Lot 7766400)<br>**Purity** 99% | 2,500.0 µg/mL | +/- 14.5352 µg/mL<br>+/- 140.1725 µg/mL<br>+/- 143.4524 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11) | | 2,500.8 | µg/mL | +/- | 17.8012 | µg/mL | Gravimetric |
| | **CAS #** 75-69-4 | (Lot SHBH4155V) | | | +/- | 140.5946 | µg/mL | Unstressed |
| | **Purity** 99% | | | | +/- | 143.8670 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**
Raw material may contain trace amounts of tert-Butanol.

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

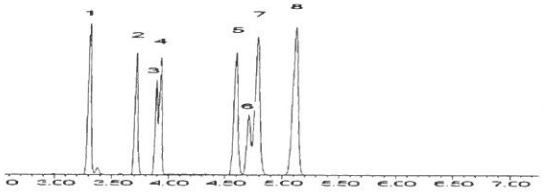
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician **Date Mixed:** 12-Nov-2018 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 11-Dec-2018

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# vm569722S_00005

VM569722S-0005 Rec: 7/17/17

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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis

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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722.SEC **Lot No.:** A0124116

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Dichlorodifluoromethane (CFC-12)<br>**CAS #** 75-71-8.SEC (Lot 23586)<br>**Purity** 99% | 2,503.4 µg/mL | +/- 19.5506 µg/mL<br>+/- 140.9699 µg/mL<br>+/- 144.2404 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | Chloromethane (methyl chloride)<br>**CAS #** 74-87-3.SEC (Lot 18343)<br>**Purity** 99% | 2,508.1 µg/mL | +/- 21.1963 µg/mL<br>+/- 141.4639 µg/mL<br>+/- 144.7353 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | Vinyl chloride<br>**CAS #** 75-01-4.SEC (Lot MKBK6872V)<br>**Purity** 99% | 2,518.6 µg/mL | +/- 19.4186 µg/mL<br>+/- 141.7924 µg/mL<br>+/- 145.0836 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | 1,3-Butadiene<br>**CAS #** 106-99-0.SEC (Lot 22331)<br>**Purity** 99% | 2,504.0 µg/mL | +/- 20.5722 µg/mL<br>+/- 141.1450 µg/mL<br>+/- 144.4130 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Bromomethane (methyl bromide)<br>**CAS #** 74-83-9.SEC (Lot Q119-46)<br>**Purity** 99% | 2,498.5 µg/mL | +/- 19.9806 µg/mL<br>+/- 140.7602 µg/mL<br>+/- 144.0229 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Chloroethane (ethyl chloride)<br>**CAS #** 75-00-3.SEC (Lot 00004202)<br>**Purity** 99% | 2,494.9 µg/mL | +/- 17.8868 µg/mL<br>+/- 140.2786 µg/mL<br>+/- 143.5429 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Dichlorofluoromethane (CFC-21)<br>**CAS #** 75-43-4.SEC (Lot SHBC0858V)<br>**Purity** 99% | 2,503.4 µg/mL | +/- 20.0421 µg/mL<br>+/- 141.0350 µg/mL<br>+/- 144.3039 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | Trichlorofluoromethane (CFC-11) | | 2,503.2 | µg/mL | +/- | 18.7037 | µg/mL | Gravimetric |
| | **CAS #** | 75-69-4.SEC (Lot Q12B-59) | | | +/- | 140.8450 | µg/mL | Unstressed |
| | **Purity** | 99% | | | +/- | 144.1179 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

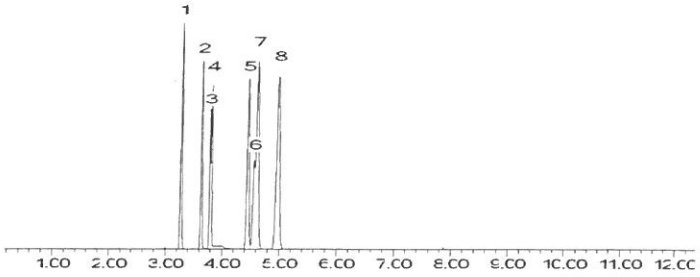
**Carrier Gas:**
helium-constant flow 2.0 mL/min.

**Temp. Program:**
40°C (hold 6 min.) to 100°C
@ 6°C/min.

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician **Date Mixed:** 12-Jan-2017 **Balance:** 1127510105

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 17-Jan-2017

**Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397**

# Reagent

# VM569723_00007

Rec: 12/4/18

vm569723_00007

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**Catalog No. :** 569723 **Lot No.:** A0133302

**Description :** 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2020 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | | |
|---|---|---|---|---|---|
| 1 | 2-Chloroethyl vinyl ether | 2,511.5 µg/mL | +/- 14.7391 | µg/mL | Gravimetric |
| | **CAS #** 110-75-8 (Lot MKBS6526V) | | +/- 53.8098 | µg/mL | Unstressed |
| | **Purity** 98% | | +/- 55.3720 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

# Reagent

# VM569724_00018

Rec: 2/15/19

VM569724_00018

(10)

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**Catalog No. :** 569724 **Lot No.:** A0144661

**Description :** 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5,000µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2019 **Storage:** 0°C or colder

**Handling:** This product is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Vinyl acetate | 5,050.0 µg/mL | +/- 29.6362 µg/mL | Gravimetric |
| | **CAS #** 108-05-4 (Lot STBD7333V) | | +/- 304.7155 µg/mL | Unstressed |
| | **Purity** 99% | | +/- 305.4388 µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

# Reagent

# VM571992_00002

Rec: 6/15/18 20 vials

VMS71992_00002

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**Catalog No. :** 571992 **Lot No.:** A0123711

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether)<br>**CAS #** 60-29-7 (Lot SHBG1462V)<br>**Purity** 99% | 2,501.3 µg/mL | +/- 14.5425 µg/mL<br>+/- 150.9115 µg/mL<br>+/- 151.2698 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>**CAS #** 76-13-1 (Lot 00009482)<br>**Purity** 99% | 2,505.1 µg/mL | +/- 14.5650 µg/mL<br>+/- 151.1453 µg/mL<br>+/- 151.5041 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 1,1-dichloroethene<br>**CAS #** 75-35-4 (Lot SHBG8609V)<br>**Purity** 99% | 2,511.5 µg/mL | +/- 14.6021 µg/mL<br>+/- 151.5299 µg/mL<br>+/- 151.8897 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | tert-Butanol (TBA)<br>**CAS #** 75-65-0 (Lot SHBF0688V)<br>**Purity** 99% | 25,001.8 µg/mL | +/- 145.3547 µg/mL<br>+/- 1,508.4656 µg/mL<br>+/- 1,512.0470 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Methyl acetate<br>**CAS #** 79-20-9 (Lot SHBG4345V)<br>**Purity** 99% | 5,000.5 µg/mL | +/- 29.0733 µg/mL<br>+/- 301.7023 µg/mL<br>+/- 302.4186 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Iodomethane (methyl iodide)<br>**CAS #** 74-88-4 (Lot SHBF2149V)<br>**Purity** 99% | 2,502.9 µg/mL | +/- 14.5519 µg/mL<br>+/- 151.0095 µg/mL<br>+/- 151.3681 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Allyl chloride ( 3-chloropropene )<br>**CAS #** 107-05-1 (Lot SHBF8133V)<br>**Purity** 99% | 2,517.1 µg/mL | +/- 14.6348 µg/mL<br>+/- 151.8693 µg/mL<br>+/- 152.2299 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane)<br>**CAS #** 75-09-2<br>**Purity** 99% | (Lot SHBH2578V) | 2,502.1 µg/mL | +/- 14.5476<br>+/- 150.9643<br>+/- 151.3227 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | Carbon disulfide<br>**CAS #** 75-15-0<br>**Purity** 99% | (Lot S20A856) | 2,501.4 µg/mL | +/- 14.5432<br>+/- 150.9190<br>+/- 151.2773 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | Acrylonitrile<br>**CAS #** 107-13-1<br>**Purity** 99% | (Lot T07B2030) | 25,001.3 µg/mL | +/- 145.3518<br>+/- 1,508.4355<br>+/- 1,512.0167 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE )<br>**CAS #** 1634-04-4<br>**Purity** 99% | (Lot SHBG2655V) | 2,505.3 µg/mL | +/- 14.5657<br>+/- 151.1528<br>+/- 151.5117 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | cis-1,2-Dichloroethene<br>**CAS #** 156-59-2<br>**Purity** 98% | (Lot MKBV2831V) | 2,500.5 µg/mL | +/- 14.5379<br>+/- 150.8644<br>+/- 151.2226 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexane (C6)<br>**CAS #** 110-54-3<br>**Purity** 99% | (Lot SHBG2674V) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | 1,1-Dichloroethane<br>**CAS #** 75-34-3<br>**Purity** 99% | (Lot 00008621) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | 2,2-Dichloropropane<br>**CAS #** 594-20-7<br>**Purity** 98% | (Lot BCBR0622V) | 2,501.0 µg/mL | +/- 14.5408<br>+/- 150.8940<br>+/- 151.2522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | trans-1,2-Dichloroethene<br>**CAS #** 156-60-5<br>**Purity** 99% | (Lot 09431AEV) | 2,503.8 µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol)<br>**CAS #** 78-83-1<br>**Purity** 99% | (Lot SHBG8201V) | 62,512.5 µg/mL | +/- 363.4341<br>+/- 3,771.6543<br>+/- 3,780.6088 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | chloroform<br>**CAS #** 67-66-3<br>**Purity** 99% | (Lot MKBV2089V) | 2,501.9 µg/mL | +/- 14.5461<br>+/- 150.9492<br>+/- 151.3076 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | Bromochloromethane<br>**CAS #** 74-97-5<br>**Purity** 99% | (Lot 00004559) | 2,503.3 µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | Tetrahydrofuran<br>**CAS #** 109-99-9<br>**Purity** 99% | (Lot SHBG2910V) | 5,001.3 µg/mL | +/- 29.0777<br>+/- 301.7476<br>+/- 302.4640 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 21 | 1,1,1-trichloroethane<br>**CAS #** 71-55-6<br>**Purity** 99% | (Lot B15W12061) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 22 | Cyclohexane<br>**CAS #** 110-82-7<br>**Purity** 99% | (Lot MKBX4768V) | 2,502.0 µg/mL | +/- 14.5468<br>+/- 150.9567<br>+/- 151.3151 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 23 | 1,1-Dichloropropene<br>**CAS #** 563-58-6<br>**Purity** 99% | (Lot 160727JLM) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 24 | carbon tetrachloride | | 2,503.3 µg/mL | +/- 14.5541 | µg/mL | Gravimetric |
| | **CAS #** 56-23-5 | (Lot SHBG1763V) | | +/- 151.0322 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3907 | µg/mL | Stressed |
| 25 | n-Heptane (C7) | | 2,505.5 µg/mL | +/- 14.5672 | µg/mL | Gravimetric |
| | **CAS #** 142-82-5 | (Lot SHBG6171V) | | +/- 151.1679 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.5268 | µg/mL | Stressed |
| 26 | 1,2-Dichloroethane | | 2,504.8 µg/mL | +/- 14.5628 | µg/mL | Gravimetric |
| | **CAS #** 107-06-2 | (Lot SHBF9313V) | | +/- 151.1227 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4815 | µg/mL | Stressed |
| 27 | Benzene | | 2,506.9 µg/mL | +/- 14.5752 | µg/mL | Gravimetric |
| | **CAS #** 71-43-2 | (Lot SHBH2056V) | | +/- 151.2509 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.6100 | µg/mL | Stressed |
| 28 | Trichloroethene | | 2,502.4 µg/mL | +/- 14.5490 | µg/mL | Gravimetric |
| | **CAS #** 79-01-6 | (Lot SHBH1955V) | | +/- 150.9794 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3378 | µg/mL | Stressed |
| 29 | Methylcyclohexane | | 2,500.3 µg/mL | +/- 14.5372 | µg/mL | Gravimetric |
| | **CAS #** 108-87-2 | (Lot SHBG0634V) | | +/- 150.8570 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.2152 | µg/mL | Stressed |
| 30 | 1,2-Dichloropropane | | 2,503.0 µg/mL | +/- 14.5527 | µg/mL | Gravimetric |
| | **CAS #** 78-87-5 | (Lot 01113D0V) | | +/- 151.0171 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3756 | µg/mL | Stressed |
| 31 | 1,4-Dioxane | | 50,011.4 µg/mL | +/- 290.7552 | µg/mL | Gravimetric |
| | **CAS #** 123-91-1 | (Lot SHBH2584V) | | +/- 3,017.4064 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 3,024.5702 | µg/mL | Stressed |
| 32 | Dibromomethane | | 2,501.9 µg/mL | +/- 14.5465 | µg/mL | Gravimetric |
| | **CAS #** 74-95-3 | (Lot 10183283) | | +/- 150.9531 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.3115 | µg/mL | Stressed |
| 33 | cis-1,3-Dichloropropene | | 2,501.0 µg/mL | +/- 14.5410 | µg/mL | Gravimetric |
| | **CAS #** 10061-01-5 | (Lot 22622) | | +/- 150.8964 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2547 | µg/mL | Stressed |
| 34 | Toluene | | 2,504.3 µg/mL | +/- 14.5599 | µg/mL | Gravimetric |
| | **CAS #** 108-88-3 | (Lot SHBH1932V) | | +/- 151.0925 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4512 | µg/mL | Stressed |
| 35 | Ethyl methacrylate | | 2,506.9 µg/mL | +/- 14.5752 | µg/mL | Gravimetric |
| | **CAS #** 97-63-2 | (Lot SHBD9190V) | | +/- 151.2509 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.6100 | µg/mL | Stressed |
| 36 | trans-1,3-Dichloropropene | | 2,503.6 µg/mL | +/- 14.5563 | µg/mL | Gravimetric |
| | **CAS #** 10061-02-6 | (Lot C584177) | | +/- 151.0548 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4134 | µg/mL | Stressed |
| 37 | 1,1,2-Trichloroethane | | 2,501.0 µg/mL | +/- 14.5410 | µg/mL | Gravimetric |
| | **CAS #** 79-00-5 | (Lot FGB01) | | +/- 150.8964 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2547 | µg/mL | Stressed |
| 38 | 1,3-Dichloropropane | | 2,503.5 µg/mL | +/- 14.5556 | µg/mL | Gravimetric |
| | **CAS #** 142-28-9 | (Lot BCBG2162V) | | +/- 151.0472 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.4059 | µg/mL | Stressed |
| 39 | Tetrachloroethene | | 2,500.9 µg/mL | +/- 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 127-18-4 | (Lot SHBD9374V) | | +/- 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2471 | µg/mL | Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40 | dibromochloromethane<br>**CAS #** 124-48-1<br>**Purity** 98% | (Lot MKBW3597V) | 2,500.2 | µg/mL | +/- 14.5365<br>+/- 150.8497<br>+/- 151.2078 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 41 | 1,2-Dibromoethane (EDB)<br>**CAS #** 106-93-4<br>**Purity** 99% | (Lot BCBH3877V) | 2,501.3 | µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 42 | Chlorobenzene<br>**CAS #** 108-90-7<br>**Purity** 99% | (Lot SHBF0505V) | 2,500.1 | µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 43 | m-Xylene<br>**CAS #** 108-38-3<br>**Purity** 99% | (Lot SHBG4347V) | 1,250.3 | µg/mL | +/- 7.2691<br>+/- 75.4331<br>+/- 75.6122 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 44 | p-Xylene<br>**CAS #** 106-42-3<br>**Purity** 99% | (Lot SHBG3928V) | 1,251.3 | µg/mL | +/- 7.2749<br>+/- 75.4935<br>+/- 75.6727 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 45 | Ethylbenzene<br>**CAS #** 100-41-4<br>**Purity** 99% | (Lot SHBG5920V) | 2,503.3 | µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 46 | 1,1,1,2-Tetrachloroethane<br>**CAS #** 630-20-6<br>**Purity** 99% | (Lot MKBS3769V) | 2,500.3 | µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 47 | o-Xylene<br>**CAS #** 95-47-6<br>**Purity** 99% | (Lot SHBH3432V) | 2,504.9 | µg/mL | +/- 14.5636<br>+/- 151.1302<br>+/- 151.4890 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 48 | Styrene<br>**CAS #** 100-42-5<br>**Purity** 99% | (Lot MKBS7097V) | 2,506.3 | µg/mL | +/- 14.5716<br>+/- 151.2132<br>+/- 151.5722 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 49 | Isopropylbenzene (cumene)<br>**CAS #** 98-82-8<br>**Purity** 99% | (Lot 10185056) | 2,501.6 | µg/mL | +/- 14.5447<br>+/- 150.9341<br>+/- 151.2925 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 50 | bromoform<br>**CAS #** 75-25-2<br>**Purity** 99% | (Lot SHBD8459V) | 2,502.9 | µg/mL | +/- 14.5519<br>+/- 151.0095<br>+/- 151.3681 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 51 | bromodichloromethane<br>**CAS #** 75-27-4<br>**Purity** 97% | (Lot MKBW5506V) | 2,506.8 | µg/mL | +/- 14.5750<br>+/- 151.2490<br>+/- 151.6081 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 52 | 1,1,2,2-Tetrachloroethane<br>**CAS #** 79-34-5<br>**Purity** 99% | (Lot CFA4D) | 2,501.3 | µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 53 | 1,2,3-Trichloropropane<br>**CAS #** 96-18-4<br>**Purity** 99% | (Lot BCBH8722V) | 2,508.5 | µg/mL | +/- 14.5846<br>+/- 151.3489<br>+/- 151.7082 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 54 | trans-1,4-dichloro-2-butene<br>**CAS #** 110-57-6<br>**Purity** 95% | (Lot MKBP6041V) | 2,500.8 | µg/mL | +/- 14.5396<br>+/- 150.8817<br>+/- 151.2399 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 55 | n-Propylbenzene<br>**CAS #** 103-65-1<br>**Purity** 99% | (Lot MKBJ0332V) | 2,501.9 | µg/mL | +/- 14.5461<br>+/- 150.9492<br>+/- 151.3076 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene<br>**CAS #** 108-86-1<br>**Purity** 99% | (Lot MKBD4032V) | 2,507.0 | µg/mL | +/- 14.5759<br>+/- 151.2584<br>+/- 151.6175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,3,5-Trimethylbenzene<br>**CAS #** 108-67-8<br>**Purity** 99% | (Lot BCBQ2165V) | 2,501.1 | µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>**CAS #** 95-49-8<br>**Purity** 99% | (Lot MKBW5554V) | 2,500.6 | µg/mL | +/- 14.5388<br>+/- 150.8738<br>+/- 151.2320 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>**CAS #** 106-43-4<br>**Purity** 99% | (Lot MKBL7753V) | 2,501.3 | µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>**CAS #** 98-06-6<br>**Purity** 99% | (Lot S52237V) | 2,507.0 | µg/mL | +/- 14.5759<br>+/- 151.2584<br>+/- 151.6175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,2,4-Trimethylbenzene<br>**CAS #** 95-63-6<br>**Purity** 98% | (Lot MKBJ6229V) | 2,500.8 | µg/mL | +/- 14.5401<br>+/- 150.8866<br>+/- 151.2448 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>**CAS #** 135-98-8<br>**Purity** 99% | (Lot MKBR9260V) | 2,505.4 | µg/mL | +/- 14.5665<br>+/- 151.1604<br>+/- 151.5193 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | p-Isopropyltoluene (p-Cymene)<br>**CAS #** 99-87-6<br>**Purity** 99% | (Lot MKBS2604V) | 2,503.8 | µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>**CAS #** 541-73-1<br>**Purity** 99% | (Lot BCBM5751V) | 2,503.9 | µg/mL | +/- 14.5577<br>+/- 151.0699<br>+/- 151.4285 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>**CAS #** 106-46-7<br>**Purity** 99% | (Lot MKBS1350V) | 2,509.9 | µg/mL | +/- 14.5926<br>+/- 151.4319<br>+/- 151.7914 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>**CAS #** 104-51-8<br>**Purity** 99% | (Lot 09418JJV) | 2,503.3 | µg/mL | +/- 14.5541<br>+/- 151.0322<br>+/- 151.3907 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>**CAS #** 95-50-1<br>**Purity** 99% | (Lot SHBD7331V) | 2,503.8 | µg/mL | +/- 14.5570<br>+/- 151.0623<br>+/- 151.4210 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>**CAS #** 96-12-8<br>**Purity** 99% | (Lot FBL01) | 2,505.0 | µg/mL | +/- 14.5643<br>+/- 151.1378<br>+/- 151.4966 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>**CAS #** 120-82-1<br>**Purity** 99% | (Lot SHBC5541V) | 2,505.3 | µg/mL | +/- 14.5657<br>+/- 151.1528<br>+/- 151.5117 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>**CAS #** 87-68-3<br>**Purity** 98% | (Lot J31X013) | 2,506.5 | µg/mL | +/- 14.5728<br>+/- 151.2266<br>+/- 151.5856 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>**CAS #** 91-20-3<br>**Purity** 99% | (Lot MKBW2603V) | 2,500.9 | µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,511.1 µg/mL | +/- | 14.5999 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6 | (Lot 12912PFV) | | +/- | 151.5073 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- | 151.8670 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

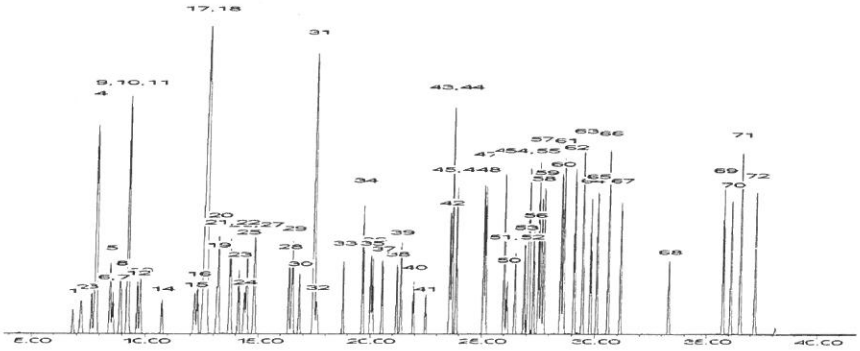
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 22-Dec-2016 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# VM571992S_00004

Rec: 12/4/18

VM571992S-00004

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# CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

## Certificate of Analysis

**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 571992.sec **Lot No.:** A0123775

**Description :** 8260 List 1 / Std #1 MegaMix (2017)

8260 List 1 / Std #1 MegaMix (2017) 1,250-62,500µg/mL, P&T Methanol, 1mL/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2019 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) | |
|---|---|---|---|---|
| 1 | Diethyl ether (ethyl ether)<br>**CAS #** 60-29-7.SEC (Lot F23X068)<br>**Purity** 98% | 2,501.2 µg/mL | +/- 14.5422 µg/mL<br>+/- 150.9088 µg/mL<br>+/- 151.2671 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2 | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>**CAS #** 76-13-1.SEC (Lot 18342)<br>**Purity** 99% | 2,501.1 µg/mL | +/- 14.5418 µg/mL<br>+/- 150.9040 µg/mL<br>+/- 151.2622 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3 | 1,1-Dichloroethene<br>**CAS #** 75-35-4.SEC (Lot 2767000)<br>**Purity** 99% | 2,500.5 µg/mL | +/- 14.5381 µg/mL<br>+/- 150.8662 µg/mL<br>+/- 151.2244 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4 | tert-Butanol (TBA)<br>**CAS #** 75-65-0.SEC (Lot XYXDO)<br>**Purity** 98% | 25,003.1 µg/mL | +/- 145.3626 µg/mL<br>+/- 1,508.5475 µg/mL<br>+/- 1,512.1291 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5 | Methyl acetate<br>**CAS #** 79-20-9.SEC (Lot YDGVD)<br>**Purity** 99% | 5,000.4 µg/mL | +/- 29.0726 µg/mL<br>+/- 301.6948 µg/mL<br>+/- 302.4111 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6 | Iodomethane (methyl iodide)<br>**CAS #** 74-88-4.SEC (Lot Y25A027)<br>**Purity** 99% | 2,500.4 µg/mL | +/- 14.5374 µg/mL<br>+/- 150.8587 µg/mL<br>+/- 151.2169 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 7 | Allyl chloride ( 3-chloropropene )<br>**CAS #** 107-05-1.SEC (Lot VEBOC)<br>**Purity** 98% | 2,500.1 µg/mL | +/- 14.5358 µg/mL<br>+/- 150.8423 µg/mL<br>+/- 151.2004 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 8 | Methylene chloride (dichloromethane)<br>**CAS #** 75-09-2.SEC (Lot [illegible])<br>**Purity** 99% | | 2,500.8 µg/mL | +/- 14.5396<br>+/- 150.8813<br>+/- 151.2395 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 9 | Carbon disulfide<br>**CAS #** 75-15-0.SEC<br>**Purity** 99% | (Lot MKBL1376V) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 10 | Acrylonitrile<br>**CAS #** 107-13-1.SEC<br>**Purity** 99% | (Lot UERIL) | 25,000.9 µg/mL | +/- 145.3496<br>+/- 1,508.4128<br>+/- 1,511.9941 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 11 | Methyl-tert-butyl ether ( MTBE )<br>**CAS #** 1634-04-4.SEC<br>**Purity** 99% | (Lot ZAQTA-MS) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 12 | cis-1,2-Dichloroethene<br>**CAS #** 156-59-2.SEC<br>**Purity** 98% | (Lot HGC01-BLKT) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 13 | n-Hexane (C6)<br>**CAS #** 110-54-3.SEC<br>**Purity** 99% | (Lot 10188491) | 2,501.5 µg/mL | +/- 14.5439<br>+/- 150.9266<br>+/- 151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 14 | 1,1-Dichloroethane<br>**CAS #** 75-34-3.SEC<br>**Purity** 99% | (Lot 5379000) | 2,500.3 µg/mL | +/- 14.5367<br>+/- 150.8512<br>+/- 151.2093 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 15 | 2,2-Dichloropropane<br>**CAS #** 594-20-7.SEC<br>**Purity** 98% | (Lot I7E8E) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 16 | trans-1,2-Dichloroethene<br>**CAS #** 156-60-5.SEC<br>**Purity** 97% | (Lot TS5UB) | 2,500.2 µg/mL | +/- 14.5362<br>+/- 150.8466<br>+/- 151.2048 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 17 | Isobutanol (2-Methyl-1-propanol)<br>**CAS #** 78-83-1.SEC<br>**Purity** 99% | (Lot 83NHH) | 62,506.9 µg/mL | +/- 363.4014<br>+/- 3,771.3149<br>+/- 3,780.2687 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 18 | Chloroform<br>**CAS #** 67-66-3.SEC<br>**Purity** 99% | (Lot 1297547) | 2,500.1 µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 19 | Bromochloromethane<br>**CAS #** 74-97-5.SEC<br>**Purity** 99% | (Lot 5670200) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 20 | Tetrahydrofuran<br>**CAS #** 109-99-9.SEC<br>**Purity** 99% | (Lot K3V7J-SJ) | 5,002.3 µg/mL | +/- 29.0835<br>+/- 301.8079<br>+/- 302.5245 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 21 | 1,1,1-Trichloroethane<br>**CAS #** 71-55-6.SEC<br>**Purity** 98% | (Lot CS160712) | 2,500.7 µg/mL | +/- 14.5394<br>+/- 150.8792<br>+/- 151.2374 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 22 | Cyclohexane<br>**CAS #** 110-82-7.SEC<br>**Purity** 99% | (Lot YADRA) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 23 | 1,1-Dichloropropene<br>**CAS #** 563-58-6.SEC<br>**Purity** 96% | (Lot 5221100) | 2,501.3 µg/mL | +/- 14.5427<br>+/- 150.9133<br>+/- 151.2716 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 24 | Carbon tetrachloride<br>**CAS #** 56-23-5.SEC<br>**Purity** 99% | (Lot 11466) | 2,500.5 | µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | n-Heptane (C7)<br>**CAS #** 142-82-5.SEC<br>**Purity** 99% | (Lot OGM01) | 2,500.5 | µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2-Dichloroethane<br>**CAS #** 107-06-2.SEC<br>**Purity** 99% | (Lot FO6PK) | 2,500.1 | µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Benzene<br>**CAS #** 71-43-2.SEC<br>**Purity** 99% | (Lot B28Y008) | 2,501.5 | µg/mL | +/- 14.5439<br>+/- 150.9266<br>+/- 151.2849 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Trichloroethene<br>**CAS #** 79-01-6.SEC<br>**Purity** 99% | (Lot H04X050) | 2,501.0 | µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | Methylcyclohexane<br>**CAS #** 108-87-2.SEC<br>**Purity** 99% | (Lot 24MSD-CD) | 2,500.9 | µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | 1,2-Dichloropropane<br>**CAS #** 78-87-5.SEC<br>**Purity** 99% | (Lot OGG01) | 2,501.1 | µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>**CAS #** 123-91-1.SEC<br>**Purity** 99% | (Lot MUFZH) | 50,007.1 | µg/mL | +/- 290.7305<br>+/- 3,017.1500<br>+/- 3,024.3132 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>**CAS #** 74-95-3.SEC<br>**Purity** 99% | (Lot FGI01-OICH) | 2,501.6 | µg/mL | +/- 14.5447<br>+/- 150.9341<br>+/- 151.2925 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>**CAS #** 10061-01-5.SEC<br>**Purity** 99% | (Lot 487OA) | 2,500.1 | µg/mL | +/- 14.5359<br>+/- 150.8436<br>+/- 151.2017 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>**CAS #** 108-88-3.SEC<br>**Purity** 99% | (Lot YND2B-BD) | 2,500.0 | µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>**CAS #** 97-63-2.SEC<br>**Purity** 99% | (Lot MLWYK-LS) | 2,500.5 | µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>**CAS #** 10061-02-6.SEC<br>**Purity** 99% | (Lot ZDMSL) | 2,500.5 | µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>**CAS #** 79-00-5.SEC<br>**Purity** 98% | (Lot 5034600) | 2,500.8 | µg/mL | +/- 14.5401<br>+/- 150.8866<br>+/- 151.2448 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>**CAS #** 142-28-9.SEC<br>**Purity** 99% | (Lot AGN01-EFPC) | 2,500.5 | µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>**CAS #** 127-18-4.SEC<br>**Purity** 99% | (Lot F09W014) | 2,501.3 | µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 40 | Dibromochloromethane<br>**CAS #** 124-48-1.SEC<br>**Purity** 97% | (Lot 10181507) | 2,500.4 µg/mL | +/- 14.5376<br>+/- 150.8613<br>+/- 151.2194 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 41 | 1,2-Dibromoethane (EDB)<br>**CAS #** 106-93-4.SEC<br>**Purity** 99% | (Lot 3505900) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 42 | Chlorobenzene<br>**CAS #** 108-90-7.SEC<br>**Purity** 99% | (Lot 1161936) | 2,501.0 µg/mL | +/- 14.5410<br>+/- 150.8964<br>+/- 151.2547 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 43 | m-Xylene<br>**CAS #** 108-38-3.SEC<br>**Purity** 99% | (Lot OUKMG-GB) | 1,250.9 µg/mL | +/- 7.2727<br>+/- 75.4708<br>+/- 75.6500 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 44 | p-Xylene<br>**CAS #** 106-42-3.SEC<br>**Purity** 99% | (Lot GM01) | 1,250.5 µg/mL | +/- 7.2705<br>+/- 75.4482<br>+/- 75.6273 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 45 | Ethylbenzene<br>**CAS #** 100-41-4.SEC<br>**Purity** 99% | (Lot PI4SE) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 46 | 1,1,1,2-Tetrachloroethane<br>**CAS #** 630-20-6.SEC<br>**Purity** 99% | (Lot GC01) | 2,501.1 µg/mL | +/- 14.5418<br>+/- 150.9040<br>+/- 151.2622 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 47 | o-Xylene<br>**CAS #** 95-47-6.SEC<br>**Purity** 99% | (Lot FGL01-KTPK) | 2,500.9 µg/mL | +/- 14.5403<br>+/- 150.8889<br>+/- 151.2471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 48 | Styrene<br>**CAS #** 100-42-5.SEC<br>**Purity** 99% | (Lot OFIOL-IA) | 2,500.4 µg/mL | +/- 14.5374<br>+/- 150.8587<br>+/- 151.2169 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 49 | Isopropylbenzene (cumene)<br>**CAS #** 98-82-8.SEC<br>**Purity** 99% | (Lot 2PHXG-IH) | 2,500.5 µg/mL | +/- 14.5381<br>+/- 150.8662<br>+/- 151.2244 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 50 | Bromoform<br>**CAS #** 75-25-2.SEC<br>**Purity** 99% | (Lot 5139000) | 2,502.3 µg/mL | +/- 14.5483<br>+/- 150.9718<br>+/- 151.3303 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 51 | Bromodichloromethane<br>**CAS #** 75-27-4.SEC<br>**Purity** 98% | (Lot 13780) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 52 | 1,1,2,2-Tetrachloroethane<br>**CAS #** 79-34-5.SEC<br>**Purity** 99% | (Lot CFA4D-AQ) | 2,501.3 µg/mL | +/- 14.5425<br>+/- 150.9115<br>+/- 151.2698 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 53 | 1,2,3-Trichloropropane<br>**CAS #** 96-18-4.SEC<br>**Purity** 98% | (Lot OGI01) | 2,500.1 µg/mL | +/- 14.5358<br>+/- 150.8423<br>+/- 151.2004 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 54 | trans-1,4-Dichloro-2-butene<br>**CAS #** 110-57-6.SEC<br>**Purity** 98% | (Lot 100700-3) | 2,501.0 µg/mL | +/- 14.5408<br>+/- 150.8940<br>+/- 151.2522 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 55 | n-Propylbenzene<br>**CAS #** 103-65-1.SEC<br>**Purity** 99% | (Lot T2HFC-IT) | 2,500.0 µg/mL | +/- 14.5352<br>+/- 150.8361<br>+/- 151.1942 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 56 | Bromobenzene | | 2,500.1 µg/mL | +/- 14.5359 | µg/mL | Gravimetric |
| | **CAS #** 108-86-1.SEC | (Lot 2FUHG-EM) | | +/- 150.8436 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2017 | µg/mL | Stressed |
| 57 | 1,3,5-Trimethylbenzene | | 2,500.3 µg/mL | +/- 14.5367 | µg/mL | Gravimetric |
| | **CAS #** 108-67-8.SEC | (Lot TOOOF) | | +/- 150.8512 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2093 | µg/mL | Stressed |
| 58 | 2-Chlorotoluene | | 2,500.9 µg/mL | +/- 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 95-49-8.SEC | (Lot SW8QG-AO) | | +/- 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2471 | µg/mL | Stressed |
| 59 | 4-Chlorotoluene | | 2,500.5 µg/mL | +/- 14.5381 | µg/mL | Gravimetric |
| | **CAS #** 106-43-4.SEC | (Lot P4XHJ-AO) | | +/- 150.8662 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2244 | µg/mL | Stressed |
| 60 | tert-Butylbenzene | | 2,500.1 µg/mL | +/- 14.5359 | µg/mL | Gravimetric |
| | **CAS #** 98-06-6.SEC | (Lot OGN01-CAI) | | +/- 150.8436 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2017 | µg/mL | Stressed |
| 61 | 1,2,4-Trimethylbenzene | | 2,500.4 µg/mL | +/- 14.5374 | µg/mL | Gravimetric |
| | **CAS #** 95-63-6.SEC | (Lot SC7LO-QA) | | +/- 150.8587 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2169 | µg/mL | Stressed |
| 62 | sec-Butylbenzene | | 2,501.4 µg/mL | +/- 14.5432 | µg/mL | Gravimetric |
| | **CAS #** 135-98-8.SEC | (Lot OGN01-IMA) | | +/- 150.9190 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2773 | µg/mL | Stressed |
| 63 | 4-Isopropyltoluene (p-cymene) | | 2,501.3 µg/mL | +/- 14.5425 | µg/mL | Gravimetric |
| | **CAS #** 99-87-6.SEC | (Lot 5221800) | | +/- 150.9115 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2698 | µg/mL | Stressed |
| 64 | 1,3-Dichlorobenzene | | 2,500.9 µg/mL | +/- 14.5403 | µg/mL | Gravimetric |
| | **CAS #** 541-73-1.SEC | (Lot FMDFD) | | +/- 150.8889 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2471 | µg/mL | Stressed |
| 65 | 1,4-Dichlorobenzene | | 2,500.8 µg/mL | +/- 14.5396 | µg/mL | Gravimetric |
| | **CAS #** 106-46-7.SEC | (Lot 4Y5DC) | | +/- 150.8813 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2395 | µg/mL | Stressed |
| 66 | n-Butylbenzene | | 2,500.8 µg/mL | +/- 14.5396 | µg/mL | Gravimetric |
| | **CAS #** 104-51-8.SEC | (Lot OGN01-PNP) | | +/- 150.8813 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2395 | µg/mL | Stressed |
| 67 | 1,2-Dichlorobenzene | | 2,501.0 µg/mL | +/- 14.5410 | µg/mL | Gravimetric |
| | **CAS #** 95-50-1.SEC | (Lot R6QDM) | | +/- 150.8964 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.2547 | µg/mL | Stressed |
| 68 | 1,2-Dibromo-3-chloropropane | | 2,501.5 µg/mL | +/- 14.5436 | µg/mL | Gravimetric |
| | **CAS #** 96-12-8.SEC | (Lot LC00408V) | | +/- 150.9236 | µg/mL | Unstressed |
| | **Purity** 98% | | | +/- 151.2819 | µg/mL | Stressed |
| 69 | 1,2,4-Trichlorobenzene | | 2,502.5 µg/mL | +/- 14.5498 | µg/mL | Gravimetric |
| | **CAS #** 120-82-1.SEC | (Lot 3LYYC) | | +/- 150.9869 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3454 | µg/mL | Stressed |
| 70 | Hexachlorobutadiene | | 2,501.4 µg/mL | +/- 14.5433 | µg/mL | Gravimetric |
| | **CAS #** 87-68-3.SEC | (Lot 5526800) | | +/- 150.9198 | µg/mL | Unstressed |
| | **Purity** 97% | | | +/- 151.2781 | µg/mL | Stressed |
| 71 | Naphthalene | | 2,501.8 µg/mL | +/- 14.5454 | µg/mL | Gravimetric |
| | **CAS #** 91-20-3.SEC | (Lot SKZ5N) | | +/- 150.9417 | µg/mL | Unstressed |
| | **Purity** 99% | | | +/- 151.3000 | µg/mL | Stressed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 72 | 1,2,3-Trichlorobenzene | | 2,500.7 | µg/mL | +/- | 14.5394 | µg/mL | Gravimetric |
| | **CAS #** 87-61-6.SEC | (Lot A0043055) | | | +/- | 150.8792 | µg/mL | Unstressed |
| | **Purity** 98% | | | | +/- | 151.2374 | µg/mL | Stressed |

**Solvent:** P&T Methanol
**CAS #** 67-56-1
**Purity** 99%

**Column:**
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

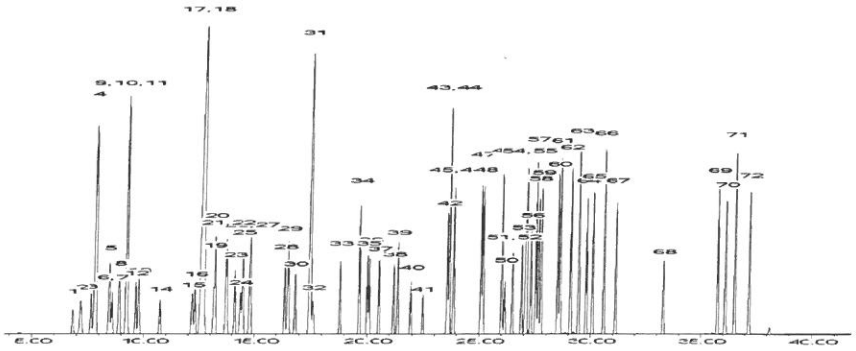
**Carrier Gas:**
helium-constant pressure 30 psi

**Temp. Program:**
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**
200°C

**Det. Temp:**
250°C

**Det. Type:**
MSD




This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

**Date Mixed:** 28-Dec-2016 **Balance:** 1127510105

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

**Date Passed:** 04-Jan-2017

**Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397**

# Reagent

# WCICSOLNA2_00020

7221 Investment Drive • North Charleston, SC 29418
843.767.7900 • info@highpuritystandards.com • www.highpuritystandards.com

# Certificate of Analysis

Certified Reference Material

ISO Guide 34:2009 (RMP) Accreditation Certificate Number AR-1436

ISO/IEC 17025:2005 Accreditation Certificate Number AT-1529

**Product Description:**

| | |
|---|---|
| Name: | CCV |
| Part Number: | **SM-606-140 Solution A** |
| Lot Number: | **1833341** |
| Matrix: | $H_2O$ |
| Purity: | 98.5+% |

**Certified Values**:

| Component | (mg/L) | SRM ID | SRM Lot# |
|---|---|---|---|
| Bromide | 100 ± 1 | 3184 | 151130 |
| Chloride | 500 ± 3 | 3182 | 060925 |
| Fluoride | 25.0 ± 0.3 | 3183 | 140203 |
| Nitrate as N | 25.0 ± 0.3 | 3185 | 050517 |
| Sulfate | 500 ± 3 | 3181 | 080603 |

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via ion chromatography (IC) and/or inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.

* Refer to Traceability Information, Section d

**Packaging and Storage Conditions:**

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

**Expiration Information:**

The expiry date is guaranteed to be valid for twelve months from the shipping date provided and is guaranteed through the month of expiration. For this reason, standards from the same lot may have different expiration dates.

**Shipped Date:** **December 2018**

**Certificate Issue Date:** December 3, 2018

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

**Preparation Information:**

The Certified Reference Material (CRM) is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. The matrix is as noted above in 18 megaohm deionized water.

Stability of this product is based upon rigorous short term and long term testing of the solution for the certified value. This testing includes, but is not limited to, the effect of temperature and packaging on the product. If during the period of validity, a recall is instituted due to substantial changes in the stability of this product, the purchaser will be notified.

**Homogeneity:**

This product is determined to be homogeneous following in-house procedures developed in accordance with the requirements of ISO Guide 34 and ISO Guide 35.

**Intended Use:**

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

**Traceability Information:**

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

**Refer to Safety Datasheet (SDS) for hazardous information.**

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

# Reagent

# WCPHENOMINER_00025

## WP Minerals 1 and 2, and Conductivity — Lot #8177-08, -102, -72

| TNI Analyte Code | Analyte | Certified Value mg/L | Acceptance Limits mg/L | Acceptance Limits % |
|---|---|---|---|---|
| **Lot #8177-08** | | | | |
| 1505 | Total Alkalinity(as CaCO3) | 168 | 142 - 193 | 84.5 - 115 |
| 1540 | Bromide | 7.95 | 6.75 - 9.20 | 84.9 - 116 |
| 1575 | Chloride | 171 | 151 - 192 | 88.3 - 112 |
| 1730 | Fluoride | 2.39 | 1.92 - 2.78 | 80.3 - 116 |
| 1813 | Total Inorganic Carbon | 40.0 | 32.0 - 48.0 | 80.0 - 120 |
| 2000 | Sulfate | 77.5 | 64.3 - 88.3 | 83.0 - 114 |
| **Lot #8177-102** | | | | |
| 1035 | Calcium | 42.9 | 36.4 - 49.3 | 84.8 - 115 |
| 1550 | Calcium Hardness (as CaCO3) | 107 | 91.0 - 123 | 85.0 - 115 |
| 1755 | Total Hardness (as CaCO3) | 246 | 209 - 283 | 85.0 - 115 |
| 1085 | Magnesium | 33.7 | 28.7 - 38.8 | 85.2 - 115 |
| 1125 | Potassium | 20.4 | 16.3 - 24.5 | 79.9 - 120 |
| 1155 | Sodium | 90.1 | 72.1 - 108 | 80.0 - 120 |
| **Lot #8177-72** | | **µmhos/cm** | **µmhos/cm** | **%** |
| 1610 | Specific Conductance (25°C) | 982 | 883 - 1080 | 89.9 - 110 |

Certified Values = "100% true concentration" of each analyte as determined from gravimetric and volumetric measurements made during standard manufacture.

Acceptance Limits = Generated based on the criteria established by The NELAC Institute (TNI) Fields of Proficiency Testing tables using regression equations and/or fixed percentage limits, historical data and other criteria distributed by accrediting agencies as applicable. Please note that regression based acceptance criteria are based on the Assigned Value and may have different criteria at different concentrations.

Matrix: Deionized Water
Store at 20-25°C.
Expiration Date: 04/20
Catalog #QC-MINSET-WP

**Preparation Instructions**: The WP Minerals and Conductivity standards are provided as whole volume standards that do not require a dilution prior to use. The standards are ready for preparation and analysis as received using your normal procedures. The standards should be stored at 20-25°C.

**Notes:** It is suggested that the lab analyze for Alkalinity first as soon as the Minerals 1 bottle has been opened. If the lab does not analyze Alkalinity, recap the bottle tightly as soon as possible after each use. This will minimize possible $CO_2$ absorption. Homogenize the Minerals 2 standard well by shaking immediately prior to taking an aliquot. The Minerals 1 and 2 standards contain no acid, so follow your normal procedures for checking and, if needed, adjusting the pH. A separate Conductivity bottle has been provided for the determination of conductivity (WP Conductivity). Do not analyze conductivity from the WP Minerals standards.

Approved by: AFL
Date: 07/17

Reviewed by: ALG
Date: 07/17

# Reagent

# TOC_CCV@1000_00043

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

# Certificate of Analysis

## Organic Carbon Standard, 1000 ppm C

4728624
ID: TOC_CCV@1000_00043
Exp:07/29/19 Prpd:MPH Opn:11/26/18
TOC CCV

**Lot Number:** 2808628 **Product Number:** 1847

**Manufacture Date:** AUG 01, 2018
**Expiration Date:** JUL 2019

The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is based upon the volumetric method of preparation.

| Name | CAS# | Grade |
|---|---|---|
| Water | 7732-18-5 | ACS/ASTM/USP/EP |
| Phosphoric Acid | 7664-38-2 | ACS |
| Potassium Acid Phthalate | 877-24-7 | ACS Acidimetric |

| Test | Specification | Result |
|---|---|---|
| Appearance | Colorless liquid | Passed |
| Carbon (C) | 995-1005 ppm | 1000 ppm |

| Specification | Reference |
|---|---|
| Organic Carbon Stock Solution | APHA (5310 B) |
| Potassium Hydrogen Phthalate, Stock Solution | EPA (SW-846) (9060) |
| Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter | EPA (415.1) |
| Organic Carbon Solution, Standard (1 mL = 1 mg C) | ASTM (D 2579) |

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |
|---|---|---|
| 1847-16 | 500 mL amber glass | 12 months |

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)

Andy Baumgartner (08/01/2018)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.

# Reagent

# TOC_LCS@1000_00023

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

# CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

## 2.0 PRODUCT DESCRIPTION

4728655
ID: TOC_LCS@1000_00023
Exp:10/24/22 Prpd:MPH Opn:11/26/18
TOC LCS

| | |
|---|---|
| Product Code: | Single Analyte Ion Chromatography Solution |
| Catalog Number: | TOCKHP1 |
| Lot Number: | N2-C672223 |
| Matrix: | H2O |
| Value / Analyte(s): | 1 000 µg/mL ea: Carbon |
| Starting Material: | KHP |
| Starting Material Lot#: | 1518 |
| Starting Material Purity: | 99.8200% |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 1004 ± 4 µg/mL

**Density:** 0.999 g/mL (measured at 20 ± 4 °C)

### Assay Information:

**Assay Method #1** **1004 ± 2 µg/mL**
Acidimetric NIST SRM 84L Lot Number: 84L

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

**Characterization of CRM by two independent methods** **Characterization of CRM by one method**

### Characterization of CRM/RM by Two Methods

**Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:**

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

$X_a$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

$X_b$ = mean of Assay Method B with standard uncertainty $u_{char\ b}$

$w_a$ and $w_b$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

**Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:**

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

**CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$**

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

$u_{bb}$ = bottle to bottle homogeneity standard uncertainty

$u_{lts}$ = long term stability standard uncertainty (storage)

$u_{ts}$ = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 CHROMATOGRAM

**Not Set**

| | | | |
|---|---|---|---|
| **Analytical Column:** | N/A | **Eluent:** | N/A |
| **Guard Column:** | N/A | **Eluent Flow Rate:** | N/A |
| **Anion Self Regen Suppressor/ Chemical Suppression:** | N/A | **Column Temp:** | N/A |
| | | **Cell Temp:** | N/A |
| **Cation Self Regen Suppressor/ Chemical Suppression:** | N/A | **Scale X-Axis:** | N/A |
| | | **Scale Y-Axis:** | N/A |
| | | **Concentration:** | N/A |
| **Suppressor Current/ Chemical Suppressant:** | N/A | | |

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

October 24, 2018

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **October 24, 2022**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

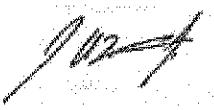
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

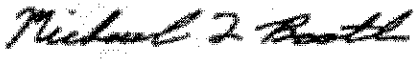
**Certificate Prepared By:**

James King Jr
Chemist, Technical Manager



**Certificate Approved By:**

Michael Booth
Supervisor, Quality Control



**Certifying Officer:**

Paul Gaines
CEO, Senior Technical Director



# Method 8260C

## Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): DB-624  ID: 0.18(mm)

| Client Sample ID | Lab Sample ID | DBFM # | DCA # | TOL # | BFB # |
|---|---|---|---|---|---|
| TB-050719 | 240-112234-1 | 86 | 86 | 88 | 86 |
| MRC-NMW-2S-050719 | 240-112234-2 | 91 | 89 | 92 | 91 |
| | MB 240-381514/7 | 88 | 88 | 93 | 86 |
| | LCS 240-381514/5 | 92 | 89 | 93 | 91 |

| | QC LIMITS |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 75-128 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 70-121 |
| TOL = Toluene-d8 (Surr) | 70-123 |
| BFB = 4-Bromofluorobenzene (Surr) | 59-120 |

# Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1270188.D

Lab ID: LCS 240-381514/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | 19.1 | 95 | 69-134 | |
| 1,1,2,2-Tetrachloroethane | 20.0 | 20.5 | 102 | 65-139 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.0 | 19.8 | 99 | 50-156 | |
| 1,1,2-Trichloroethane | 20.0 | 19.5 | 97 | 78-133 | |
| 1,1-Dichloroethane | 20.0 | 19.2 | 96 | 75-133 | |
| 1,1-Dichloroethene | 20.0 | 19.0 | 95 | 65-139 | |
| 1,2,4-Trichlorobenzene | 20.0 | 16.7 | 83 | 42-133 | |
| 1,2-Dibromo-3-Chloropropane | 20.0 | 18.2 | 91 | 46-132 | |
| Ethylene Dibromide | 20.0 | 18.9 | 95 | 77-123 | |
| 1,2-Dichlorobenzene | 20.0 | 18.8 | 94 | 78-120 | |
| 1,2-Dichloroethane | 20.0 | 17.7 | 88 | 71-135 | |
| 1,2-Dichloropropane | 20.0 | 20.6 | 103 | 78-133 | |
| 1,3-Dichlorobenzene | 20.0 | 19.0 | 95 | 78-120 | |
| 1,4-Dichlorobenzene | 20.0 | 18.8 | 94 | 78-120 | |
| 2-Butanone (MEK) | 40.0 | 36.2 | 91 | 39-163 | |
| 2-Hexanone | 40.0 | 35.5 | 89 | 43-148 | |
| 4-Methyl-2-pentanone (MIBK) | 40.0 | 36.7 | 92 | 49-143 | |
| Acetone | 40.0 | 30.2 | 76 | 21-162 | |
| Benzene | 20.0 | 20.0 | 100 | 80-123 | |
| Dichlorobromomethane | 20.0 | 19.2 | 96 | 77-125 | |
| Bromoform | 20.0 | 18.3 | 92 | 49-141 | |
| Bromomethane | 20.0 | 19.6 | 98 | 41-175 | |
| Carbon disulfide | 20.0 | 17.9 | 90 | 60-138 | |
| Carbon tetrachloride | 20.0 | 18.7 | 93 | 63-140 | |
| Chlorobenzene | 20.0 | 19.0 | 95 | 80-121 | |
| Chloroethane | 20.0 | 19.1 | 96 | 33-173 | |
| Chloroform | 20.0 | 19.0 | 95 | 79-127 | |
| Chloromethane | 20.0 | 17.9 | 90 | 54-143 | |
| cis-1,2-Dichloroethene | 20.0 | 19.4 | 97 | 76-128 | |
| cis-1,3-Dichloropropene | 20.0 | 20.5 | 103 | 64-132 | |
| Cyclohexane | 20.0 | 20.1 | 100 | 58-145 | |
| Chlorodibromomethane | 20.0 | 18.7 | 93 | 70-132 | |
| Dichlorodifluoromethane | 20.0 | 17.2 | 86 | 29-148 | |
| Ethylbenzene | 20.0 | 19.3 | 97 | 80-120 | |
| Isopropylbenzene | 20.0 | 19.6 | 98 | 74-120 | |
| Methyl acetate | 40.0 | 33.4 | 83 | 52-145 | |
| Methyl tert-butyl ether | 20.0 | 19.2 | 96 | 51-133 | |
| Methylcyclohexane | 20.0 | 20.1 | 100 | 60-125 | |
| Methylene Chloride | 20.0 | 17.2 | 86 | 70-134 | |
| Styrene | 20.0 | 18.6 | 93 | 79-120 | |
| Tetrachloroethene | 20.0 | 19.1 | 95 | 74-130 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: U1270188.D

Lab ID: LCS 240-381514/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Toluene | 20.0 | 19.4 | 97 | 78-129 | |
| trans-1,2-Dichloroethene | 20.0 | 19.1 | 95 | 78-133 | |
| trans-1,3-Dichloropropene | 20.0 | 18.7 | 94 | 55-128 | |
| Trichloroethene | 20.0 | 19.5 | 97 | 76-125 | |
| Trichlorofluoromethane | 20.0 | 19.8 | 99 | 51-164 | |
| Vinyl chloride | 20.0 | 20.0 | 100 | 58-143 | |
| Xylenes, Total | 40.0 | 39.1 | 98 | 80-120 | |
| m-Xylene & p-Xylene | 20.0 | 19.8 | 99 | 80-120 | |
| o-Xylene | 20.0 | 19.3 | 96 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab File ID: U1270190.D  Lab Sample ID: MB 240-381514/7

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

Instrument ID: A3UX12  Date Analyzed: 05/15/2019 19:49

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

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-381514/5 | U1270188.D | 05/15/2019 19:04 |
| TB-050719 | 240-112234-1 | U1270199.D | 05/15/2019 23:10 |
| MRC-NMW-2S-050719 | 240-112234-2 | U1270200.D | 05/15/2019 23:32 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab File ID: BFB4108.D  BFB Injection Date: 04/30/2019

Instrument ID: A3UX12  BFB Injection Time: 13:47

Analysis Batch No.: 378870

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 17.1 | |
| 75 | 30.0 - 60.0 % of mass 95 | 46.5 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.6 | |
| 173 | Less than 2.0 % of mass 174 | 0.0 | (0.0) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 86.4 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.3 | (7.3) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 83.6 | (96.8) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.3 | (6.3) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD8260 240-378870/8 | U1269795.D | 04/30/2019 | 14:10 |
| | STD8260 240-378870/9 | U1269796.D | 04/30/2019 | 14:33 |
| | STD8260 240-378870/10 | U1269797.D | 04/30/2019 | 14:55 |
| | ICIS 240-378870/11 | U1269798.D | 04/30/2019 | 15:17 |
| | STD8260 240-378870/12 | U1269799.D | 04/30/2019 | 15:39 |
| | STD8260 240-378870/13 | U1269800.D | 04/30/2019 | 16:02 |
| | STD8260 240-378870/14 | U1269801.D | 04/30/2019 | 16:24 |
| | ICV 240-378870/15 | U1269802.D | 04/30/2019 | 16:46 |
| | ICV 240-378870/25 | U1269812.D | 04/30/2019 | 20:27 |

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

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab File ID: BFB4121.D  BFB Injection Date: 05/15/2019

Instrument ID: A3UX12  BFB Injection Time: 17:56

Analysis Batch No.: 381514

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 16.1 | |
| 75 | 30.0 - 60.0 % of mass 95 | 46.3 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.6 | |
| 173 | Less than 2.0 % of mass 174 | 0.3 | (0.3) 1 |
| 174 | 50.0 - 120.00 % of mass 95 | 82.5 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.0 | (7.3) 1 |
| 176 | 95.0 - 101.0 % of mass 174 | 80.1 | (97.0) 1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.2 | (6.5) 2 |

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

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

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-381514/3 | U1270186.D | 05/15/2019 | 18:20 |
| | CCVIS 240-381514/4 | U1270187.D | 05/15/2019 | 18:42 |
| | LCS 240-381514/5 | U1270188.D | 05/15/2019 | 19:04 |
| | MB 240-381514/7 | U1270190.D | 05/15/2019 | 19:49 |
| TB-050719 | 240-112234-1 | U1270199.D | 05/15/2019 | 23:10 |
| MRC-NMW-2S-050719 | 240-112234-2 | U1270200.D | 05/15/2019 | 23:32 |

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Sample No.: ICIS 240-378870/11  Date Analyzed: 04/30/2019 15:17

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)

Lab File ID (Standard): U1269798.D  Heated Purge: (Y/N) N

Calibration ID: 50823

| | | FB | | CBNZd5 | | DCBd4 | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 1246876 | 5.10 | 855324 | 7.76 | 464704 | 9.97 |
| UPPER LIMIT | | 2493752 | 5.60 | 1710648 | 8.26 | 929408 | 10.47 |
| LOWER LIMIT | | 623438 | 4.60 | 427662 | 7.26 | 232352 | 9.47 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| CCVIS 240-381514/4 | | 1070584 | 5.10 | 722465 | 7.76 | 368199 | 9.97 |

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Sample No.: CCVIS 240-381514/4  Date Analyzed: 05/15/2019 18:42

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)

Lab File ID (Standard): U1270187.D  Heated Purge: (Y/N) N

Calibration ID: 50829

| | | FB | | CBNZd5 | | DCBd4 | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 1070584 | 5.10 | 722465 | 7.76 | 368199 | 9.97 |
| UPPER LIMIT | | 2141168 | 5.60 | 1444930 | 8.26 | 736398 | 10.47 |
| LOWER LIMIT | | 535292 | 4.60 | 361233 | 7.26 | 184100 | 9.47 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| LCS 240-381514/5 | | 1077943 | 5.10 | 749396 | 7.76 | 394844 | 9.97 |
| MB 240-381514/7 | | 1166877 | 5.10 | 773906 | 7.76 | 404526 | 9.97 |
| 240-112234-1 | TB-050719 | 1062412 | 5.10 | 708613 | 7.76 | 384922 | 9.97 |
| 240-112234-2 | MRC-NMW-2S-050719 | 1028943 | 5.10 | 694898 | 7.76 | 383313 | 9.97 |

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: TB-050719  Lab Sample ID: 240-112234-1

Matrix: Water  Lab File ID: U1270199.D

Analysis Method: 8260C  Date Collected: 05/07/2019 00:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 23:10

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.4 | U | 10 | 5.4 |
| 71-43-2 | Benzene | 0.13 | U | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: TB-050719  Lab Sample ID: 240-112234-1

Matrix: Water  Lab File ID: U1270199.D

Analysis Method: 8260C  Date Collected: 05/07/2019 00:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 23:10

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 0.10 | U | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 0.20 | U | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 88 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 86 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 86 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 86 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270199.D
Lims ID: 240-112234-A-1
Client ID: TB-050719
Sample Type: Client
Inject. Date: 15-May-2019 23:10:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-016
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-May-2019 02:59:30 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: laveyt Date: 16-May-2019 14:32:30

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1062412 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 708613 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 94 | 384922 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 242785 | 17.2 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 94 | 272071 | 17.1 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 883124 | 17.6 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 93 | 317555 | 17.2 | |
| 9 Dichlorodifluoromethane | 85 | | 1.403 | | | | ND | |
| 10 Chloromethane | 50 | | 1.593 | | | | ND | |
| 12 Vinyl chloride | 62 | | 1.687 | | | | ND | |
| 14 Bromomethane | 94 | | 1.912 | | | | ND | |
| 15 Chloroethane | 64 | | 1.995 | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.220 | | | | ND | |
| 21 1,1-Dichloroethene | 61 | | 2.634 | | | | ND | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | | 2.669 | | | | ND | |
| 23 Acetone | 43 | | 2.693 | | | | ND | |
| 25 Carbon disulfide | 76 | | 2.835 | | | | ND | |
| 28 Methyl acetate | 43 | | 2.977 | | | | ND | |
| 29 Methylene Chloride | 49 | | 3.060 | | | | ND | |
| 32 trans-1,2-Dichloroethene | 61 | | 3.285 | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 3.297 | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 3.652 | | | | ND | |
| 40 cis-1,2-Dichloroethene | 96 | | 4.137 | | | | ND | |
| 42 2-Butanone (MEK) | 72 | | 4.149 | | | | ND | |
| 48 Chloroform | 83 | | 4.409 | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 4.551 | | | | ND | |
| 50 Cyclohexane | 84 | | 4.598 | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 4.693 | | | | ND | |
| 54 Benzene | 78 | | 4.870 | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 4.882 | | | | ND | |
| 59 Trichloroethene | 130 | | 5.403 | | | | ND | |
| 61 Methylcyclohexane | 83 | | 5.569 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 5.604 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 5.829 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.219 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.350 | | | | ND | |
| 71 Toluene | 91 | | 6.515 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 6.705 | | | | ND | |
| 75 1,1,2-Trichloroethane | 97 | | 6.870 | | | | ND | |
| 76 Tetrachloroethene | 166 | | 7.000 | | | | ND | |
| 78 2-Hexanone | 43 | | 7.095 | | | | ND | |
| 80 Chlorodibromomethane | 129 | | 7.225 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 7.332 | | | | ND | |
| 83 Chlorobenzene | 112 | | 7.781 | | | | ND | |
| 85 Ethylbenzene | 106 | | 7.876 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 7.982 | | | | ND | |
| 87 o-Xylene | 106 | | 8.361 | | | | ND | |
| 88 Styrene | 104 | | 8.373 | | | | ND | |
| 89 Bromoform | 173 | | 8.550 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 8.704 | | | | ND | |
| 92 1,1,2,2-Tetrachloroethane | 83 | | 9.000 | | | | ND | |
| 106 1,3-Dichlorobenzene | 146 | | 9.911 | | | | ND | |
| 108 1,4-Dichlorobenzene | 146 | | 9.994 | | | | ND | |
| 112 1,2-Dichlorobenzene | 146 | | 10.361 | | | | ND | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | | 11.142 | | | | ND | |
| 115 1,2,4-Trichlorobenzene | 180 | | 11.946 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.020 | | | | ND | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm40ml_vials_00013 | Amount Added: | 0.00 | Units: | Run Reagent |

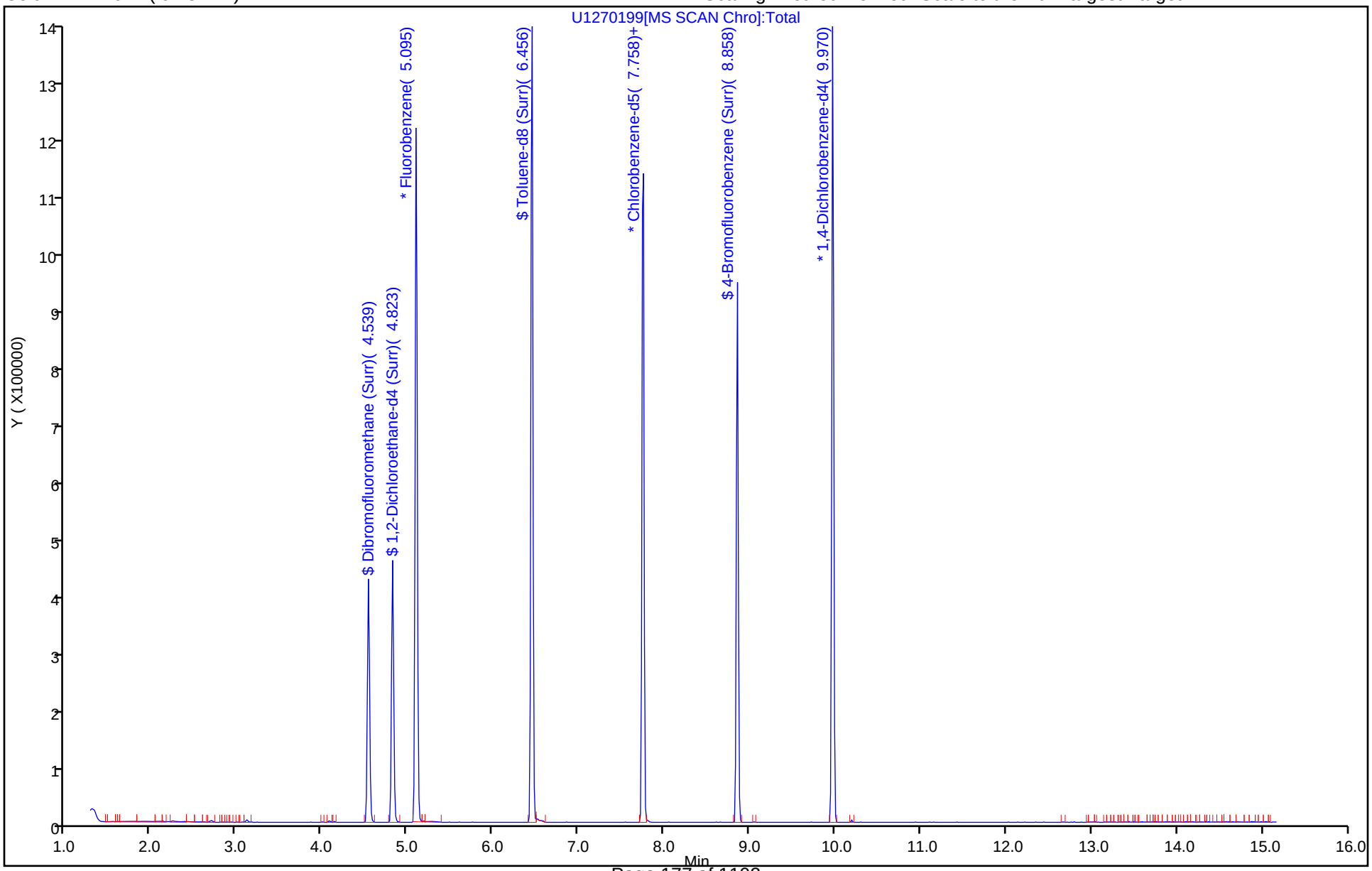
Report Date: 16-May-2019 14:32:31 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270199.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:10:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | 240-112234-A-1 | Lab Sample ID: | 240-112234-1 | Worklist Smp#: | 16 |
| Client ID: | TB-050719 | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270199.D
Lims ID: 240-112234-A-1
Client ID: TB-050719
Sample Type: Client
Inject. Date: 15-May-2019 23:10:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-016
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-May-2019 02:59:30 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: laveyt Date: 16-May-2019 14:32:30

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 17.2 | 85.91 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.1 | 85.71 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 17.6 | 87.96 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 17.2 | 85.87 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: MRC-NMW-2S-050719  Lab Sample ID: 240-112234-2

Matrix: Water  Lab File ID: U1270200.D

Analysis Method: 8260C  Date Collected: 05/07/2019 12:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 23:32

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.49 | J | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.94 | J | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 2.8 | J | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.6 | J | 10 | 5.4 |
| 71-43-2 | Benzene | 0.26 | J | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 30 |  | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: MRC-NMW-2S-050719  Lab Sample ID: 240-112234-2

Matrix: Water  Lab File ID: U1270200.D

Analysis Method: 8260C  Date Collected: 05/07/2019 12:00

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 23:32

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 1.7 | | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 23 | | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 13 | | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 92 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 91 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 91 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 89 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D
Lims ID: 240-112234-B-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 15-May-2019 23:32:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-017
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-May-2019 14:34:14 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: laveyt Date: 16-May-2019 14:34:14

| | Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * | 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1028943 | 20.0 | |
| * | 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 694898 | 20.0 | |
| * | 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 95 | 383313 | 20.0 | |
| $ | 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 95 | 250406 | 18.3 | |
| $ | 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 94 | 274448 | 17.9 | |
| $ | 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 909935 | 18.5 | |
| $ | 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 328908 | 18.1 | |
| | 9 Dichlorodifluoromethane | 85 | | 1.403 | | | | ND | |
| | 10 Chloromethane | 50 | | 1.593 | | | | ND | |
| | 12 Vinyl chloride | 62 | 1.676 | 1.687 | -0.011 | 98 | 260964 | 13.5 | |
| | 14 Bromomethane | 94 | | 1.912 | | | | ND | |
| | 15 Chloroethane | 64 | | 1.995 | | | | ND | |
| | 17 Trichlorofluoromethane | 101 | | 2.220 | | | | ND | |
| | 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 96 | 20088 | 0.9444 | |
| | 22 1,1,2-Trichloro-1,2,2-trif | 101 | | 2.669 | | | | ND | |
| | 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 98 | 56458 | 5.63 | |
| | 25 Carbon disulfide | 76 | | 2.835 | | | | ND | |
| | 28 Methyl acetate | 43 | | 2.977 | | | | ND | U |
| | 29 Methylene Chloride | 49 | | 3.060 | | | | ND | |
| | 32 trans-1,2-Dichloroethene | 61 | 3.297 | 3.285 | 0.012 | 97 | 35123 | 1.68 | |
| | 33 Methyl tert-butyl ether | 73 | | 3.297 | | | | ND | |
| | 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 92 | 12869 | 0.4937 | |
| | 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 79 | 537603 | 30.3 | |
| | 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 99 | 8981 | 2.80 | |
| | 48 Chloroform | 83 | | 4.409 | | | | ND | |
| | 49 1,1,1-Trichloroethane | 97 | | 4.551 | | | | ND | |
| | 50 Cyclohexane | 84 | | 4.598 | | | | ND | |
| | 52 Carbon tetrachloride | 117 | | 4.693 | | | | ND | |
| | 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 91 | 16012 | 0.2643 | |
| | 55 1,2-Dichloroethane | 62 | | 4.882 | | | | ND | |
| | 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 98 | 368124 | 22.7 | |
| | 61 Methylcyclohexane | 83 | | 5.569 | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|
| 62 1,2-Dichloropropane | 63 | | 5.604 | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 5.829 | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.219 | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.350 | | | | ND | U |
| 71 Toluene | 91 | | 6.515 | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 6.705 | | | | ND | |
| 75 1,1,2-Trichloroethane | 97 | | 6.870 | | | | ND | |
| 76 Tetrachloroethene | 166 | | 7.000 | | | | ND | |
| 78 2-Hexanone | 43 | | 7.095 | | | | ND | U |
| 80 Chlorodibromomethane | 129 | | 7.225 | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 7.332 | | | | ND | |
| 83 Chlorobenzene | 112 | | 7.781 | | | | ND | |
| 85 Ethylbenzene | 106 | | 7.876 | | | | ND | |
| 86 m-Xylene & p-Xylene | 106 | | 7.982 | | | | ND | |
| 87 o-Xylene | 106 | | 8.361 | | | | ND | |
| 88 Styrene | 104 | | 8.373 | | | | ND | |
| 89 Bromoform | 173 | | 8.550 | | | | ND | |
| 90 Isopropylbenzene | 105 | | 8.704 | | | | ND | |
| 92 1,1,2,2-Tetrachloroethane | 83 | | 9.000 | | | | ND | |
| 106 1,3-Dichlorobenzene | 146 | | 9.911 | | | | ND | |
| 108 1,4-Dichlorobenzene | 146 | | 9.994 | | | | ND | |
| 112 1,2-Dichlorobenzene | 146 | | 10.361 | | | | ND | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | | 11.142 | | | | ND | |
| 115 1,2,4-Trichlorobenzene | 180 | | 11.946 | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.020 | | | | ND | |

## QC Flag Legend

Review Flags

U - Marked Undetected

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm40ml_vials_00013 | Amount Added: | 0.00 | Units: | Run Reagent |

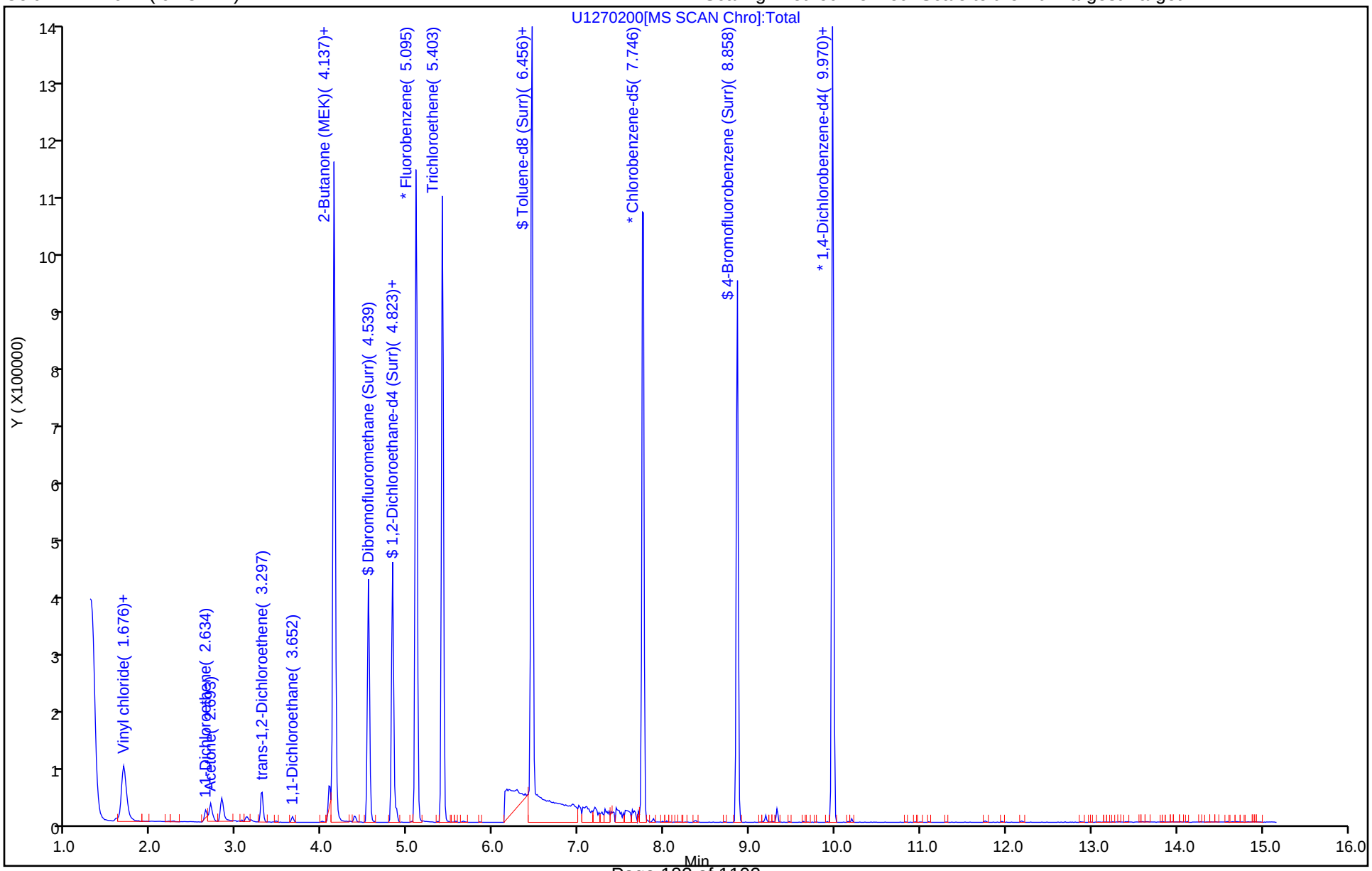
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | Worklist Smp#: | 17 |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 16 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D
Lims ID: 240-112234-B-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 15-May-2019 23:32:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-017
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 16-May-2019 14:34:14 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0304

First Level Reviewer: laveyt Date: 16-May-2019 14:34:14

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 18.3 | 91.49 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.9 | 89.27 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 18.5 | 92.42 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.1 | 90.69 |

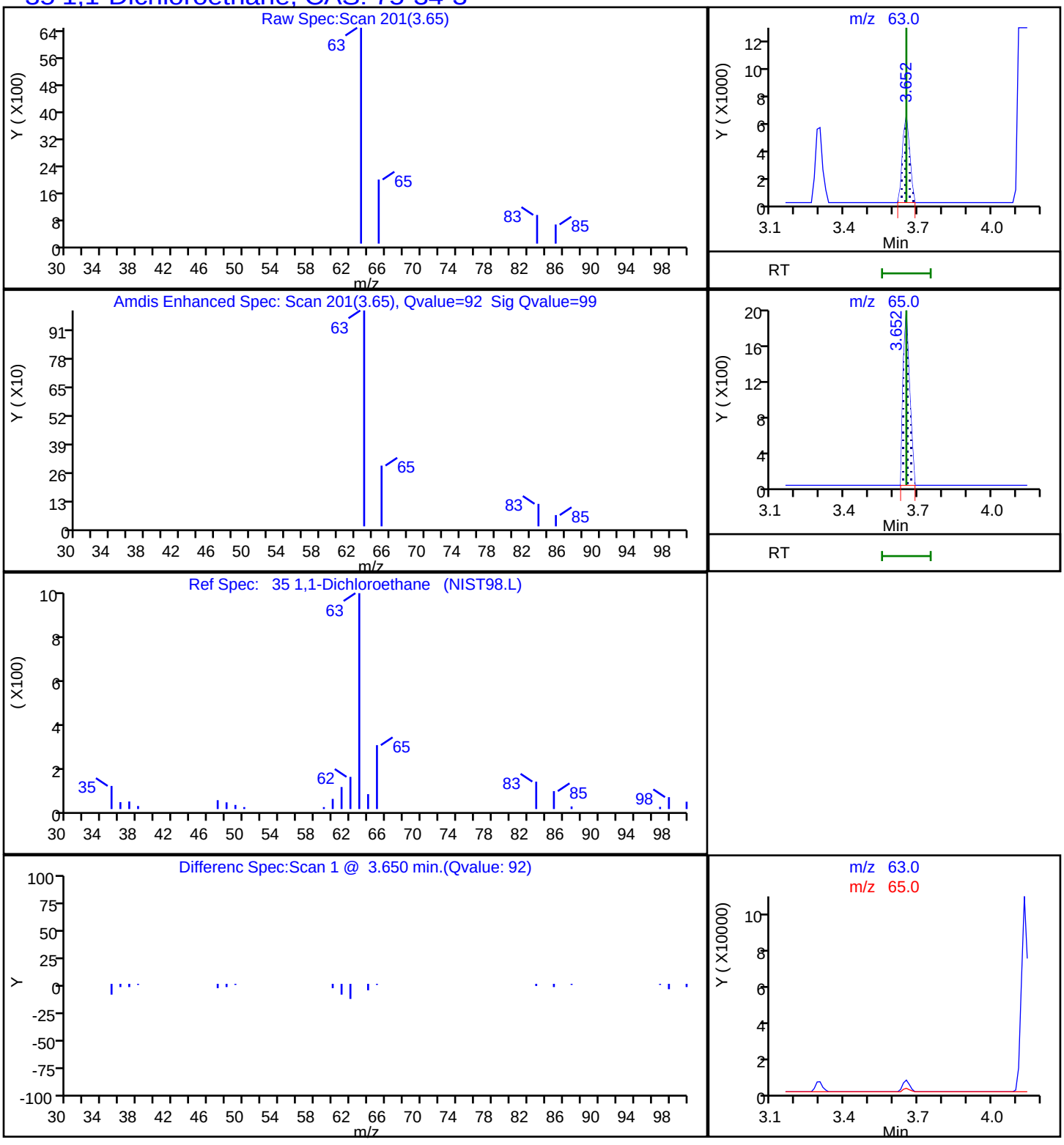
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 35 1,1-Dichloroethane, CAS: 75-34-3



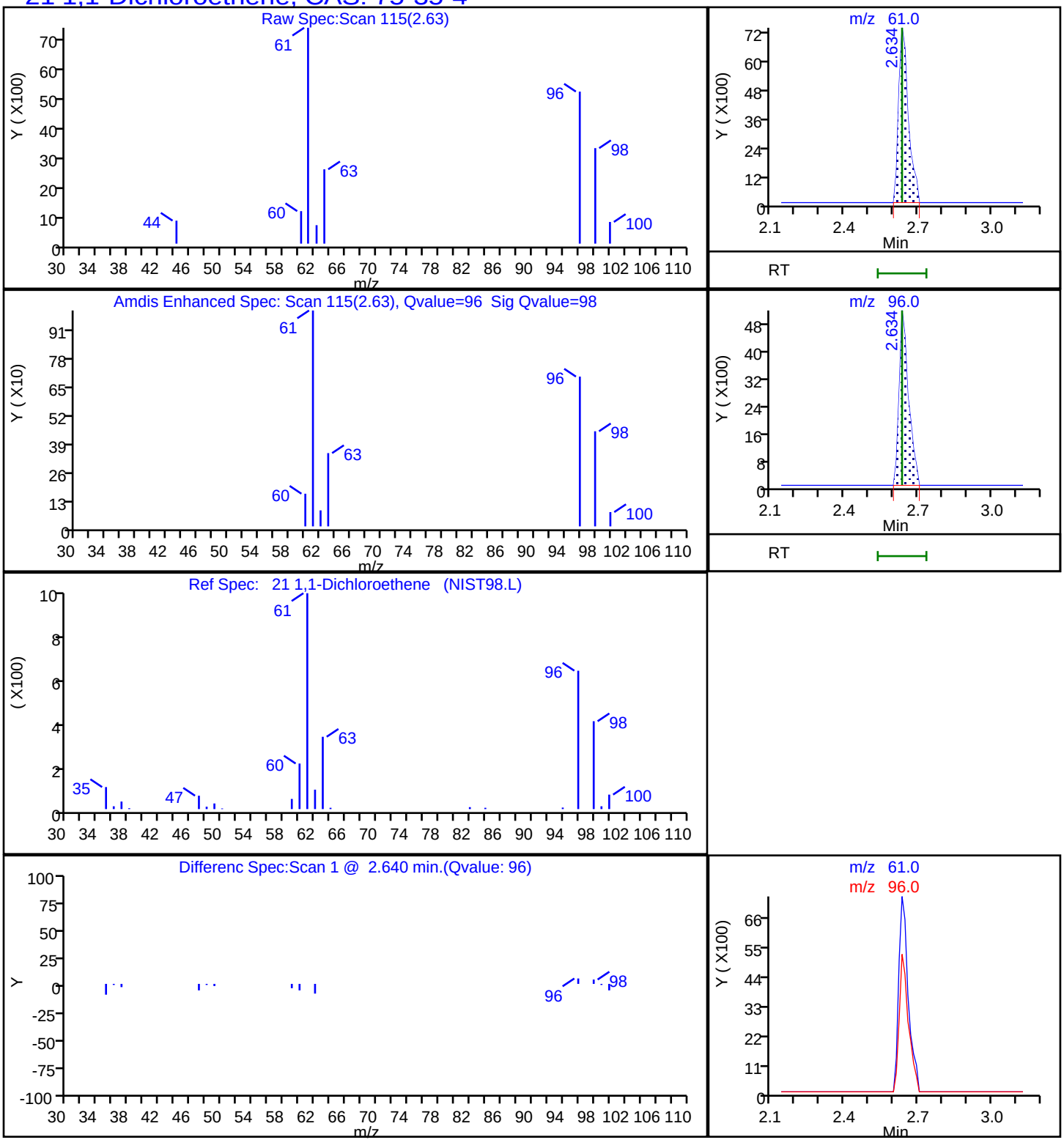
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 21 1,1-Dichloroethene, CAS: 75-35-4



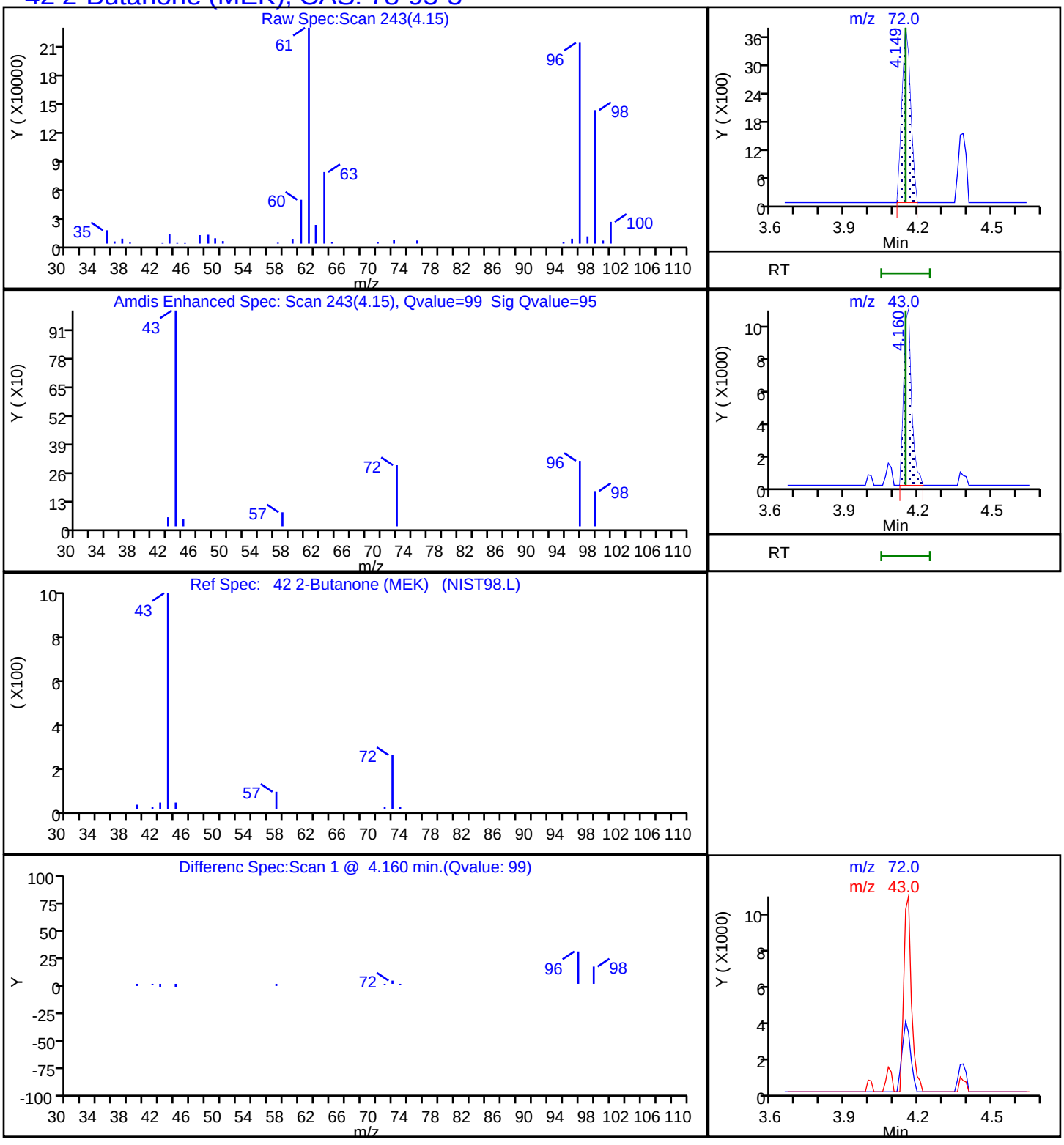
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 42 2-Butanone (MEK), CAS: 78-93-3



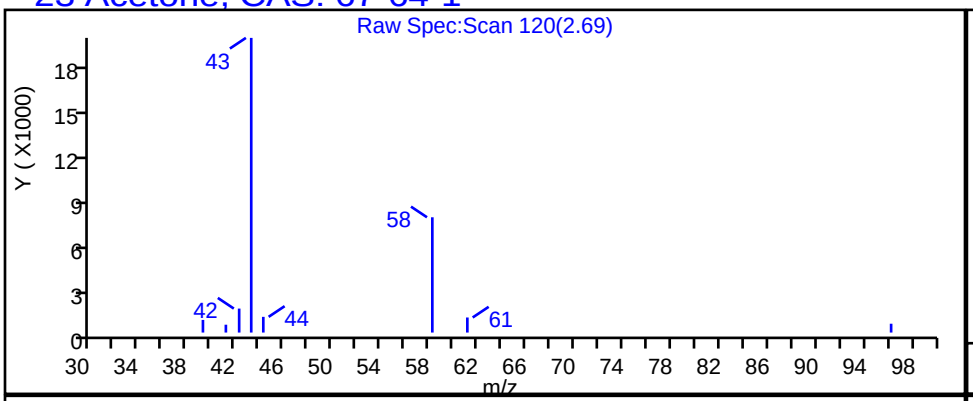
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

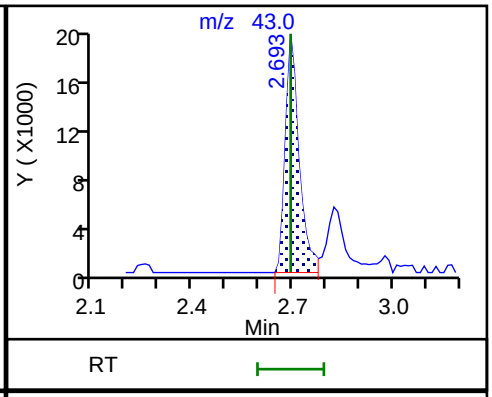
Eurofins TestAmerica, Canton

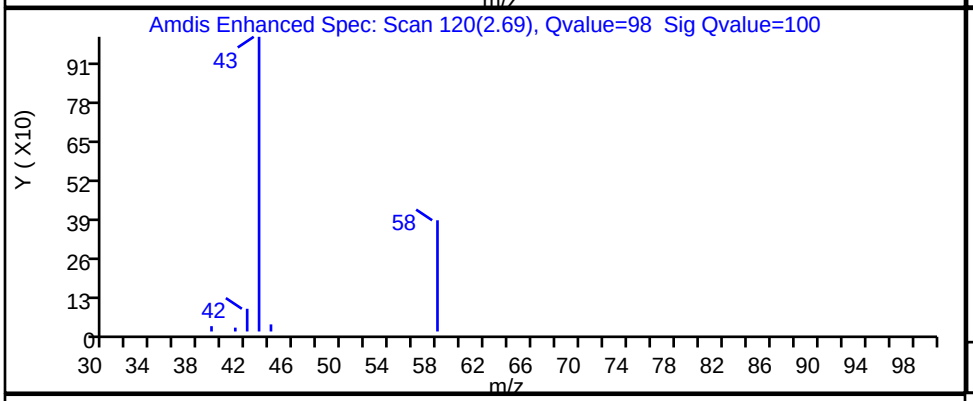
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

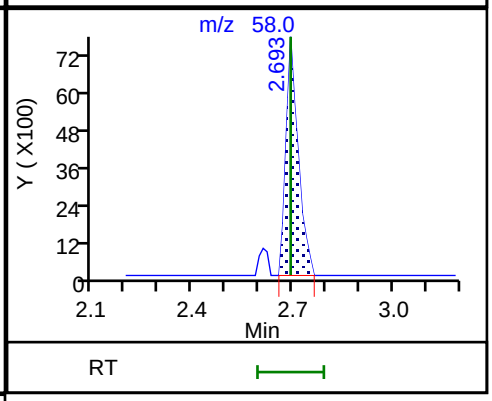
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

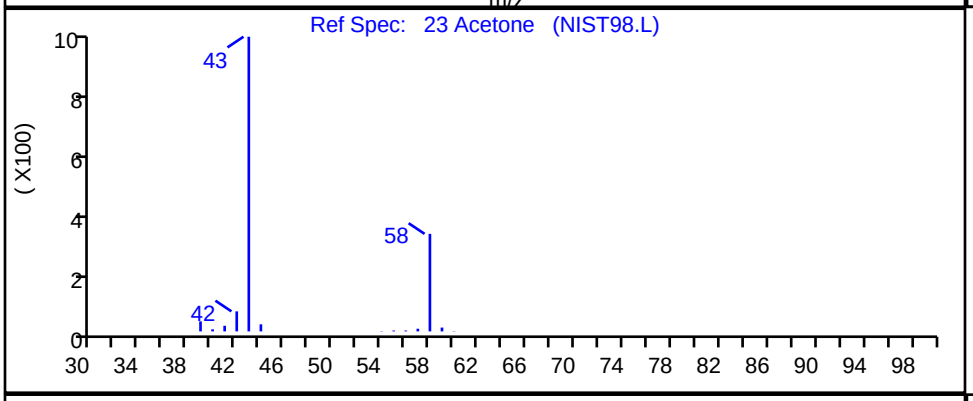
## 23 Acetone, CAS: 67-64-1

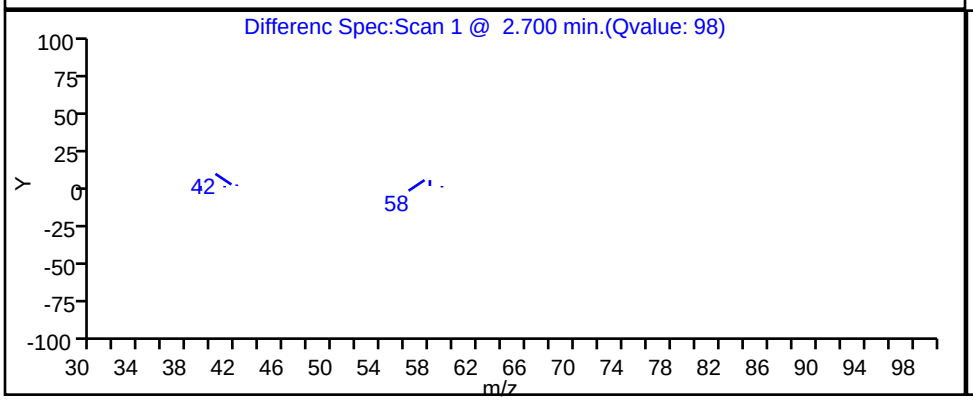


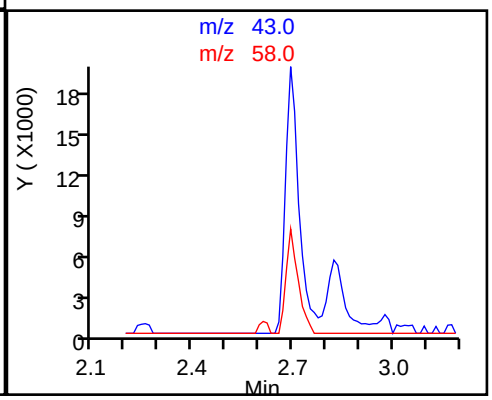



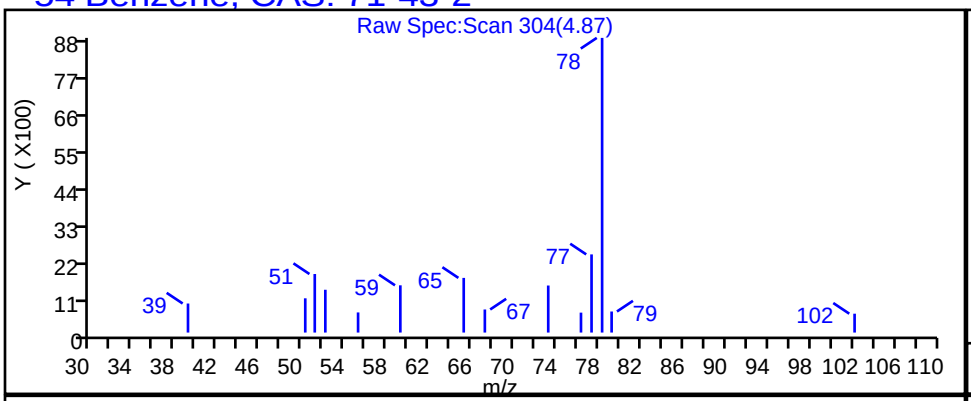
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

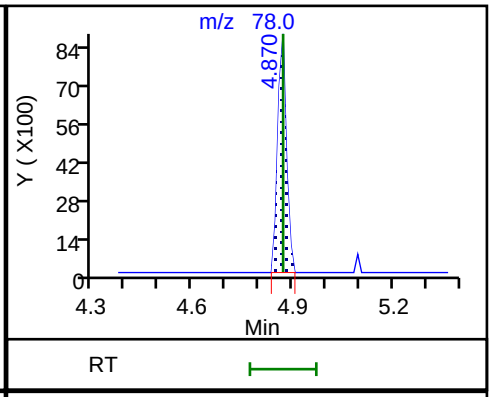
Eurofins TestAmerica, Canton

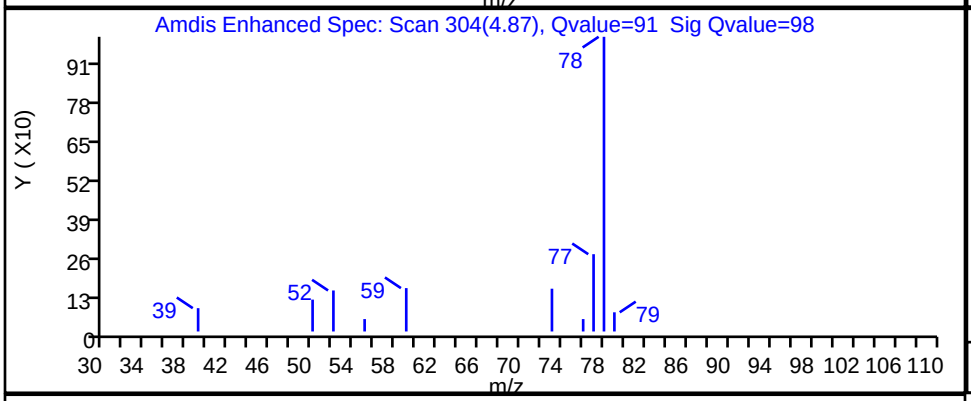
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

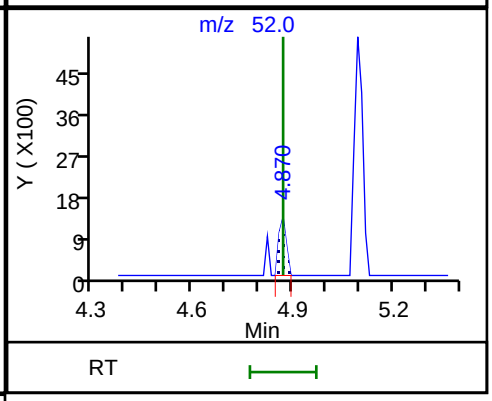
| | | | |
|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 |
| Client ID: | MRC-NMW-2S-050719 | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 Worklist Smp#: 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN |

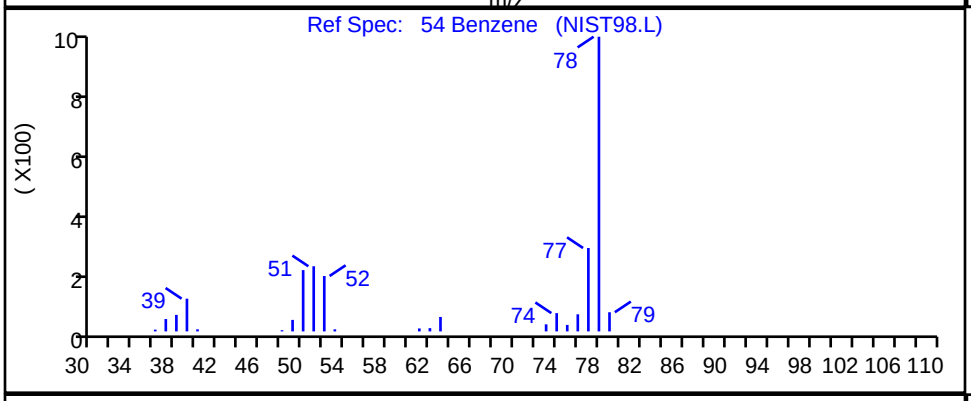
## 54 Benzene, CAS: 71-43-2

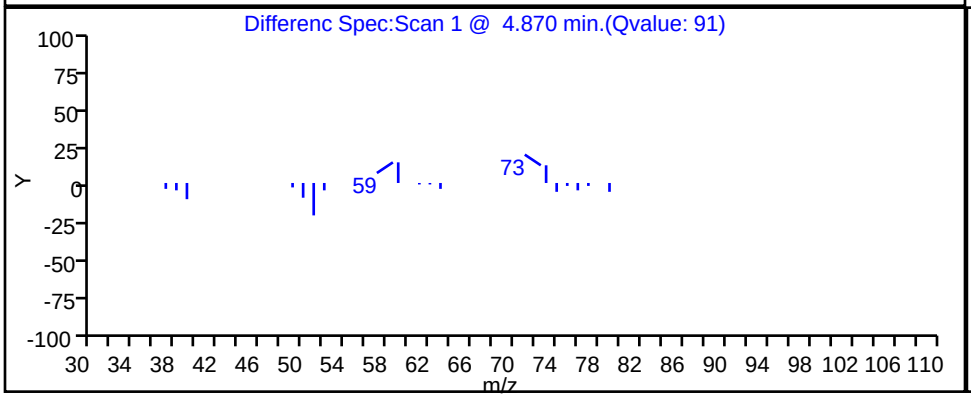


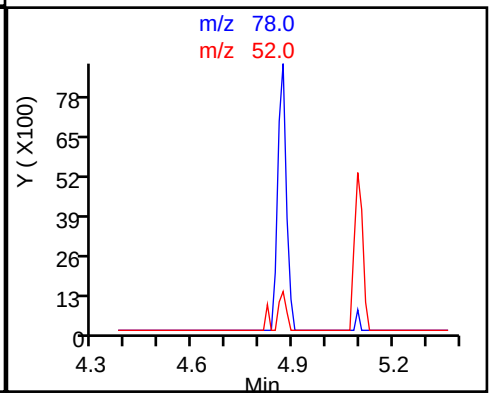



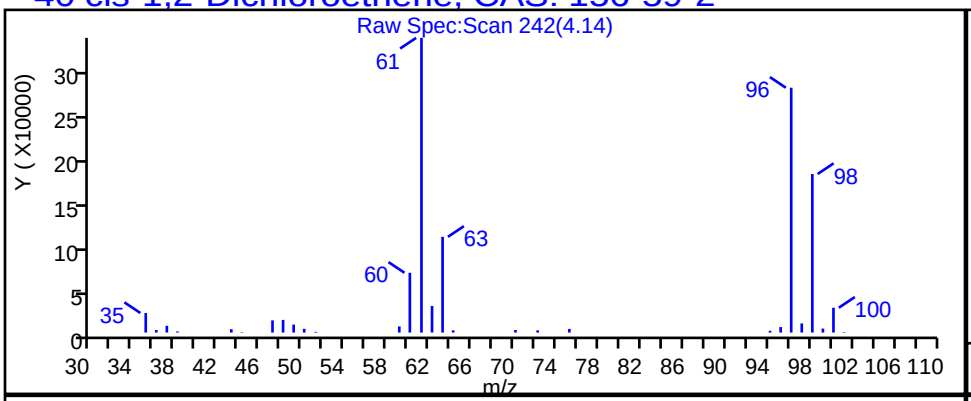
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

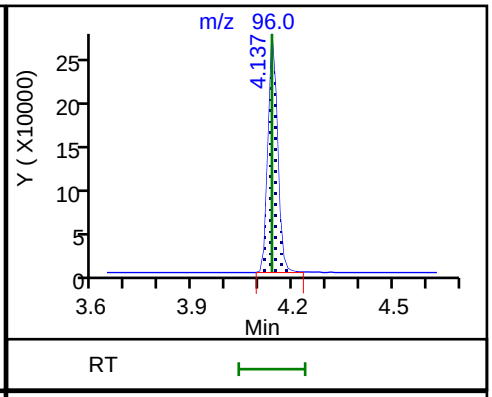
Eurofins TestAmerica, Canton

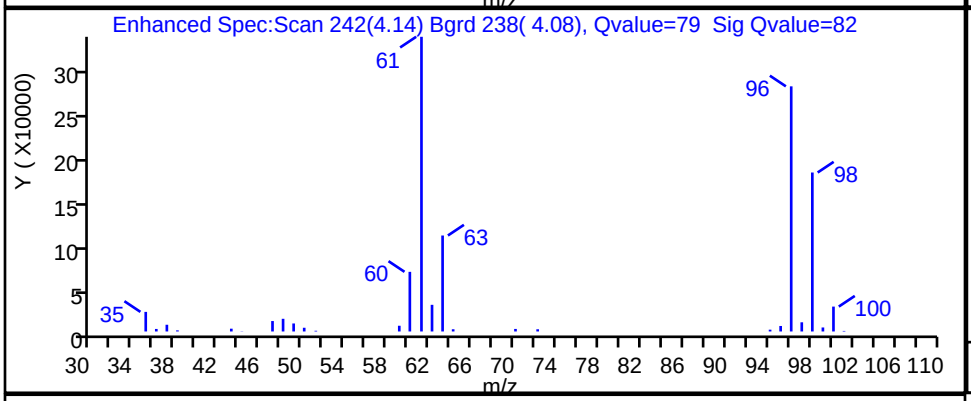
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

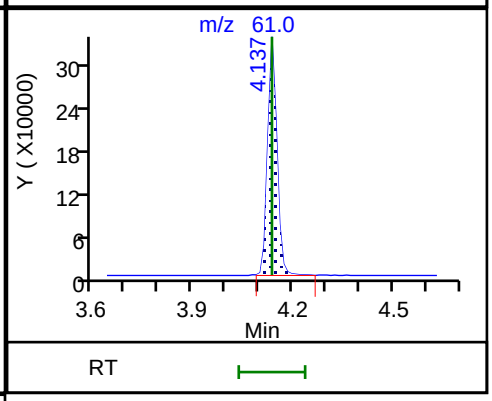
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

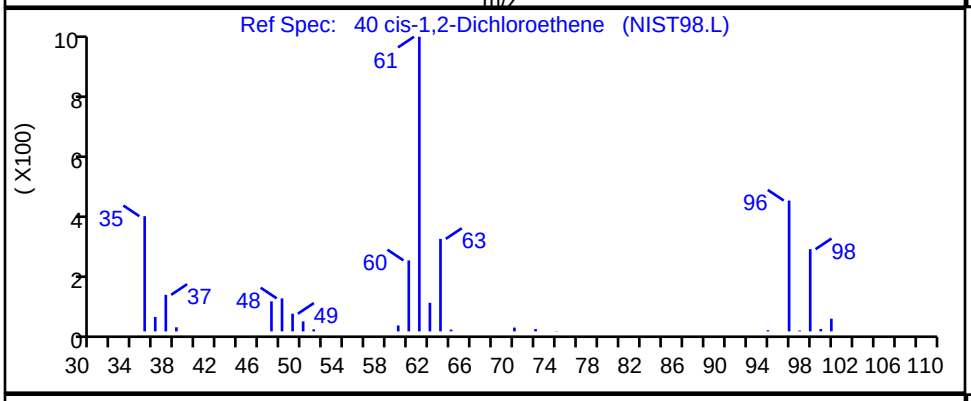
## 40 cis-1,2-Dichloroethene, CAS: 156-59-2

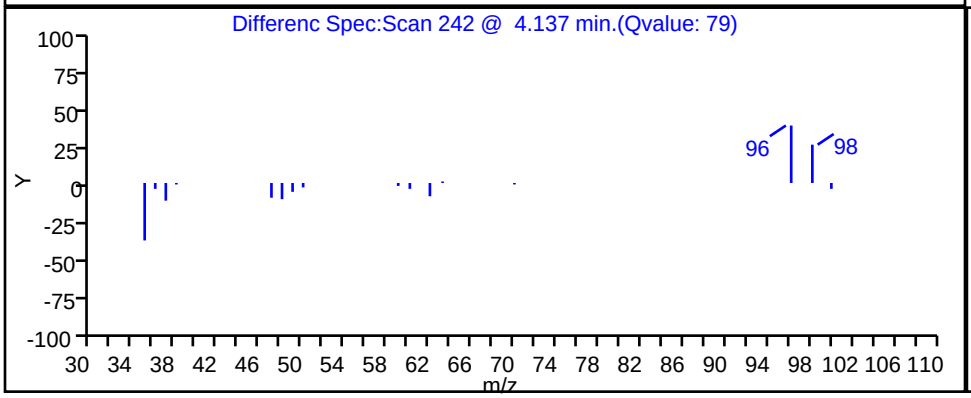


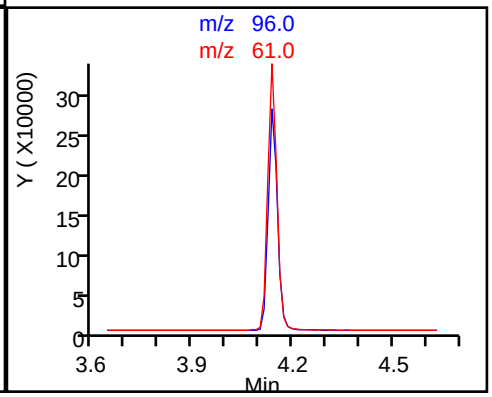



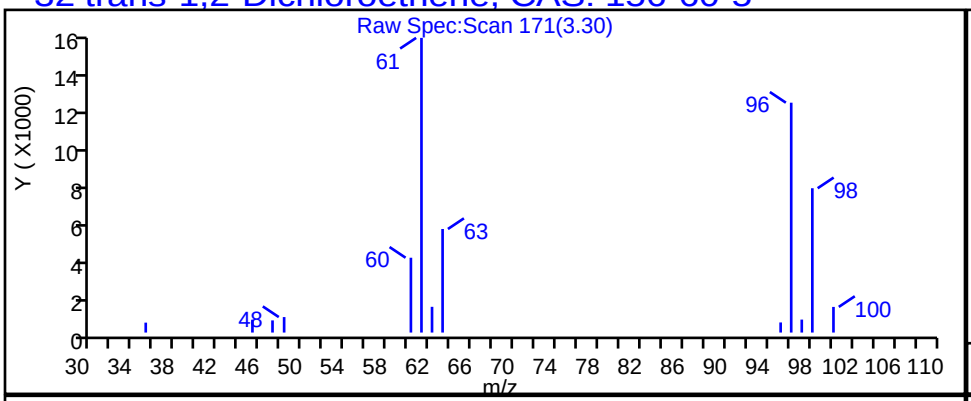
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

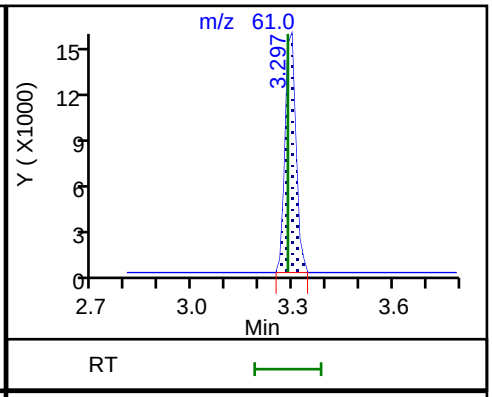
Eurofins TestAmerica, Canton

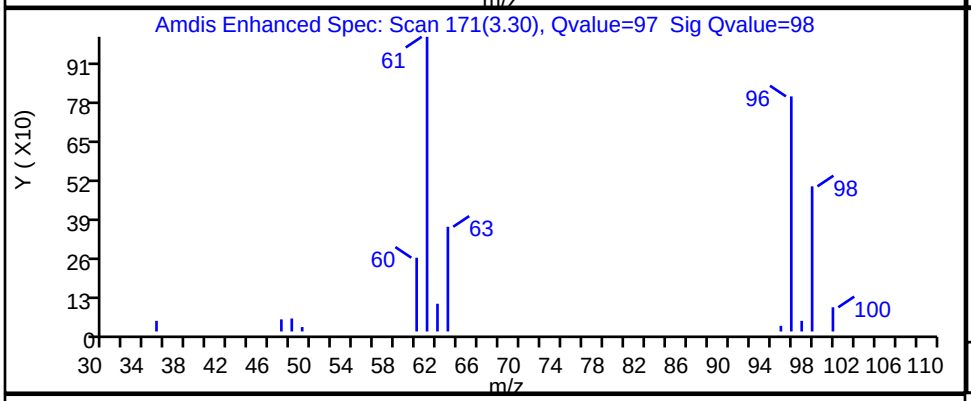
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

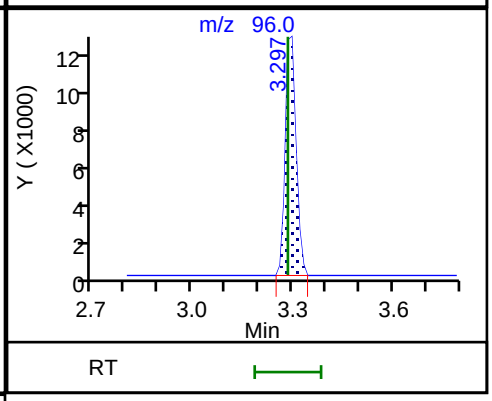
| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

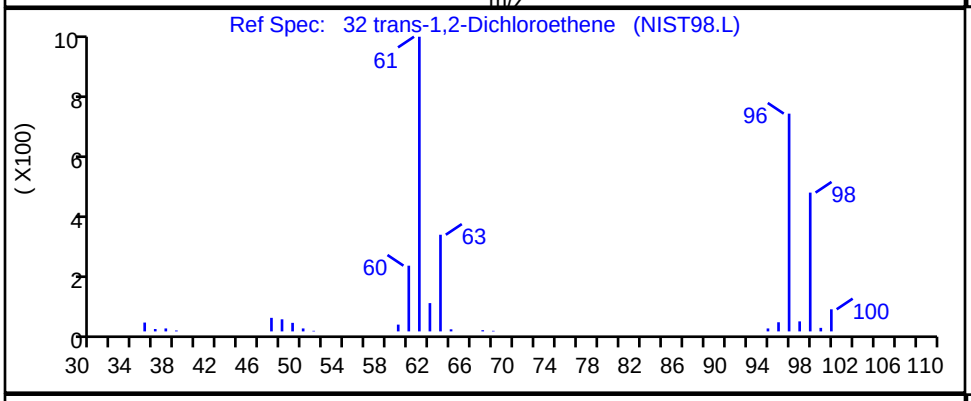
## 32 trans-1,2-Dichloroethene, CAS: 156-60-5

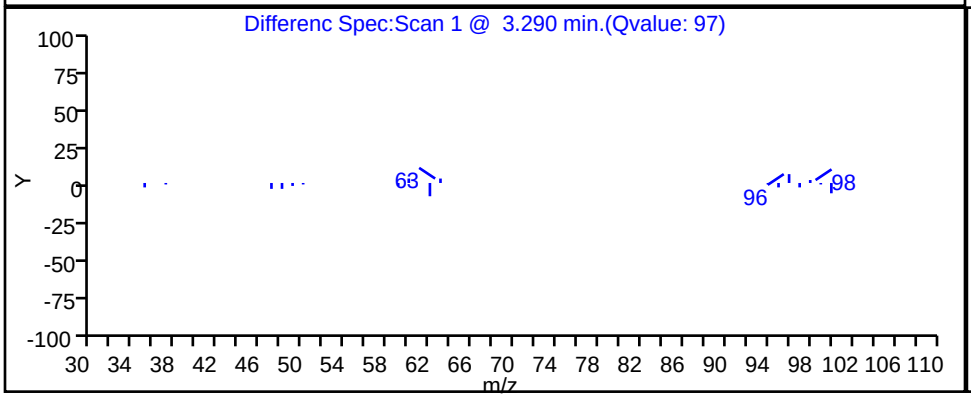


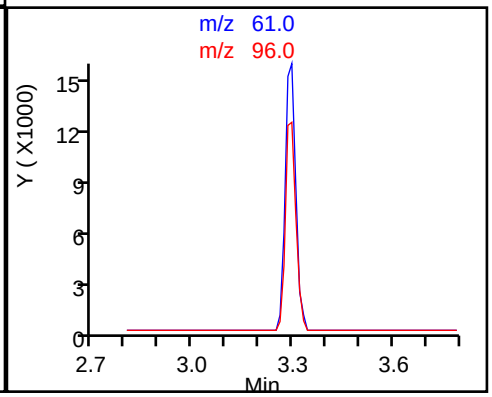



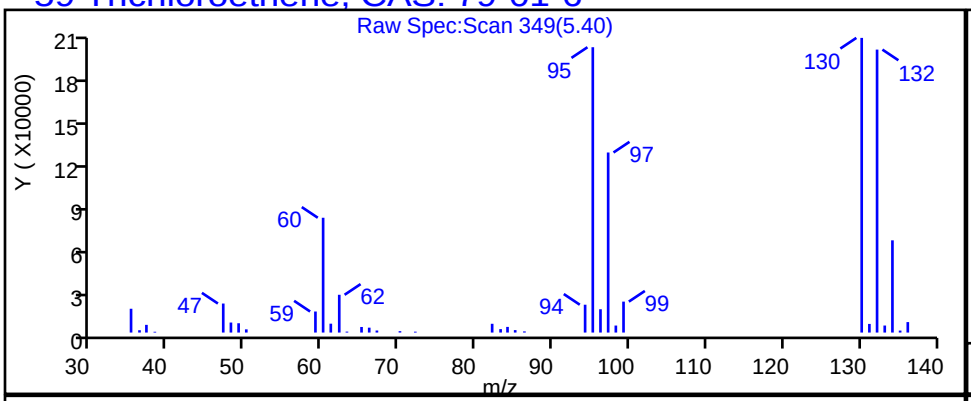
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

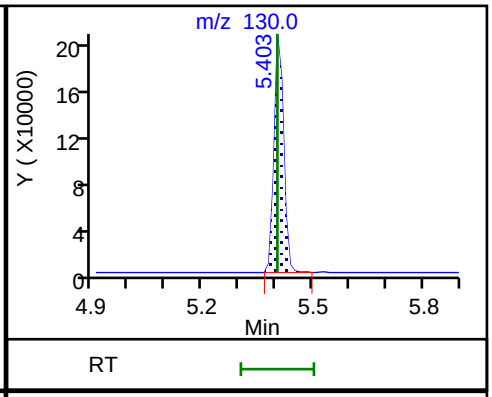
Eurofins TestAmerica, Canton

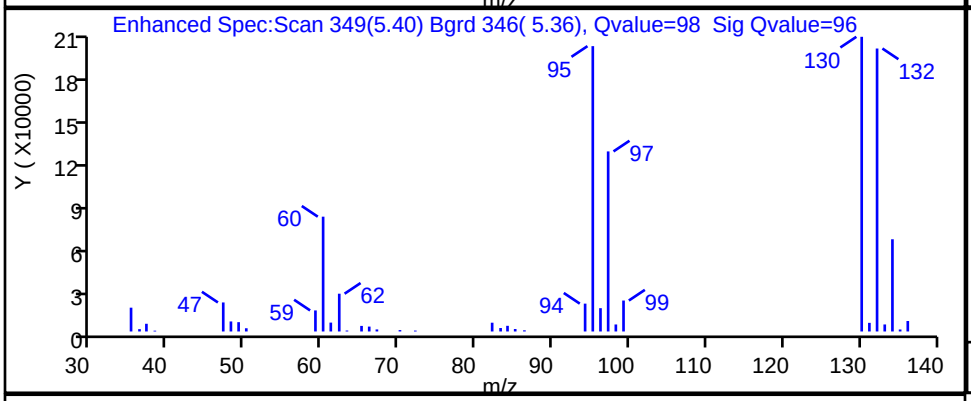
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D

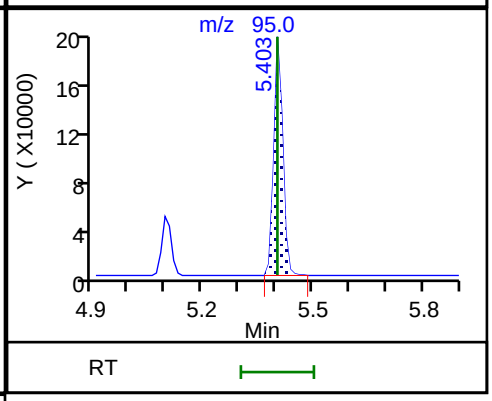
| | | | |
|---|---|---|---|
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 |
| Client ID: | MRC-NMW-2S-050719 | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 Worklist Smp#: 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN |

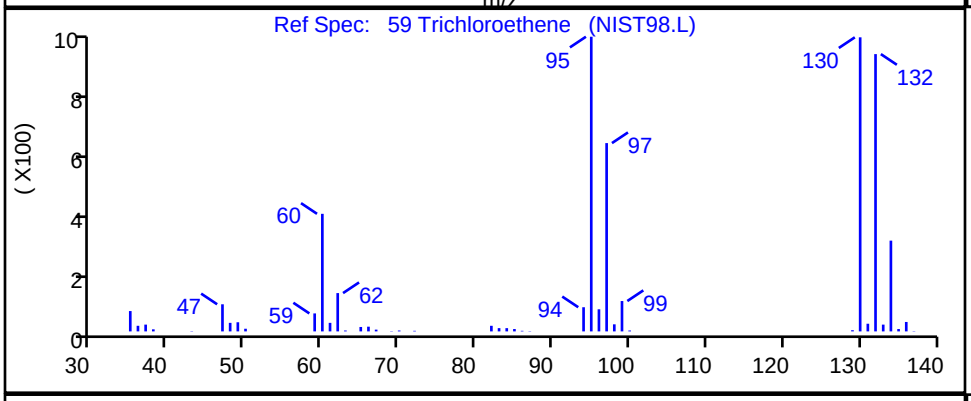
## 59 Trichloroethene, CAS: 79-01-6

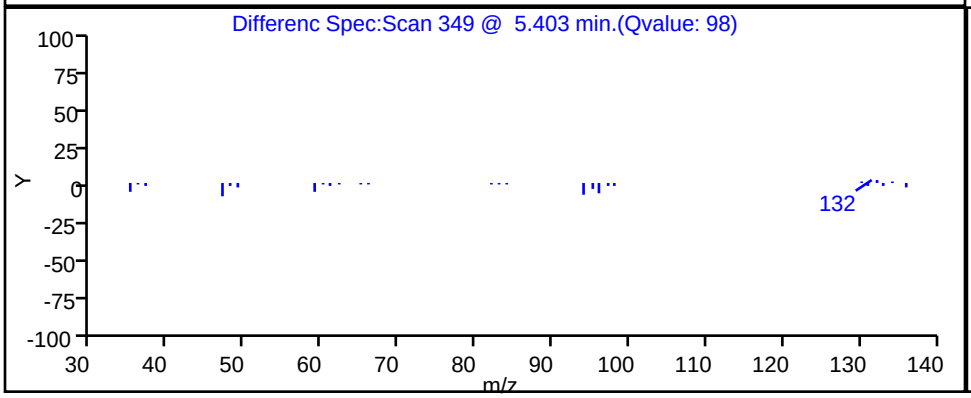


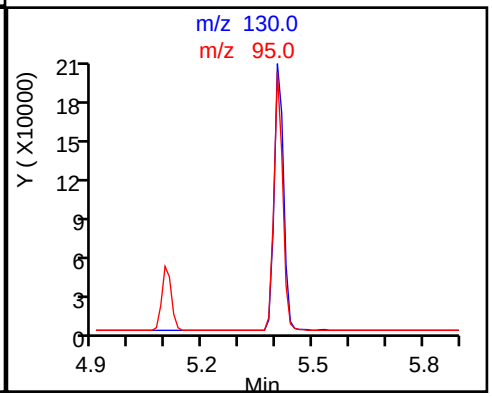



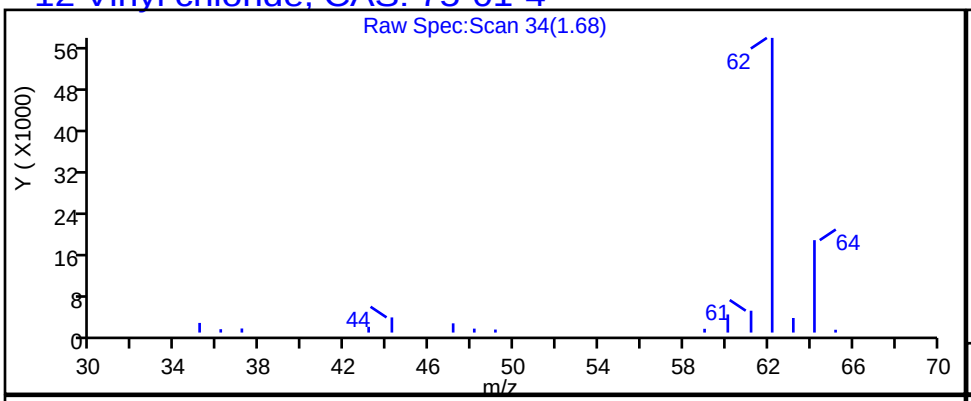



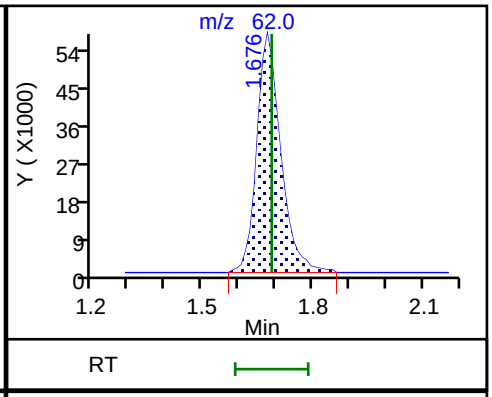
Report Date: 16-May-2019 14:34:16 Chrom Revision: 2.3 03-May-2019 15:52:00

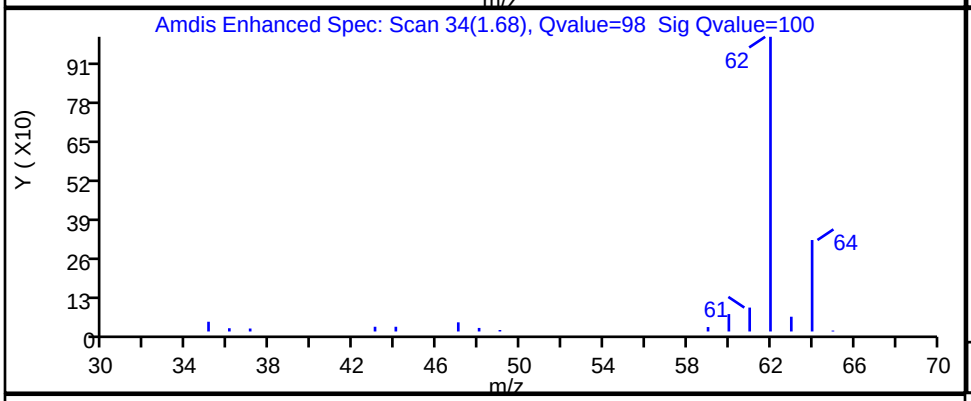
Eurofins TestAmerica, Canton

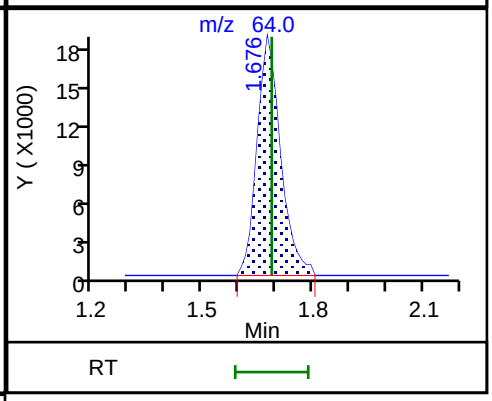
| | | | |
|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D | | |
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 |
| Client ID: | MRC-NMW-2S-050719 | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 Worklist Smp#: 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN |

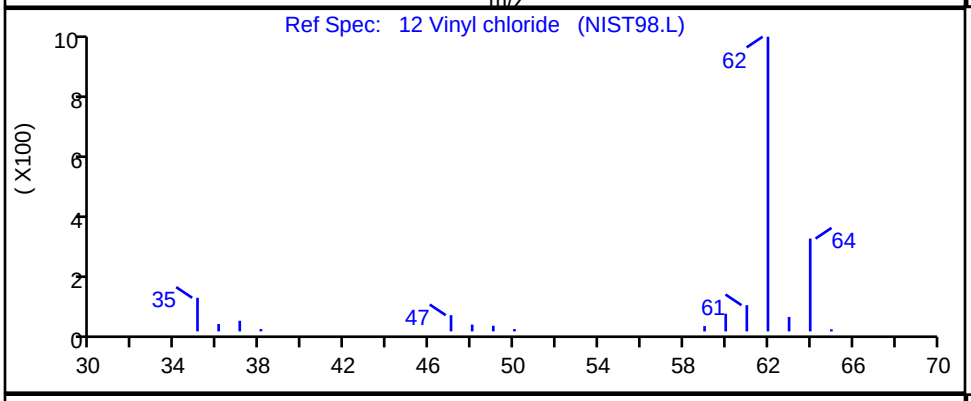
## 12 Vinyl chloride, CAS: 75-01-4

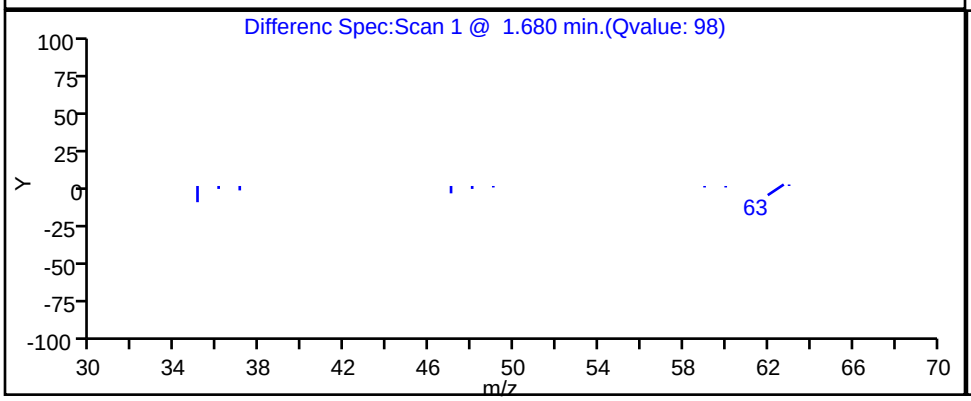


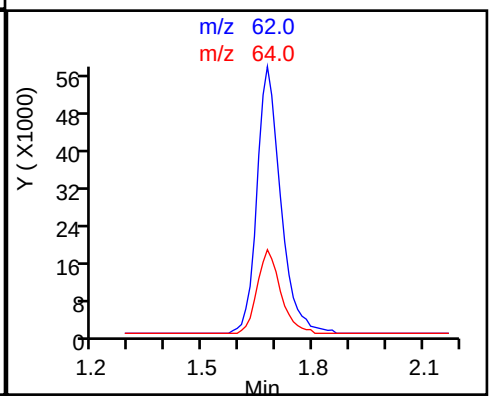



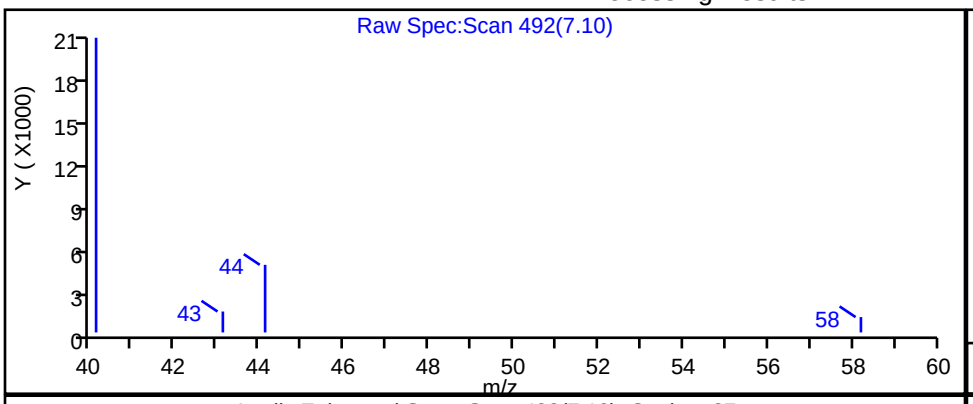
User Disabled Compound Report

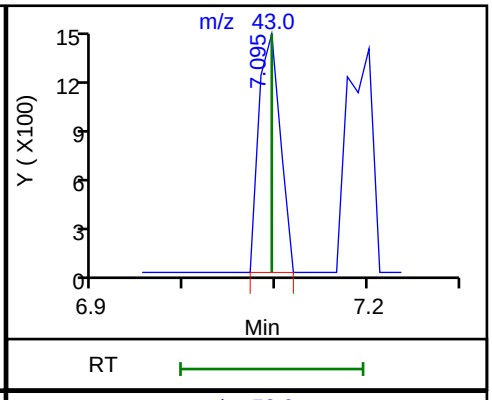
Eurofins TestAmerica, Canton

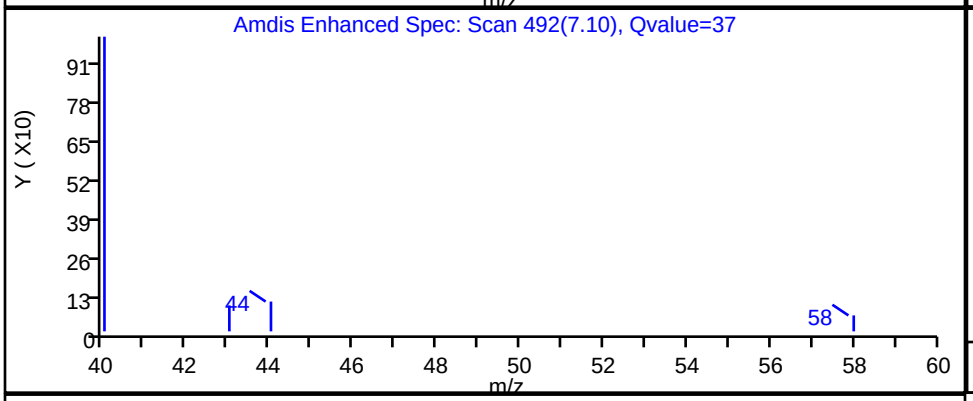
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D | | | | |
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

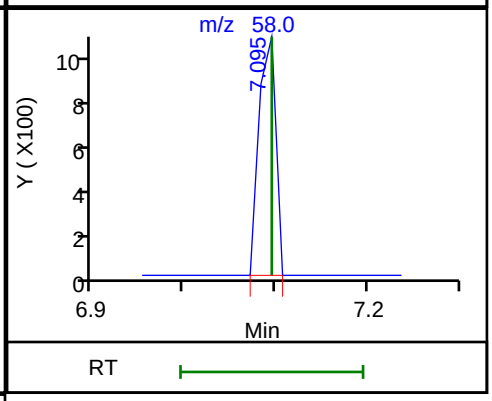
## 78 2-Hexanone, CAS: 591-78-6

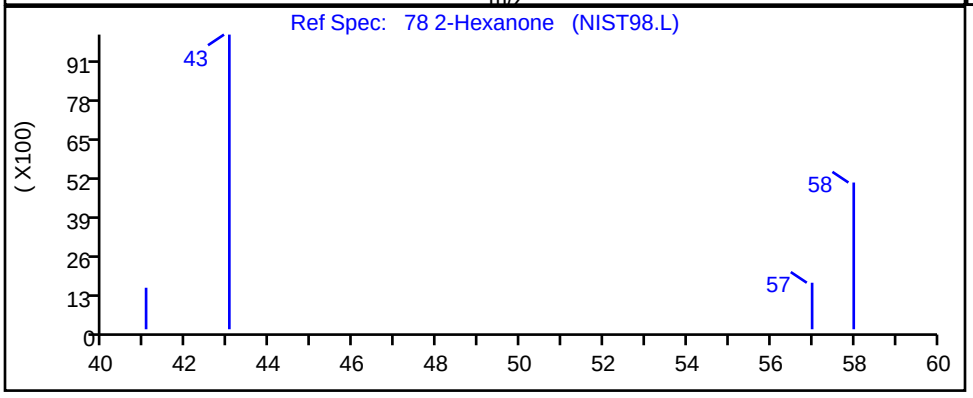
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.10 | 43.00 | 2339 | 0.168311 |
| 7.10 | 58.00 | 1348 | |

Reviewer: laveyt, 16-May-2019 14:33:33

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

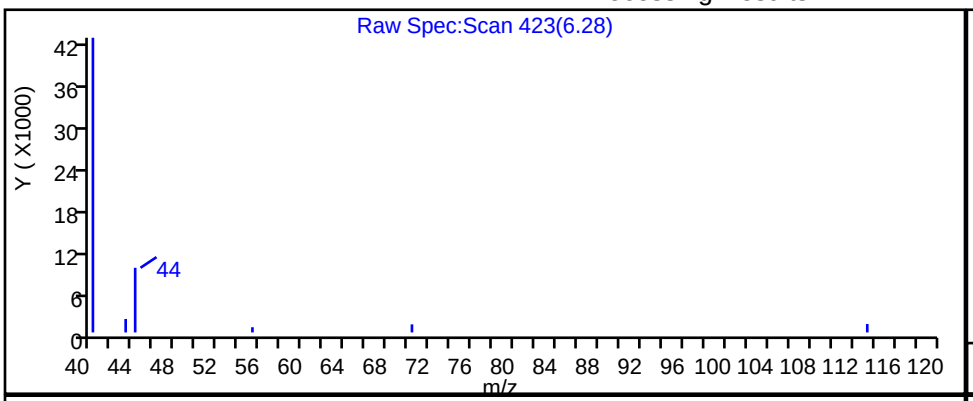
User Disabled Compound Report

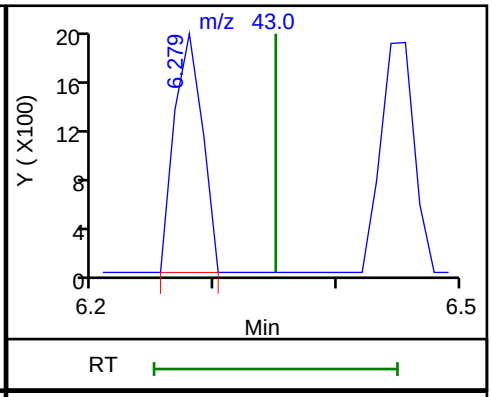
Eurofins TestAmerica, Canton

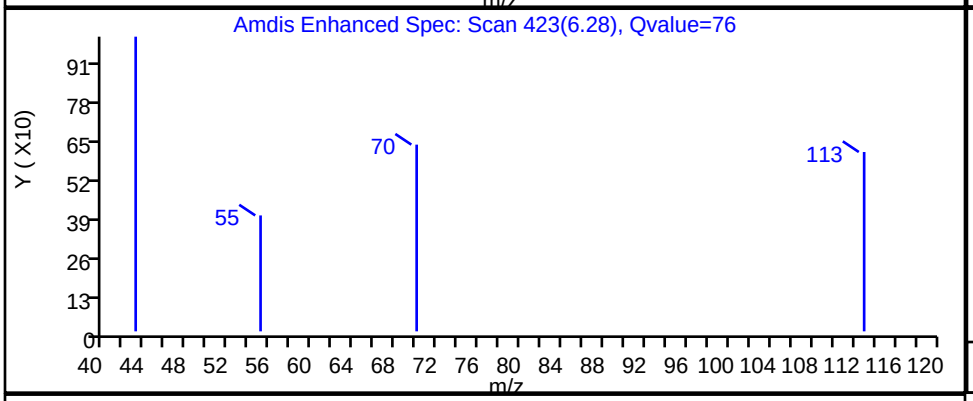
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D | | | | |
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

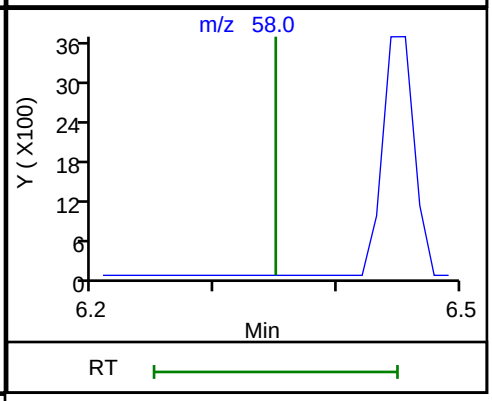
## 70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

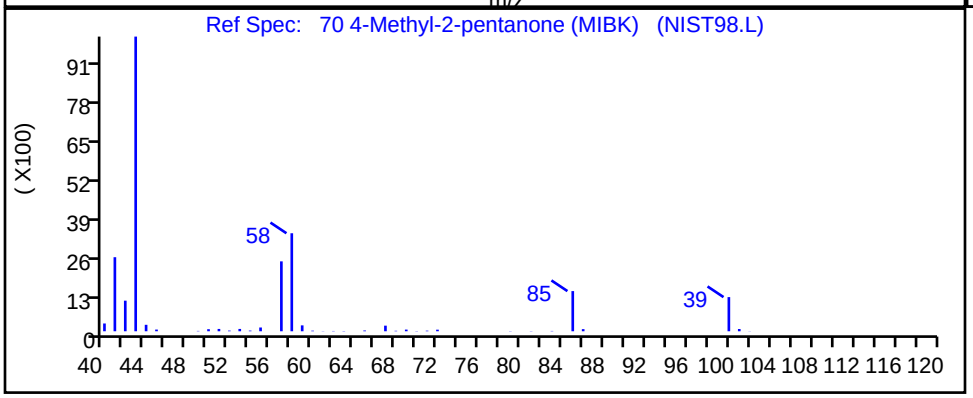
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.28 | 43.00 | 3107 | 0.157512 |
| 6.35 | 58.00 | 0 | |

Reviewer: laveyt, 16-May-2019 14:33:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

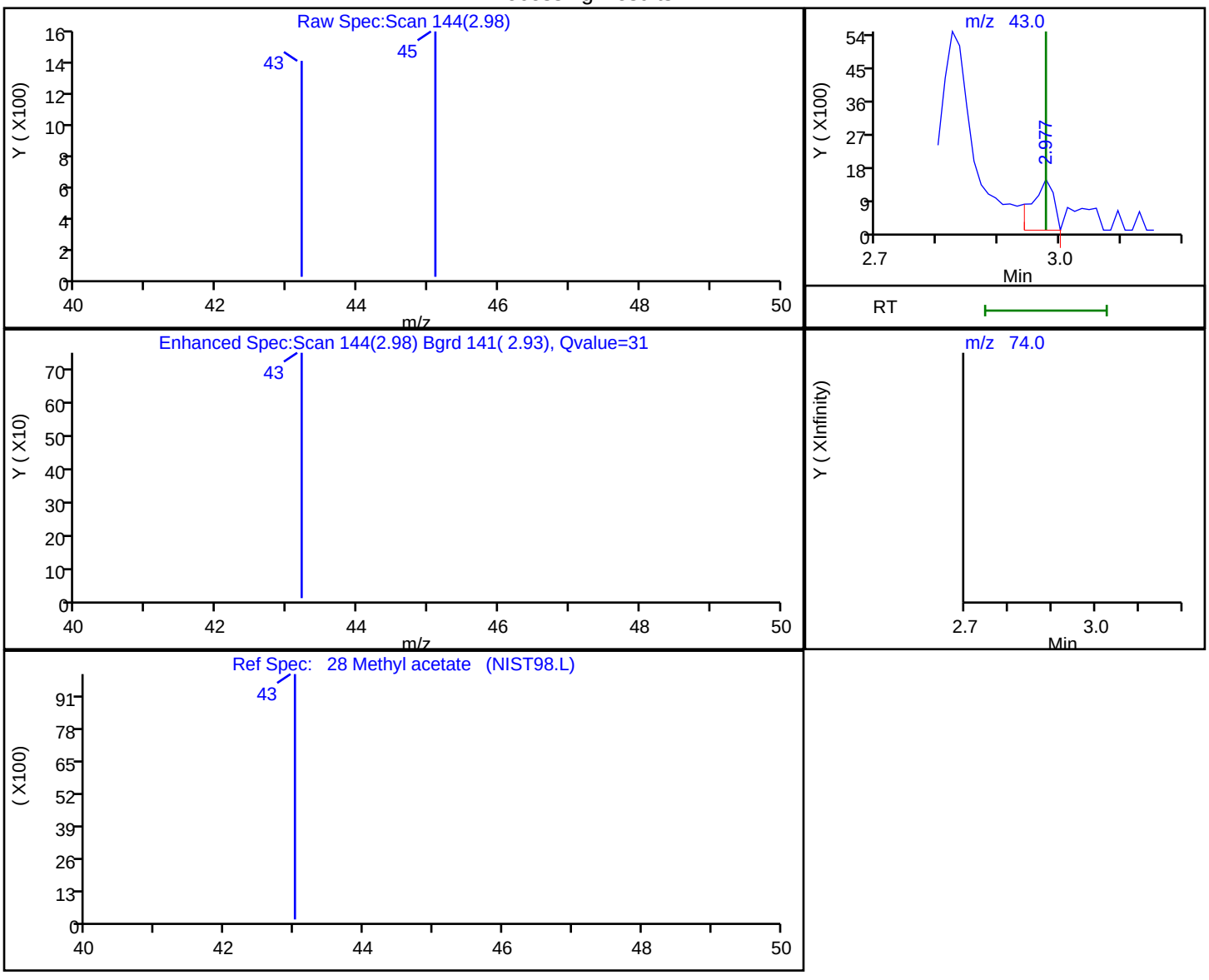
User Disabled Compound Report

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270200.D | | | | |
| Injection Date: | 15-May-2019 23:32:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | 240-112234-B-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 16 | Worklist Smp#: | 17 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 28 Methyl acetate, CAS: 79-20-9

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.98 | 43.00 | 3395 | 0.189622 |
| 2.98 | 74.00 | 0 | |

Reviewer: laveyt, 16-May-2019 14:32:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10  Calibration End Date: 04/30/2019 16:24  Calibration ID: 50823

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-378870/14 | U1269801.D |
| Level 2 | STD8260 240-378870/13 | U1269800.D |
| Level 3 | STD8260 240-378870/12 | U1269799.D |
| Level 4 | ICIS 240-378870/11 | U1269798.D |
| Level 5 | STD8260 240-378870/10 | U1269797.D |
| Level 6 | STD8260 240-378870/9 | U1269796.D |
| Level 7 | STD8260 240-378870/8 | U1269795.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dichlorodifluoromethane | 0.3633<br>0.4173 | 0.3307<br>0.4106 | 0.3625 | 0.3979 | 0.4130 | Ave | | 0.3850 | | | 0.1000 | 8.6 | | 20.0 | | | |
| Chloromethane | +++++<br>0.3349 | 0.3157<br>0.3582 | 0.3458 | 0.3237 | 0.3462 | Ave | | 0.3374 | | | 0.1000 | 4.7 | | 20.0 | | | |
| Butadiene | 0.3642<br>0.3859 | 0.3535<br>0.3787 | 0.3596 | 0.3692 | 0.3849 | Ave | | 0.3709 | | | | 3.4 | | 20.0 | | | |
| Vinyl chloride | 0.3531<br>0.3876 | 0.3746<br>0.3870 | 0.3765 | 0.3716 | 0.3891 | Ave | | 0.3771 | | | 0.1000 | 3.4 | | 20.0 | | | |
| Bromomethane | 0.2359<br>0.2352 | 0.2527<br>0.1909 | 0.2447 | 0.2332 | 0.2368 | Ave | | 0.2328 | | | 0.0500 | 8.5 | | 20.0 | | | |
| Chloroethane | 0.2531<br>0.2446 | 0.2455<br>0.2027 | 0.2395 | 0.2349 | 0.2376 | Ave | | 0.2368 | | | 0.0500 | 6.8 | | 20.0 | | | |
| Dichlorofluoromethane | 0.4736<br>0.4813 | 0.4798<br>0.4585 | 0.4834 | 0.4616 | 0.4743 | Ave | | 0.4732 | | | | 2.1 | | 20.0 | | | |
| Trichlorofluoromethane | 0.4112<br>0.4427 | 0.3928<br>0.4146 | 0.4217 | 0.4207 | 0.4388 | Ave | | 0.4204 | | | 0.1000 | 4.0 | | 20.0 | | | |
| Ethyl ether | 0.2685<br>0.2474 | 0.2624<br>0.2312 | 0.2543 | 0.2471 | 0.2570 | Ave | | 0.2526 | | | | 4.8 | | 20.0 | | | |
| Acrolein | 0.0778<br>0.0735 | 0.0754<br>+++++ | 0.0774 | 0.0729 | 0.0759 | Ave | | 0.0755 | | | | 2.7 | | 20.0 | | | |
| 1,1-Dichloroethene | 0.4303<br>0.4053 | 0.4157<br>0.4052 | 0.4117 | 0.4077 | 0.4183 | Ave | | 0.4135 | | | 0.1000 | 2.2 | | 20.0 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2628<br>0.2806 | 0.2614<br>0.2733 | 0.2761 | 0.2772 | 0.2842 | Ave | | 0.2737 | | | 0.0500 | 3.2 | | 20.0 | | | |
| Acetone | +++++<br>0.1421 | 0.2958<br>+++++ | 0.1578 | 0.1420 | 0.1462 | Lin1 | 0.3105 | 0.1398 | | | 0.0100 | 2.7 | | | 1.0000 | | 0.9900 |
| Iodomethane | 0.4620<br>0.4312 | 0.4507<br>0.4253 | 0.4283 | 0.4317 | 0.4473 | Ave | | 0.4395 | | | | 3.1 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon disulfide | 1.1582<br>0.8815 | 1.0493<br>0.8578 | 0.9096 | 0.8961 | 0.9091 | Ave | | 0.9516 | | | 0.1000 | 11.6 | | 20.0 | | | |
| 3-Chloro-1-propene | 0.5306<br>0.4520 | 0.4842<br>0.4523 | 0.4599 | 0.4492 | 0.4714 | Ave | | 0.4714 | | | | 6.1 | | 20.0 | | | |
| Methyl acetate | 0.3734<br>0.3369 | 0.3585<br>+++++ | 0.3445 | 0.3309 | 0.3439 | Ave | | 0.3480 | | | 0.1000 | 4.4 | | 20.0 | | | |
| Methylene Chloride | +++++<br>0.3493 | 1.2721<br>0.3463 | 0.4243 | 0.3723 | 0.3728 | Lin1 | 0.9295 | 0.3363 | | | 0.1000 | 2.8 | | | 1.0000 | | 0.9900 |
| 2-Methyl-2-propanol | 0.0805<br>0.0680 | 0.0761<br>+++++ | 0.0730 | 0.0700 | 0.0718 | Ave | | 0.0732 | | | | 6.1 | | 20.0 | | | |
| Acrylonitrile | 0.1960<br>0.1727 | 0.1891<br>+++++ | 0.1798 | 0.1713 | 0.1778 | Ave | | 0.1811 | | | | 5.3 | | 20.0 | | | |
| trans-1,2-Dichloroethene | 0.4388<br>0.3861 | 0.4327<br>0.3845 | 0.4006 | 0.3951 | 0.4062 | Ave | | 0.4063 | | | 0.1000 | 5.3 | | 20.0 | | | |
| Methyl tert-butyl ether | 0.8683<br>0.8061 | 0.8857<br>0.7696 | 0.8607 | 0.8334 | 0.8545 | Ave | | 0.8398 | | | 0.1000 | 4.8 | | 20.0 | | | |
| Hexane | 0.4565<br>0.4534 | 0.4143<br>0.4249 | 0.4503 | 0.4473 | 0.4579 | Ave | | 0.4435 | | | | 3.8 | | 20.0 | | | |
| 1,1-Dichloroethane | 0.5177<br>0.4943 | 0.5212<br>0.4907 | 0.5091 | 0.4989 | 0.5149 | Ave | | 0.5067 | | | 0.2000 | 2.4 | | 20.0 | | | |
| Vinyl acetate | 0.5580<br>0.5787 | 0.5728<br>+++++ | 0.5589 | 0.5619 | 0.5864 | Ave | | 0.5694 | | | | 2.1 | | 20.0 | | | |
| 2,2-Dichloropropane | 0.3469<br>0.3079 | 0.3283<br>0.3227 | 0.3273 | 0.3311 | 0.3375 | Ave | | 0.3288 | | | | 3.7 | | 20.0 | | | |
| cis-1,2-Dichloroethene | 0.3560<br>0.3343 | 0.3649<br>0.3316 | 0.3413 | 0.3352 | 0.3475 | Ave | | 0.3444 | | | 0.1000 | 3.6 | | 20.0 | | | |
| 2-Butanone (MEK) | 0.0615<br>0.0642 | 0.0597<br>+++++ | 0.0632 | 0.0607 | 0.0645 | Ave | | 0.0623 | | | 0.0100 | 3.2 | | 20.0 | | | |
| Chlorobromomethane | 0.2785<br>0.2285 | 0.2509<br>0.2244 | 0.2357 | 0.2316 | 0.2400 | Ave | | 0.2413 | | | | 7.7 | | 20.0 | | | |
| Tetrahydrofuran | 0.1604<br>0.1508 | 0.1429<br>+++++ | 0.1501 | 0.1446 | 0.1514 | Ave | | 0.1500 | | | | 4.1 | | 20.0 | | | |
| Chloroform | 0.5004<br>0.4703 | 0.4870<br>0.4731 | 0.4836 | 0.4829 | 0.4938 | Ave | | 0.4844 | | | 0.2000 | 2.2 | | 20.0 | | | |
| 1,1,1-Trichloroethane | 0.3922<br>0.4192 | 0.4015<br>0.4179 | 0.4170 | 0.4276 | 0.4345 | Ave | | 0.4157 | | | 0.1000 | 3.5 | | 20.0 | | | |
| Cyclohexane | 0.5033<br>0.5135 | 0.4858<br>0.4766 | 0.5239 | 0.5157 | 0.5153 | Ave | | 0.5049 | | | 0.1000 | 3.5 | | 20.0 | | | |
| 1,1-Dichloropropene | 0.4381<br>0.4050 | 0.4072<br>0.3945 | 0.4119 | 0.4049 | 0.4145 | Ave | | 0.4109 | | | | 3.3 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10  Calibration End Date: 04/30/2019 16:24  Calibration ID: 50823

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Carbon tetrachloride | 0.3547<br>0.3535 | 0.3314<br>0.3513 | 0.3425 | 0.3636 | 0.3768 | Ave | | 0.3534 | | | 0.1000 | 4.1 | | 20.0 | | | |
| Isobutyl alcohol | 0.0214<br>0.0190 | 0.0189<br>+++++ | 0.0202 | 0.0197 | 0.0201 | Ave | | 0.0199 | | | | 4.6 | | 20.0 | | | |
| Benzene | 1.2351<br>1.1561 | 1.2006<br>1.1376 | 1.1748 | 1.1526 | 1.1878 | Ave | | 1.1778 | | | 0.5000 | 2.8 | | 20.0 | | | |
| 1,2-Dichloroethane | 0.3915<br>0.3540 | 0.3893<br>0.3393 | 0.3455 | 0.3539 | 0.3641 | Ave | | 0.3625 | | | 0.1000 | 5.7 | | 20.0 | | | |
| n-Heptane | +++++<br>0.2241 | 0.8189<br>0.2083 | 0.2765 | 0.2406 | 0.2291 | Lin1 | 0.6210 | 0.2083 | | | | 3.9 | | | 0.9990 | | 0.9900 |
| Trichloroethene | 0.3459<br>0.3108 | 0.3166<br>0.3021 | 0.3026 | 0.3105 | 0.3179 | Ave | | 0.3152 | | | 0.1500 | 4.7 | | 20.0 | | | |
| Methylcyclohexane | 0.5757<br>0.5798 | 0.5136<br>0.5210 | 0.5842 | 0.5782 | 0.5985 | Ave | | 0.5644 | | | 0.1000 | 5.9 | | 20.0 | | | |
| 1,2-Dichloropropane | 0.2504<br>0.2495 | 0.2406<br>0.2466 | 0.2499 | 0.2468 | 0.2580 | Ave | | 0.2488 | | | 0.1000 | 2.1 | | 20.0 | | | |
| Dibromomethane | 0.2511<br>0.2018 | 0.2266<br>0.1879 | 0.1970 | 0.2002 | 0.2123 | Ave | | 0.2110 | | | | 10.2 | | 20.0 | | | |
| 1,4-Dioxane | 0.0035<br>0.0040 | 0.0034<br>0.0038 | 0.0047 | 0.0044 | 0.0043 | Ave | | 0.0040 | | | | 12.1 | | 20.0 | | | |
| Dichlorobromomethane | 0.3369<br>0.3474 | 0.3224<br>0.3346 | 0.3359 | 0.3412 | 0.3584 | Ave | | 0.3396 | | | 0.1500 | 3.3 | | 20.0 | | | |
| 2-Chloroethyl vinyl ether | 0.1875<br>0.1911 | 0.1776<br>0.1507 | 0.1862 | 0.1818 | 0.1895 | Ave | | 0.1806 | | | | 7.7 | | 20.0 | | | |
| cis-1,3-Dichloropropene | 0.4366<br>0.4171 | 0.4107<br>0.3952 | 0.4011 | 0.4068 | 0.4265 | Ave | | 0.4134 | | | 0.1500 | 3.5 | | 20.0 | | | |
| 4-Methyl-2-pentanone (MIBK) | 0.3839<br>0.3806 | 0.3808<br>+++++ | 0.3872 | 0.3769 | 0.3911 | Ave | | 0.3834 | | | 0.0500 | 1.3 | | 20.0 | | | |
| Toluene | 1.8023<br>1.6267 | 1.6891<br>1.6145 | 1.6659 | 1.6181 | 1.7001 | Ave | | 1.6738 | | | 0.4000 | 4.0 | | 20.0 | | | |
| trans-1,3-Dichloropropene | 0.5769<br>0.5343 | 0.5645<br>0.5065 | 0.5263 | 0.5262 | 0.5576 | Ave | | 0.5418 | | | 0.1000 | 4.6 | | 20.0 | | | |
| Ethyl methacrylate | 0.5226<br>0.5394 | 0.4946<br>0.4478 | 0.5518 | 0.5362 | 0.5613 | Ave | | 0.5220 | | | | 7.5 | | 20.0 | | | |
| 1,1,2-Trichloroethane | 0.3778<br>0.3286 | 0.3178<br>0.3033 | 0.3333 | 0.3248 | 0.3429 | Ave | | 0.3327 | | | 0.1000 | 7.1 | | 20.0 | | | |
| Tetrachloroethene | 0.4570<br>0.4417 | 0.4243<br>0.4396 | 0.4476 | 0.4415 | 0.4623 | Ave | | 0.4449 | | | 0.1500 | 2.8 | | 20.0 | | | |
| 1,3-Dichloropropane | 0.6595<br>0.5804 | 0.5855<br>0.5367 | 0.5879 | 0.5738 | 0.6044 | Ave | | 0.5898 | | | | 6.3 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10  Calibration End Date: 04/30/2019 16:24  Calibration ID: 50823

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Hexanone | 0.4148<br>0.3823 | 0.3921<br>+++++ | 0.4171 | 0.3943 | 0.3992 | Ave | | 0.4000 | | | 0.0500 | 3.4 | | 20.0 | | | |
| Chlorodibromomethane | 0.3436<br>0.3509 | 0.3261<br>0.3352 | 0.3393 | 0.3492 | 0.3738 | Ave | | 0.3454 | | | | 4.4 | | 20.0 | | | |
| Ethylene Dibromide | 0.3803<br>0.3593 | 0.3661<br>0.3178 | 0.3511 | 0.3562 | 0.3736 | Ave | | 0.3578 | | | | 5.7 | | 20.0 | | | |
| Chlorobenzene | 1.1917<br>1.0431 | 1.0788<br>1.0358 | 1.0620 | 1.0437 | 1.1063 | Ave | | 1.0802 | | | 0.3000 | 5.1 | | 20.0 | | | |
| 1,1,1,2-Tetrachloroethane | 0.3770<br>0.3768 | 0.3617<br>0.3870 | 0.3721 | 0.3706 | 0.3978 | Ave | | 0.3776 | | | | 3.1 | | 20.0 | | | |
| Ethylbenzene | 0.6003<br>0.5897 | 0.5954<br>0.5969 | 0.6098 | 0.5997 | 0.6287 | Ave | | 0.6029 | | | | 2.1 | | 20.0 | | | |
| m-Xylene & p-Xylene | 0.7152<br>0.7393 | 0.7520<br>0.7353 | 0.7549 | 0.7557 | 0.7836 | Ave | | 0.7480 | | | | 2.8 | | 20.0 | | | |
| o-Xylene | 0.7592<br>0.7370 | 0.7654<br>0.7387 | 0.7487 | 0.7584 | 0.7848 | Ave | | 0.7560 | | | | 2.2 | | 20.0 | | | |
| Styrene | 1.2553<br>1.2064 | 1.1402<br>1.1932 | 1.2030 | 1.2192 | 1.2715 | Ave | | 1.2127 | | | 0.3000 | 3.5 | | 20.0 | | | |
| Bromoform | 0.2213<br>0.2662 | 0.2350<br>0.2312 | 0.2485 | 0.2670 | 0.2802 | Ave | | 0.2499 | | | 0.1000 | 8.7 | | 20.0 | | | |
| Isopropylbenzene | 1.9470<br>1.9256 | 1.9183<br>1.9274 | 2.0090 | 1.9856 | 2.0675 | Ave | | 1.9686 | | | 0.1000 | 2.8 | | 20.0 | | | |
| 1,1,2,2-Tetrachloroethane | 0.9347<br>1.0089 | 0.9925<br>0.8398 | 1.0421 | 1.0190 | 1.0529 | Ave | | 0.9843 | | | 0.3000 | 7.6 | | 20.0 | | | |
| Bromobenzene | 0.9090<br>0.8447 | 0.8758<br>0.8518 | 0.8455 | 0.8624 | 0.8771 | Ave | | 0.8666 | | | | 2.6 | | 20.0 | | | |
| 1,2,3-Trichloropropane | 0.3616<br>0.3604 | 0.3856<br>+++++ | 0.3726 | 0.3724 | 0.3827 | Ave | | 0.3726 | | | | 2.8 | | 20.0 | | | |
| trans-1,4-Dichloro-2-butene | 0.3307<br>0.3153 | 0.3082<br>+++++ | 0.3131 | 0.3186 | 0.3275 | Ave | | 0.3189 | | | | 2.7 | | 20.0 | | | |
| N-Propylbenzene | 0.9647<br>0.9889 | 0.9069<br>0.9978 | 0.9987 | 1.0115 | 1.0363 | Ave | | 0.9864 | | | | 4.2 | | 20.0 | | | |
| 2-Chlorotoluene | 0.8029<br>0.8162 | 0.7917<br>0.8480 | 0.8225 | 0.8298 | 0.8726 | Ave | | 0.8263 | | | | 3.3 | | 20.0 | | | |
| 1,3,5-Trimethylbenzene | 2.7098<br>2.8199 | 2.6571<br>2.8891 | 2.8991 | 2.9082 | 3.0109 | Ave | | 2.8420 | | | | 4.3 | | 20.0 | | | |
| 4-Chlorotoluene | 0.8644<br>0.8286 | 0.8857<br>0.8408 | 0.8361 | 0.8393 | 0.8746 | Ave | | 0.8528 | | | | 2.6 | | 20.0 | | | |
| tert-Butylbenzene | 2.4839<br>2.5923 | 2.3390<br>2.6462 | 2.6216 | 2.6249 | 2.7660 | Ave | | 2.5820 | | | | 5.2 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10  Calibration End Date: 04/30/2019 16:24  Calibration ID: 50823

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,2,4-Trimethylbenzene | 2.9044<br>2.8957 | 2.7731<br>2.9649 | 2.9896 | 2.9855 | 3.0915 | Ave | | 2.9435 | | | | 3.4 | | 20.0 | | | |
| sec-Butylbenzene | 3.4931<br>3.7070 | 3.4481<br>3.7162 | 3.8562 | 3.8180 | 3.9769 | Ave | | 3.7165 | | | | 5.1 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.8530<br>1.6328 | 1.7598<br>1.6496 | 1.6537 | 1.6730 | 1.7292 | Ave | | 1.7073 | | | 0.6000 | 4.6 | | 20.0 | | | |
| 4-Isopropyltoluene | 2.9898<br>3.1812 | 3.0425<br>3.2731 | 3.2720 | 3.2957 | 3.4448 | Ave | | 3.2142 | | | | 4.9 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.9866<br>1.6505 | 1.8499<br>1.6771 | 1.6636 | 1.7046 | 1.7595 | Ave | | 1.7560 | | | 0.5000 | 7.0 | | 20.0 | | | |
| n-Butylbenzene | 2.5658<br>2.7237 | 2.6277<br>2.8018 | 2.7646 | 2.7987 | 2.9054 | Ave | | 2.7411 | | | | 4.2 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.8655<br>1.5698 | 1.6719<br>1.6169 | 1.5834 | 1.6103 | 1.6665 | Ave | | 1.6549 | | | 0.4000 | 6.1 | | 20.0 | | | |
| 1,2-Dibromo-3-Chloropropane | 0.3275<br>0.3332 | 0.2864<br>+++++ | 0.3130 | 0.3187 | 0.3491 | Ave | | 0.3213 | | | 0.0500 | 6.6 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 1.2956<br>1.0915 | 1.2328<br>1.2075 | 1.0259 | 1.0636 | 1.1751 | Ave | | 1.1560 | | | 0.2000 | 8.5 | | 20.0 | | | |
| Hexachlorobutadiene | 0.5365<br>0.4716 | 0.6238<br>0.5042 | 0.4510 | 0.4832 | 0.5034 | Ave | | 0.5105 | | | | 11.1 | | 20.0 | | | |
| Naphthalene | 3.8848<br>3.4986 | 3.9098<br>3.2717 | 3.4440 | 3.5237 | 3.8266 | Ave | | 3.6227 | | | | 6.9 | | 20.0 | | | |
| 1,2,3-Trichlorobenzene | 1.2332<br>0.9963 | 1.1549<br>1.1194 | 0.9312 | 0.9820 | 1.0736 | Ave | | 1.0701 | | | | 10.0 | | 20.0 | | | |
| Dibromofluoromethane (Surr) | +++++<br>0.2632 | 0.2807<br>0.2572 | 0.2551 | 0.2667 | 0.2730 | Ave | | 0.2660 | | | | 3.6 | | 20.0 | | | |
| 1,2-Dichloroethane-d4 (Surr) | +++++<br>0.2956 | 0.3370<br>0.2788 | 0.2849 | 0.2939 | 0.3026 | Ave | | 0.2988 | | | | 6.9 | | 20.0 | | | |
| Toluene-d8 (Surr) | +++++<br>1.3548 | 1.6210<br>1.3318 | 1.3946 | 1.3817 | 1.4168 | Ave | | 1.4168 | | | | 7.4 | | 20.0 | | | |
| 4-Bromofluorobenzene (Surr) | +++++<br>0.4999 | 0.6202<br>0.4892 | 0.5085 | 0.4983 | 0.5153 | Ave | | 0.5219 | | | | 9.4 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-378870/14 | U1269801.D |
| Level 2 | STD8260 240-378870/13 | U1269800.D |
| Level 3 | STD8260 240-378870/12 | U1269799.D |
| Level 4 | ICIS 240-378870/11 | U1269798.D |
| Level 5 | STD8260 240-378870/10 | U1269797.D |
| Level 6 | STD8260 240-378870/9 | U1269796.D |
| Level 7 | STD8260 240-378870/8 | U1269795.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane | FB | Ave | 11044<br>1567191 | 19984<br>2052069 | 224597 | 496091 | 1030351 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloromethane | FB | Ave | +++++<br>1257715 | 19082<br>1789816 | 214265 | 403612 | 863765 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Butadiene | FB | Ave | 11073<br>1449292 | 21365<br>1892418 | 222795 | 460371 | 960327 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl chloride | FB | Ave | 10733<br>1455844 | 22643<br>1934142 | 233314 | 463335 | 970649 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromomethane | FB | Ave | 7170<br>883232 | 15275<br>953805 | 151619 | 290732 | 590824 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Chloroethane | FB | Ave | 7695<br>918797 | 14836<br>1012997 | 148379 | 292854 | 592754 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dichlorofluoromethane | FB | Ave | 14396<br>1807740 | 29001<br>2290963 | 299518 | 575498 | 1183160 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichlorofluoromethane | FB | Ave | 12502<br>1662729 | 23742<br>2071934 | 261265 | 524611 | 1094737 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl ether | FB | Ave | 8163<br>929149 | 15857<br>1155554 | 157567 | 308106 | 641131 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acrolein | FB | Ave | 11833<br>1380457 | 22786<br>+++++ | 239777 | 454386 | 946268 | 2.50<br>300 | 5.00<br>+++++ | 50.0 | 100 | 200 |
| 1,1-Dichloroethene | FB | Ave | 13081<br>1522285 | 25123<br>2024854 | 255094 | 508373 | 1043595 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | FB | Ave | 7988<br>1054000 | 15799<br>1365935 | 171045 | 345600 | 708990 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Acetone | FB | Lin1 | +++++<br>1067191 | 35750<br>+++++ | 195589 | 354093 | 729471 | +++++<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Iodomethane | FB | Ave | 14045<br>1619670 | 27241<br>2125484 | 265387 | 538227 | 1115860 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon disulfide | FB | Ave | 35208<br>3310792 | 63418<br>4286373 | 563594 | 1117299 | 2267883 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 3-Chloro-1-propene | FB | Ave | 16129<br>1697487 | 29262<br>2260088 | 284969 | 560067 | 1176034 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl acetate | FB | Ave | 22700<br>2530486 | 43336<br>+++++ | 426943 | 825132 | 1715851 | 1.00<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Methylene Chloride | FB | Lin1 | +++++<br>1311846 | 76885<br>1730659 | 262888 | 464186 | 930086 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Methyl-2-propanol | FB | Ave | 24459<br>2552659 | 46009<br>+++++ | 452013 | 872907 | 1790088 | 5.00<br>600 | 10.0<br>+++++ | 100 | 200 | 400 |
| Acrylonitrile | FB | Ave | 59579<br>6486159 | 114297<br>+++++ | 1113771 | 2135420 | 4436089 | 5.00<br>600 | 10.0<br>+++++ | 100 | 200 | 400 |
| trans-1,2-Dichloroethene | FB | Ave | 13341<br>1450217 | 26151<br>1921542 | 248232 | 492658 | 1013326 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methyl tert-butyl ether | FB | Ave | 26396<br>3027404 | 53530<br>3846016 | 533312 | 1039087 | 2131851 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexane | FB | Ave | 13878<br>1702774 | 25038<br>2123105 | 279012 | 557732 | 1142313 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloroethane | FB | Ave | 15738<br>1856520 | 31501<br>2451944 | 315456 | 622049 | 1284657 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Vinyl acetate | FB | Ave | 16963<br>2173371 | 34619<br>+++++ | 346293 | 700651 | 1462850 | 0.500<br>60.0 | 1.00<br>+++++ | 10.0 | 20.0 | 40.0 |
| 2,2-Dichloropropane | FB | Ave | 10546<br>1156337 | 19842<br>1612711 | 202782 | 412857 | 841953 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| cis-1,2-Dichloroethene | FB | Ave | 10822<br>1255612 | 22054<br>1657053 | 211496 | 417933 | 866934 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Butanone (MEK) | FB | Ave | 3739<br>482200 | 7212<br>+++++ | 78345 | 151425 | 322049 | 1.00<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Chlorobromomethane | FB | Ave | 8465<br>858112 | 15161<br>1121143 | 146065 | 288735 | 598675 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrahydrofuran | FB | Ave | 9753<br>1132369 | 17279<br>+++++ | 185955 | 360495 | 755334 | 1.00<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Chloroform | FB | Ave | 15213<br>1766502 | 29434<br>2363996 | 299618 | 602114 | 1231881 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1-Trichloroethane | FB | Ave | 11924<br>1574408 | 24264<br>2088351 | 258363 | 533200 | 1083939 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Cyclohexane | FB | Ave | 15299<br>1928649 | 29359<br>2381579 | 324586 | 642956 | 1285622 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1-Dichloropropene | FB | Ave | 13318<br>1521069 | 24613<br>1971517 | 255221 | 504905 | 1034085 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Carbon tetrachloride | FB | Ave | 10783<br>1327796 | 20029<br>1755611 | 212237 | 453383 | 940122 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isobutyl alcohol | FB | Ave | 16262<br>1784970 | 28500<br>+++++ | 312412 | 615511 | 1254651 | 12.5<br>1500 | 25.0<br>+++++ | 250 | 500 | 1000 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Benzene | FB | Ave | 37546<br>4341955 | 72564<br>5684570 | 727951 | 1437120 | 2963156 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane | FB | Ave | 11902<br>1329568 | 23529<br>1695389 | 214099 | 441298 | 908435 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Heptane | FB | Lin1 | +++++<br>841832 | 49490<br>1041160 | 171315 | 299975 | 571599 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Trichloroethene | FB | Ave | 10516<br>1167306 | 19135<br>1509661 | 187506 | 387176 | 793097 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Methylcyclohexane | FB | Ave | 17502<br>2177617 | 31043<br>2603437 | 361953 | 720921 | 1493017 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloropropane | FB | Ave | 7613<br>937223 | 14544<br>1232396 | 154817 | 307704 | 643520 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromomethane | FB | Ave | 7633<br>757811 | 13696<br>938835 | 122075 | 249664 | 529643 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,4-Dioxane | FB | Ave | 2151<br>298901 | 4063<br>374894 | 58179 | 110260 | 212766 | 10.0<br>1200 | 20.0<br>1600 | 200 | 400 | 800 |
| Dichlorobromomethane | FB | Ave | 10242<br>1304681 | 19488<br>1672281 | 208118 | 425494 | 894000 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chloroethyl vinyl ether | FB | Ave | 11398<br>1435551 | 21468<br>1506274 | 230721 | 453314 | 945507 | 1.00<br>120 | 2.00<br>160 | 20.0 | 40.0 | 80.0 |
| cis-1,3-Dichloropropene | FB | Ave | 13273<br>1566673 | 24819<br>1974815 | 248543 | 507172 | 1063891 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Methyl-2-pentanone (MIBK) | FB | Ave | 23343<br>2858560 | 46025<br>+++++ | 479830 | 939875 | 1951525 | 1.00<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Toluene | CBNZ d5 | Ave | 36733<br>4263658 | 69512<br>5446274 | 693965 | 1384009 | 2883485 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| trans-1,3-Dichloropropene | CBNZ d5 | Ave | 11758<br>1400355 | 23230<br>1708636 | 219235 | 450107 | 945703 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethyl methacrylate | CBNZ d5 | Ave | 10652<br>1413898 | 20354<br>1510478 | 229870 | 458650 | 952052 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2-Trichloroethane | CBNZ d5 | Ave | 7700<br>861361 | 13079<br>1023274 | 138863 | 277803 | 581540 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Tetrachloroethene | CBNZ d5 | Ave | 9314<br>1157587 | 17463<br>1482922 | 186459 | 377626 | 784044 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichloropropane | CBNZ d5 | Ave | 13441<br>1521180 | 24096<br>1810575 | 244890 | 490824 | 1025142 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Hexanone | CBNZ d5 | Ave | 16906<br>2004012 | 32274<br>+++++ | 347483 | 674546 | 1354308 | 1.00<br>120 | 2.00<br>+++++ | 20.0 | 40.0 | 80.0 |
| Chlorodibromomethane | CBNZ d5 | Ave | 7003<br>919717 | 13420<br>1130859 | 141322 | 298689 | 633936 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylene Dibromide | CBNZ d5 | Ave | 7750<br>941630 | 15068<br>1071876 | 146267 | 304693 | 633639 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| Chlorobenzene | CBNZ d5 | Ave | 24288<br>2734043 | 44396<br>3494036 | 442384 | 892667 | 1876430 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,1,2-Tetrachloroethane | CBNZ d5 | Ave | 7683<br>987481 | 14884<br>1305612 | 154999 | 316979 | 674622 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Ethylbenzene | CBNZ d5 | Ave | 12234<br>1545630 | 24504<br>2013623 | 254036 | 512928 | 1066262 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| m-Xylene & p-Xylene | CBNZ d5 | Ave | 14577<br>1937780 | 30946<br>2480479 | 314453 | 646378 | 1329053 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| o-Xylene | CBNZ d5 | Ave | 15474<br>1931683 | 31499<br>2491810 | 311889 | 648657 | 1331003 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Styrene | CBNZ d5 | Ave | 25585<br>3161922 | 46924<br>4024869 | 501125 | 1042824 | 2156541 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromoform | CBNZ d5 | Ave | 4510<br>697809 | 9669<br>780055 | 103500 | 228364 | 475190 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Isopropylbenzene | CBNZ d5 | Ave | 39682<br>5047046 | 78943<br>6501576 | 836910 | 1698359 | 3506656 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,1,2,2-Tetrachloroethane | DCBd 4 | Ave | 10861<br>1444688 | 23506<br>1530842 | 237420 | 473524 | 982071 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Bromobenzene | DCBd 4 | Ave | 10562<br>1209647 | 20743<br>1552619 | 192642 | 400745 | 818090 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichloropropane | DCBd 4 | Ave | 4202<br>516092 | 9133<br>+++++ | 84888 | 173052 | 356976 | 0.500<br>60.0 | 1.00<br>+++++ | 10.0 | 20.0 | 40.0 |
| trans-1,4-Dichloro-2-butene | DCBd 4 | Ave | 3843<br>451551 | 7300<br>+++++ | 71337 | 148061 | 305416 | 0.500<br>60.0 | 1.00<br>+++++ | 10.0 | 20.0 | 40.0 |
| N-Propylbenzene | DCBd 4 | Ave | 11209<br>1416141 | 21478<br>1818752 | 227545 | 470058 | 966595 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 2-Chlorotoluene | DCBd 4 | Ave | 9330<br>1168744 | 18750<br>1545785 | 187392 | 385627 | 813877 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3,5-Trimethylbenzene | DCBd 4 | Ave | 31487<br>4038075 | 62930<br>5266204 | 660502 | 1351432 | 2808258 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Chlorotoluene | DCBd 4 | Ave | 10044<br>1186575 | 20976<br>1532612 | 190484 | 390042 | 815761 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| tert-Butylbenzene | DCBd 4 | Ave | 28862<br>3712091 | 55395<br>4823562 | 597272 | 1219799 | 2579873 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trimethylbenzene | DCBd 4 | Ave | 33748<br>4146548 | 65676<br>5404391 | 681127 | 1387358 | 2883392 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| sec-Butylbenzene | DCBd 4 | Ave | 40589<br>5308368 | 81663<br>6773871 | 878572 | 1774243 | 3709245 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,3-Dichlorobenzene | DCBd 4 | Ave | 21531<br>2338079 | 41679<br>3006850 | 376754 | 777449 | 1612862 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Isopropyltoluene | DCBd 4 | Ave | 34741<br>4555449 | 72056<br>5966210 | 745472 | 1531521 | 3212945 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10  Calibration End Date: 04/30/2019 16:24  Calibration ID: 50823

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3 | LVL 4 | LVL 5 |
| 1,4-Dichlorobenzene | DCBd 4 | Ave | 23084<br>2363448 | 43811<br>3056952 | 379011 | 792152 | 1641044 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| n-Butylbenzene | DCBd 4 | Ave | 29814<br>3900305 | 62232<br>5107201 | 629870 | 1300578 | 2709817 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichlorobenzene | DCBd 4 | Ave | 21676<br>2247875 | 39597<br>2947208 | 360738 | 748334 | 1554362 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dibromo-3-Chloropropane | DCBd 4 | Ave | 3806<br>477069 | 6783<br>+++++ | 71305 | 148124 | 325575 | 0.500<br>60.0 | 1.00<br>+++++ | 10.0 | 20.0 | 40.0 |
| 1,2,4-Trichlorobenzene | DCBd 4 | Ave | 15055<br>1562937 | 29197<br>2200965 | 233740 | 494279 | 1096024 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Hexachlorobutadiene | DCBd 4 | Ave | 6234<br>675267 | 14773<br>918998 | 102755 | 224541 | 469488 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Naphthalene | DCBd 4 | Ave | 45140<br>5009873 | 92597<br>5963618 | 784648 | 1637491 | 3569051 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2,3-Trichlorobenzene | DCBd 4 | Ave | 14329<br>1426661 | 27351<br>2040460 | 212164 | 456339 | 1001370 | 0.500<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Dibromofluoromethane (Surr) | FB | Ave | +++++<br>988457 | 16968<br>1285236 | 158064 | 332600 | 680998 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 1,2-Dichloroethane-d4 (Surr) | FB | Ave | +++++<br>1110364 | 20365<br>1393127 | 176503 | 366398 | 754824 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| Toluene-d8 (Surr) | CBNZ d5 | Ave | +++++<br>3550979 | 66709<br>4492583 | 580962 | 1181805 | 2403057 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |
| 4-Bromofluorobenzene (Surr) | CBNZ d5 | Ave | +++++<br>1310206 | 25525<br>1650135 | 211821 | 426237 | 874019 | +++++<br>60.0 | 1.00<br>80.0 | 10.0 | 20.0 | 40.0 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 378870

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2019 14:10 Calibration End Date: 04/30/2019 16:24 Calibration ID: 50823

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-378870/14 | U1269801.D |
| Level 2 | STD8260 240-378870/13 | U1269800.D |
| Level 3 | STD8260 240-378870/12 | U1269799.D |
| Level 4 | ICIS 240-378870/11 | U1269798.D |
| Level 5 | STD8260 240-378870/10 | U1269797.D |
| Level 6 | STD8260 240-378870/9 | U1269796.D |
| Level 7 | STD8260 240-378870/8 | U1269795.D |

| ANALYTE | PERCENT ERROR | | | | | | PERCENT ERROR LIMIT | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 # LVL 7 # | LVL 2 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1 LVL 7 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
| Acetone | +++++ +++++ | 0.5 | | | | | | 50 | | | | |
| Methylene Chloride | +++++ | 1.9 | | | | | | 50 | | | | |
| n-Heptane | +++++ | -5.0 | | | | | | 50 | | | | |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Lims ID: std8260 L7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Apr-2019 14:10:30 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-008
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:02 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 14:37:07

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1249296 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 83 | 843322 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 90 | 455702 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 95 | 1285236 | 80.0 | 77.4 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 96 | 1393127 | 80.0 | 74.6 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 4492583 | 80.0 | 75.2 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 1650135 | 80.0 | 75.0 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 99 | 2052069 | 80.0 | 85.3 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 98 | 1789816 | 80.0 | 84.9 | |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 88 | 1892418 | 80.0 | 81.7 | |
| 12 Vinyl chloride | 62 | 1.664 | 1.675 | -0.011 | 98 | 1934142 | 80.0 | 82.1 | |
| 14 Bromomethane | 94 | 1.888 | 1.912 | -0.024 | 90 | 953805 | 80.0 | 65.6 | |
| 15 Chloroethane | 64 | 1.971 | 1.995 | -0.024 | 99 | 1012997 | 80.0 | 68.5 | |
| 16 Dichlorofluoromethane | 67 | 2.161 | 2.172 | -0.011 | 97 | 2290963 | 80.0 | 77.5 | |
| 17 Trichlorofluoromethane | 101 | 2.208 | 2.220 | -0.012 | 99 | 2071934 | 80.0 | 78.9 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 1155554 | 80.0 | 73.2 | |
| 20 Acrolein | 56 | | 2.551 | | | | ND | ND | U |
| 21 1,1-Dichloroethene | 61 | 2.622 | 2.634 | -0.012 | 98 | 2024854 | 80.0 | 78.4 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.658 | 2.669 | -0.011 | 93 | 1365935 | 80.0 | 79.9 | |
| 23 Acetone | 43 | | 2.693 | | | | ND | ND | U |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 2125484 | 80.0 | 77.4 | |
| 25 Carbon disulfide | 76 | 2.811 | 2.823 | -0.012 | 99 | 4286373 | 80.0 | 72.1 | |
| 27 3-Chloro-1-propene | 41 | 2.942 | 2.953 | -0.011 | 93 | 2260088 | 80.0 | 76.8 | |
| 28 Methyl acetate | 43 | | 2.977 | | | | ND | ND | U |
| 29 Methylene Chloride | 49 | 3.048 | 3.060 | -0.012 | 90 | 1730659 | 80.0 | 79.6 | |
| 30 2-Methyl-2-propanol | 59 | | 3.166 | | | | ND | ND | U |
| 31 Acrylonitrile | 53 | | 3.273 | | | | ND | ND | U |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 98 | 1921542 | 80.0 | 75.7 | |
| 33 Methyl tert-butyl ether | 73 | 3.297 | 3.285 | 0.011 | 94 | 3846016 | 80.0 | 73.3 | |
| 34 Hexane | 57 | 3.510 | 3.510 | 0.000 | 90 | 2123105 | 80.0 | 76.6 | |
| 35 1,1-Dichloroethane | 63 | 3.651 | 3.652 | -0.001 | 96 | 2451944 | 80.0 | 77.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | | 3.687 | | | | ND | ND | U |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 60 | 1612711 | 80.0 | 78.5 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 81 | 1657053 | 80.0 | 77.0 | |
| 42 2-Butanone (MEK) | 72 | | 4.149 | | | | ND | ND | U |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 1121143 | 80.0 | 74.4 | |
| 47 Tetrahydrofuran | 42 | | 4.373 | | | | ND | ND | U |
| 48 Chloroform | 83 | 4.397 | 4.397 | 0.000 | 93 | 2363996 | 80.0 | 78.1 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 99 | 2088351 | 80.0 | 80.4 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 90 | 2381579 | 80.0 | 75.5 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 1971517 | 80.0 | 76.8 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 79 | 1755611 | 80.0 | 79.5 | |
| 53 Isobutyl alcohol | 41 | | 4.788 | | | | ND | ND | U |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 96 | 5684570 | 80.0 | 77.3 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 1695389 | 80.0 | 74.9 | |
| 57 n-Heptane | 57 | 5.071 | 5.071 | 0.000 | 90 | 1041160 | 80.0 | 77.0 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 98 | 1509661 | 80.0 | 76.7 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.568 | 0.000 | 86 | 2603437 | 80.0 | 73.8 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 93 | 1232396 | 80.0 | 79.3 | |
| 64 Dibromomethane | 174 | 5.710 | 5.710 | 0.000 | 93 | 938835 | 80.0 | 71.2 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 92 | 374894 | 1600.0 | 1499.9 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 1672281 | 80.0 | 78.8 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 1506274 | 160.0 | 133.5 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 97 | 1974815 | 80.0 | 76.5 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.349 | | | | ND | ND | U |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 5446274 | 80.0 | 77.2 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.704 | 0.000 | 92 | 1708636 | 80.0 | 74.8 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.775 | 0.000 | 89 | 1510478 | 80.0 | 68.6 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 90 | 1023274 | 80.0 | 73.0 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 1482922 | 80.0 | 79.1 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 1810575 | 80.0 | 72.8 | |
| 78 2-Hexanone | 43 | | 7.095 | | | | ND | ND | U |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 1130859 | 80.0 | 77.6 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 99 | 1071876 | 80.0 | 71.1 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 95 | 3494036 | 80.0 | 76.7 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 1305612 | 80.0 | 82.0 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 2013623 | 80.0 | 79.2 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 2480479 | 80.0 | 78.6 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 2491810 | 80.0 | 78.2 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 94 | 4024869 | 80.0 | 78.7 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 98 | 780055 | 80.0 | 74.0 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 96 | 6501576 | 80.0 | 78.3 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 79 | 1530842 | 80.0 | 68.3 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 89 | 1552619 | 80.0 | 78.6 | |
| 95 1,2,3-Trichloropropane | 110 | | 9.047 | | | | ND | ND | U |
| 94 trans-1,4-Dichloro-2-buten | 53 | | 9.047 | | | | ND | ND | U |
| 96 N-Propylbenzene | 120 | 9.106 | 9.107 | -0.001 | 98 | 1818752 | 80.0 | 80.9 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 1545785 | 80.0 | 82.1 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 5266204 | 80.0 | 81.3 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 99 | 1532612 | 80.0 | 78.9 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 4823562 | 80.0 | 82.0 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 5404391 | 80.0 | 80.6 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 94 | 6773871 | 80.0 | 80.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 3006850 | 80.0 | 77.3 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 5966210 | 80.0 | 81.5 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 95 | 3056952 | 80.0 | 76.4 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 5107201 | 80.0 | 81.8 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 98 | 2947208 | 80.0 | 78.2 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | | 11.142 | | | | ND | ND | U |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 94 | 2200965 | 80.0 | 83.6 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 95 | 918998 | 80.0 | 79.0 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 5963618 | 80.0 | 72.2 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 2040460 | 80.0 | 83.7 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 320.0 | 308.6 | |
| S 125 Total BTEX | 1 | | | | 0 | | 400.0 | 390.4 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 152.7 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 151.3 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 160.0 | 156.8 | |

## QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 64.00 | Units: uL |
| vm50ss_00362 | Amount Added: | 64.00 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 64.00 | Units: uL |
| vmrprimw_00331 | Amount Added: | 64.00 | Units: uL |

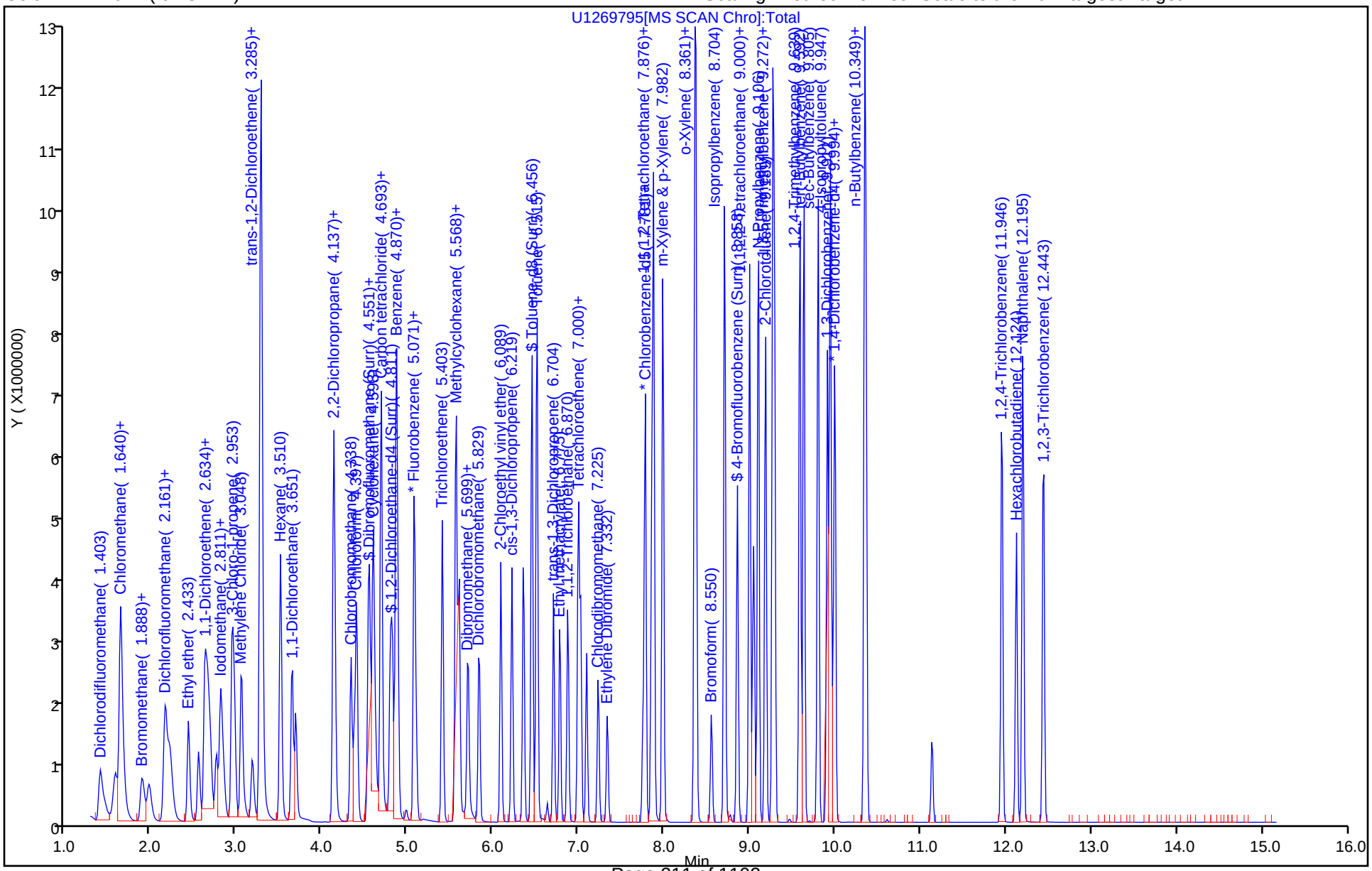
Report Date: 30-Apr-2019 17:22:08 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 14:10:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L7 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 2 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



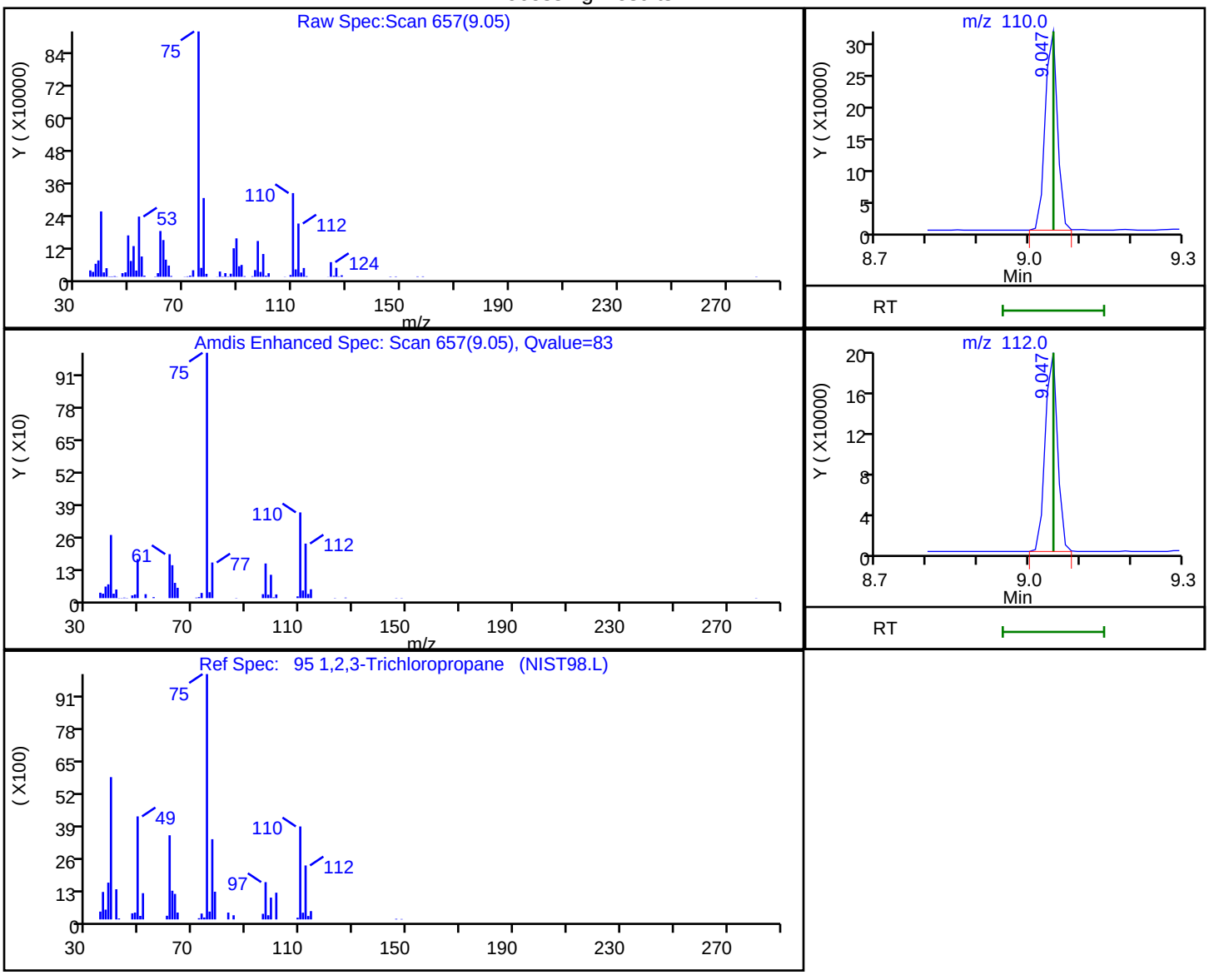
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 95 1,2,3-Trichloropropane, CAS: 96-18-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 9.05 | 110.00 | 523898 | 66.934030 |
| 9.05 | 112.00 | 334270 | |

Reviewer: laveyt, 30-Apr-2019 15:28:42
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

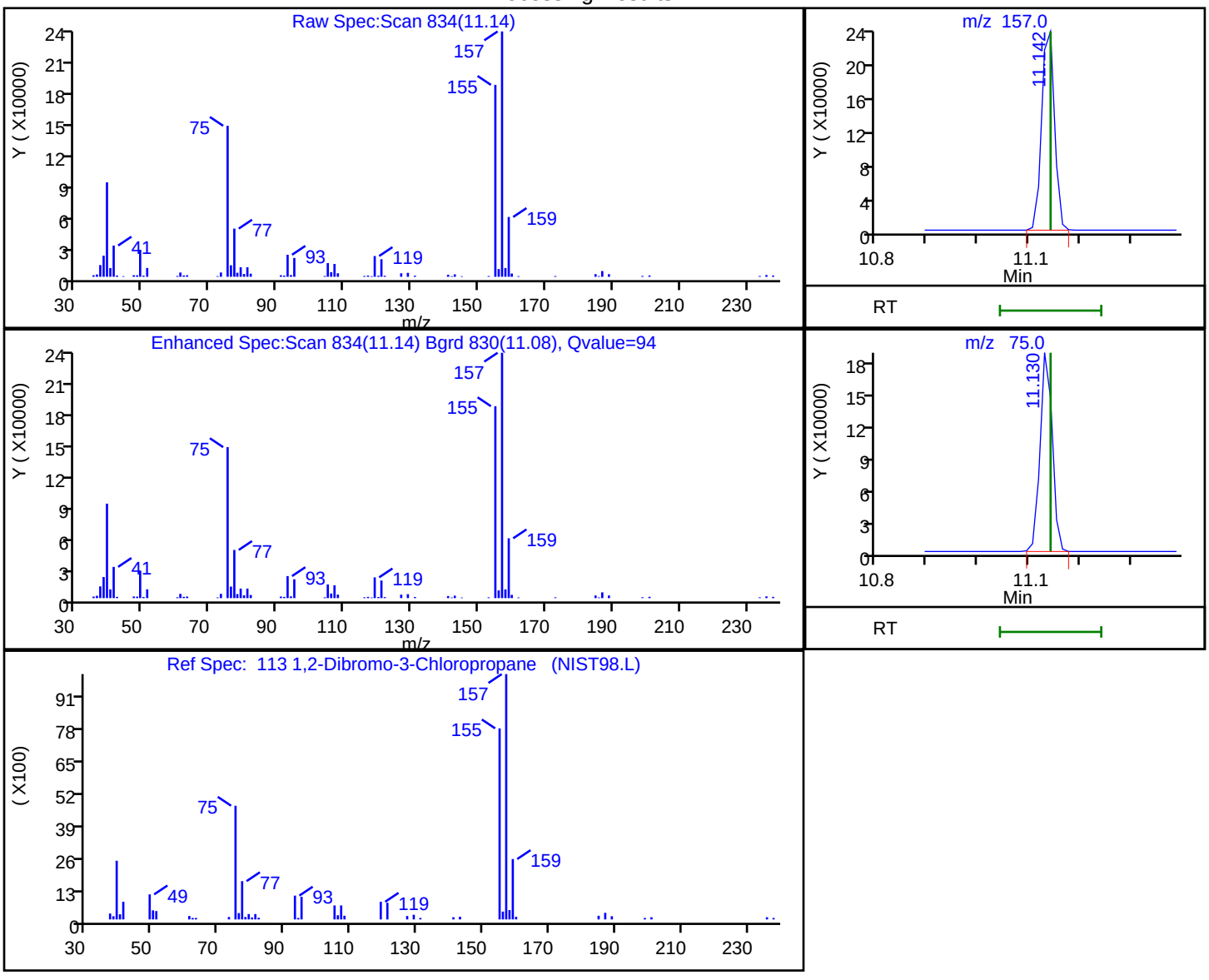
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 113 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 11.14 | 157.00 | 412663 | 59.798200 |
| 11.13 | 75.00 | 309605 | |

Reviewer: laveyt, 30-Apr-2019 15:29:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

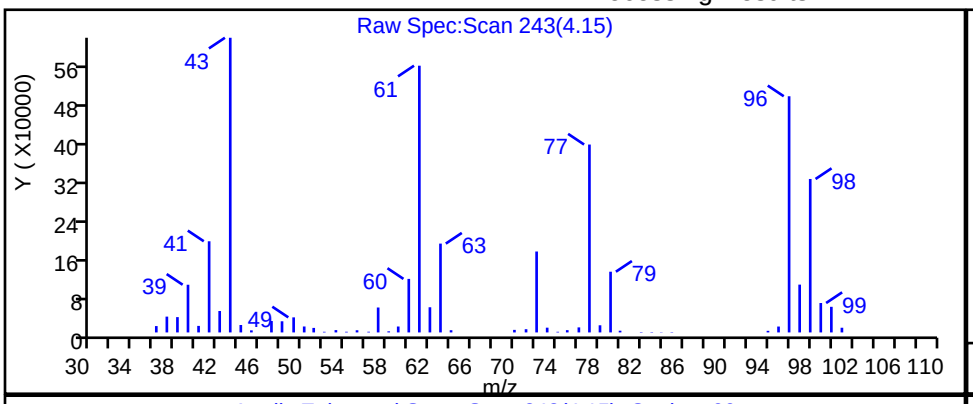
User Disabled Compound Report

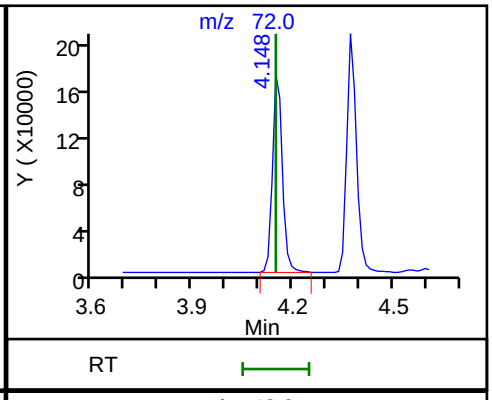
Eurofins TestAmerica, Canton

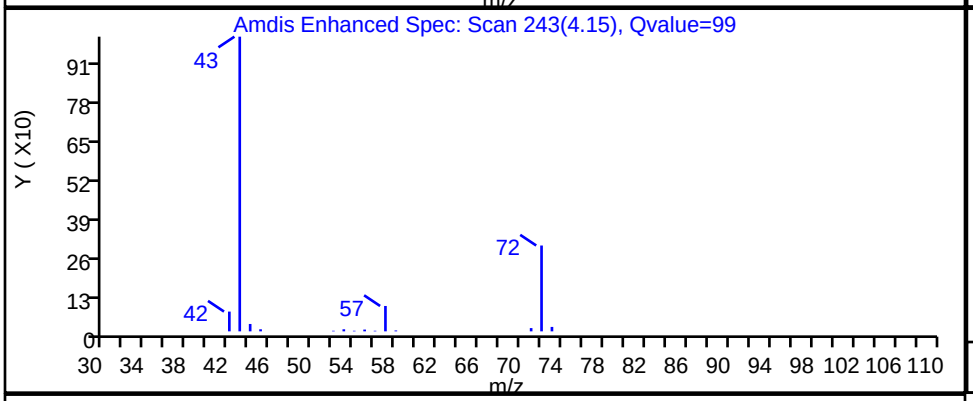
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

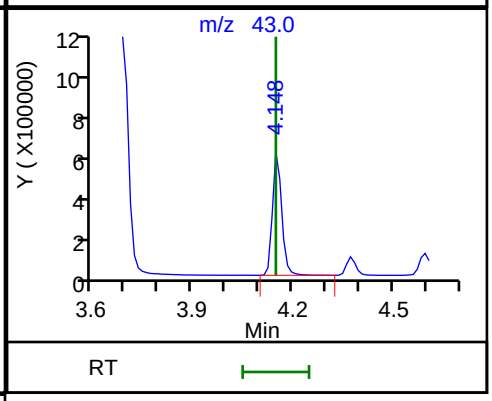
## 42 2-Butanone (MEK), CAS: 78-93-3

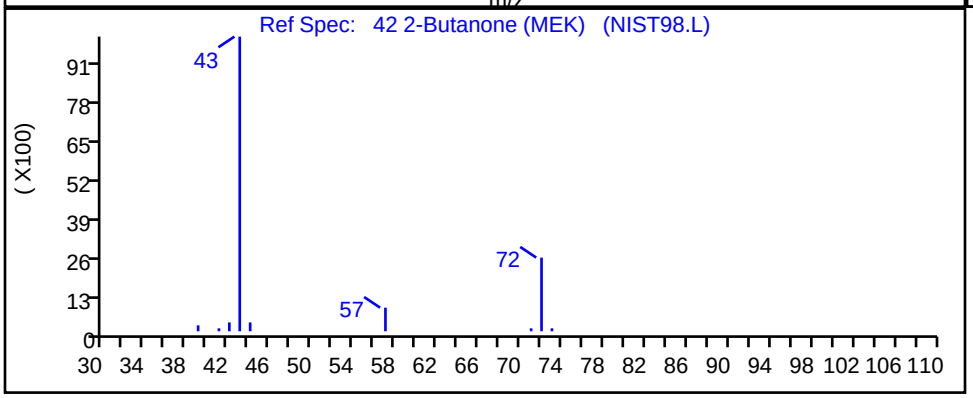
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.15 | 72.00 | 350699 | 102.8080 |
| 4.15 | 43.00 | 1190034 | |

Reviewer: laveyt, 30-Apr-2019 15:25:19
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

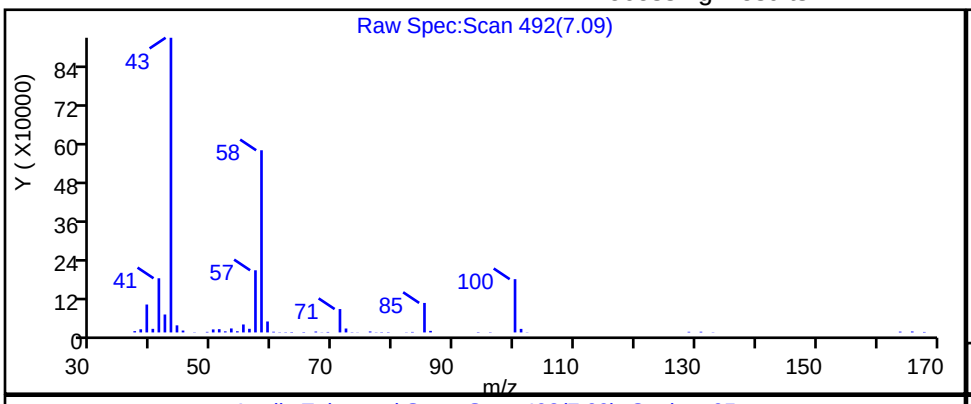
User Disabled Compound Report

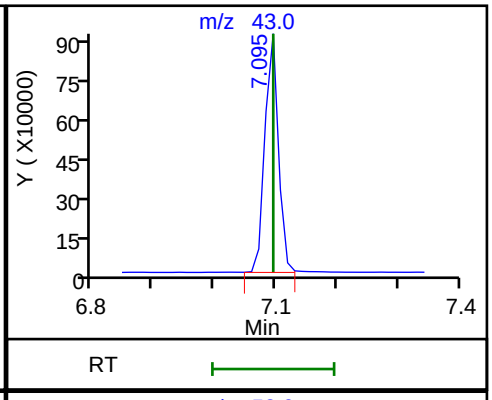
Eurofins TestAmerica, Canton

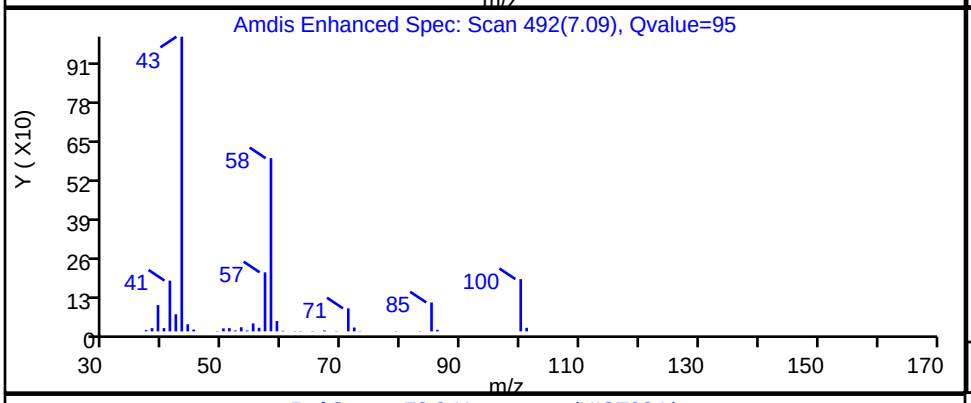
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

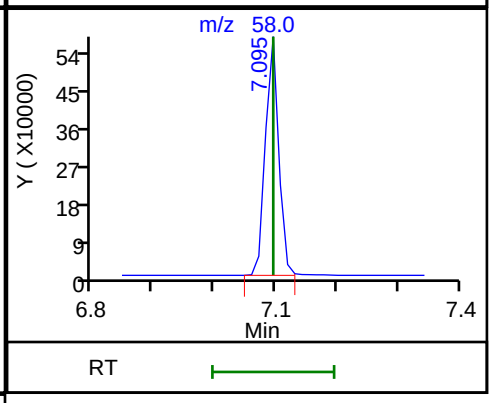
## 78 2-Hexanone, CAS: 591-78-6

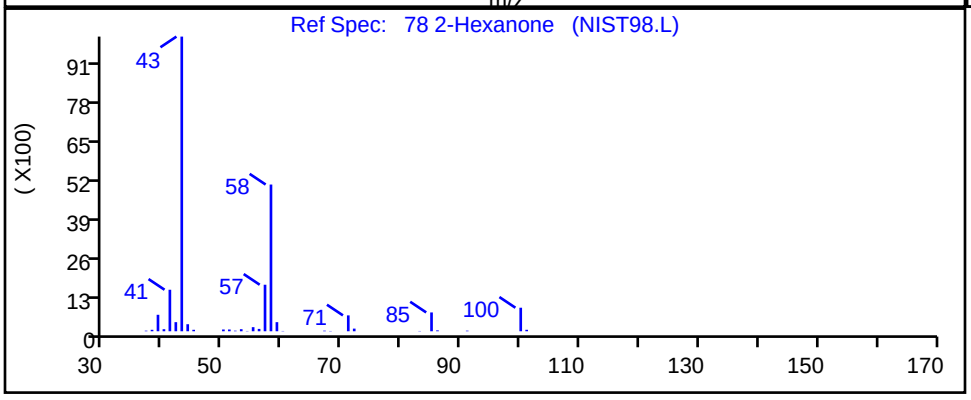
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 7.09 | 43.00 | 1429669 | 102.3875 |
| 7.09 | 58.00 | 868743 | |

Reviewer: laveyt, 30-Apr-2019 15:27:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

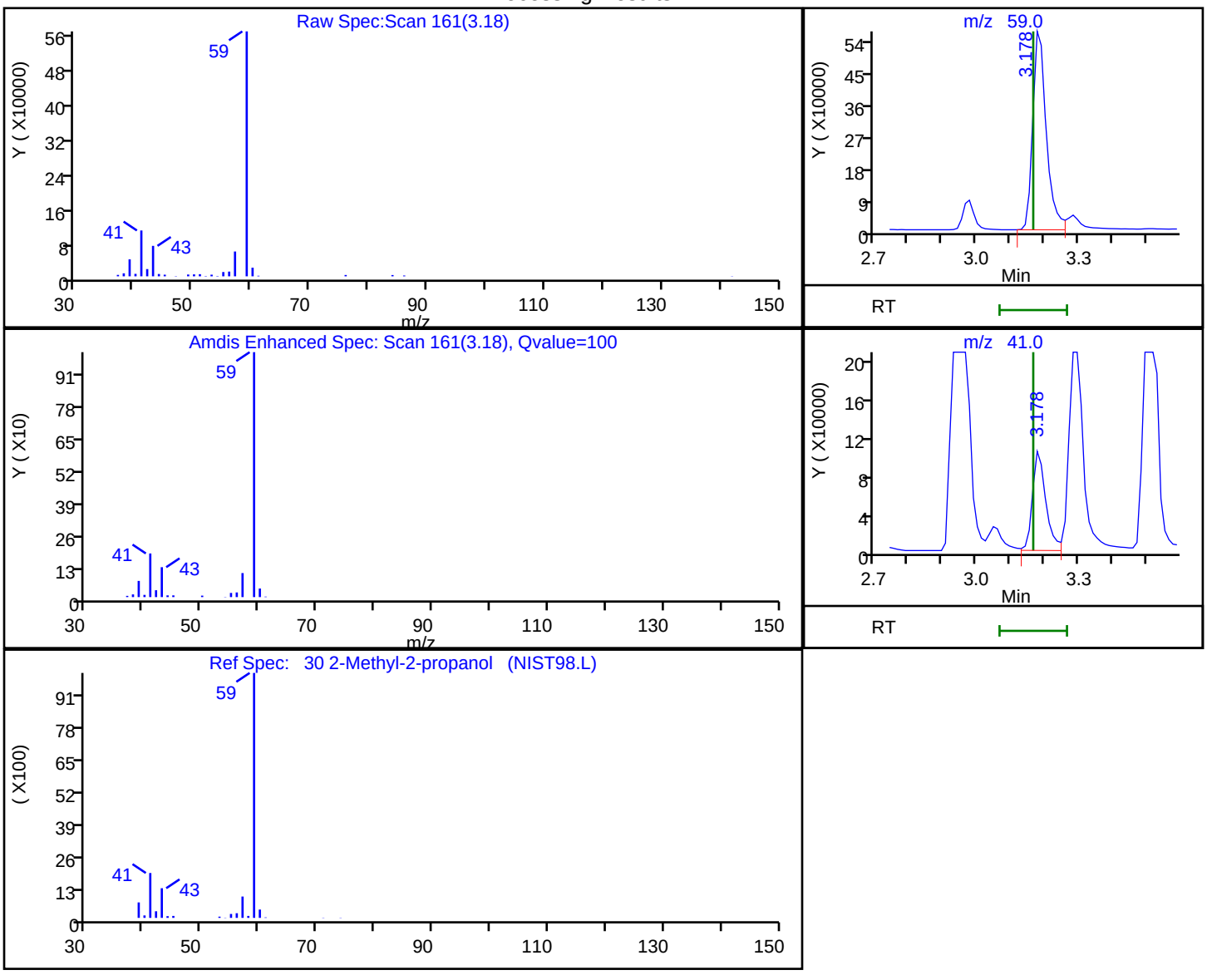
User Disabled Compound Report

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D | | | | |
| Injection Date: | 30-Apr-2019 14:10:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | std8260 L7 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 2 | Worklist Smp#: | 8 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 30 2-Methyl-2-propanol, CAS: 75-65-0

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.18 | 59.00 | 1576196 | 442.0113 |
| 3.18 | 41.00 | 291950 | |

Reviewer: laveyt, 30-Apr-2019 15:24:22

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

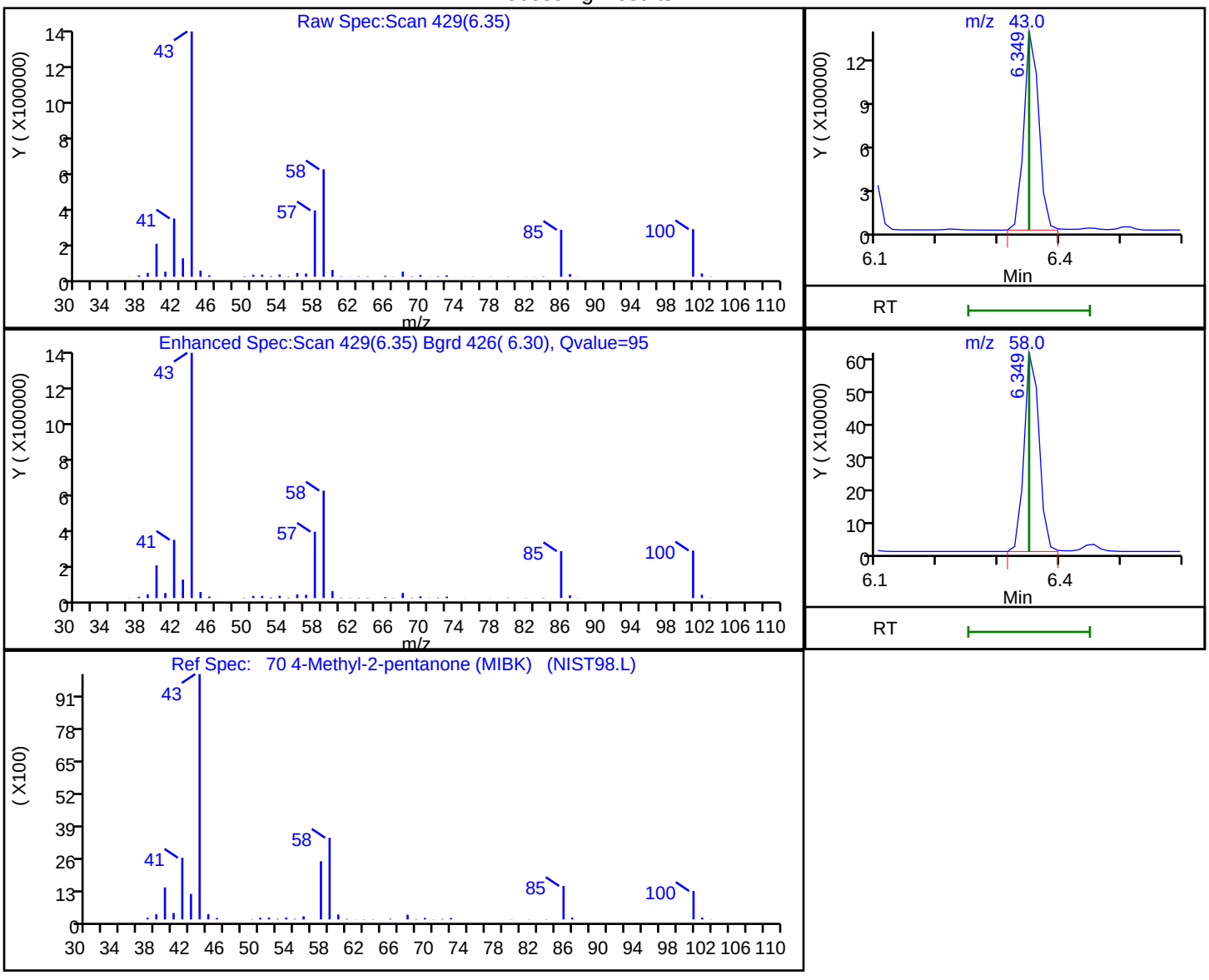
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 70 4-Methyl-2-pentanone (MIBK), CAS: 108-10-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.35 | 43.00 | 2351243 | 112.1448 |
| 6.35 | 58.00 | 1040187 | |

Reviewer: laveyt, 30-Apr-2019 15:26:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

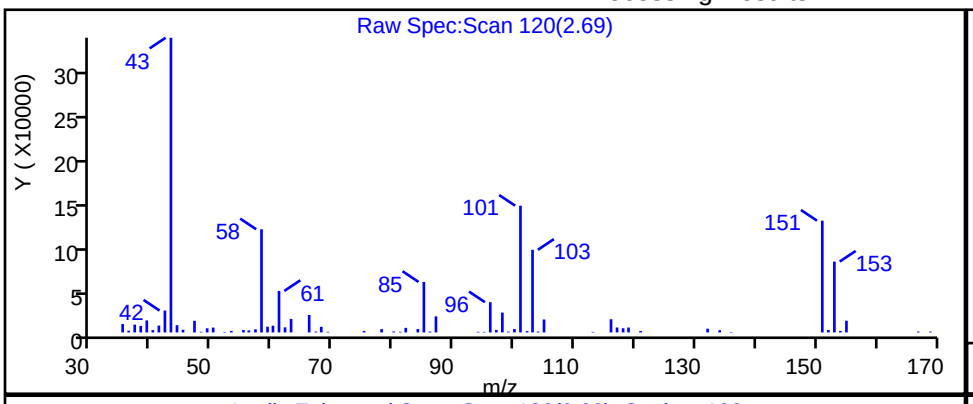
User Disabled Compound Report

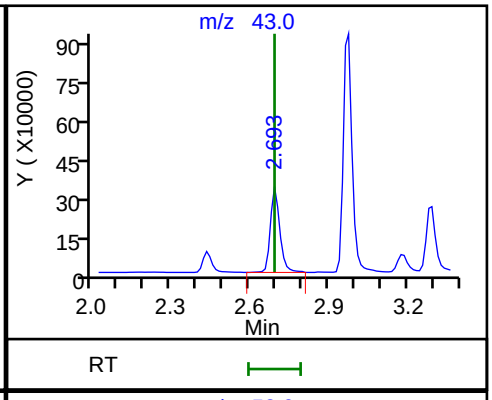
Eurofins TestAmerica, Canton

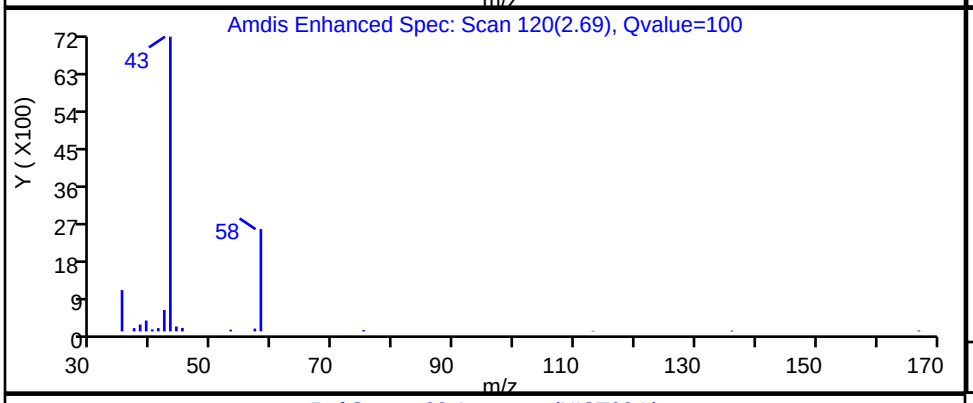
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

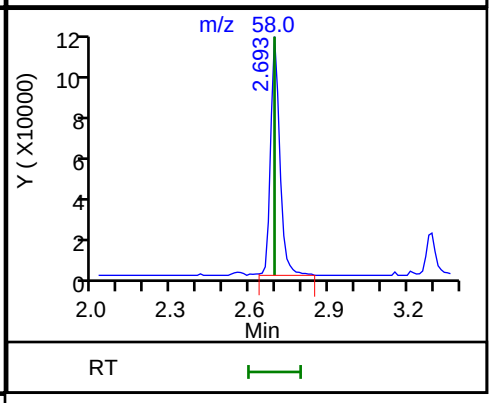
## 23 Acetone, CAS: 67-64-1

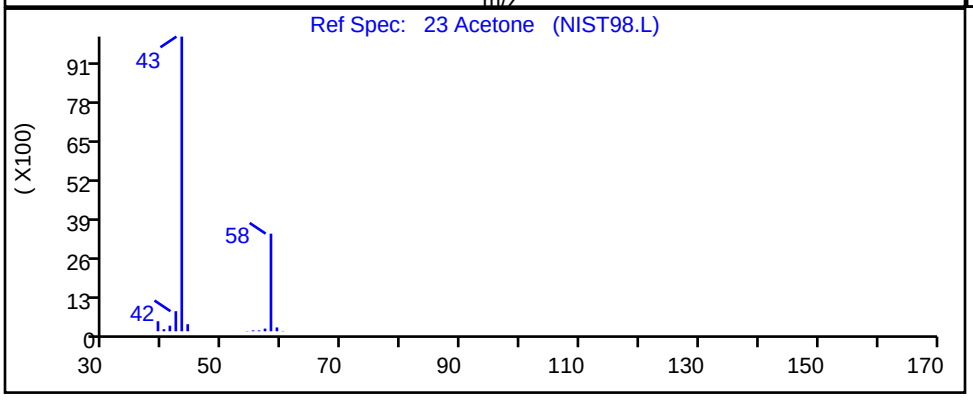
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.69 | 43.00 | 837854 | 108.1396 |
| 2.69 | 58.00 | 287960 | |

Reviewer: laveyt, 30-Apr-2019 15:23:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

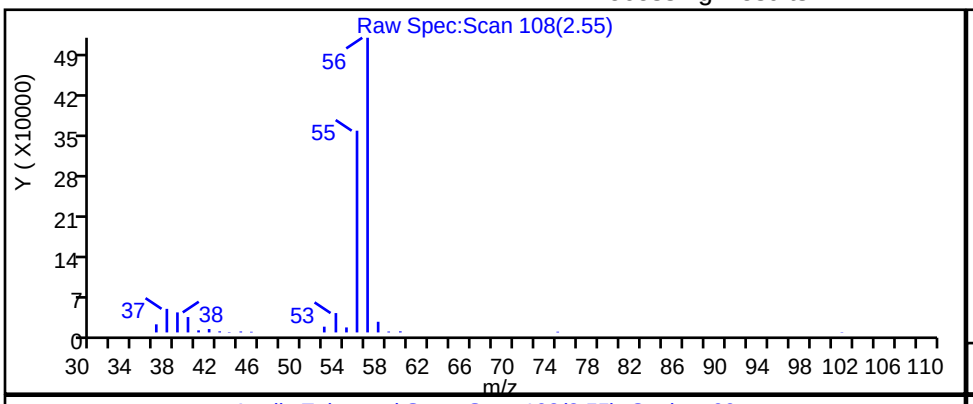
User Disabled Compound Report

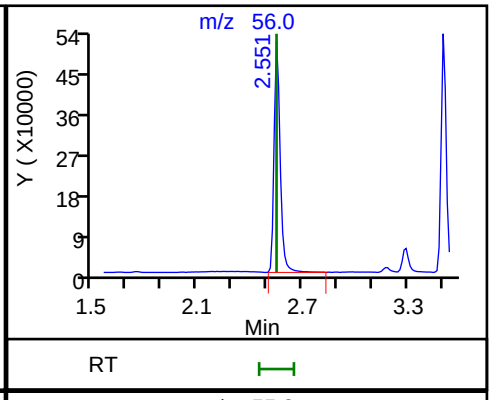
Eurofins TestAmerica, Canton

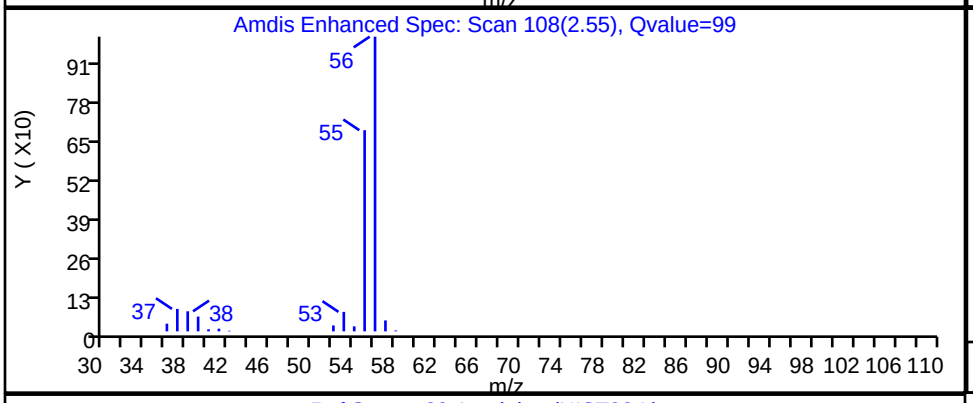
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

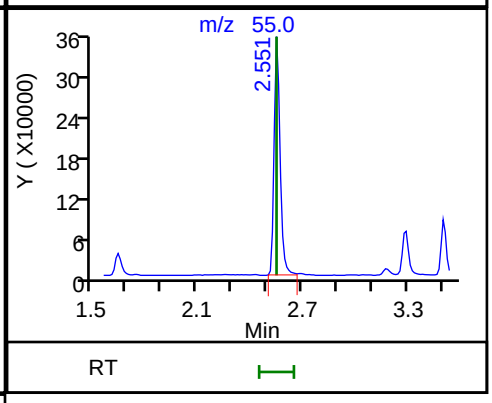
## 20 Acrolein, CAS: 107-02-8

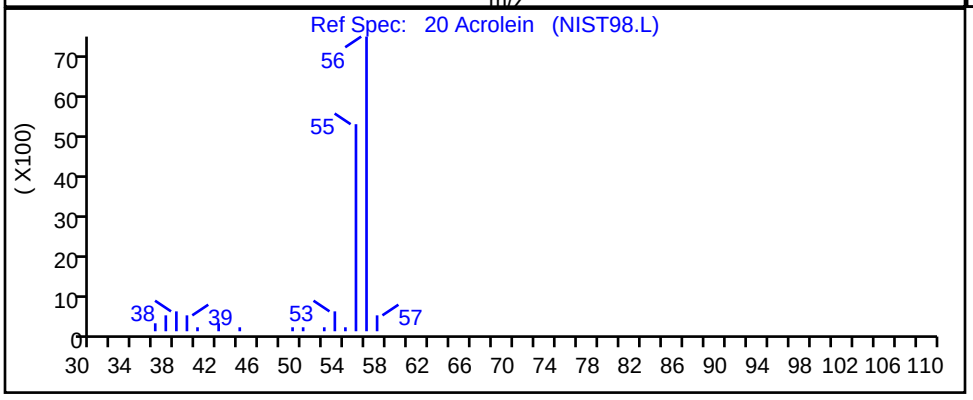
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.55 | 56.00 | 1265832 | 303.9187 |
| 2.55 | 55.00 | 841550 | |

Reviewer: laveyt, 30-Apr-2019 15:23:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

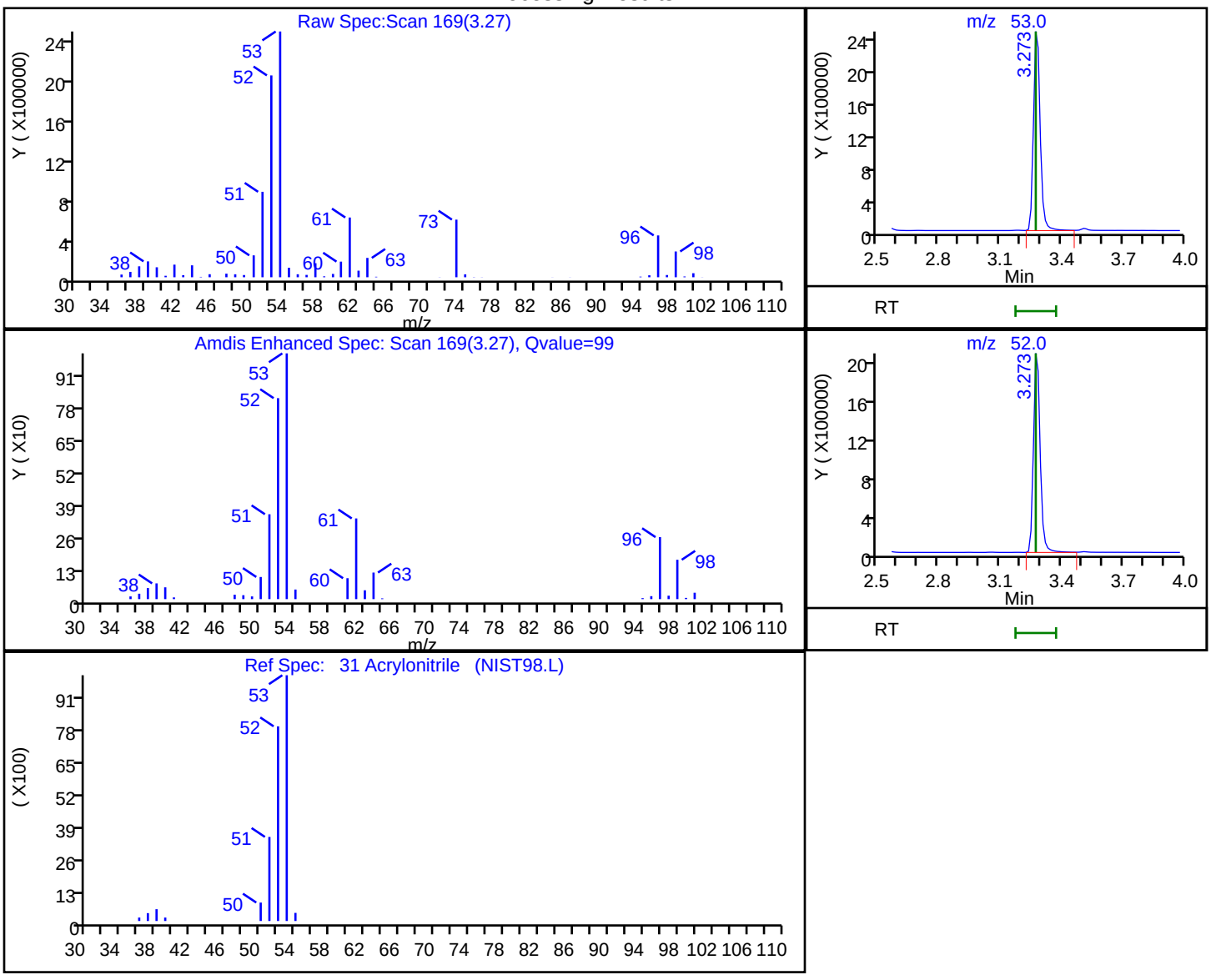
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 31 Acrylonitrile, CAS: 107-13-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.27 | 53.00 | 5744749 | 592.7333 |
| 3.27 | 52.00 | 4692139 | |

Reviewer: laveyt, 30-Apr-2019 15:24:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

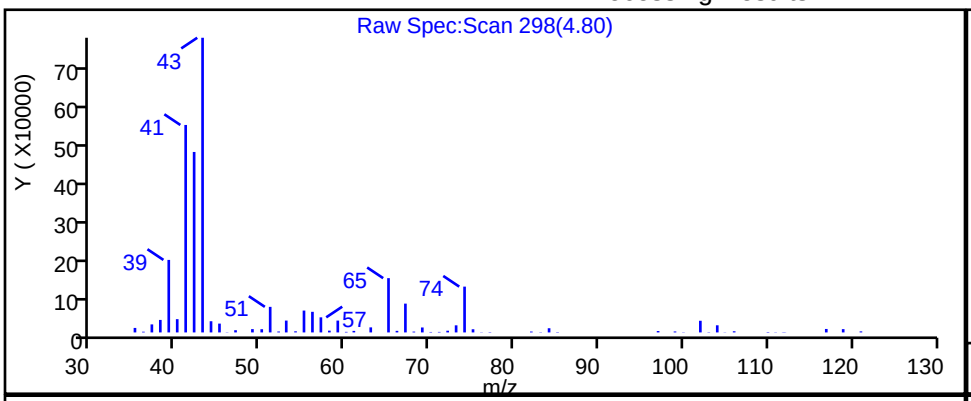
User Disabled Compound Report

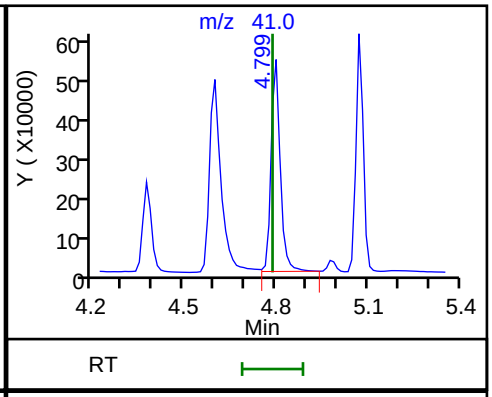
Eurofins TestAmerica, Canton

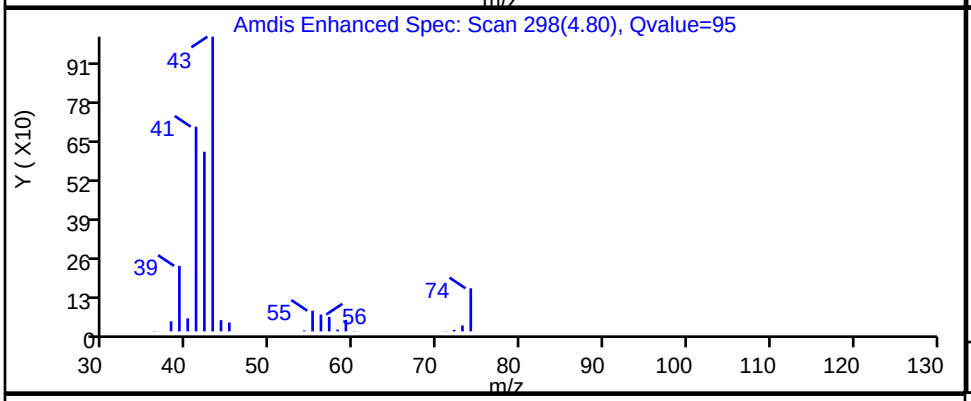
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

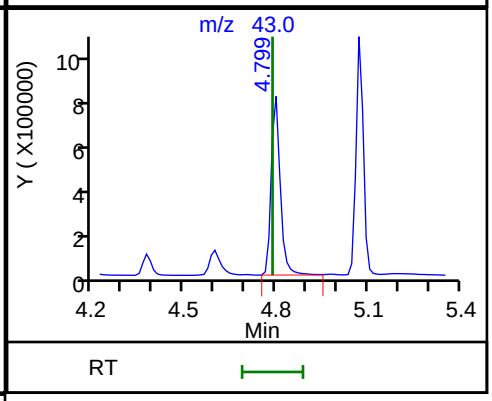
## 53 Isobutyl alcohol, CAS: 78-83-1

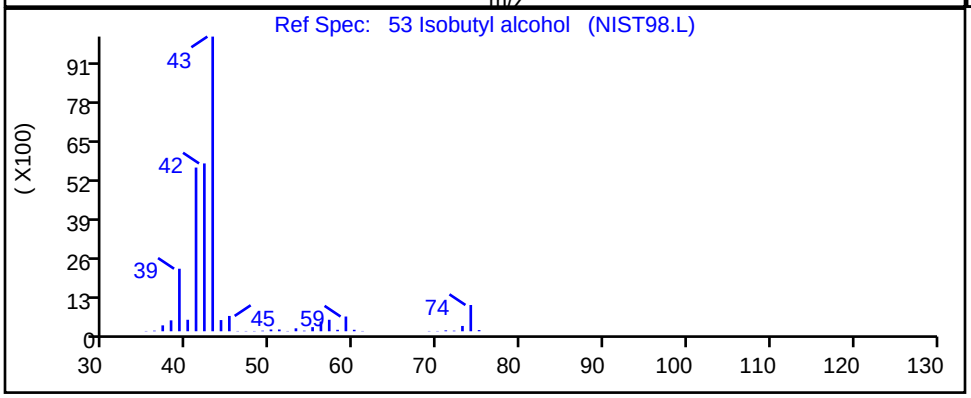
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.80 | 41.00 | 1138584 | 1133.5337 |
| 4.80 | 43.00 | 1619422 | |

Reviewer: laveyt, 30-Apr-2019 15:25:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

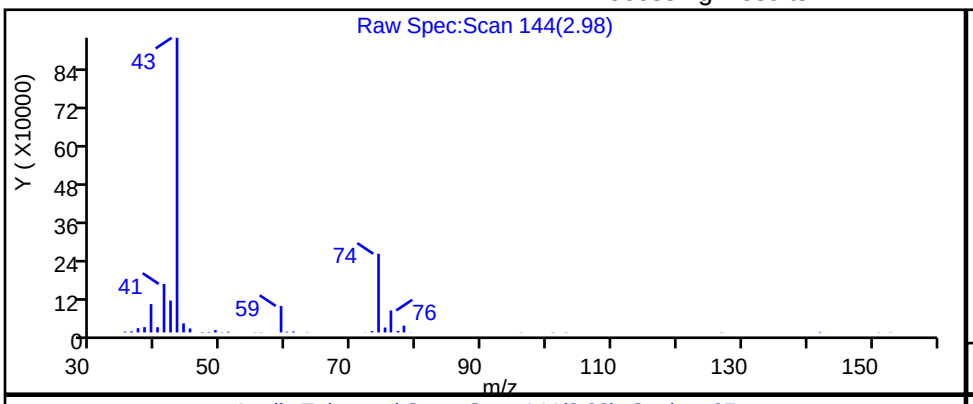
User Disabled Compound Report

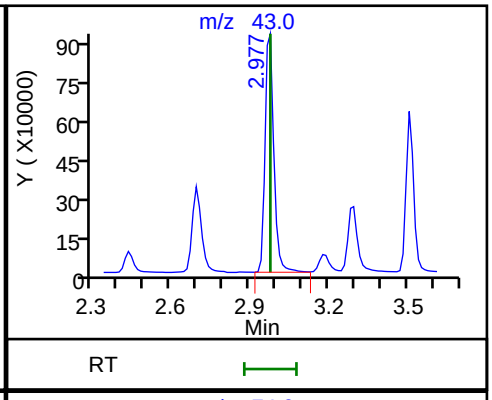
Eurofins TestAmerica, Canton

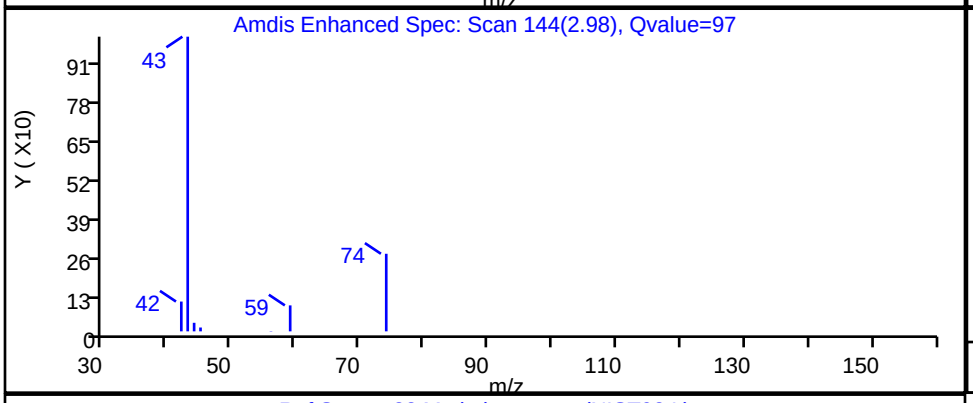
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

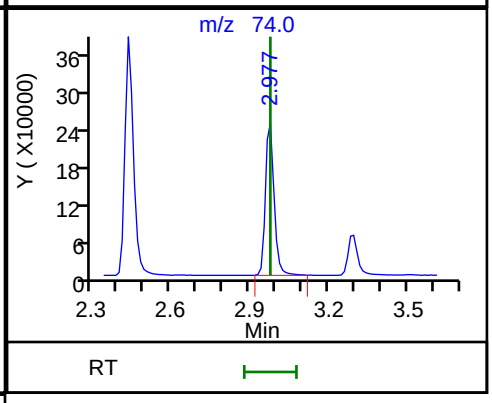
## 28 Methyl acetate, CAS: 79-20-9

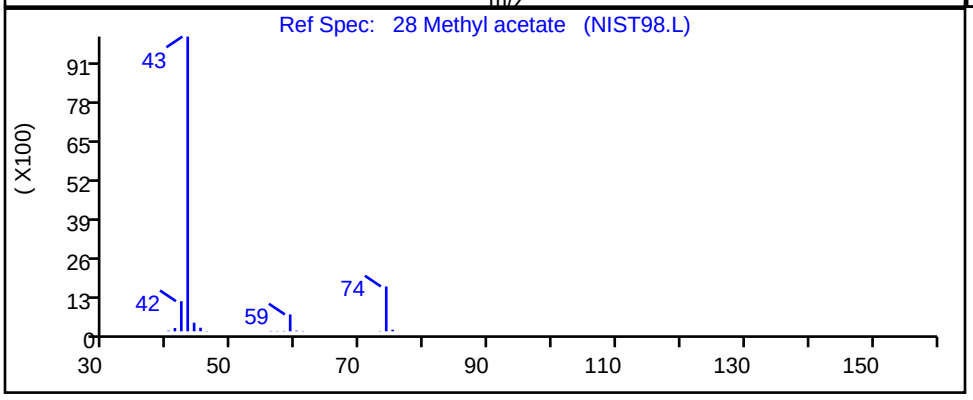
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.98 | 43.00 | 2177198 | 116.3615 |
| 2.98 | 74.00 | 577255 | |

Reviewer: laveyt, 30-Apr-2019 15:24:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

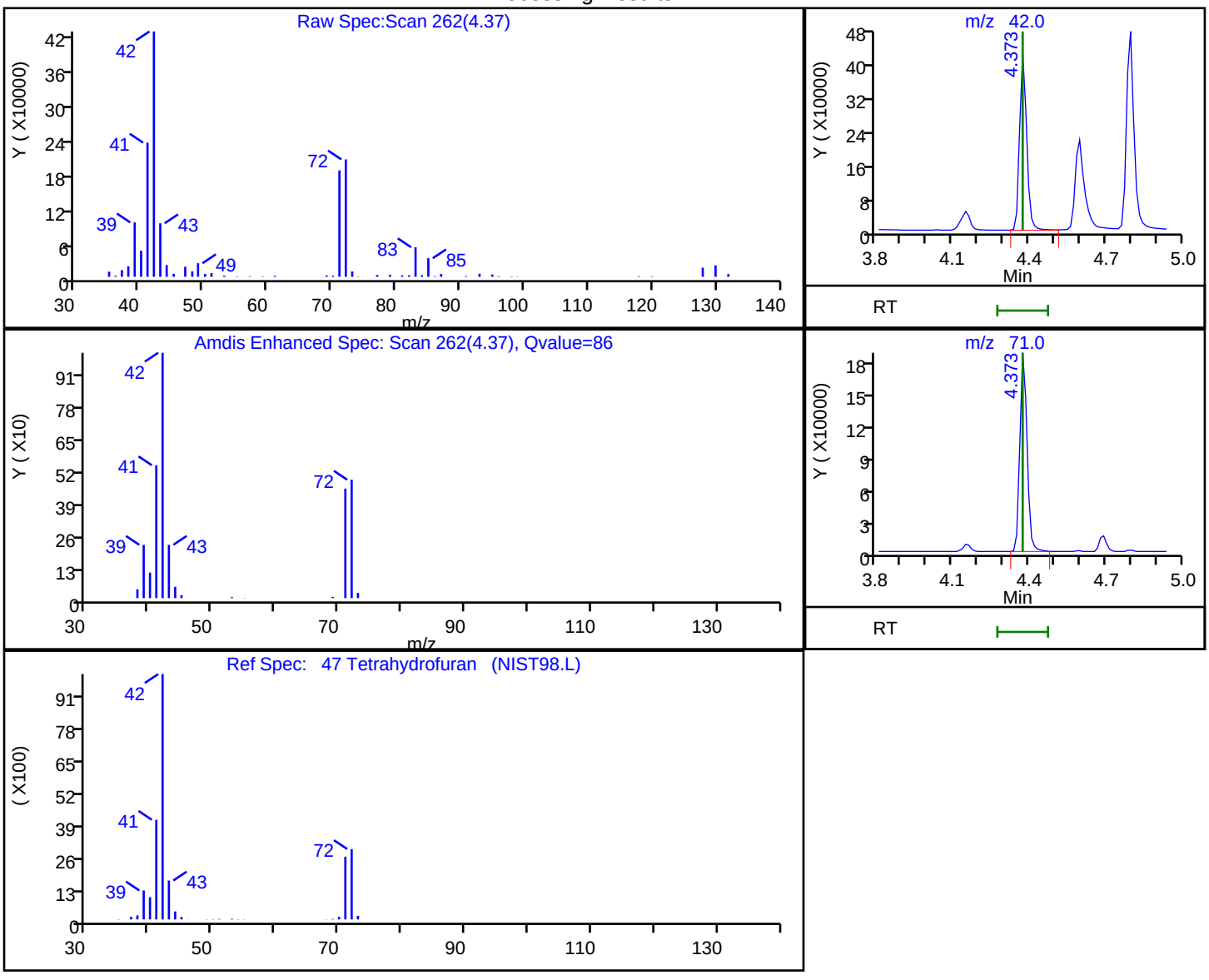
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 47 Tetrahydrofuran, CAS: 109-99-9

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.37 | 42.00 | 828689 | 103.3614 |
| 4.37 | 71.00 | 366944 | |

Reviewer: laveyt, 30-Apr-2019 15:25:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

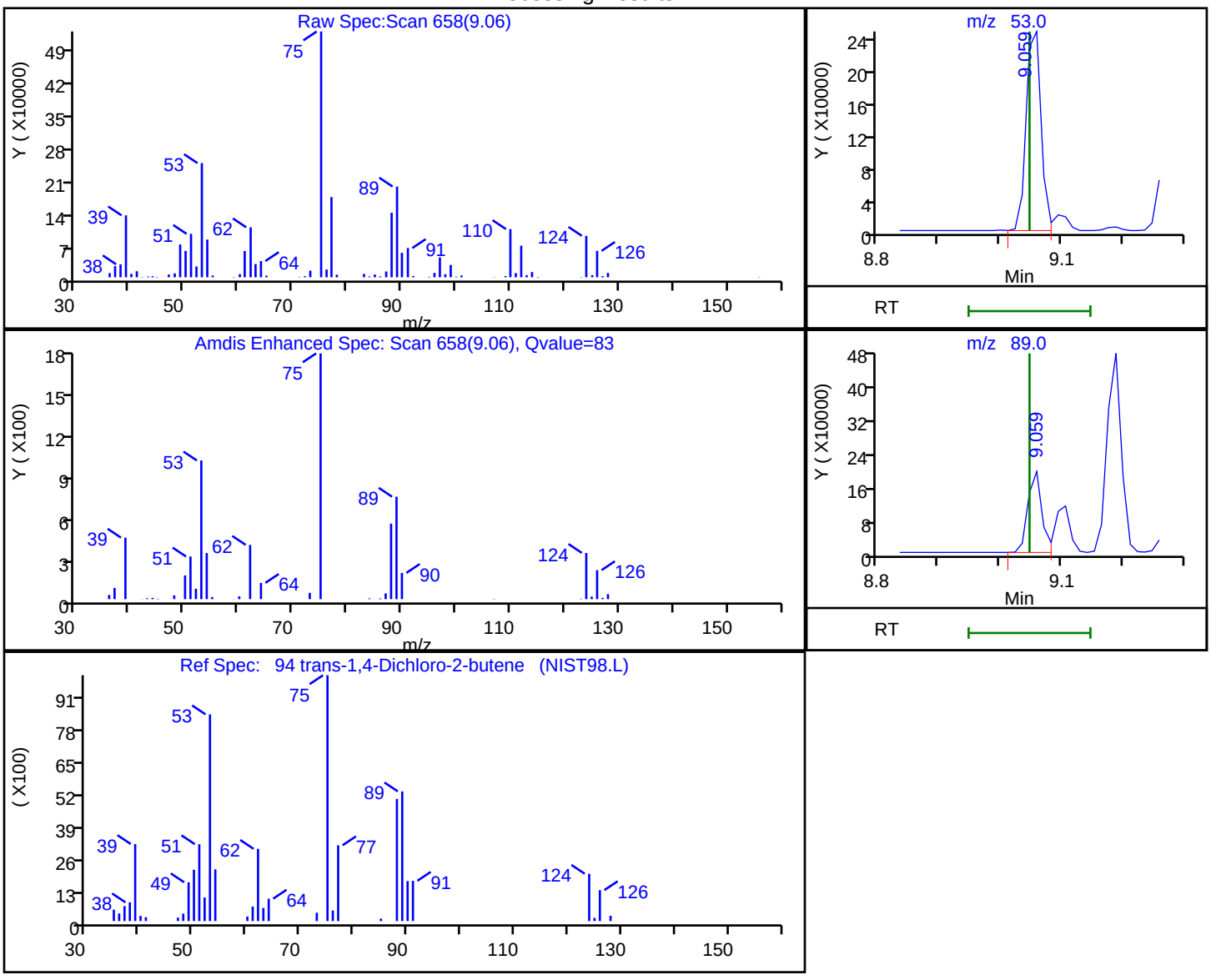
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 94 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 9.06 | 53.00 | 418490 | 63.161578 |
| 9.06 | 89.00 | 314865 | |

Reviewer: laveyt, 30-Apr-2019 15:28:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

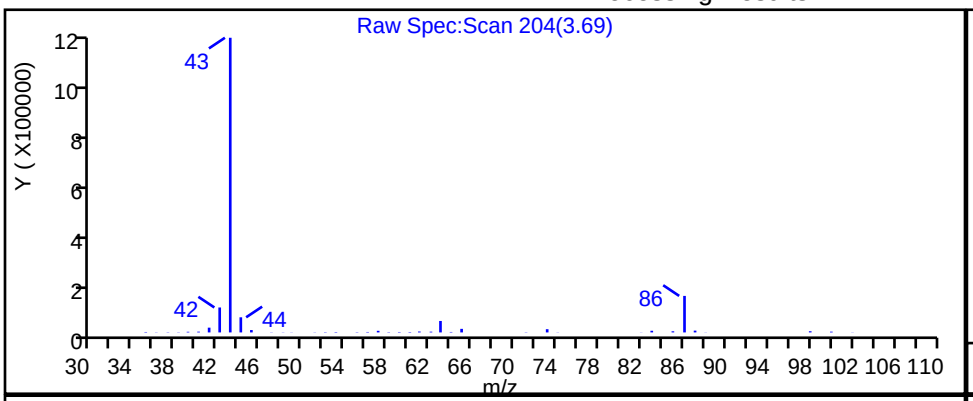
User Disabled Compound Report

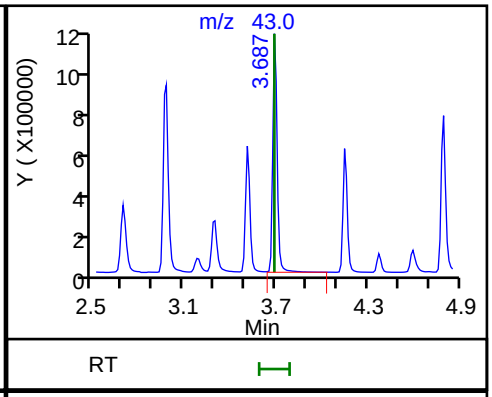
Eurofins TestAmerica, Canton

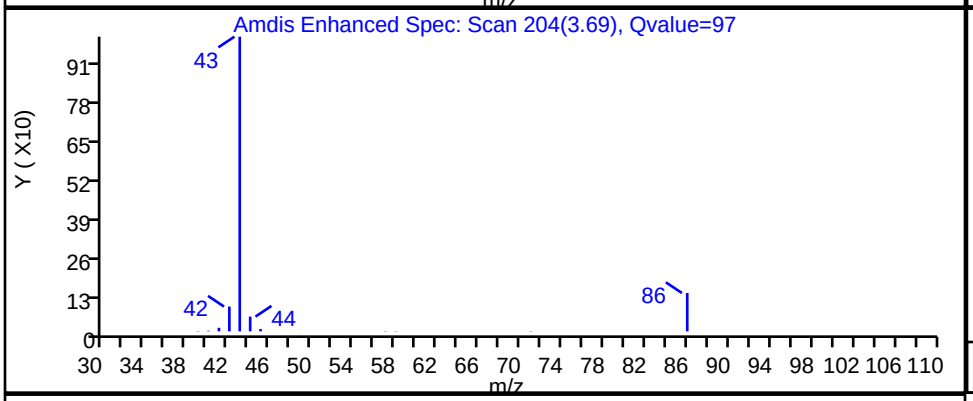
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269795.D
Injection Date: 30-Apr-2019 14:10:30 Instrument ID: A3UX12
Lims ID: std8260 L7
Client ID:
Operator ID: 001904 ALS Bottle#: 2 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

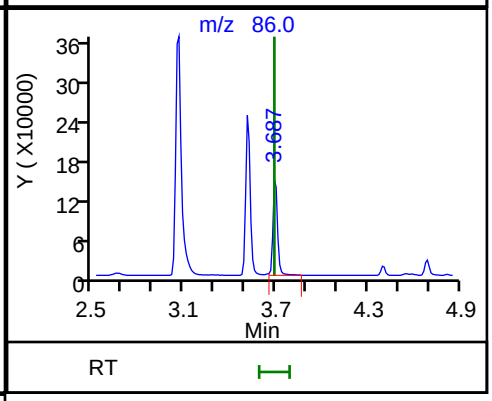
## 36 Vinyl acetate, CAS: 108-05-4

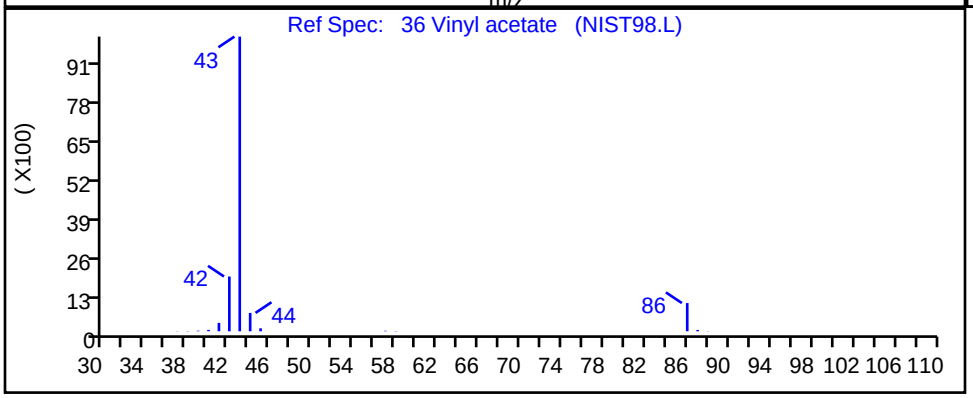
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.69 | 43.00 | 2383821 | 69.721119 |
| 3.69 | 86.00 | 313435 | |

Reviewer: laveyt, 30-Apr-2019 15:25:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269796.D
Lims ID: std8260 L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 30-Apr-2019 14:33:30 ALS Bottle#: 3 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-009
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:19 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 15:00:42

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1251919 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.757 | 7.758 | -0.001 | 83 | 873681 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 92 | 477326 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 988457 | 60.0 | 59.4 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 99 | 1110364 | 60.0 | 59.4 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 3550979 | 60.0 | 57.4 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 1310206 | 60.0 | 57.5 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 100 | 1567191 | 60.0 | 65.0 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 98 | 1257715 | 60.0 | 59.5 | |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 88 | 1449292 | 60.0 | 62.4 | |
| 12 Vinyl chloride | 62 | 1.675 | 1.675 | 0.000 | 97 | 1455844 | 60.0 | 61.7 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 90 | 883232 | 60.0 | 60.6 | |
| 15 Chloroethane | 64 | 1.983 | 1.995 | -0.012 | 99 | 918797 | 60.0 | 62.0 | |
| 16 Dichlorofluoromethane | 67 | 2.172 | 2.172 | 0.000 | 98 | 1807740 | 60.0 | 61.0 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 99 | 1662729 | 60.0 | 63.2 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 929149 | 60.0 | 58.8 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 1380457 | 300.0 | 292.2 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 1522285 | 60.0 | 58.8 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 94 | 1054000 | 60.0 | 61.5 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 1067191 | 120.0 | 119.8 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 1619670 | 60.0 | 58.9 | |
| 25 Carbon disulfide | 76 | 2.811 | 2.823 | -0.012 | 99 | 3310792 | 60.0 | 55.6 | |
| 27 3-Chloro-1-propene | 41 | 2.941 | 2.953 | -0.012 | 93 | 1697487 | 60.0 | 57.5 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 2530486 | 120.0 | 116.2 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 89 | 1311846 | 60.0 | 59.6 | |
| 30 2-Methyl-2-propanol | 59 | 3.178 | 3.166 | 0.012 | 100 | 2552659 | 600.0 | 557.0 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 6486159 | 600.0 | 572.2 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 98 | 1450217 | 60.0 | 57.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.296 | 3.285 | 0.011 | 94 | 3027404 | 60.0 | 57.6 | |
| 34 Hexane | 57 | 3.509 | 3.510 | -0.001 | 89 | 1702774 | 60.0 | 61.3 | |
| 35 1,1-Dichloroethane | 63 | 3.651 | 3.652 | -0.001 | 96 | 1856520 | 60.0 | 58.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 2173371 | 60.0 | 61.0 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 60 | 1156337 | 60.0 | 56.2 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 80 | 1255612 | 60.0 | 58.2 | |
| 42 2-Butanone (MEK) | 72 | 4.148 | 4.149 | -0.001 | 99 | 482200 | 120.0 | 123.6 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 95 | 858112 | 60.0 | 56.8 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 86 | 1132369 | 120.0 | 120.6 | |
| 48 Chloroform | 83 | 4.397 | 4.397 | 0.000 | 93 | 1766502 | 60.0 | 58.3 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 1574408 | 60.0 | 60.5 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 1928649 | 60.0 | 61.0 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 1521069 | 60.0 | 59.1 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 79 | 1327796 | 60.0 | 60.0 | |
| 53 Isobutyl alcohol | 41 | 4.799 | 4.788 | 0.011 | 94 | 1784970 | 1500.0 | 1434.1 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 95 | 4341955 | 60.0 | 58.9 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 1329568 | 60.0 | 58.6 | |
| 57 n-Heptane | 57 | 5.071 | 5.071 | 0.000 | 93 | 841832 | 60.0 | 61.6 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 97 | 1167306 | 60.0 | 59.2 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.568 | 0.000 | 86 | 2177617 | 60.0 | 61.6 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 93 | 937223 | 60.0 | 60.2 | |
| 64 Dibromomethane | 174 | 5.710 | 5.710 | 0.000 | 97 | 757811 | 60.0 | 57.4 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 90 | 298901 | 1200.0 | 1193.3 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 1304681 | 60.0 | 61.4 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 1435551 | 120.0 | 127.0 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 96 | 1566673 | 60.0 | 60.5 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.349 | 6.349 | 0.000 | 95 | 2858560 | 120.0 | 119.1 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 4263658 | 60.0 | 58.3 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.704 | 0.000 | 92 | 1400355 | 60.0 | 59.2 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.775 | 0.000 | 89 | 1413898 | 60.0 | 62.0 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 91 | 861361 | 60.0 | 59.3 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 97 | 1157587 | 60.0 | 59.6 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 1521180 | 60.0 | 59.0 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 93 | 2004012 | 120.0 | 114.7 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 919717 | 60.0 | 60.9 | |
| 81 Ethylene Dibromide | 107 | 7.331 | 7.332 | -0.001 | 98 | 941630 | 60.0 | 60.3 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 95 | 2734043 | 60.0 | 57.9 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 987481 | 60.0 | 59.9 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 1545630 | 60.0 | 58.7 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 1937780 | 60.0 | 59.3 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 1931683 | 60.0 | 58.5 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 94 | 3161922 | 60.0 | 59.7 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 98 | 697809 | 60.0 | 63.9 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 5047046 | 60.0 | 58.7 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 86 | 1444688 | 60.0 | 61.5 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 89 | 1209647 | 60.0 | 58.5 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 86 | 516092 | 60.0 | 58.0 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.059 | 9.047 | 0.012 | 81 | 451551 | 60.0 | 59.3 | |
| 96 N-Propylbenzene | 120 | 9.106 | 9.107 | -0.001 | 98 | 1416141 | 60.0 | 60.2 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 1168744 | 60.0 | 59.3 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 4038075 | 60.0 | 59.5 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 99 | 1186575 | 60.0 | 58.3 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 3712091 | 60.0 | 60.2 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 4146548 | 60.0 | 59.0 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 5308368 | 60.0 | 59.8 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 2338079 | 60.0 | 57.4 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 4555449 | 60.0 | 59.4 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 96 | 2363448 | 60.0 | 56.4 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 3900305 | 60.0 | 59.6 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 98 | 2247875 | 60.0 | 56.9 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 94 | 477069 | 60.0 | 62.2 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 94 | 1562937 | 60.0 | 56.6 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 96 | 675267 | 60.0 | 55.4 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 5009873 | 60.0 | 57.9 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 1426661 | 60.0 | 55.9 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 240.0 | 244.5 | |
| S 125 Total BTEX | 1 | | | | 0 | | 300.0 | 293.7 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 115.3 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 119.7 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 120.0 | 117.8 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 48.00 | Units: uL |
| vm50ss_00362 | Amount Added: | 48.00 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 48.00 | Units: uL |
| vmrprimw_00331 | Amount Added: | 48.00 | Units: uL |

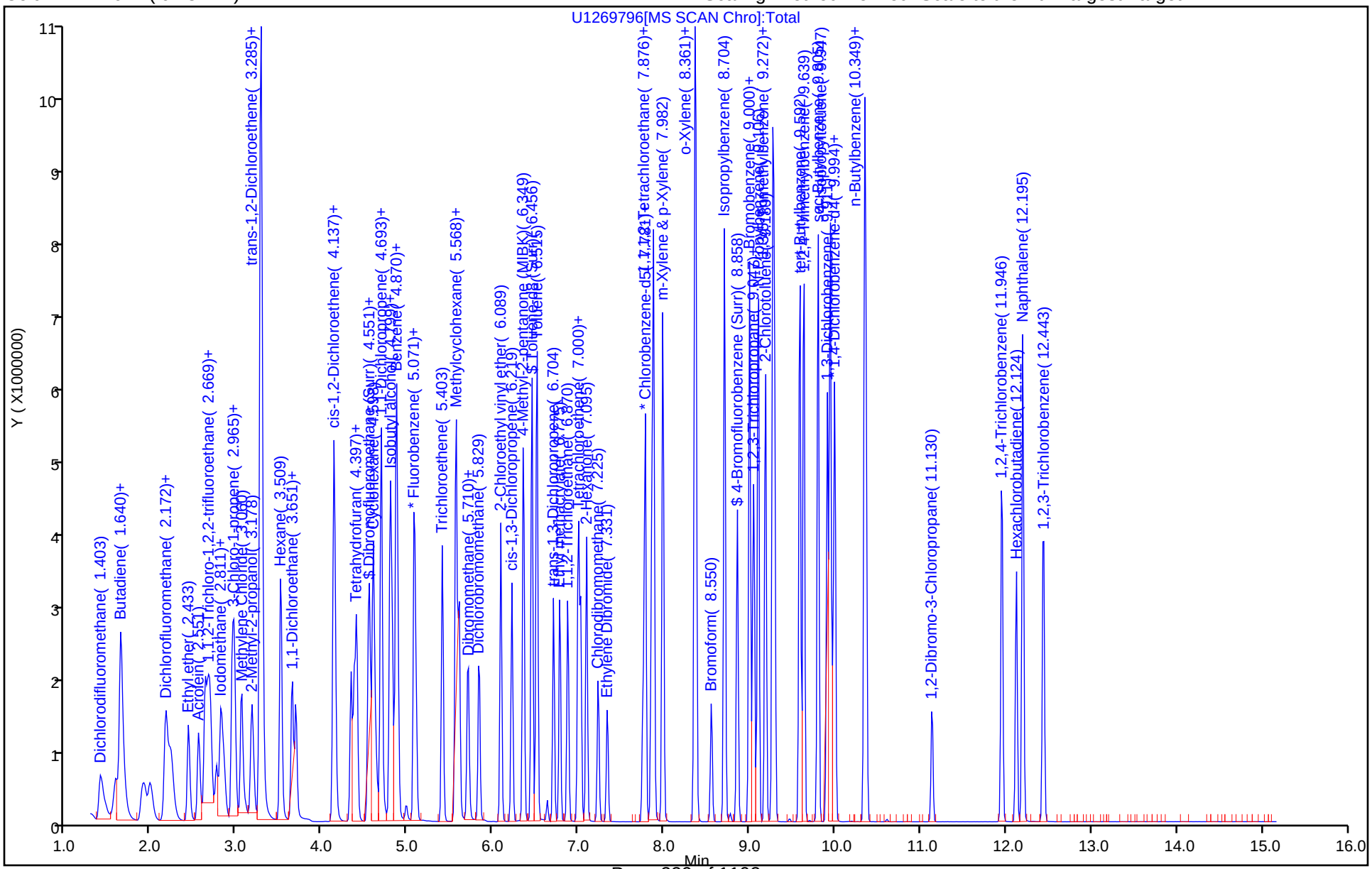
Report Date: 30-Apr-2019 17:22:24 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269796.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 14:33:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L6 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269797.D
Lims ID: std8260 L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Apr-2019 14:55:30 ALS Bottle#: 4 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-010
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:36 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 15:22:08

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1247371 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 848037 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.971 | 9.970 | 0.001 | 93 | 466349 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 680998 | 40.0 | 41.0 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 98 | 754824 | 40.0 | 40.5 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 2403057 | 40.0 | 40.0 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 95 | 874019 | 40.0 | 39.5 | |
| 9 Dichlorodifluoromethane | 85 | 1.404 | 1.403 | 0.001 | 99 | 1030351 | 40.0 | 42.9 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 99 | 863765 | 40.0 | 41.0 | |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 87 | 960327 | 40.0 | 41.5 | |
| 12 Vinyl chloride | 62 | 1.664 | 1.675 | -0.011 | 98 | 970649 | 40.0 | 41.3 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 90 | 590824 | 40.0 | 40.7 | |
| 15 Chloroethane | 64 | 1.983 | 1.995 | -0.012 | 99 | 592754 | 40.0 | 40.1 | |
| 16 Dichlorofluoromethane | 67 | 2.161 | 2.172 | -0.011 | 97 | 1183160 | 40.0 | 40.1 | |
| 17 Trichlorofluoromethane | 101 | 2.208 | 2.220 | -0.012 | 98 | 1094737 | 40.0 | 41.8 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 641131 | 40.0 | 40.7 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 946268 | 200.0 | 201.0 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 1043595 | 40.0 | 40.5 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.658 | 2.669 | -0.011 | 93 | 708990 | 40.0 | 41.5 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 729471 | 80.0 | 81.5 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 1115860 | 40.0 | 40.7 | |
| 25 Carbon disulfide | 76 | 2.823 | 2.823 | 0.000 | 99 | 2267883 | 40.0 | 38.2 | |
| 27 3-Chloro-1-propene | 41 | 2.942 | 2.953 | -0.011 | 93 | 1176034 | 40.0 | 40.0 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 1715851 | 80.0 | 79.1 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 90 | 930086 | 40.0 | 41.6 | |
| 30 2-Methyl-2-propanol | 59 | 3.178 | 3.166 | 0.012 | 100 | 1790088 | 400.0 | 392.0 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 4436089 | 400.0 | 392.7 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 98 | 1013326 | 40.0 | 40.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.285 | 3.285 | 0.000 | 94 | 2131851 | 40.0 | 40.7 | |
| 34 Hexane | 57 | 3.510 | 3.510 | 0.000 | 90 | 1142313 | 40.0 | 41.3 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 96 | 1284657 | 40.0 | 40.7 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 1462850 | 40.0 | 41.2 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 61 | 841953 | 40.0 | 41.1 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 81 | 866934 | 40.0 | 40.4 | |
| 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 99 | 322049 | 80.0 | 82.9 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 95 | 598675 | 40.0 | 39.8 | |
| 47 Tetrahydrofuran | 42 | 4.374 | 4.373 | 0.001 | 86 | 755334 | 80.0 | 80.7 | |
| 48 Chloroform | 83 | 4.397 | 4.397 | 0.000 | 95 | 1231881 | 40.0 | 40.8 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 1083939 | 40.0 | 41.8 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 1285622 | 40.0 | 40.8 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 95 | 1034085 | 40.0 | 40.4 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 82 | 940122 | 40.0 | 42.7 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 94 | 1254651 | 1000.0 | 1011.7 | |
| 54 Benzene | 78 | 4.871 | 4.870 | 0.001 | 95 | 2963156 | 40.0 | 40.3 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 908435 | 40.0 | 40.2 | |
| 57 n-Heptane | 57 | 5.072 | 5.071 | 0.001 | 94 | 571599 | 40.0 | 41.0 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 96 | 793097 | 40.0 | 40.3 | |
| 61 Methylcyclohexane | 83 | 5.569 | 5.568 | 0.001 | 86 | 1493017 | 40.0 | 42.4 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 94 | 643520 | 40.0 | 41.5 | |
| 64 Dibromomethane | 174 | 5.711 | 5.710 | 0.001 | 96 | 529643 | 40.0 | 40.2 | |
| 65 1,4-Dioxane | 88 | 5.723 | 5.722 | 0.001 | 90 | 212766 | 800.0 | 852.6 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 894000 | 40.0 | 42.2 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 945507 | 80.0 | 83.9 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.220 | 6.219 | 0.001 | 97 | 1063891 | 40.0 | 41.3 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.350 | 6.349 | 0.001 | 95 | 1951525 | 80.0 | 81.6 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 2883485 | 40.0 | 40.6 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.705 | 6.704 | 0.001 | 92 | 945703 | 40.0 | 41.2 | |
| 74 Ethyl methacrylate | 69 | 6.776 | 6.775 | 0.001 | 89 | 952052 | 40.0 | 43.0 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 91 | 581540 | 40.0 | 41.2 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 784044 | 40.0 | 41.6 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 1025142 | 40.0 | 41.0 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 93 | 1354308 | 80.0 | 79.9 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 633936 | 40.0 | 43.3 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 98 | 633639 | 40.0 | 41.8 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 1876430 | 40.0 | 41.0 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 674622 | 40.0 | 42.1 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 1066262 | 40.0 | 41.7 | |
| 86 m-Xylene & p-Xylene | 106 | 7.983 | 7.982 | 0.001 | 99 | 1329053 | 40.0 | 41.9 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 96 | 1331003 | 40.0 | 41.5 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 95 | 2156541 | 40.0 | 41.9 | |
| 89 Bromoform | 173 | 8.551 | 8.550 | 0.001 | 97 | 475190 | 40.0 | 44.8 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 3506656 | 40.0 | 42.0 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 86 | 982071 | 40.0 | 42.8 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 88 | 818090 | 40.0 | 40.5 | |
| 95 1,2,3-Trichloropropane | 110 | 9.048 | 9.047 | 0.001 | 84 | 356976 | 40.0 | 41.1 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.048 | 9.047 | 0.001 | 91 | 305416 | 40.0 | 41.1 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 98 | 966595 | 40.0 | 42.0 | |
| 97 2-Chlorotoluene | 126 | 9.190 | 9.189 | 0.001 | 98 | 813877 | 40.0 | 42.2 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 2808258 | 40.0 | 42.4 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 97 | 815761 | 40.0 | 41.0 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 2579873 | 40.0 | 42.9 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 2883392 | 40.0 | 42.0 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 3709245 | 40.0 | 42.8 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 1612862 | 40.0 | 40.5 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 3212945 | 40.0 | 42.9 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 96 | 1641044 | 40.0 | 40.1 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 2709817 | 40.0 | 42.4 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 1554362 | 40.0 | 40.3 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 92 | 325575 | 40.0 | 43.5 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.947 | 11.946 | 0.001 | 94 | 1096024 | 40.0 | 40.7 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 95 | 469488 | 40.0 | 39.4 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 3569051 | 40.0 | 42.3 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.444 | 12.443 | 0.001 | 96 | 1001370 | 40.0 | 40.1 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 160.0 | 171.1 | |
| S 125 Total BTEX | 1 | | | | 0 | | 200.0 | 206.1 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 80.3 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 82.4 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 80.0 | 83.4 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 32.00 | Units: uL |
| vm50ss_00362 | Amount Added: | 32.00 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 32.00 | Units: uL |
| vmrprimw_00331 | Amount Added: | 32.00 | Units: uL |

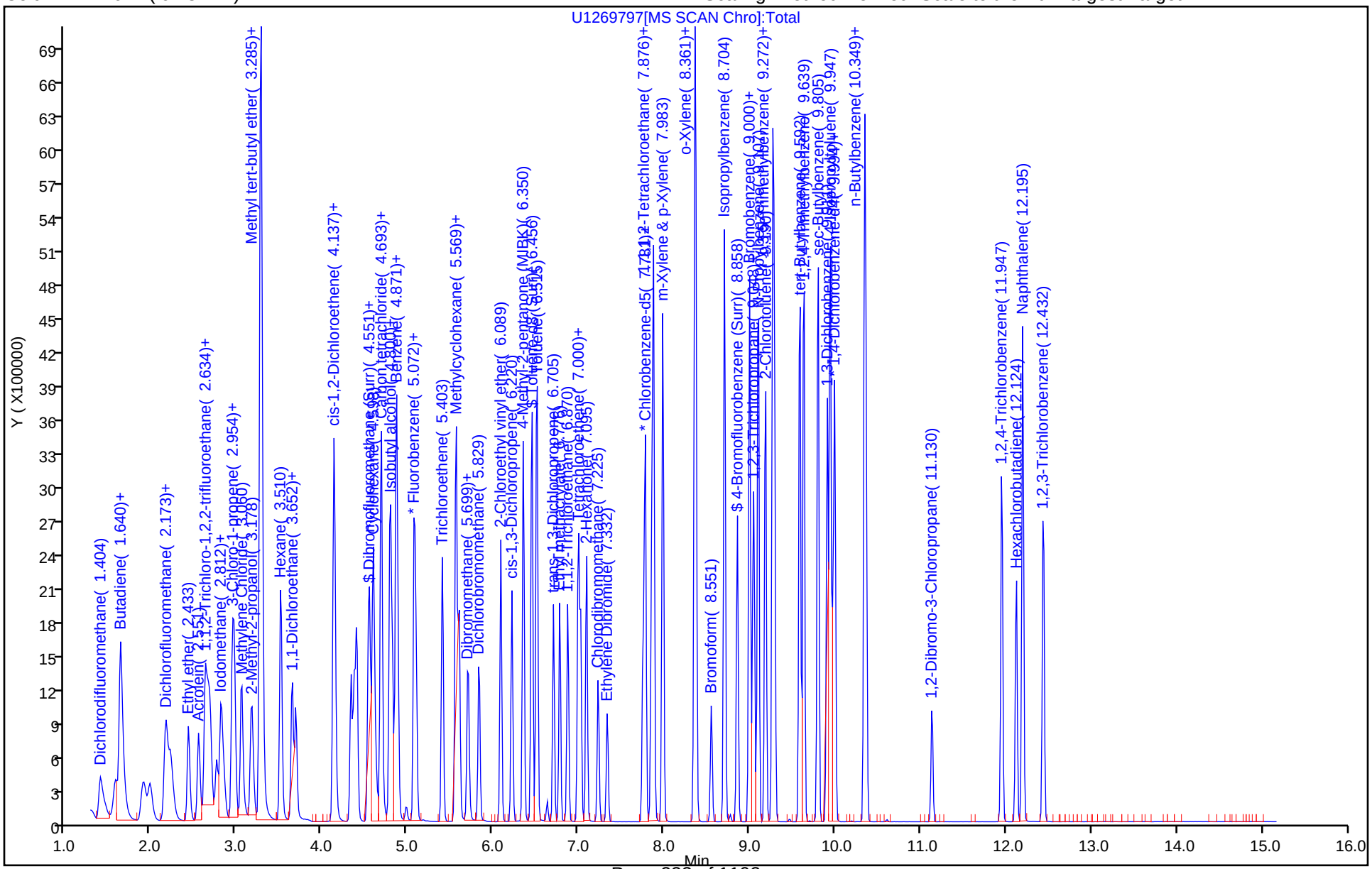
Report Date: 30-Apr-2019 17:22:42 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269797.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 14:55:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L5 | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269798.D
Lims ID: ICIS L4
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 30-Apr-2019 15:17:30 ALS Bottle#: 5 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-011
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:22:54 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:03:23

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1246876 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 83 | 855324 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 94 | 464704 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 332600 | 20.0 | 20.1 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 96 | 366398 | 20.0 | 19.7 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 1181805 | 20.0 | 19.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 95 | 426237 | 20.0 | 19.1 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 99 | 496091 | 20.0 | 20.7 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 99 | 403612 | 20.0 | 19.2 | |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 88 | 460371 | 20.0 | 19.9 | |
| 12 Vinyl chloride | 62 | 1.675 | 1.675 | 0.000 | 97 | 463335 | 20.0 | 19.7 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 90 | 290732 | 20.0 | 20.0 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 99 | 292854 | 20.0 | 19.8 | |
| 16 Dichlorofluoromethane | 67 | 2.172 | 2.172 | 0.000 | 97 | 575498 | 20.0 | 19.5 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 99 | 524611 | 20.0 | 20.0 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 308106 | 20.0 | 19.6 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 454386 | 100.0 | 96.6 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 508373 | 20.0 | 19.7 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 94 | 345600 | 20.0 | 20.3 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 354093 | 40.0 | 38.4 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 538227 | 20.0 | 19.6 | |
| 25 Carbon disulfide | 76 | 2.823 | 2.823 | 0.000 | 99 | 1117299 | 20.0 | 18.8 | |
| 27 3-Chloro-1-propene | 41 | 2.953 | 2.953 | 0.000 | 92 | 560067 | 20.0 | 19.1 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 825132 | 40.0 | 38.0 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 90 | 464186 | 20.0 | 19.4 | |
| 30 2-Methyl-2-propanol | 59 | 3.166 | 3.166 | 0.000 | 100 | 872907 | 200.0 | 191.3 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 2135420 | 200.0 | 189.1 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 71 | 492658 | 20.0 | 19.4 | |
| 33 Methyl tert-butyl ether | 73 | 3.285 | 3.285 | 0.000 | 94 | 1039087 | 20.0 | 19.8 | |
| 34 Hexane | 57 | 3.510 | 3.510 | 0.000 | 90 | 557732 | 20.0 | 20.2 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 96 | 622049 | 20.0 | 19.7 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 700651 | 20.0 | 19.7 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 61 | 412857 | 20.0 | 20.1 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 80 | 417933 | 20.0 | 19.5 | |
| 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 99 | 151425 | 40.0 | 39.0 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 288735 | 20.0 | 19.2 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 86 | 360495 | 40.0 | 38.5 | |
| 48 Chloroform | 83 | 4.397 | 4.397 | 0.000 | 94 | 602114 | 20.0 | 19.9 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 533200 | 20.0 | 20.6 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 642956 | 20.0 | 20.4 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 504905 | 20.0 | 19.7 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 81 | 453383 | 20.0 | 20.6 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 94 | 615511 | 500.0 | 496.5 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 95 | 1437120 | 20.0 | 19.6 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 441298 | 20.0 | 19.5 | |
| 57 n-Heptane | 57 | 5.071 | 5.071 | 0.000 | 90 | 299975 | 20.0 | 20.1 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 96 | 387176 | 20.0 | 19.7 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.568 | 0.000 | 85 | 720921 | 20.0 | 20.5 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 93 | 307704 | 20.0 | 19.8 | |
| 64 Dibromomethane | 174 | 5.710 | 5.710 | 0.000 | 97 | 249664 | 20.0 | 19.0 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 90 | 110260 | 400.0 | 442.0 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 425494 | 20.0 | 20.1 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 453314 | 40.0 | 40.3 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 97 | 507172 | 20.0 | 19.7 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.349 | 6.349 | 0.000 | 95 | 939875 | 40.0 | 39.3 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 1384009 | 20.0 | 19.3 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.704 | 0.000 | 92 | 450107 | 20.0 | 19.4 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.775 | 0.000 | 89 | 458650 | 20.0 | 20.5 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 90 | 277803 | 20.0 | 19.5 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 377626 | 20.0 | 19.8 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 490824 | 20.0 | 19.5 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 93 | 674546 | 40.0 | 39.4 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 298689 | 20.0 | 20.2 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 98 | 304693 | 20.0 | 19.9 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 892667 | 20.0 | 19.3 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 316979 | 20.0 | 19.6 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 512928 | 20.0 | 19.9 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 646378 | 20.0 | 20.2 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 648657 | 20.0 | 20.1 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 95 | 1042824 | 20.0 | 20.1 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 97 | 228364 | 20.0 | 21.4 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 1698359 | 20.0 | 20.2 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 86 | 473524 | 20.0 | 20.7 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 87 | 400745 | 20.0 | 19.9 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 84 | 173052 | 20.0 | 20.0 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.047 | 9.047 | 0.000 | 93 | 148061 | 20.0 | 20.0 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 98 | 470058 | 20.0 | 20.5 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 385627 | 20.0 | 20.1 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 1351432 | 20.0 | 20.5 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 97 | 390042 | 20.0 | 19.7 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 1219799 | 20.0 | 20.3 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 1387358 | 20.0 | 20.3 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 1774243 | 20.0 | 20.5 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 777449 | 20.0 | 19.6 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 1531521 | 20.0 | 20.5 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 96 | 792152 | 20.0 | 19.4 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 97 | 1300578 | 20.0 | 20.4 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 748334 | 20.0 | 19.5 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 90 | 148124 | 20.0 | 19.8 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.946 | 11.946 | 0.000 | 94 | 494279 | 20.0 | 18.4 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 95 | 224541 | 20.0 | 18.9 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 1637491 | 20.0 | 19.5 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 456339 | 20.0 | 18.4 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 81.6 | |
| S 125 Total BTEX | 1 | | | | 0 | | 100.0 | 99.1 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 40.3 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 16.00 | Units: uL |
| vm50ss_00362 | Amount Added: | 16.00 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 16.00 | Units: uL |
| vmrprimw_00331 | Amount Added: | 16.00 | Units: uL |

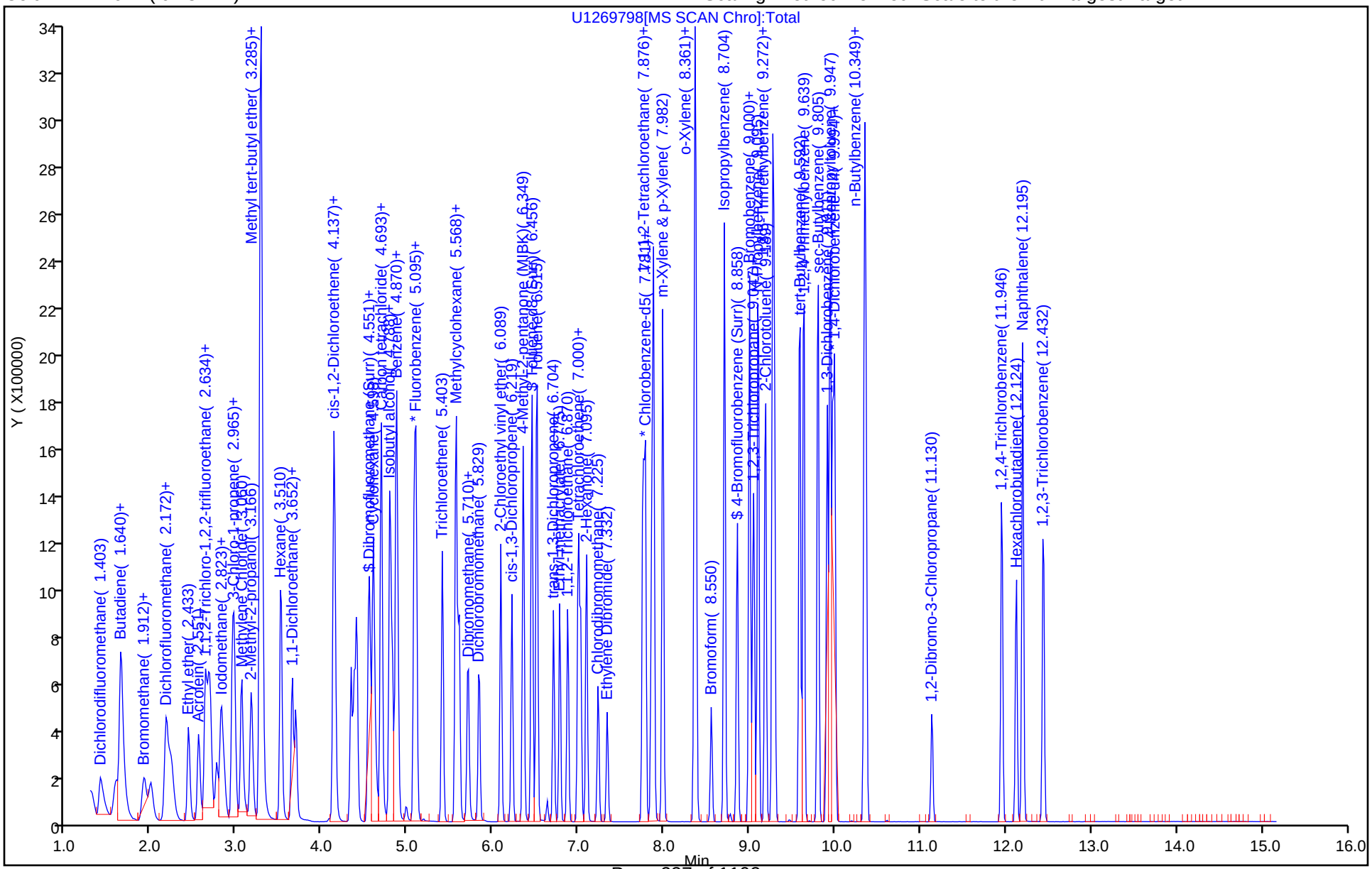
Report Date: 30-Apr-2019 17:22:59 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269798.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 15:17:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | ICIS L4 | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269799.D
Lims ID: std8260 L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Apr-2019 15:39:30 ALS Bottle#: 6 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-012
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:11 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:01:02

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1239226 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.757 | 7.758 | -0.001 | 85 | 833142 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 93 | 455662 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 158064 | 10.0 | 9.59 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 96 | 176503 | 10.0 | 9.53 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 580962 | 10.0 | 9.84 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 93 | 211821 | 10.0 | 9.74 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 100 | 224597 | 10.0 | 9.41 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 98 | 214265 | 10.0 | 10.2 | |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 86 | 222795 | 10.0 | 9.70 | |
| 12 Vinyl chloride | 62 | 1.675 | 1.675 | 0.000 | 97 | 233314 | 10.0 | 9.99 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 90 | 151619 | 10.0 | 10.5 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 99 | 148379 | 10.0 | 10.1 | |
| 16 Dichlorofluoromethane | 67 | 2.172 | 2.172 | 0.000 | 97 | 299518 | 10.0 | 10.2 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 98 | 261265 | 10.0 | 10.0 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 157567 | 10.0 | 10.1 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 100 | 239777 | 50.0 | 51.3 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 98 | 255094 | 10.0 | 9.96 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 93 | 171045 | 10.0 | 10.1 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 195589 | 20.0 | 20.4 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 265387 | 10.0 | 9.75 | |
| 25 Carbon disulfide | 76 | 2.823 | 2.823 | 0.000 | 99 | 563594 | 10.0 | 9.56 | |
| 27 3-Chloro-1-propene | 41 | 2.953 | 2.953 | 0.000 | 93 | 284969 | 10.0 | 9.76 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 426943 | 20.0 | 19.8 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 91 | 262888 | 10.0 | 9.85 | |
| 30 2-Methyl-2-propanol | 59 | 3.166 | 3.166 | 0.000 | 100 | 452013 | 100.0 | 99.6 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 1113771 | 100.0 | 99.3 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.284 | 3.285 | -0.001 | 69 | 248232 | 10.0 | 9.86 | |
| 33 Methyl tert-butyl ether | 73 | 3.296 | 3.285 | 0.011 | 94 | 533312 | 10.0 | 10.2 | |
| 34 Hexane | 57 | 3.521 | 3.510 | 0.011 | 89 | 279012 | 10.0 | 10.2 | |
| 35 1,1-Dichloroethane | 63 | 3.651 | 3.652 | -0.001 | 95 | 315456 | 10.0 | 10.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 346293 | 10.0 | 9.81 | |
| 41 2,2-Dichloropropane | 77 | 4.136 | 4.137 | -0.001 | 61 | 202782 | 10.0 | 9.95 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.136 | 4.137 | -0.001 | 80 | 211496 | 10.0 | 9.91 | |
| 42 2-Butanone (MEK) | 72 | 4.148 | 4.149 | -0.001 | 98 | 78345 | 20.0 | 20.3 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 146065 | 10.0 | 9.77 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 86 | 185955 | 20.0 | 20.0 | |
| 48 Chloroform | 83 | 4.409 | 4.397 | 0.012 | 93 | 299618 | 10.0 | 9.98 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 258363 | 10.0 | 10.0 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 324586 | 10.0 | 10.4 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 255221 | 10.0 | 10.0 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 80 | 212237 | 10.0 | 9.69 | |
| 53 Isobutyl alcohol | 41 | 4.787 | 4.788 | -0.001 | 95 | 312412 | 250.0 | 253.6 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 95 | 727951 | 10.0 | 9.98 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 214099 | 10.0 | 9.53 | |
| 57 n-Heptane | 57 | 5.071 | 5.071 | 0.000 | 89 | 171315 | 10.0 | 10.3 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 97 | 187506 | 10.0 | 9.60 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.568 | 0.000 | 86 | 361953 | 10.0 | 10.3 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 94 | 154817 | 10.0 | 10.0 | |
| 64 Dibromomethane | 174 | 5.710 | 5.710 | 0.000 | 93 | 122075 | 10.0 | 9.34 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 89 | 58179 | 200.0 | 234.7 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 99 | 208118 | 10.0 | 9.89 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 230721 | 20.0 | 20.6 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 97 | 248543 | 10.0 | 9.70 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.349 | 6.349 | 0.000 | 95 | 479830 | 20.0 | 20.2 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 693965 | 10.0 | 9.95 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.704 | 0.000 | 92 | 219235 | 10.0 | 9.71 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.775 | 0.000 | 88 | 229870 | 10.0 | 10.6 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 89 | 138863 | 10.0 | 10.0 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 186459 | 10.0 | 10.1 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 244890 | 10.0 | 9.97 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 93 | 347483 | 20.0 | 20.9 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 141322 | 10.0 | 9.82 | |
| 81 Ethylene Dibromide | 107 | 7.331 | 7.332 | -0.001 | 99 | 146267 | 10.0 | 9.81 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 442384 | 10.0 | 9.83 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 154999 | 10.0 | 9.86 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 254036 | 10.0 | 10.1 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 314453 | 10.0 | 10.1 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 311889 | 10.0 | 9.90 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 94 | 501125 | 10.0 | 9.92 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 97 | 103500 | 10.0 | 9.94 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 836910 | 10.0 | 10.2 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 86 | 237420 | 10.0 | 10.6 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 89 | 192642 | 10.0 | 9.76 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 84 | 84888 | 10.0 | 10.0 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.047 | 9.047 | 0.000 | 80 | 71337 | 10.0 | 9.82 | |
| 96 N-Propylbenzene | 120 | 9.106 | 9.107 | -0.001 | 99 | 227545 | 10.0 | 10.1 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 187392 | 10.0 | 9.95 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 660502 | 10.0 | 10.2 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 99 | 190484 | 10.0 | 9.80 | |
| 102 tert-Butylbenzene | 119 | 9.591 | 9.592 | -0.001 | 91 | 597272 | 10.0 | 10.2 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 681127 | 10.0 | 10.2 | |
| 105 sec-Butylbenzene | 105 | 9.804 | 9.805 | -0.001 | 93 | 878572 | 10.0 | 10.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 376754 | 10.0 | 9.69 | |
| 107 4-Isopropyltoluene | 119 | 9.946 | 9.947 | -0.001 | 97 | 745472 | 10.0 | 10.2 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 95 | 379011 | 10.0 | 9.47 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 629870 | 10.0 | 10.1 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 360738 | 10.0 | 9.57 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 89 | 71305 | 10.0 | 9.74 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 94 | 233740 | 10.0 | 8.87 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 96 | 102755 | 10.0 | 8.83 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 784648 | 10.0 | 9.51 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 212164 | 10.0 | 8.70 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 40.0 | 39.6 | |
| S 125 Total BTEX | 1 | | | | 0 | | 50.0 | 50.0 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 19.8 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 19.4 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 20.0 | 20.0 | |

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 8.00 | Units: uL |
| vm50ss_00362 | Amount Added: | 8.00 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 8.00 | Units: uL |
| vmrprimw_00331 | Amount Added: | 8.00 | Units: uL |

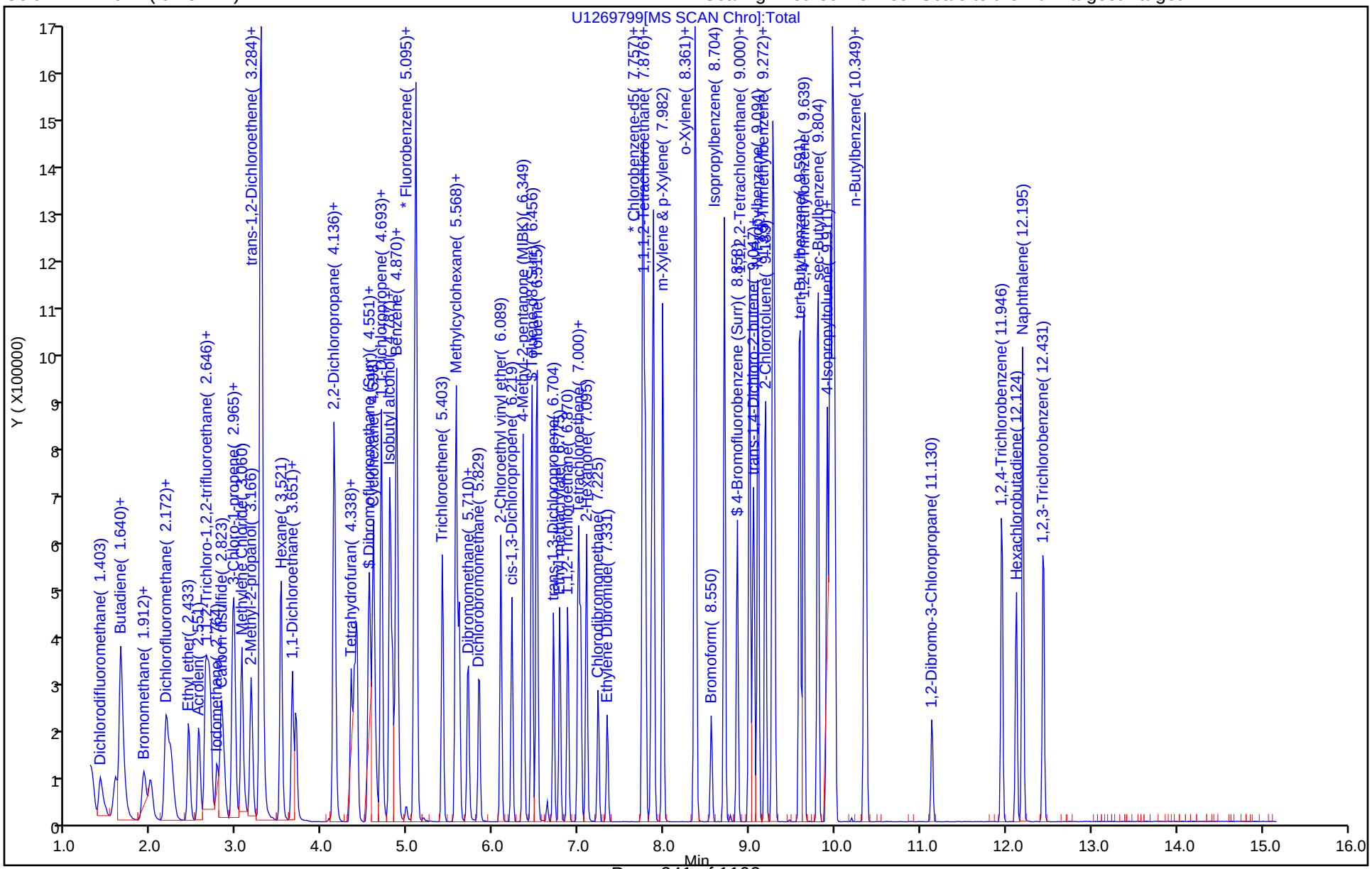
Report Date: 30-Apr-2019 17:23:17 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269799.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 15:39:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L3 | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 6 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D
Lims ID: std8260 L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Apr-2019 16:02:30 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-013
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:30 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:24:40

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1208766 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 823058 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.971 | 9.970 | 0.001 | 94 | 473669 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 93 | 16968 | 1.00 | 1.06 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 96 | 20365 | 1.00 | 1.13 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 93 | 66709 | 1.00 | 1.14 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 93 | 25525 | 1.00 | 1.19 | |
| 9 Dichlorodifluoromethane | 85 | 1.404 | 1.403 | 0.001 | 95 | 19984 | 1.00 | 0.8588 | |
| 10 Chloromethane | 50 | 1.581 | 1.581 | 0.000 | 96 | 19082 | 1.00 | 0.9357 | M |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 86 | 21365 | 1.00 | 0.9532 | |
| 12 Vinyl chloride | 62 | 1.676 | 1.675 | 0.001 | 95 | 22643 | 1.00 | 0.99 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 87 | 15275 | 1.00 | 1.09 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 98 | 14836 | 1.00 | 1.04 | |
| 16 Dichlorofluoromethane | 67 | 2.173 | 2.172 | 0.001 | 95 | 29001 | 1.00 | 1.01 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 96 | 23742 | 1.00 | 0.9345 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 88 | 15857 | 1.00 | 1.04 | |
| 20 Acrolein | 56 | 2.563 | 2.551 | 0.012 | 99 | 22786 | 5.00 | 4.99 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 25123 | 1.00 | 1.01 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.670 | 2.669 | 0.001 | 89 | 15799 | 1.00 | 0.9553 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 99 | 35750 | 2.00 | 2.01 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 98 | 27241 | 1.00 | 1.03 | |
| 25 Carbon disulfide | 76 | 2.823 | 2.823 | 0.000 | 99 | 63418 | 1.00 | 1.10 | |
| 27 3-Chloro-1-propene | 41 | 2.954 | 2.953 | 0.001 | 91 | 29262 | 1.00 | 1.03 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 96 | 43336 | 2.00 | 2.06 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 90 | 76885 | 1.00 | 1.02 | |
| 30 2-Methyl-2-propanol | 59 | 3.167 | 3.166 | 0.001 | 99 | 46009 | 10.0 | 10.4 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 100 | 114297 | 10.0 | 10.4 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.297 | 3.285 | 0.012 | 68 | 26151 | 1.00 | 1.06 | |
| 33 Methyl tert-butyl ether | 73 | 3.297 | 3.285 | 0.012 | 93 | 53530 | 1.00 | 1.05 | |
| 34 Hexane | 57 | 3.522 | 3.510 | 0.012 | 90 | 25038 | 1.00 | 0.9341 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 95 | 31501 | 1.00 | 1.03 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.699 | 3.687 | 0.012 | 97 | 34619 | 1.00 | 1.01 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 58 | 19842 | 1.00 | 1.00 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 80 | 22054 | 1.00 | 1.06 | |
| 42 2-Butanone (MEK) | 72 | 4.161 | 4.149 | 0.012 | 99 | 7212 | 2.00 | 1.92 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 92 | 15161 | 1.00 | 1.04 | |
| 47 Tetrahydrofuran | 42 | 4.374 | 4.373 | 0.001 | 85 | 17279 | 2.00 | 1.91 | |
| 48 Chloroform | 83 | 4.409 | 4.397 | 0.012 | 93 | 29434 | 1.00 | 1.01 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 24264 | 1.00 | 0.9658 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 29359 | 1.00 | 0.9622 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 24613 | 1.00 | 0.99 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 78 | 20029 | 1.00 | 0.9377 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 93 | 28500 | 25.0 | 23.7 | |
| 54 Benzene | 78 | 4.871 | 4.870 | 0.001 | 95 | 72564 | 1.00 | 1.02 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 23529 | 1.00 | 1.07 | |
| 57 n-Heptane | 57 | 5.095 | 5.071 | 0.024 | 87 | 49490 | 1.00 | 0.9500 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 94 | 19135 | 1.00 | 1.00 | |
| 61 Methylcyclohexane | 83 | 5.569 | 5.568 | 0.001 | 83 | 31043 | 1.00 | 0.9100 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 92 | 14544 | 1.00 | 0.9671 | |
| 64 Dibromomethane | 174 | 5.711 | 5.710 | 0.001 | 91 | 13696 | 1.00 | 1.07 | |
| 65 1,4-Dioxane | 88 | 5.723 | 5.722 | 0.001 | 27 | 4063 | 20.0 | 16.8 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 97 | 19488 | 1.00 | 0.9496 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 91 | 21468 | 2.00 | 1.97 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.220 | 6.219 | 0.001 | 95 | 24819 | 1.00 | 0.99 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.350 | 6.349 | 0.001 | 95 | 46025 | 2.00 | 1.99 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 69512 | 1.00 | 1.01 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.705 | 6.704 | 0.001 | 91 | 23230 | 1.00 | 1.04 | |
| 74 Ethyl methacrylate | 69 | 6.776 | 6.775 | 0.001 | 87 | 20354 | 1.00 | 0.9475 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 91 | 13079 | 1.00 | 0.9554 | |
| 76 Tetrachloroethene | 166 | 7.001 | 7.000 | 0.000 | 96 | 17463 | 1.00 | 0.9539 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 90 | 24096 | 1.00 | 0.99 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 92 | 32274 | 2.00 | 1.96 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 87 | 13420 | 1.00 | 0.9440 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 98 | 15068 | 1.00 | 1.02 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 95 | 44396 | 1.00 | 1.00 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 93 | 14884 | 1.00 | 0.9579 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 24504 | 1.00 | 0.9876 | |
| 86 m-Xylene & p-Xylene | 106 | 7.983 | 7.982 | 0.001 | 100 | 30946 | 1.00 | 1.01 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 96 | 31499 | 1.00 | 1.01 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 94 | 46924 | 1.00 | 0.9403 | |
| 89 Bromoform | 173 | 8.551 | 8.550 | 0.001 | 99 | 9669 | 1.00 | 0.9402 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 78943 | 1.00 | 0.9744 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 83 | 23506 | 1.00 | 1.01 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 88 | 20743 | 1.00 | 1.01 | |
| 95 1,2,3-Trichloropropane | 110 | 9.036 | 9.047 | -0.011 | 85 | 9133 | 1.00 | 1.04 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.048 | 9.047 | 0.001 | 80 | 7300 | 1.00 | 0.9665 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 98 | 21478 | 1.00 | 0.9194 | |
| 97 2-Chlorotoluene | 126 | 9.190 | 9.189 | 0.001 | 97 | 18750 | 1.00 | 0.9582 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 94 | 62930 | 1.00 | 0.9349 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 96 | 20976 | 1.00 | 1.04 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 55395 | 1.00 | 0.9059 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 65676 | 1.00 | 0.9421 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 81663 | 1.00 | 0.9278 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 97 | 41679 | 1.00 | 1.03 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 72056 | 1.00 | 0.9466 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 96 | 43811 | 1.00 | 1.05 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 97 | 62232 | 1.00 | 0.9586 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 98 | 39597 | 1.00 | 1.01 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 85 | 6783 | 1.00 | 0.8913 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.947 | 11.946 | 0.001 | 94 | 29197 | 1.00 | 1.07 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 93 | 14773 | 1.00 | 1.22 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 96 | 92597 | 1.00 | 1.08 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.444 | 12.443 | 0.001 | 95 | 27351 | 1.00 | 1.08 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 4.00 | 3.84 | |
| S 125 Total BTEX | 1 | | | | 0 | | 5.00 | 5.03 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 2.12 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 2.04 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 2.00 | 2.02 | |

## QC Flag Legend

Review Flags

M - Manually Integrated

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 0.80 | Units: uL |
| vm50ss_00362 | Amount Added: | 0.80 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 0.80 | Units: uL |
| vmrprimw_00331 | Amount Added: | 0.80 | Units: uL |

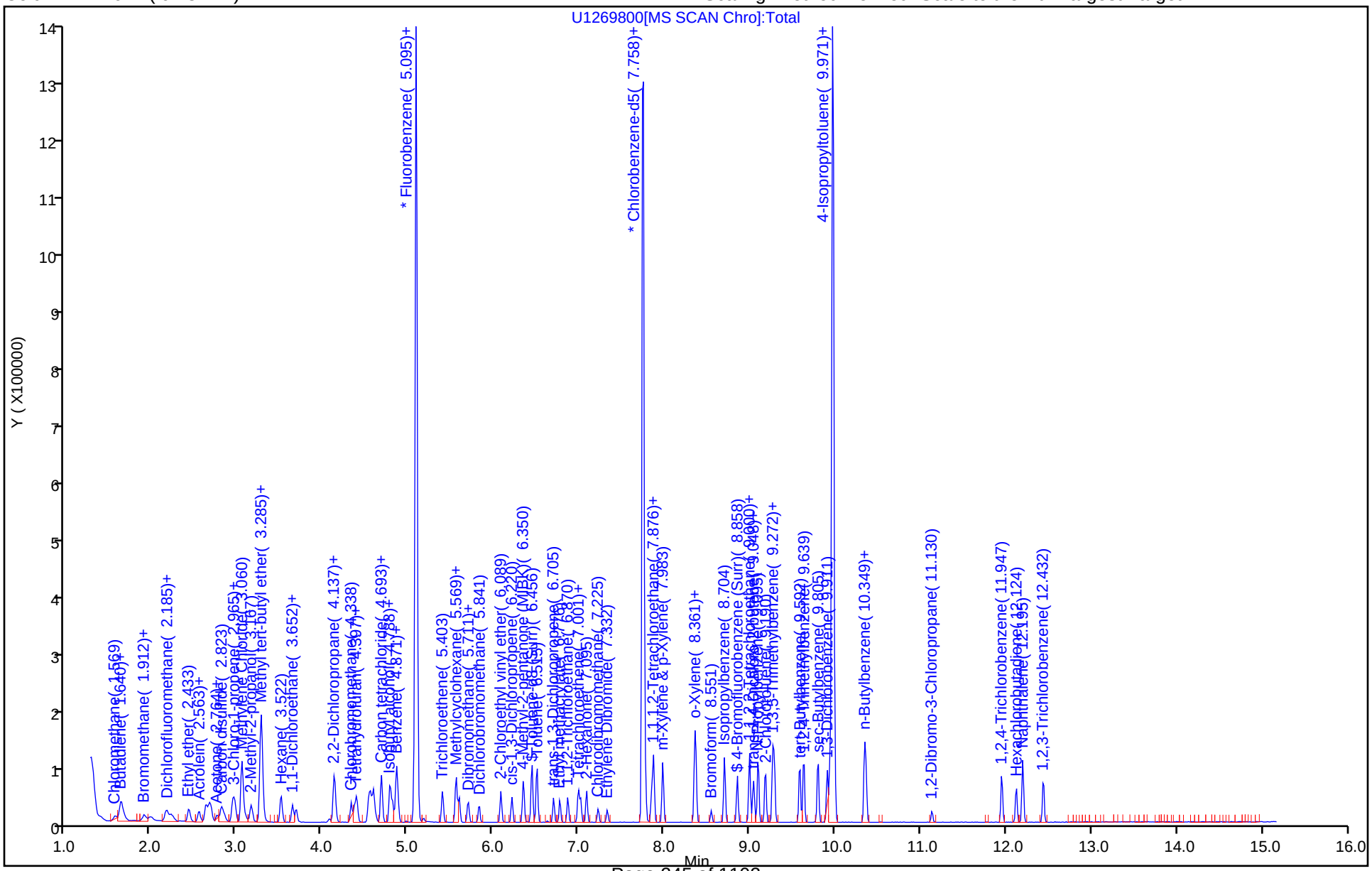
Report Date: 30-Apr-2019 17:23:35 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 16:02:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L2 | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

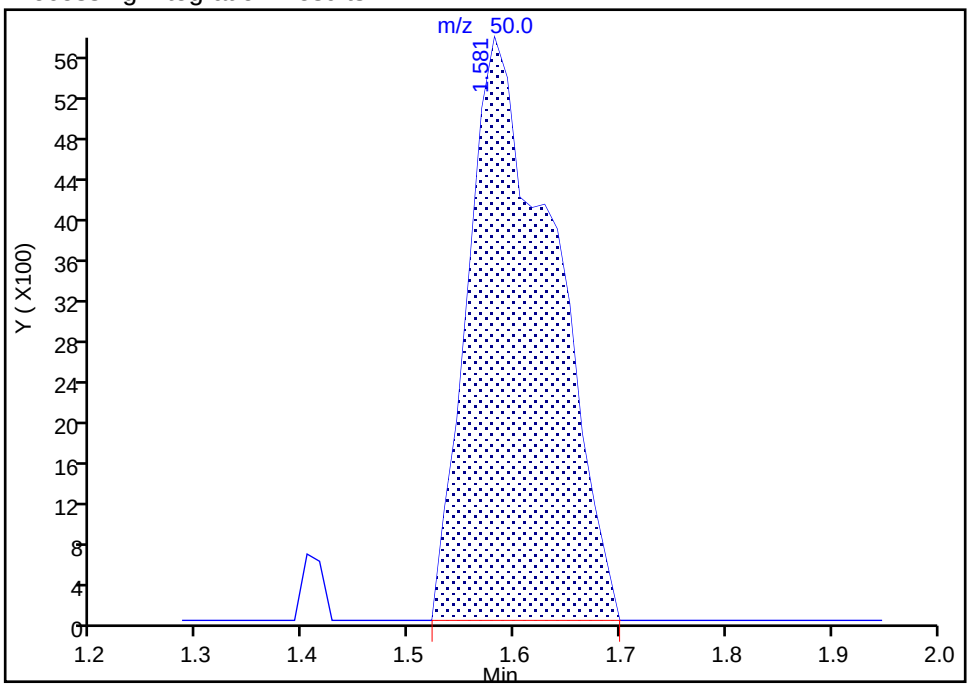
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269800.D
Injection Date: 30-Apr-2019 16:02:30 Instrument ID: A3UX12
Lims ID: std8260 L2
Client ID:
Operator ID: 001904 ALS Bottle#: 7 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 10 Chloromethane, CAS: 74-87-3

Signal: 1

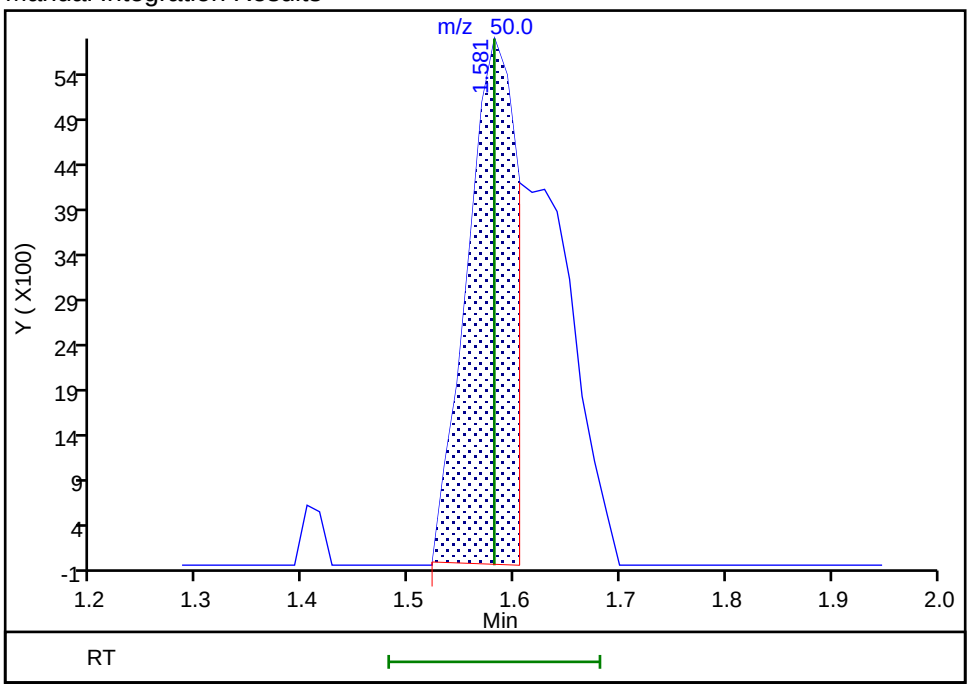
Processing Integration Results

RT: 1.58
Area: 32521
Amount: 1.095929
Amount Units: ug/l




Manual Integration Results

RT: 1.58
Area: 19082
Amount: 0.935716
Amount Units: ug/l




Reviewer: laveyt, 30-Apr-2019 16:22:33
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Lims ID: std8260 L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Apr-2019 16:24:30 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-014
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:23:43 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 16:52:44

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1216002 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 85 | 815231 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 95 | 464788 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | | 4.539 | | | | ND | ND | U |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | | 4.823 | | | | ND | ND | U |
| $ 6 Toluene-d8 (Surr) | 98 | | 6.456 | | | | ND | ND | U |
| $ 7 4-Bromofluorobenzene (Surr | 95 | | 8.858 | | | | ND | ND | U |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 95 | 11044 | 0.5000 | 0.4718 | |
| 10 Chloromethane | 50 | | 1.581 | | | | ND | ND | U |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 84 | 11073 | 0.5000 | 0.4911 | |
| 12 Vinyl chloride | 62 | 1.676 | 1.675 | 0.001 | 95 | 10733 | 0.5000 | 0.4681 | |
| 14 Bromomethane | 94 | 1.924 | 1.912 | 0.012 | 81 | 7170 | 0.5000 | 0.5066 | |
| 15 Chloroethane | 64 | 1.983 | 1.995 | -0.012 | 93 | 7695 | 0.5000 | 0.5344 | |
| 16 Dichlorofluoromethane | 67 | 2.173 | 2.172 | 0.001 | 95 | 14396 | 0.5000 | 0.5004 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 94 | 12502 | 0.5000 | 0.4891 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 92 | 8163 | 0.5000 | 0.5316 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 96 | 11833 | 2.50 | 2.58 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 94 | 13081 | 0.5000 | 0.5204 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.670 | 2.669 | 0.001 | 55 | 7988 | 0.5000 | 0.4801 | |
| 23 Acetone | 43 | | 2.693 | | | | ND | ND | U |
| 24 Iodomethane | 142 | 2.776 | 2.764 | 0.012 | 93 | 14045 | 0.5000 | 0.5256 | |
| 25 Carbon disulfide | 76 | 2.835 | 2.823 | 0.012 | 99 | 35208 | 0.5000 | 0.6085 | |
| 27 3-Chloro-1-propene | 41 | 2.954 | 2.953 | 0.001 | 92 | 16129 | 0.5000 | 0.5628 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 96 | 22700 | 1.00 | 1.07 | |
| 29 Methylene Chloride | 49 | | 3.060 | | | | ND | ND | U |
| 30 2-Methyl-2-propanol | 59 | 3.167 | 3.166 | 0.001 | 99 | 24459 | 5.00 | 5.49 | |
| 31 Acrylonitrile | 53 | 3.285 | 3.273 | 0.012 | 99 | 59579 | 5.00 | 5.41 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.297 | 3.285 | 0.012 | 73 | 13341 | 0.5000 | 0.5401 | |
| 33 Methyl tert-butyl ether | 73 | 3.297 | 3.285 | 0.012 | 93 | 26396 | 0.5000 | 0.5170 | |
| 34 Hexane | 57 | 3.522 | 3.510 | 0.012 | 90 | 13878 | 0.5000 | 0.5147 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 95 | 15738 | 0.5000 | 0.5109 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 96 | 16963 | 0.5000 | 0.4899 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 56 | 10546 | 0.5000 | 0.5275 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 79 | 10822 | 0.5000 | 0.5168 | |
| 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 99 | 3739 | 1.00 | 0.9870 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 91 | 8465 | 0.5000 | 0.5769 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 86 | 9753 | 1.00 | 1.07 | |
| 48 Chloroform | 83 | 4.409 | 4.397 | 0.012 | 92 | 15213 | 0.5000 | 0.5165 | |
| 49 1,1,1-Trichloroethane | 97 | 4.563 | 4.551 | 0.012 | 95 | 11924 | 0.5000 | 0.4718 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 86 | 15299 | 0.5000 | 0.4984 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 94 | 13318 | 0.5000 | 0.5331 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 78 | 10783 | 0.5000 | 0.5018 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 93 | 16262 | 12.5 | 13.5 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 94 | 37546 | 0.5000 | 0.5243 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 96 | 11902 | 0.5000 | 0.5400 | |
| 57 n-Heptane | 57 | | 5.071 | | | | ND | ND | U |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 90 | 10516 | 0.5000 | 0.5487 | |
| 61 Methylcyclohexane | 83 | 5.569 | 5.568 | 0.001 | 82 | 17502 | 0.5000 | 0.5100 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 93 | 7613 | 0.5000 | 0.5032 | |
| 64 Dibromomethane | 174 | 5.711 | 5.710 | 0.001 | 87 | 7633 | 0.5000 | 0.5950 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 27 | 2151 | 10.0 | 8.84 | |
| 66 Dichlorobromomethane | 83 | 5.841 | 5.829 | 0.012 | 95 | 10242 | 0.5000 | 0.4961 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 91 | 11398 | 1.00 | 1.04 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 95 | 13273 | 0.5000 | 0.5281 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.350 | 6.349 | 0.001 | 93 | 23343 | 1.00 | 1.00 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 98 | 36733 | 0.5000 | 0.5384 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.705 | 6.704 | 0.001 | 91 | 11758 | 0.5000 | 0.5324 | |
| 74 Ethyl methacrylate | 69 | 6.776 | 6.775 | 0.001 | 85 | 10652 | 0.5000 | 0.5006 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 83 | 7700 | 0.5000 | 0.5679 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 94 | 9314 | 0.5000 | 0.5137 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 87 | 13441 | 0.5000 | 0.5591 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 94 | 16906 | 1.00 | 1.04 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 86 | 7003 | 0.5000 | 0.4973 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 96 | 7750 | 0.5000 | 0.5314 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 97 | 24288 | 0.5000 | 0.5516 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 93 | 7683 | 0.5000 | 0.4992 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 12234 | 0.5000 | 0.4978 | |
| 86 m-Xylene & p-Xylene | 106 | 7.983 | 7.982 | 0.001 | 98 | 14577 | 0.5000 | 0.4781 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 15474 | 0.5000 | 0.5021 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 94 | 25585 | 0.5000 | 0.5176 | |
| 89 Bromoform | 173 | 8.551 | 8.550 | 0.000 | 92 | 4510 | 0.5000 | 0.4427 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 39682 | 0.5000 | 0.4945 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 84 | 10861 | 0.5000 | 0.4748 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 88 | 10562 | 0.5000 | 0.5244 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 84 | 4202 | 0.5000 | 0.4853 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.059 | 9.047 | 0.012 | 70 | 3843 | 0.5000 | 0.5185 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 98 | 11209 | 0.5000 | 0.4890 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 96 | 9330 | 0.5000 | 0.4859 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 95 | 31487 | 0.5000 | 0.4767 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 97 | 10044 | 0.5000 | 0.5068 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 90 | 28862 | 0.5000 | 0.4810 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 95 | 33748 | 0.5000 | 0.4934 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 40589 | 0.5000 | 0.4699 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 96 | 21531 | 0.5000 | 0.5427 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 96 | 34741 | 0.5000 | 0.4651 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 95 | 23084 | 0.5000 | 0.5657 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 95 | 29814 | 0.5000 | 0.4680 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 97 | 21676 | 0.5000 | 0.5636 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 84 | 3806 | 0.5000 | 0.5097 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 91 | 15055 | 0.5000 | 0.5604 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 92 | 6234 | 0.5000 | 0.5255 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 96 | 45140 | 0.5000 | 0.5362 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.444 | 12.443 | 0.001 | 94 | 14329 | 0.5000 | 0.5762 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 2.00 | 1.95 | |
| S 125 Total BTEX | 1 | | | | 0 | | 2.50 | 2.54 | |
| S 126 1,2-Dichloroethene, Total | 96 | | | | 0 | | | 1.06 | |
| S 127 1,3-Dichloropropene, Total | 75 | | | | 0 | | | 1.06 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 1.00 | 0.9802 | |

## QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

U - Marked Undetected

## Reagents:

| | | | |
|---|---|---|---|
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL |
| vmrgas_00291 | Amount Added: | 0.40 | Units: uL |
| vm50ss_00362 | Amount Added: | 0.40 | Units: uL |
| vmarolistdw_00294 | Amount Added: | 0.40 | Units: uL |
| vmrprimw_00331 | Amount Added: | 0.40 | Units: uL |

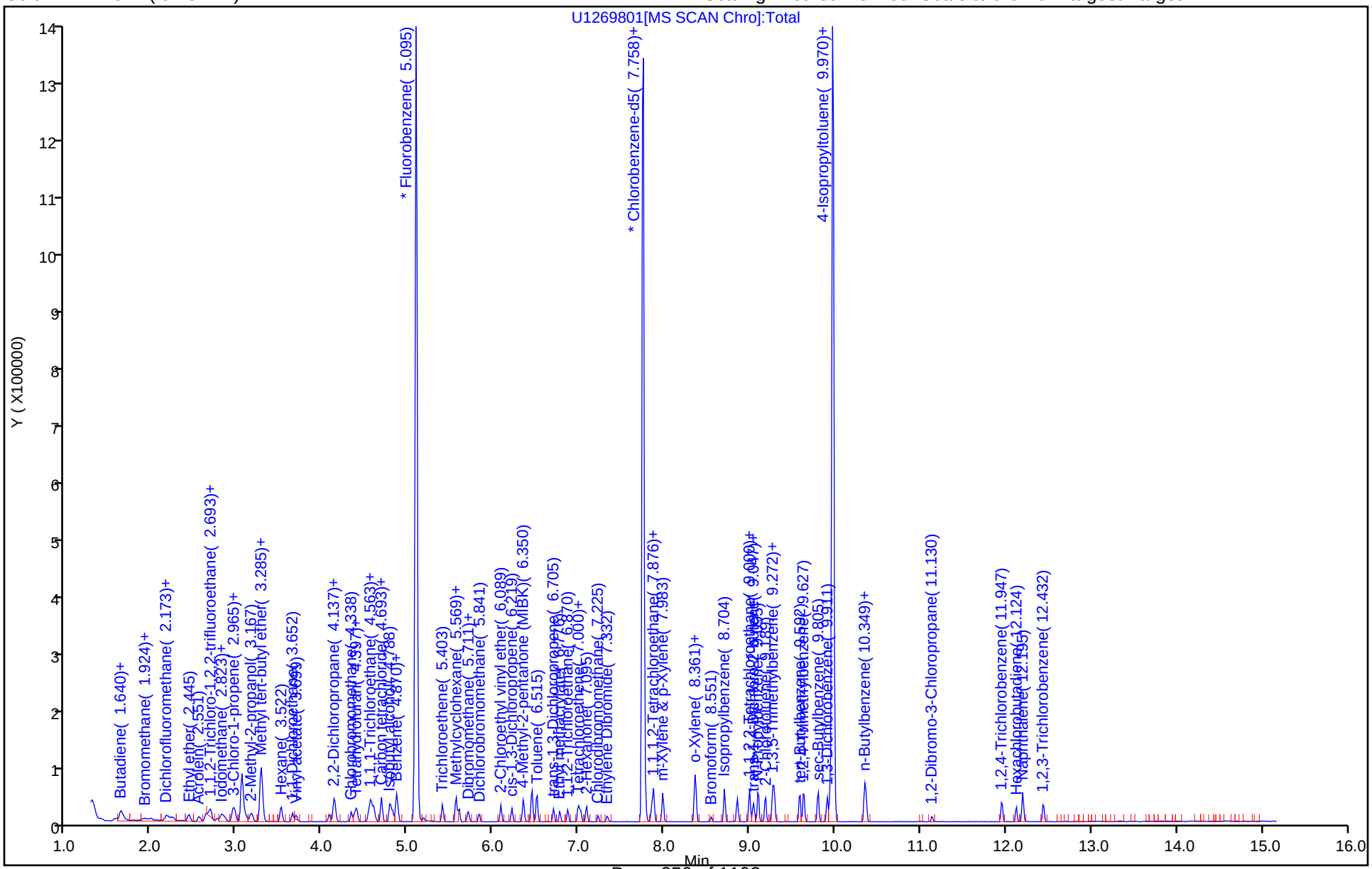
Report Date: 30-Apr-2019 17:23:46 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 16:24:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | std8260 L1 | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 8 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



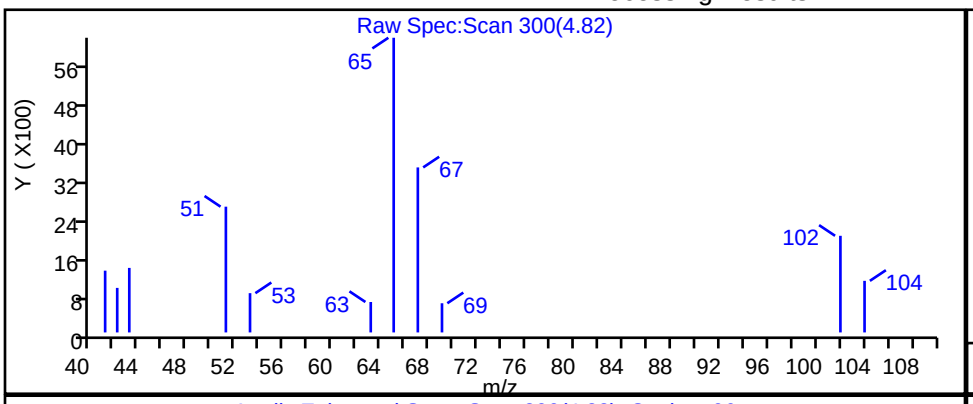
User Disabled Compound Report

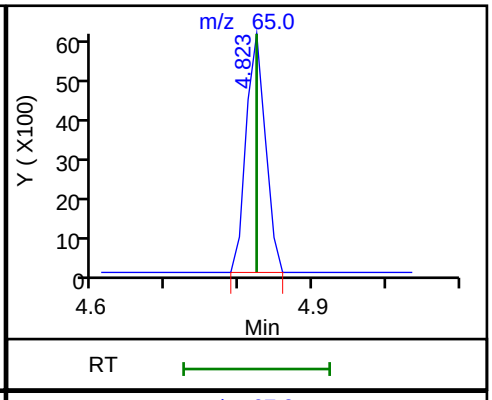
Eurofins TestAmerica, Canton

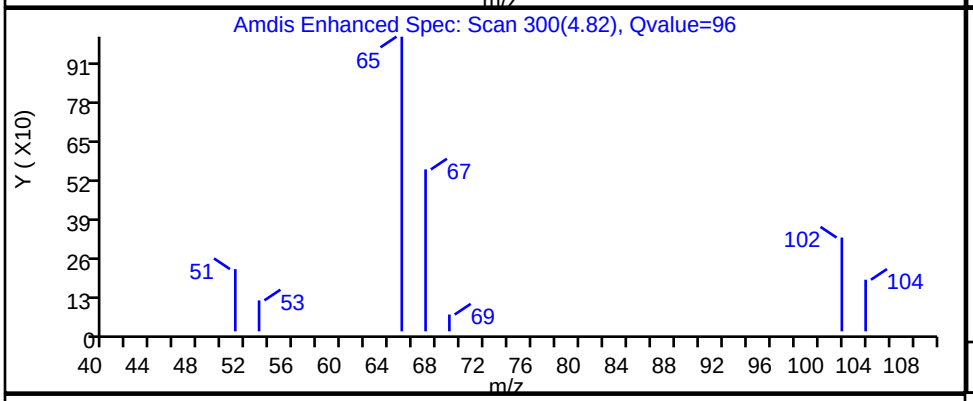
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

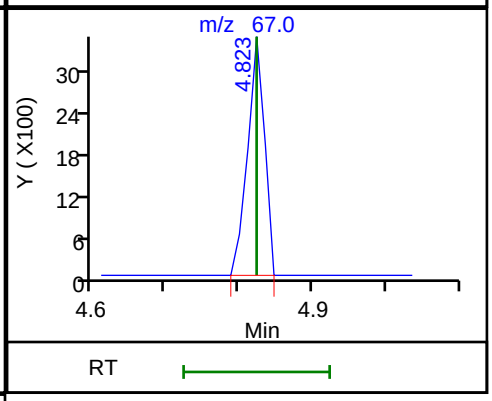
## $ 5 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

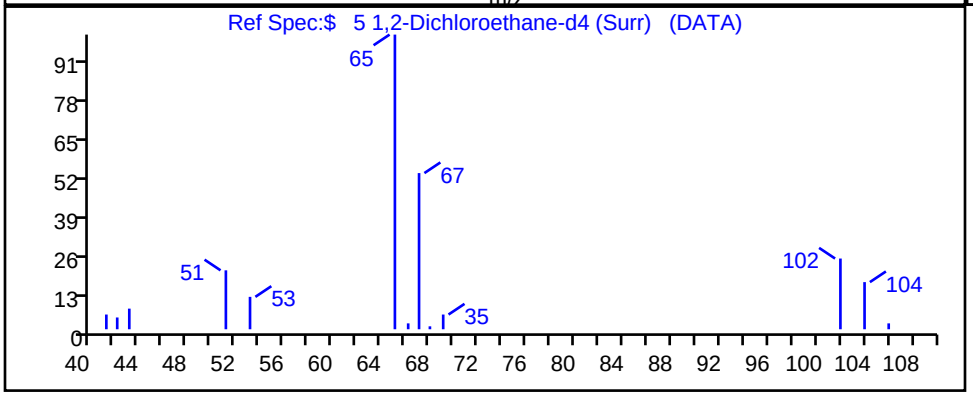
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.82 | 65.00 | 11177 | 0.595662 |
| 4.82 | 67.00 | 5473 | |

Reviewer: laveyt, 30-Apr-2019 16:51:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

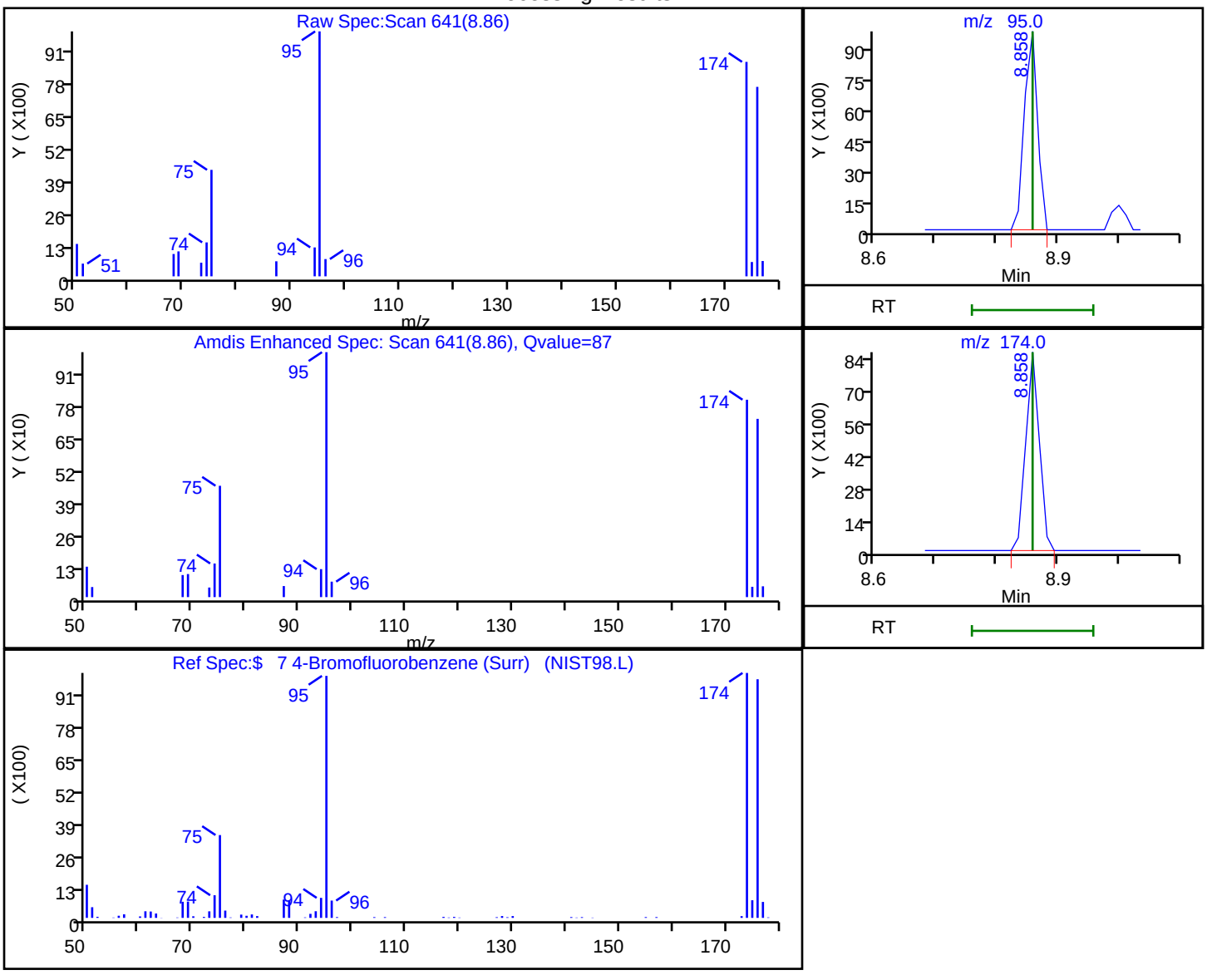
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## $ 7 4-Bromofluorobenzene (Surr), CAS: 460-00-4

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 8.86 | 95.00 | 14951 | 0.492470 |
| 8.86 | 174.00 | 13421 | |

Reviewer: laveyt, 30-Apr-2019 16:52:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

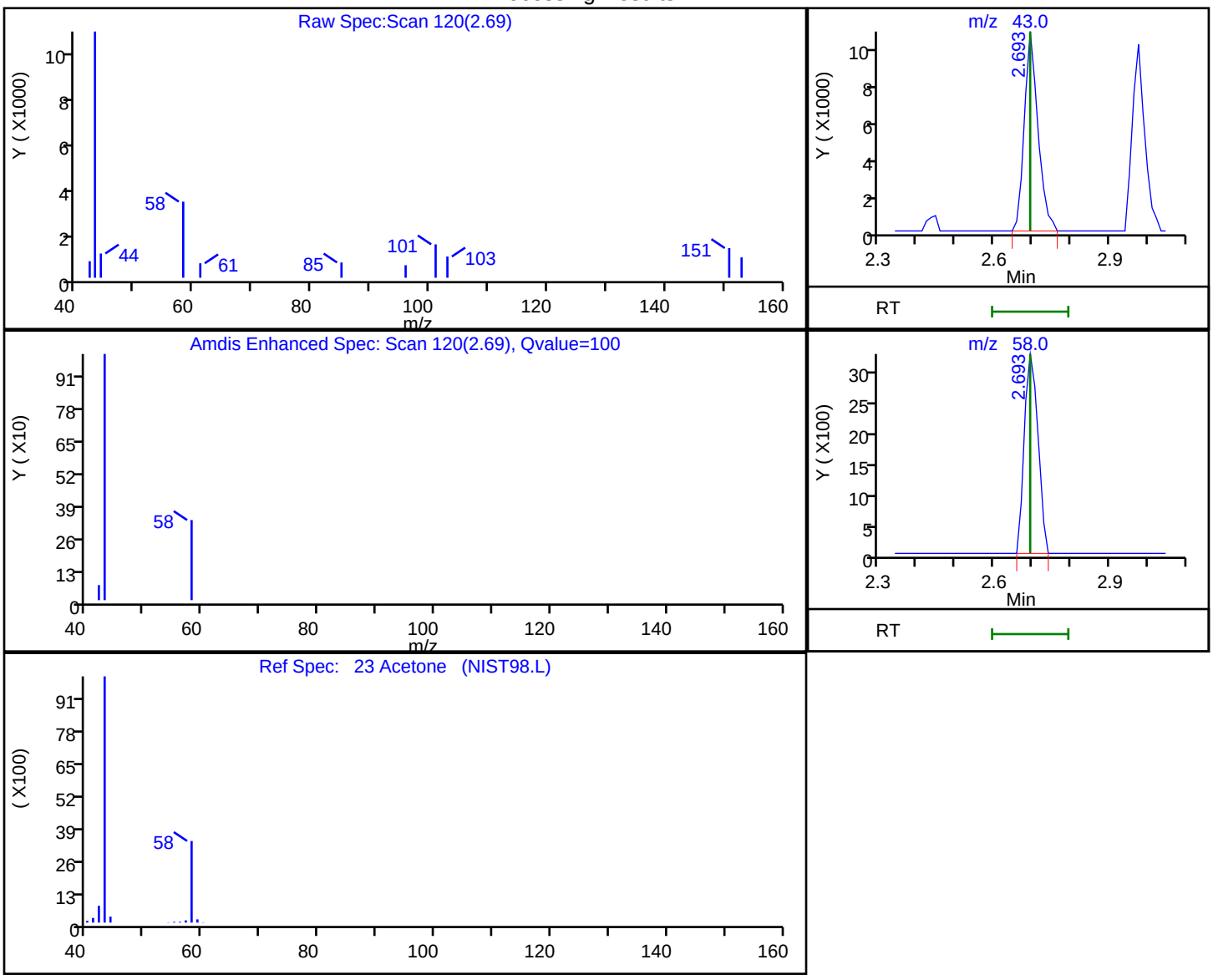
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 23 Acetone, CAS: 67-64-1

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 2.69 | 43.00 | 26506 | 0.965095 |
| 2.69 | 58.00 | 8203 | |

Reviewer: laveyt, 30-Apr-2019 16:45:37
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

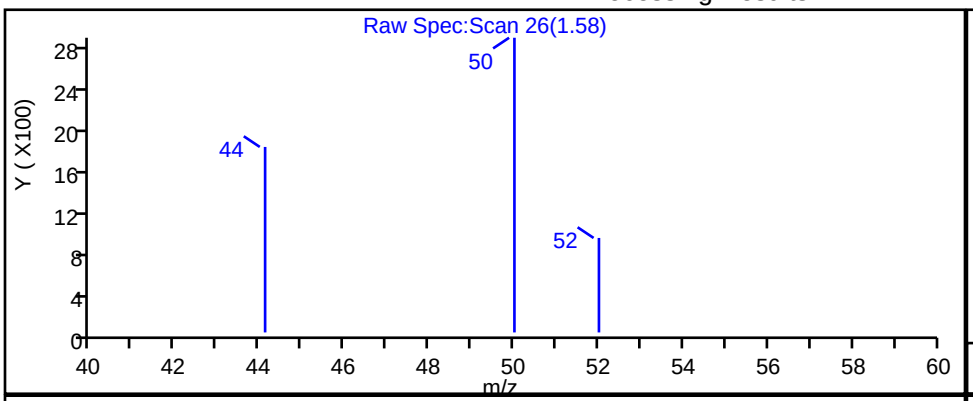
User Disabled Compound Report

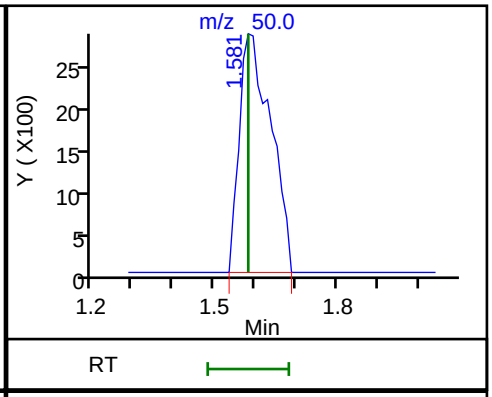
Eurofins TestAmerica, Canton

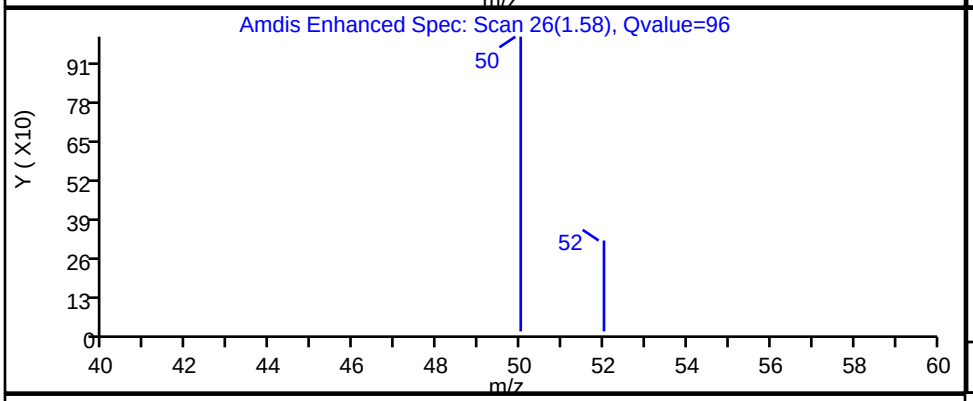
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

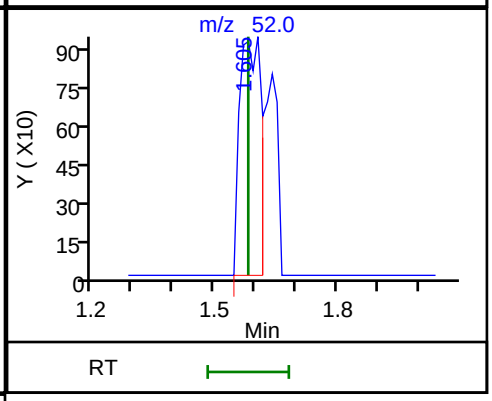
## 10 Chloromethane, CAS: 74-87-3

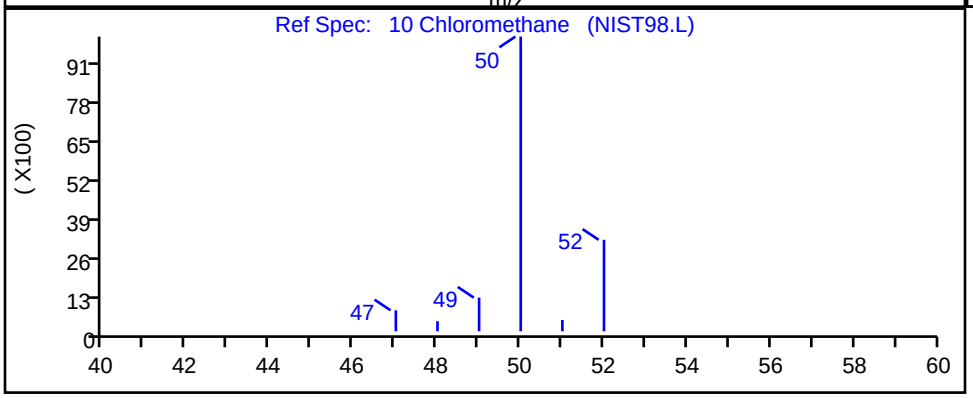
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 1.58 | 50.00 | 15543 | 0.628668 |
| 1.60 | 52.00 | 3453 | |

Reviewer: laveyt, 30-Apr-2019 16:44:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

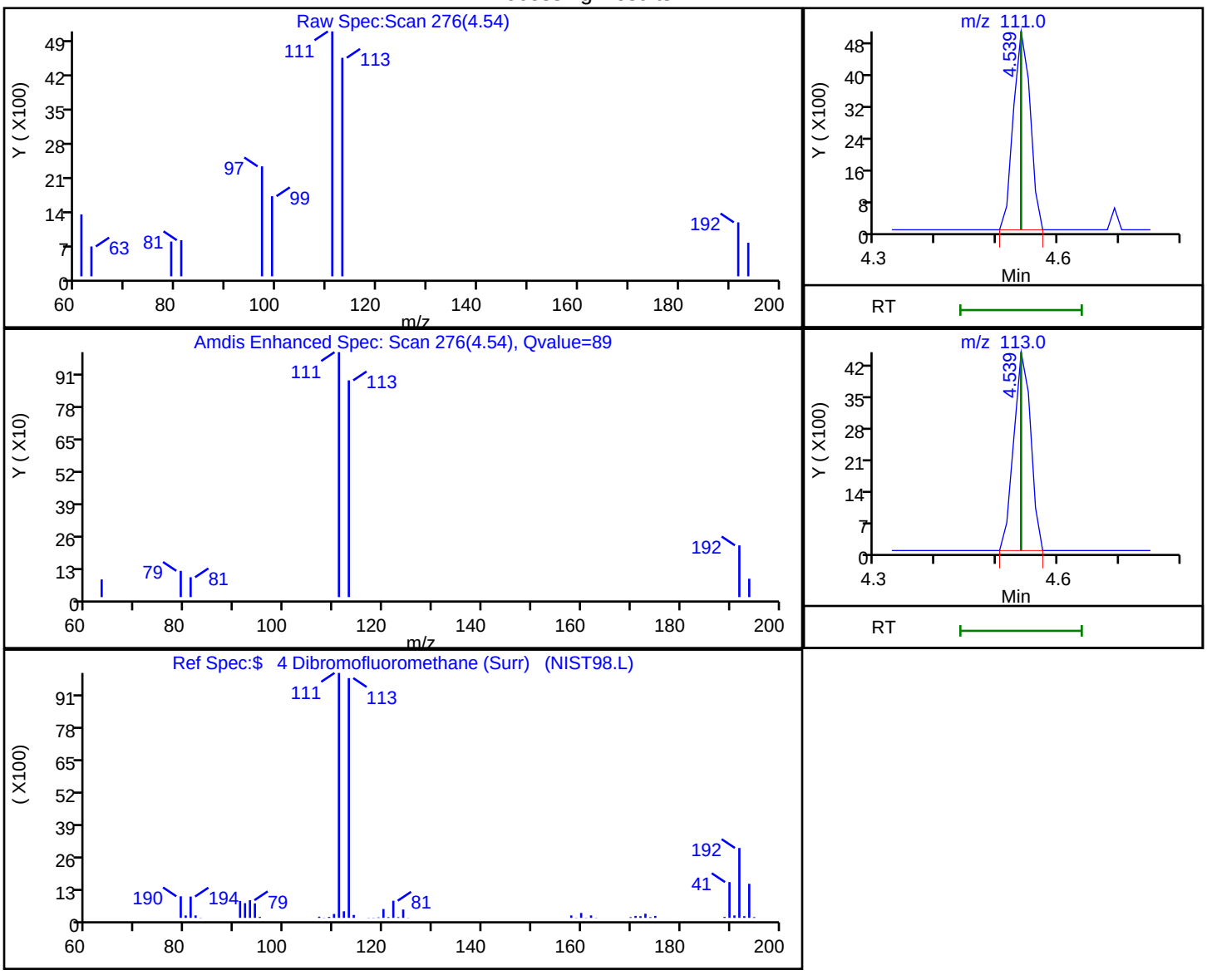
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## $ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 4.54 | 111.00 | 9661 | 0.581209 |
| 4.54 | 113.00 | 8696 | |

Reviewer: laveyt, 30-Apr-2019 16:51:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

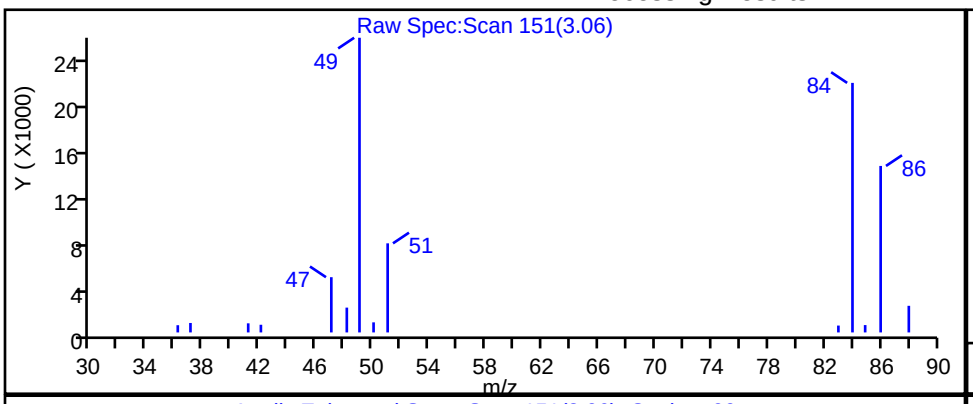
User Disabled Compound Report

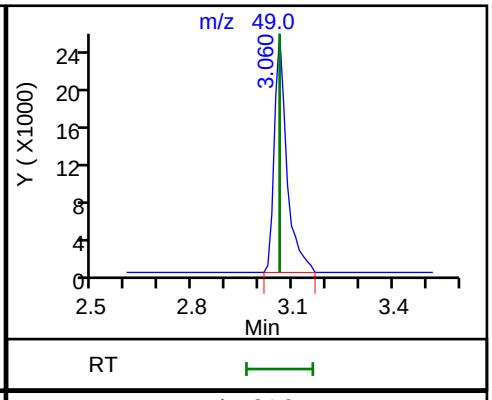
Eurofins TestAmerica, Canton

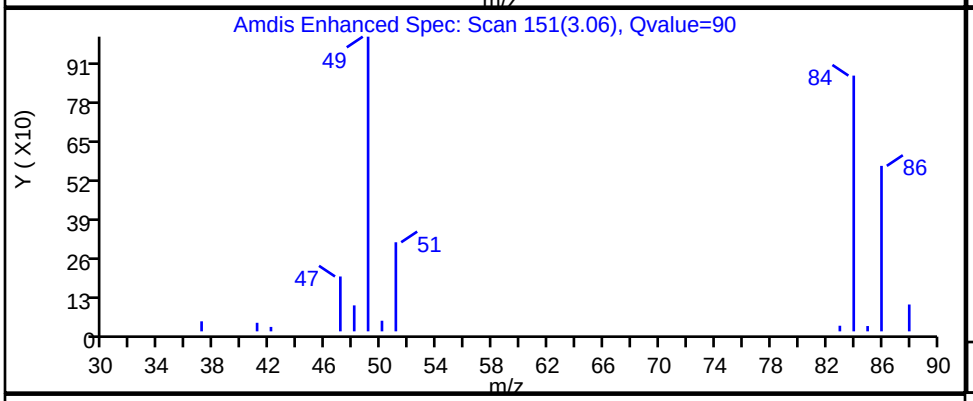
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

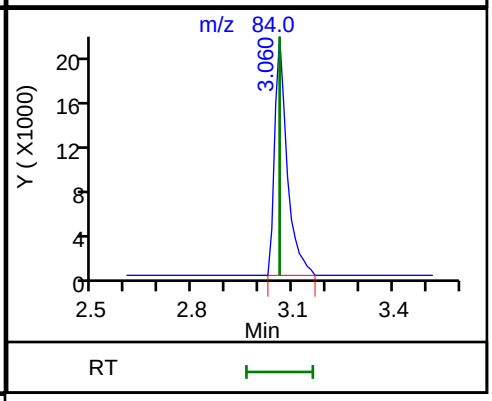
## 29 Methylene Chloride, CAS: 75-09-2

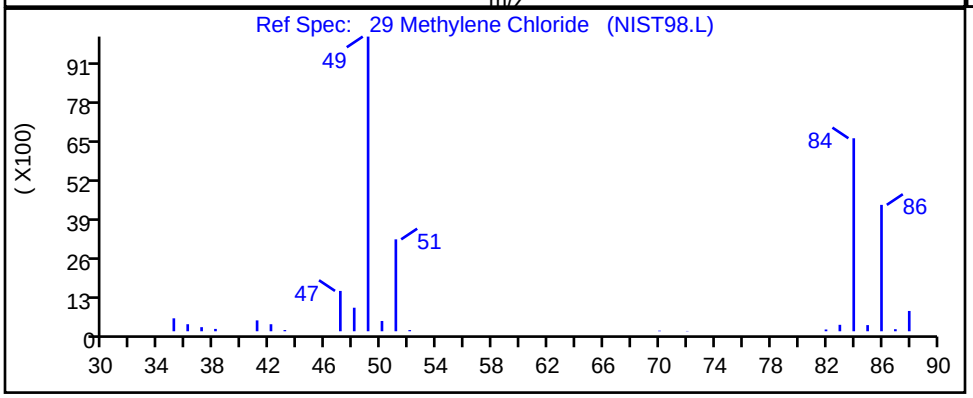
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 3.06 | 49.00 | 66051 | 0.488334 |
| 3.06 | 84.00 | 55788 | |

Reviewer: laveyt, 30-Apr-2019 16:46:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

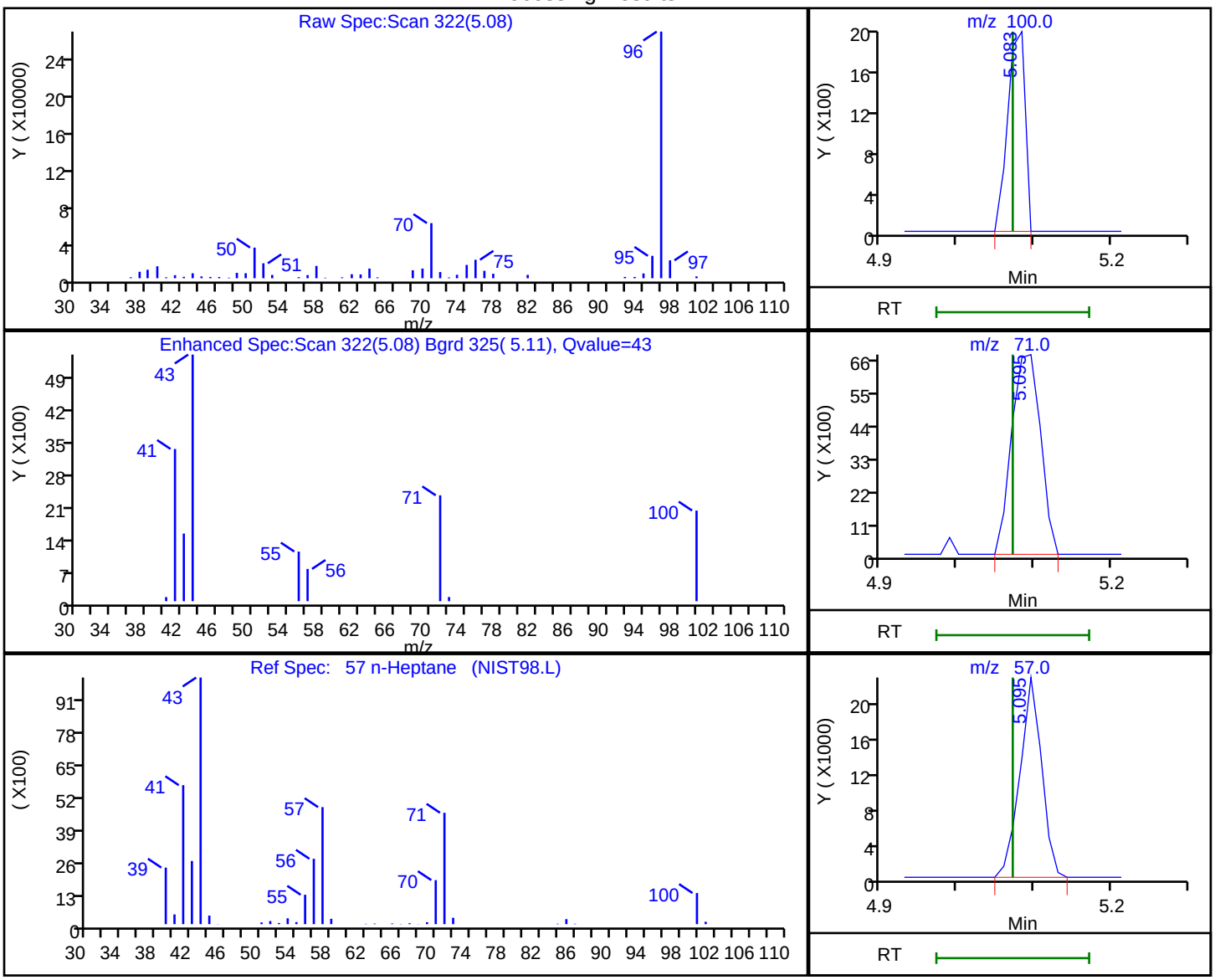
User Disabled Compound Report

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D | | | | |
| Injection Date: | 30-Apr-2019 16:24:30 | Instrument ID: | A3UX12 | | |
| Lims ID: | std8260 L1 | | | | |
| Client ID: | | | | | |
| Operator ID: | 001904 | ALS Bottle#: | 8 | Worklist Smp#: | 14 |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |
| Column: | DB-624 ( 0.18 mm) | Detector | MS SCAN | | |

## 57 n-Heptane, CAS: 142-82-5

Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 5.08 | 100.00 | 3106 | |
| 5.10 | 71.00 | 17689 | |
| 5.10 | 57.00 | 43825 | 0.492830 |

Reviewer: laveyt, 30-Apr-2019 16:54:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

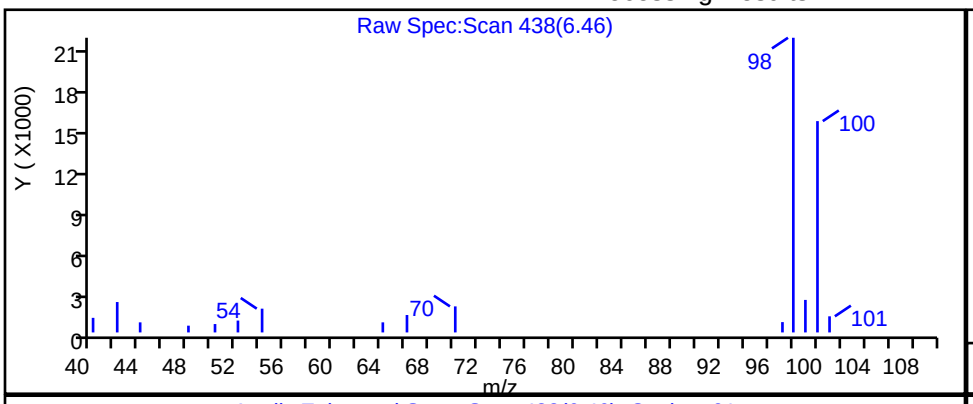
User Disabled Compound Report

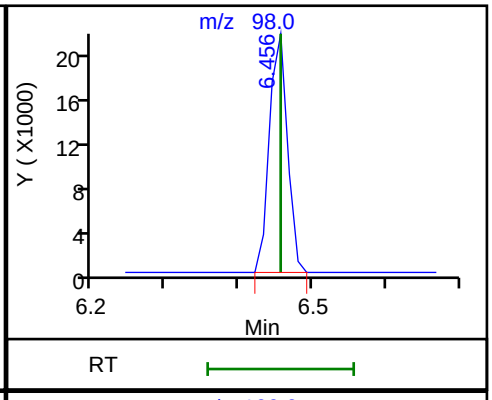
Eurofins TestAmerica, Canton

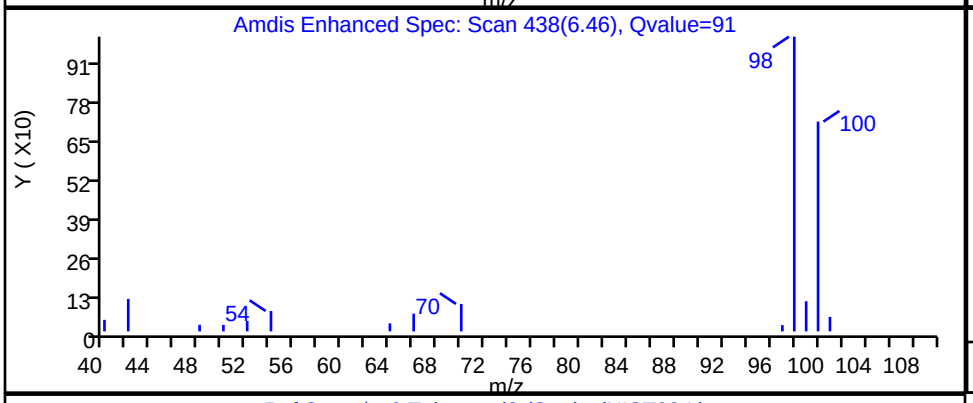
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D
Injection Date: 30-Apr-2019 16:24:30 Instrument ID: A3UX12
Lims ID: std8260 L1
Client ID:
Operator ID: 001904 ALS Bottle#: 8 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

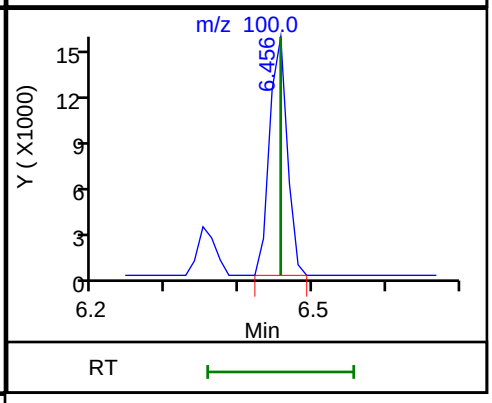
## $ 6 Toluene-d8 (Surr), CAS: 2037-26-5

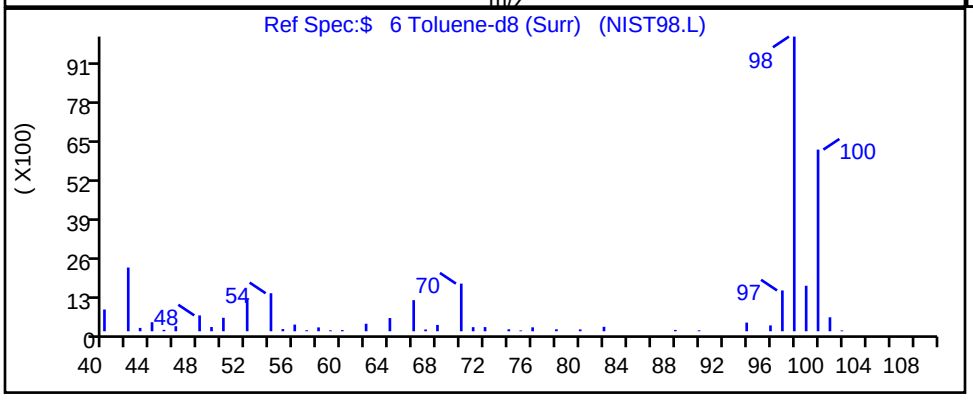
Processing Results




| RT | Mass | Response | Amount |
|---|---|---|---|
| 6.46 | 98.00 | 37355 | 0.620788 |
| 6.46 | 100.00 | 26225 | |

Reviewer: laveyt, 30-Apr-2019 16:52:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-378870/15  Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.3850 | 0.3222 | 0.1000 | 0.0167 | 0.0200 | -16.3 | 30.0 |
| Chloromethane | Ave | 0.3374 | 0.3285 | 0.1000 | 0.0195 | 0.0200 | -2.6 | 30.0 |
| Butadiene | Ave | 0.3709 | 0.3353 | | 0.0181 | 0.0200 | -9.6 | 30.0 |
| Vinyl chloride | Ave | 0.3771 | 0.3787 | 0.1000 | 0.0201 | 0.0200 | 0.4 | 30.0 |
| Bromomethane | Ave | 0.2328 | 0.2224 | 0.0500 | 0.0191 | 0.0200 | -4.4 | 30.0 |
| Chloroethane | Ave | 0.2368 | 0.2302 | 0.0500 | 0.0194 | 0.0200 | -2.8 | 30.0 |
| Dichlorofluoromethane | Ave | 0.4732 | 0.4997 | | 0.0211 | 0.0200 | 5.6 | 30.0 |
| Trichlorofluoromethane | Ave | 0.4204 | 0.4076 | 0.1000 | 0.0194 | 0.0200 | -3.0 | 30.0 |
| Ethyl ether | Ave | 0.2526 | 0.2615 | | 0.0207 | 0.0200 | 3.5 | 30.0 |
| Acrolein | Ave | 0.0755 | 0.0650 | | 0.0861 | 0.100 | -13.9 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.4135 | 0.4227 | 0.1000 | 0.0204 | 0.0200 | 2.2 | 30.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave | 0.2737 | 0.2804 | 0.0500 | 0.0205 | 0.0200 | 2.5 | 30.0 |
| Acetone | Lin1 | | 0.1555 | 0.0100 | 0.0423 | 0.0400 | 5.7 | 50.0 |
| Iodomethane | Ave | 0.4395 | 0.4317 | | 0.0196 | 0.0200 | -1.8 | 30.0 |
| Carbon disulfide | Ave | 0.9516 | 0.8606 | 0.1000 | 0.0181 | 0.0200 | -9.6 | 30.0 |
| 3-Chloro-1-propene | Ave | 0.4714 | 0.4556 | | 0.0193 | 0.0200 | -3.3 | 30.0 |
| Methyl acetate | Ave | 0.3480 | 0.3354 | 0.1000 | 0.0385 | 0.0400 | -3.6 | 30.0 |
| Methylene Chloride | Lin1 | | 0.3744 | 0.1000 | 0.0195 | 0.0200 | -2.5 | 50.0 |
| 2-Methyl-2-propanol | Ave | 0.0732 | 0.0784 | | 0.214 | 0.200 | 7.1 | 50.0 |
| Acrylonitrile | Ave | 0.1811 | 0.1775 | | 0.196 | 0.200 | -2.0 | 30.0 |
| trans-1,2-Dichloroethene | Ave | 0.4063 | 0.4067 | 0.1000 | 0.0200 | 0.0200 | 0.0 | 30.0 |
| Methyl tert-butyl ether | Ave | 0.8398 | 0.8451 | 0.1000 | 0.0201 | 0.0200 | 0.6 | 30.0 |
| Hexane | Ave | 0.4435 | 0.4479 | | 0.0202 | 0.0200 | 1.0 | 30.0 |
| 1,1-Dichloroethane | Ave | 0.5067 | 0.5009 | 0.2000 | 0.0198 | 0.0200 | -1.1 | 30.0 |
| Vinyl acetate | Ave | 0.5694 | 0.6286 | | 0.0221 | 0.0200 | 10.4 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.3288 | 0.3089 | | 0.0188 | 0.0200 | -6.1 | 30.0 |
| cis-1,2-Dichloroethene | Ave | 0.3444 | 0.3344 | 0.1000 | 0.0194 | 0.0200 | -2.9 | 30.0 |
| 2-Butanone (MEK) | Ave | 0.0623 | 0.0642 | 0.0100 | 0.0412 | 0.0400 | 3.1 | 30.0 |
| Chlorobromomethane | Ave | 0.2413 | 0.2321 | | 0.0192 | 0.0200 | -3.8 | 30.0 |
| Tetrahydrofuran | Ave | 0.1500 | 0.1525 | | 0.0407 | 0.0400 | 1.6 | 30.0 |
| Chloroform | Ave | 0.4844 | 0.4803 | 0.2000 | 0.0198 | 0.0200 | -0.8 | 30.0 |
| 1,1,1-Trichloroethane | Ave | 0.4157 | 0.4258 | 0.1000 | 0.0205 | 0.0200 | 2.4 | 30.0 |
| Cyclohexane | Ave | 0.5049 | 0.5068 | 0.1000 | 0.0201 | 0.0200 | 0.4 | 30.0 |
| 1,1-Dichloropropene | Ave | 0.4109 | 0.4100 | | 0.0200 | 0.0200 | -0.2 | 30.0 |
| Carbon tetrachloride | Ave | 0.3534 | 0.3567 | 0.1000 | 0.0202 | 0.0200 | 0.9 | 30.0 |
| Isobutyl alcohol | Ave | 0.0199 | 0.0212 | | 0.534 | 0.500 | 6.8 | 30.0 |
| Benzene | Ave | 1.178 | 1.160 | 0.5000 | 0.0197 | 0.0200 | -1.5 | 30.0 |
| 1,2-Dichloroethane | Ave | 0.3625 | 0.3568 | 0.1000 | 0.0197 | 0.0200 | -1.6 | 30.0 |
| n-Heptane | Lin1 | | 0.2434 | | 0.0204 | 0.0200 | 1.9 | 30.0 |
| Trichloroethene | Ave | 0.3152 | 0.3133 | 0.1500 | 0.0199 | 0.0200 | -0.6 | 30.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-378870/15  Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.5644 | 0.5547 | 0.1000 | 0.0197 | 0.0200 | -1.7 | 30.0 |
| 1,2-Dichloropropane | Ave | 0.2488 | 0.2556 | 0.1000 | 0.0205 | 0.0200 | 2.7 | 30.0 |
| Dibromomethane | Ave | 0.2110 | 0.1998 | | 0.0189 | 0.0200 | -5.3 | 30.0 |
| 1,4-Dioxane | Ave | 0.0040 | 0.0050 | | 0.498 | 0.400 | 24.5 | 50.0 |
| Dichlorobromomethane | Ave | 0.3396 | 0.3391 | 0.1500 | 0.0200 | 0.0200 | -0.1 | 30.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1806 | 0.1852 | | 0.0205 | 0.0200 | 2.5 | 30.0 |
| cis-1,3-Dichloropropene | Ave | 0.4134 | 0.4266 | 0.1500 | 0.0206 | 0.0200 | 3.2 | 30.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.3834 | 0.3876 | 0.0500 | 0.0404 | 0.0400 | 1.1 | 30.0 |
| Toluene | Ave | 1.674 | 1.670 | 0.4000 | 0.0200 | 0.0200 | -0.2 | 30.0 |
| trans-1,3-Dichloropropene | Ave | 0.5418 | 0.5319 | 0.1000 | 0.0196 | 0.0200 | -1.8 | 30.0 |
| Ethyl methacrylate | Ave | 0.5220 | 0.5312 | | 0.0204 | 0.0200 | 1.8 | 30.0 |
| 1,1,2-Trichloroethane | Ave | 0.3327 | 0.3406 | 0.1000 | 0.0205 | 0.0200 | 2.4 | 30.0 |
| Tetrachloroethene | Ave | 0.4449 | 0.4485 | 0.1500 | 0.0202 | 0.0200 | 0.8 | 30.0 |
| 1,3-Dichloropropane | Ave | 0.5898 | 0.5904 | | 0.0200 | 0.0200 | 0.1 | 30.0 |
| 2-Hexanone | Ave | 0.4000 | 0.4074 | 0.0500 | 0.0407 | 0.0400 | 1.9 | 30.0 |
| Chlorodibromomethane | Ave | 0.3454 | 0.3577 | | 0.0207 | 0.0200 | 3.6 | 30.0 |
| Ethylene Dibromide | Ave | 0.3578 | 0.3607 | | 0.0202 | 0.0200 | 0.8 | 30.0 |
| Chlorobenzene | Ave | 1.080 | 1.065 | 0.3000 | 0.0197 | 0.0200 | -1.4 | 30.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3776 | 0.3797 | | 0.0201 | 0.0200 | 0.6 | 30.0 |
| Ethylbenzene | Ave | 0.6029 | 0.6034 | | 0.0200 | 0.0200 | 0.0 | 30.0 |
| m-Xylene & p-Xylene | Ave | 0.7480 | 0.7610 | | 0.0203 | 0.0200 | 1.7 | 30.0 |
| o-Xylene | Ave | 0.7560 | 0.7537 | | 0.0199 | 0.0200 | -0.3 | 30.0 |
| Styrene | Ave | 1.213 | 1.155 | 0.3000 | 0.0191 | 0.0200 | -4.7 | 30.0 |
| Bromoform | Ave | 0.2499 | 0.2587 | 0.1000 | 0.0207 | 0.0200 | 3.5 | 30.0 |
| Isopropylbenzene | Ave | 1.969 | 2.009 | 0.1000 | 0.0204 | 0.0200 | 2.1 | 30.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.9843 | 1.035 | 0.3000 | 0.0210 | 0.0200 | 5.1 | 30.0 |
| Bromobenzene | Ave | 0.8666 | 0.8526 | | 0.0197 | 0.0200 | -1.6 | 30.0 |
| 1,2,3-Trichloropropane | Ave | 0.3726 | 0.3857 | | 0.0207 | 0.0200 | 3.5 | 30.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.3189 | 0.3232 | | 0.0203 | 0.0200 | 1.4 | 30.0 |
| N-Propylbenzene | Ave | 0.9864 | 1.003 | | 0.0203 | 0.0200 | 1.7 | 30.0 |
| 2-Chlorotoluene | Ave | 0.8263 | 0.8265 | | 0.0200 | 0.0200 | 0.0 | 30.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.842 | 2.880 | | 0.0203 | 0.0200 | 1.3 | 30.0 |
| 4-Chlorotoluene | Ave | 0.8528 | 0.8188 | | 0.0192 | 0.0200 | -4.0 | 30.0 |
| tert-Butylbenzene | Ave | 2.582 | 2.643 | | 0.0205 | 0.0200 | 2.4 | 30.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.944 | 2.923 | | 0.0199 | 0.0200 | -0.7 | 30.0 |
| sec-Butylbenzene | Ave | 3.717 | 3.788 | | 0.0204 | 0.0200 | 1.9 | 30.0 |
| 1,3-Dichlorobenzene | Ave | 1.707 | 1.638 | 0.6000 | 0.0192 | 0.0200 | -4.1 | 30.0 |
| 4-Isopropyltoluene | Ave | 3.214 | 3.318 | | 0.0206 | 0.0200 | 3.2 | 30.0 |
| 1,4-Dichlorobenzene | Ave | 1.756 | 1.667 | 0.5000 | 0.0190 | 0.0200 | -5.0 | 30.0 |
| n-Butylbenzene | Ave | 2.741 | 2.726 | | 0.0199 | 0.0200 | -0.6 | 30.0 |
| 1,2-Dichlorobenzene | Ave | 1.655 | 1.606 | 0.4000 | 0.0194 | 0.0200 | -2.9 | 30.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-378870/15  Calibration Date: 04/30/2019 16:46

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1269802.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.3213 | 0.3347 | 0.0500 | 0.0208 | 0.0200 | 4.2 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 1.156 | 1.069 | 0.2000 | 0.0185 | 0.0200 | -7.5 | 50.0 |
| Hexachlorobutadiene | Ave | 0.5105 | 0.4509 | | 0.0177 | 0.0200 | -11.7 | 30.0 |
| Naphthalene | Ave | 3.623 | 3.581 | | 0.0198 | 0.0200 | -1.2 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 1.070 | 0.9941 | | 0.0186 | 0.0200 | -7.1 | 30.0 |
| Dibromofluoromethane (Surr) | Ave | 0.2660 | 0.2632 | | 0.0198 | 0.0200 | -1.1 | 30.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2988 | 0.2950 | | 0.0197 | 0.0200 | -1.3 | 30.0 |
| Toluene-d8 (Surr) | Ave | 1.417 | 1.397 | | 0.0197 | 0.0200 | -1.4 | 30.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.5219 | 0.5000 | | 0.0192 | 0.0200 | -4.2 | 30.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2019 16:46:30 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-015
Operator ID: 001904 Instrument ID: A3UX12
Sublist:

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 01-May-2019 13:37:31 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: bosworthh Date: 02-May-2019 11:54:21

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1259418 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 83 | 851416 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.971 | -0.001 | 92 | 466847 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 331430 | 20.0 | 19.8 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 98 | 371514 | 20.0 | 19.7 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 1189609 | 20.0 | 19.7 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 425722 | 20.0 | 19.2 | |
| 9 Dichlorodifluoromethane | 85 | 1.415 | 1.403 | 0.012 | 99 | 405832 | 20.0 | 16.7 | |
| 10 Chloromethane | 50 | 1.593 | 1.581 | 0.012 | 99 | 413696 | 20.0 | 19.5 | M |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 89 | 422228 | 20.0 | 18.1 | |
| 12 Vinyl chloride | 62 | 1.687 | 1.675 | 0.012 | 98 | 476883 | 20.0 | 20.1 | |
| 14 Bromomethane | 94 | 1.924 | 1.912 | 0.012 | 90 | 280106 | 20.0 | 19.1 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 99 | 289966 | 20.0 | 19.4 | |
| 16 Dichlorofluoromethane | 67 | 2.172 | 2.172 | 0.000 | 97 | 629342 | 20.0 | 21.1 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 98 | 513365 | 20.0 | 19.4 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 89 | 329369 | 20.0 | 20.7 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 409129 | 100.0 | 86.1 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 98 | 532370 | 20.0 | 20.4 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 94 | 353091 | 20.0 | 20.5 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 391714 | 40.0 | 42.3 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 98 | 543731 | 20.0 | 19.6 | |
| 25 Carbon disulfide | 76 | 2.847 | 2.823 | 0.024 | 99 | 1083802 | 20.0 | 18.1 | |
| 27 3-Chloro-1-propene | 41 | 2.953 | 2.953 | 0.000 | 92 | 573835 | 20.0 | 19.3 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 844749 | 40.0 | 38.5 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 90 | 471457 | 20.0 | 19.5 | |
| 30 2-Methyl-2-propanol | 59 | 3.166 | 3.166 | 0.000 | 100 | 987948 | 200.0 | 214.3 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 2235056 | 200.0 | 196.0 | |
| 33 Methyl tert-butyl ether | 73 | 3.297 | 3.285 | 0.012 | 94 | 1064379 | 20.0 | 20.1 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 97 | 512174 | 20.0 | 20.0 | |
| 34 Hexane | 57 | 3.521 | 3.510 | 0.011 | 89 | 564057 | 20.0 | 20.2 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 96 | 630828 | 20.0 | 19.8 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 791608 | 20.0 | 22.1 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 80 | 421134 | 20.0 | 19.4 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 70 | 389030 | 20.0 | 18.8 | |
| 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 99 | 161737 | 40.0 | 41.2 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 292354 | 20.0 | 19.2 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 85 | 384062 | 40.0 | 40.7 | |
| 48 Chloroform | 83 | 4.409 | 4.397 | 0.012 | 93 | 604929 | 20.0 | 19.8 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 99 | 536242 | 20.0 | 20.5 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 87 | 638312 | 20.0 | 20.1 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 80 | 449179 | 20.0 | 20.2 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 96 | 516359 | 20.0 | 20.0 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 95 | 668811 | 500.0 | 534.2 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 95 | 1461247 | 20.0 | 19.7 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 449407 | 20.0 | 19.7 | |
| 57 n-Heptane | 57 | 5.071 | 5.071 | 0.000 | 89 | 306524 | 20.0 | 20.4 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 96 | 394562 | 20.0 | 19.9 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.568 | 0.000 | 86 | 698584 | 20.0 | 19.7 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 94 | 321931 | 20.0 | 20.5 | |
| 64 Dibromomethane | 174 | 5.710 | 5.710 | 0.000 | 94 | 251580 | 20.0 | 18.9 | |
| 65 1,4-Dioxane | 88 | 5.722 | 5.722 | 0.000 | 91 | 125486 | 400.0 | 498.0 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 427012 | 20.0 | 20.0 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 233209 | 20.0 | 20.5 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 96 | 537264 | 20.0 | 20.6 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.349 | 6.349 | 0.000 | 95 | 976381 | 40.0 | 40.4 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 1422238 | 20.0 | 20.0 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.704 | 0.000 | 92 | 452861 | 20.0 | 19.6 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.775 | 0.000 | 89 | 452252 | 20.0 | 20.4 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 90 | 289983 | 20.0 | 20.5 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 381853 | 20.0 | 20.2 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 88 | 502713 | 20.0 | 20.0 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 93 | 693681 | 40.0 | 40.7 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 93 | 304567 | 20.0 | 20.7 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 99 | 307071 | 20.0 | 20.2 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 907166 | 20.0 | 19.7 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 323236 | 20.0 | 20.1 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 513744 | 20.0 | 20.0 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 647955 | 20.0 | 20.3 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 641716 | 20.0 | 19.9 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 95 | 983663 | 20.0 | 19.1 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 98 | 220246 | 20.0 | 20.7 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 1710910 | 20.0 | 20.4 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 88 | 398025 | 20.0 | 19.7 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 87 | 483078 | 20.0 | 21.0 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.047 | 9.047 | 0.000 | 92 | 150901 | 20.0 | 20.3 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 84 | 180047 | 20.0 | 20.7 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 99 | 468364 | 20.0 | 20.3 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 385849 | 20.0 | 20.0 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 1344408 | 20.0 | 20.3 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 97 | 382265 | 20.0 | 19.2 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 1234083 | 20.0 | 20.5 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 96 | 1364531 | 20.0 | 19.9 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 1768239 | 20.0 | 20.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 764629 | 20.0 | 19.2 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 1549141 | 20.0 | 20.6 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 95 | 778371 | 20.0 | 19.0 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 1272624 | 20.0 | 19.9 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 749970 | 20.0 | 19.4 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 91 | 156261 | 20.0 | 20.8 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 95 | 499249 | 20.0 | 18.5 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 96 | 210509 | 20.0 | 17.7 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 1671766 | 20.0 | 19.8 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 464069 | 20.0 | 18.6 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 81.2 | |
| S 125 Total BTEX | 1 | | | | 0 | | 100.0 | 100.0 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 40.3 | |

## QC Flag Legend

Review Flags

M - Manually Integrated

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00307 | Amount Added: 16.00 | Units: uL | | |
| vmfaspw_00297 | Amount Added: 16.00 | Units: uL | | |
| vmfasaw_00277 | Amount Added: 16.00 | Units: uL | | |
| vmDist_H2o_00144 | Amount Added: 0.00 | Units: | Run Reagent | |
| vm50is_stk_A_00003 | Amount Added: 2.00 | Units: uL | Run Reagent | |
| vm50ss_stk_00080 | Amount Added: 2.00 | Units: uL | Run Reagent | |

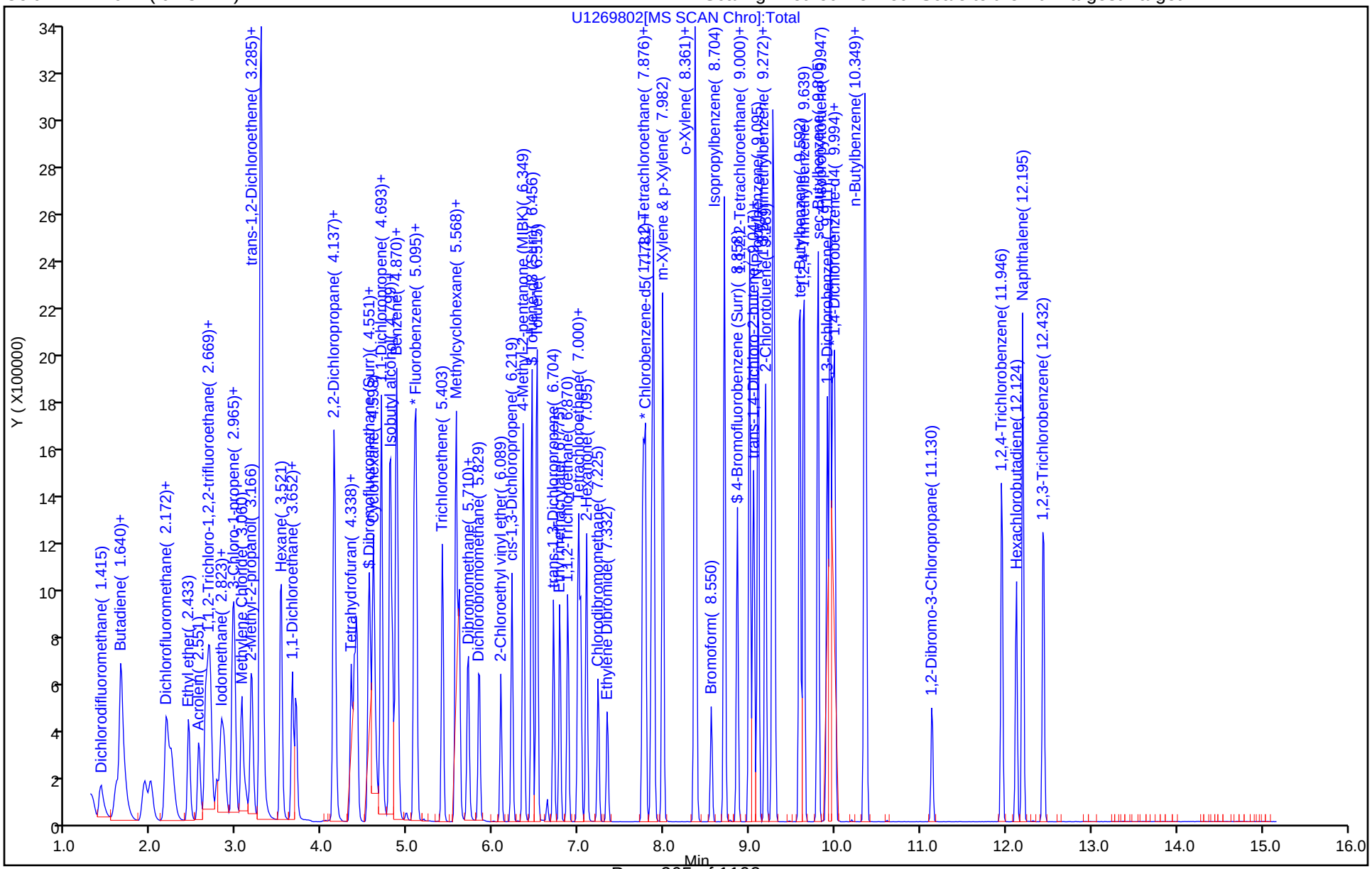
Report Date: 02-May-2019 11:54:26 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 16:46:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 15 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 9 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

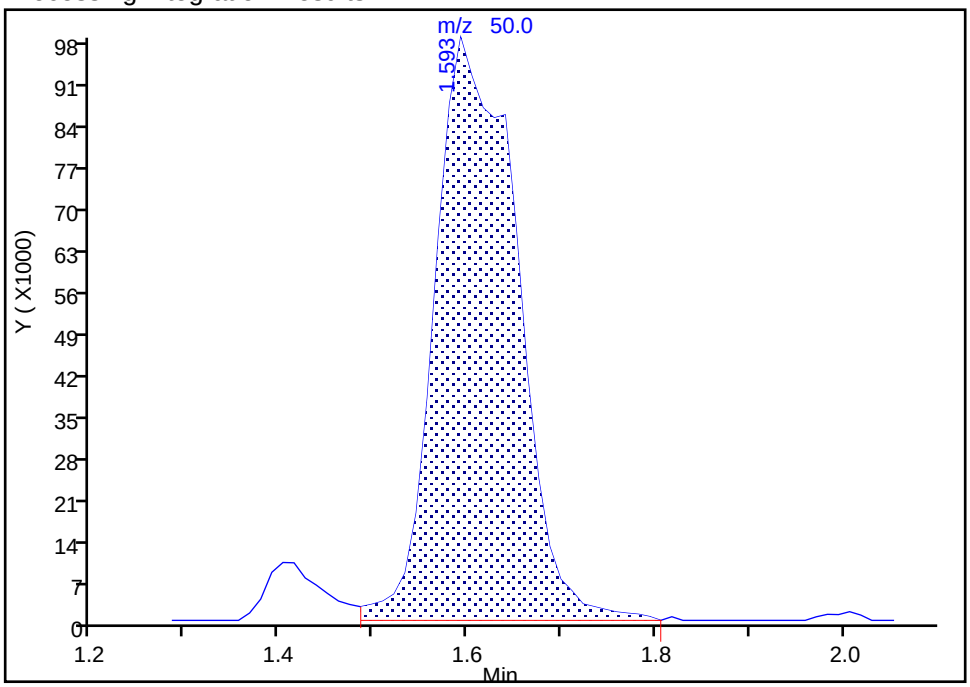
Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269802.D
Injection Date: 30-Apr-2019 16:46:30 Instrument ID: A3UX12
Lims ID: ICV
Client ID:
Operator ID: 001904 ALS Bottle#: 9 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 10 Chloromethane, CAS: 74-87-3

Signal: 1

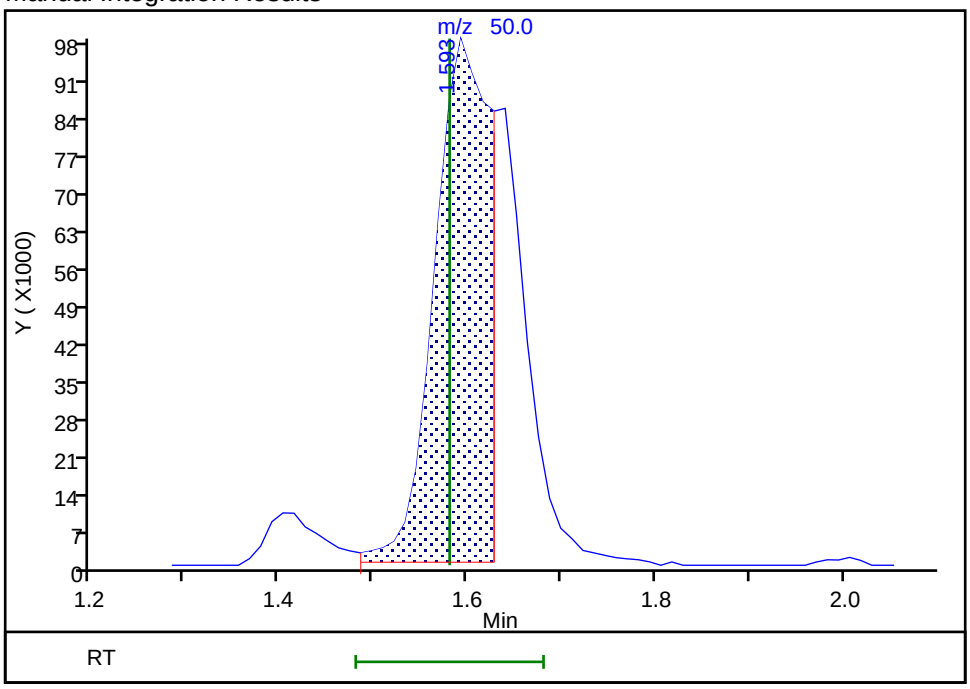
Processing Integration Results

RT: 1.59
Area: 598051
Amount: 28.146899
Amount Units: ug/l




Manual Integration Results

RT: 1.59
Area: 413696
Amount: 19.470345
Amount Units: ug/l




Reviewer: laveyt, 30-Apr-2019 17:05:20
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-378870/25  Calibration Date: 04/30/2019 20:27

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1269812.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dibromofluoromethane (Surr) | Ave | 0.2660 | 0.2521 | | 0.0190 | 0.0200 | -5.2 | 30.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2988 | 0.2907 | | 0.0195 | 0.0200 | -2.7 | 30.0 |
| Toluene-d8 (Surr) | Ave | 1.417 | 1.342 | | 0.0189 | 0.0200 | -5.3 | 30.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.5219 | 0.4893 | | 0.0188 | 0.0200 | -6.2 | 30.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269812.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2019 20:27:30 ALS Bottle#: 19 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-025
Operator ID: 001904 Instrument ID: A3UX12
Sublist:

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 02-May-2019 12:03:16 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: bosworthh Date: 02-May-2019 12:09:32

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1276838 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 890370 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.971 | 9.971 | 0.000 | 94 | 480538 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 95 | 321828 | 20.0 | 19.0 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 95 | 371155 | 20.0 | 19.5 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 1195200 | 20.0 | 18.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 435656 | 20.0 | 18.8 | |
| 26 Acetonitrile | 41 | 2.942 | 2.942 | 0.000 | 99 | 705328 | 200.0 | 175.5 | |
| 37 Isopropyl ether | 87 | 3.699 | 3.699 | 0.000 | 94 | 326682 | 20.0 | 19.0 | |
| 38 2-Chloro-1,3-butadiene | 53 | 3.723 | 3.723 | 0.000 | 89 | 580460 | 20.0 | 20.0 | |
| 39 Tert-butyl ethyl ether | 59 | 4.007 | 4.007 | 0.000 | 97 | 1042558 | 20.0 | 18.5 | |
| 43 Ethyl acetate | 43 | 4.196 | 4.196 | 0.000 | 99 | 983592 | 40.0 | 42.1 | |
| 44 Propionitrile | 54 | 4.208 | 4.208 | 0.000 | 99 | 919929 | 200.0 | 188.7 | |
| 45 Methacrylonitrile | 41 | 4.326 | 4.326 | 0.000 | 92 | 3011956 | 200.0 | 190.9 | |
| 56 Tert-amyl methyl ether | 73 | 4.953 | 4.953 | 0.000 | 98 | 1115344 | 20.0 | 19.3 | |
| 58 n-Butanol | 56 | 5.344 | 5.344 | 0.000 | 85 | 586224 | 500.0 | 387.8 | |
| 60 Ethyl acrylate | 55 | 5.486 | 5.486 | 0.000 | 99 | 560775 | 20.0 | 22.9 | |
| 63 Methyl methacrylate | 41 | 5.687 | 5.687 | 0.000 | 88 | 719329 | 40.0 | 44.2 | |
| 67 2-Nitropropane | 41 | 6.042 | 6.030 | 0.012 | 99 | 180395 | 40.0 | 36.8 | |
| 79 n-Butyl acetate | 43 | 7.202 | 7.202 | 0.000 | 97 | 630285 | 20.0 | 20.2 | |
| 82 1-Chlorohexane | 91 | 7.746 | 7.746 | 0.000 | 77 | 509667 | 20.0 | 20.0 | |
| 91 Cyclohexanone | 55 | 8.799 | 8.799 | 0.000 | 91 | 207270 | 200.0 | 166.3 | |
| 103 Pentachloroethane | 167 | 9.616 | 9.604 | 0.012 | 90 | 414906 | 40.0 | 38.9 | |
| 109 1,2,3-Trimethylbenzene | 105 | 10.042 | 10.042 | 0.000 | 98 | 1417952 | 20.0 | 20.0 | |
| 110 Benzyl chloride | 91 | 10.136 | 10.136 | 0.000 | 98 | 938954 | 20.0 | 18.3 | |
| 114 1,3,5-Trichlorobenzene | 180 | 11.343 | 11.343 | 0.000 | 98 | 533529 | 20.0 | 17.6 | |
| 119 2-Methylnaphthalene | 142 | 13.378 | 13.378 | 0.000 | 93 | 1525808 | 40.0 | 25.6 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| VMFASA9W_00228 | Amount Added: | 16.00 | Units: uL | |
| vmDist_H2o_00144 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |

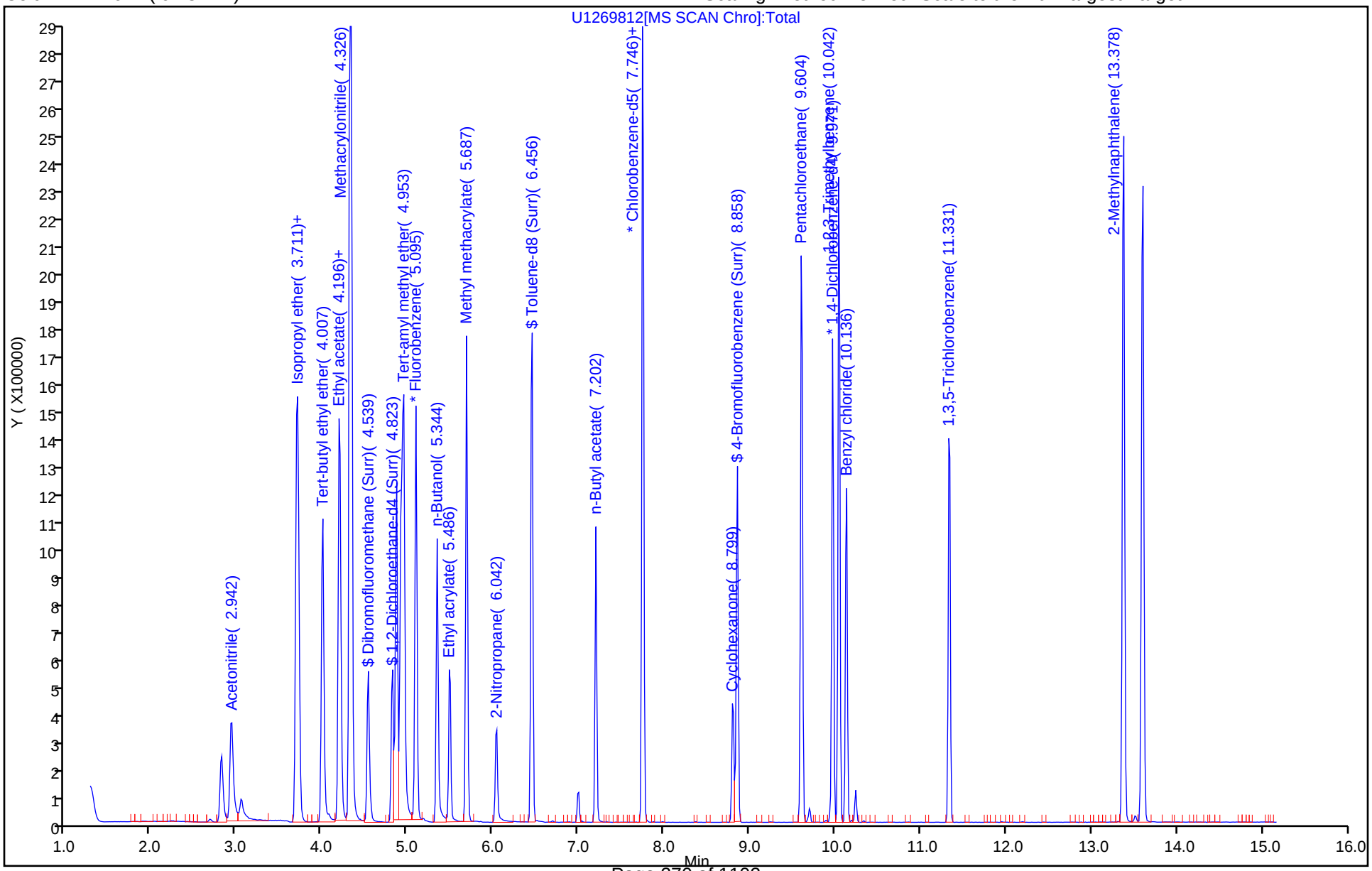
Report Date: 02-May-2019 12:09:34 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269812.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 20:27:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 25 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-378870/25  Calibration Date: 04/30/2019 20:27

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 17:52

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 20:05

Lab File ID: U1269812.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | Lin1 | | 0.0552 | | 0.175 | 0.200 | -12.3 | 30.0 |
| Isopropyl ether | Ave | 0.2698 | 0.2559 | | 0.0190 | 0.0200 | -5.2 | 30.0 |
| 2-Chloro-1,3-butadiene | Ave | 0.4548 | 0.4546 | | 0.0200 | 0.0200 | -0.0 | 30.0 |
| Tert-butyl ethyl ether | Ave | 0.8827 | 0.8165 | | 0.0185 | 0.0200 | -7.5 | 30.0 |
| Ethyl acetate | Ave | 0.3663 | 0.3852 | | 0.0421 | 0.0400 | 5.1 | 50.0 |
| Propionitrile | Lin1 | | 0.0721 | | 0.189 | 0.200 | -5.7 | 30.0 |
| Methacrylonitrile | Ave | 0.2471 | 0.2359 | | 0.191 | 0.200 | -4.5 | 30.0 |
| Tert-amyl methyl ether | Ave | 0.9065 | 0.8735 | | 0.0193 | 0.0200 | -3.6 | 30.0 |
| n-Butanol | Ave | 0.0237 | 0.0184 | | 0.388 | 0.500 | -22.4 | 30.0 |
| Ethyl acrylate | Ave | 0.3838 | 0.4392 | | 0.0229 | 0.0200 | 14.4 | 30.0 |
| Methyl methacrylate | Ave | 0.2550 | 0.2817 | | 0.0442 | 0.0400 | 10.4 | 30.0 |
| 2-Nitropropane | Ave | 0.0769 | 0.0706 | | 0.0368 | 0.0400 | -8.1 | 30.0 |
| n-Butyl acetate | Ave | 0.7023 | 0.7079 | | 0.0202 | 0.0200 | 0.8 | 30.0 |
| 1-Chlorohexane | Ave | 0.5721 | 0.5724 | | 0.0200 | 0.0200 | 0.0 | 30.0 |
| Cyclohexanone | Lin1 | | 0.0233 | | 0.166 | 0.200 | -16.8 | 30.0 |
| Pentachloroethane | Ave | 0.4435 | 0.4317 | | 0.0389 | 0.0400 | -2.7 | 30.0 |
| 1,2,3-Trimethylbenzene | Ave | 2.954 | 2.951 | | 0.0200 | 0.0200 | -0.1 | 30.0 |
| Benzyl chloride | Ave | 2.132 | 1.954 | | 0.0183 | 0.0200 | -8.4 | 30.0 |
| 1,3,5-Trichlorobenzene | Ave | 1.258 | 1.110 | | 0.0176 | 0.0200 | -11.8 | 30.0 |
| 2-Methylnaphthalene | Ave | 2.484 | 1.588 | | 0.0256 | 0.0400 | -36.1* | 30.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269812.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Apr-2019 20:27:30 ALS Bottle#: 19 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-025
Operator ID: 001904 Instrument ID: A3UX12
Sublist:

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 02-May-2019 12:03:16 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: bosworthh Date: 02-May-2019 12:09:32

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1276838 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 84 | 890370 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.971 | 9.971 | 0.000 | 94 | 480538 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 95 | 321828 | 20.0 | 19.0 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 95 | 371155 | 20.0 | 19.5 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 1195200 | 20.0 | 18.9 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 435656 | 20.0 | 18.8 | |
| 26 Acetonitrile | 41 | 2.942 | 2.942 | 0.000 | 99 | 705328 | 200.0 | 175.5 | |
| 37 Isopropyl ether | 87 | 3.699 | 3.699 | 0.000 | 94 | 326682 | 20.0 | 19.0 | |
| 38 2-Chloro-1,3-butadiene | 53 | 3.723 | 3.723 | 0.000 | 89 | 580460 | 20.0 | 20.0 | |
| 39 Tert-butyl ethyl ether | 59 | 4.007 | 4.007 | 0.000 | 97 | 1042558 | 20.0 | 18.5 | |
| 43 Ethyl acetate | 43 | 4.196 | 4.196 | 0.000 | 99 | 983592 | 40.0 | 42.1 | |
| 44 Propionitrile | 54 | 4.208 | 4.208 | 0.000 | 99 | 919929 | 200.0 | 188.7 | |
| 45 Methacrylonitrile | 41 | 4.326 | 4.326 | 0.000 | 92 | 3011956 | 200.0 | 190.9 | |
| 56 Tert-amyl methyl ether | 73 | 4.953 | 4.953 | 0.000 | 98 | 1115344 | 20.0 | 19.3 | |
| 58 n-Butanol | 56 | 5.344 | 5.344 | 0.000 | 85 | 586224 | 500.0 | 387.8 | |
| 60 Ethyl acrylate | 55 | 5.486 | 5.486 | 0.000 | 99 | 560775 | 20.0 | 22.9 | |
| 63 Methyl methacrylate | 41 | 5.687 | 5.687 | 0.000 | 88 | 719329 | 40.0 | 44.2 | |
| 67 2-Nitropropane | 41 | 6.042 | 6.030 | 0.012 | 99 | 180395 | 40.0 | 36.8 | |
| 79 n-Butyl acetate | 43 | 7.202 | 7.202 | 0.000 | 97 | 630285 | 20.0 | 20.2 | |
| 82 1-Chlorohexane | 91 | 7.746 | 7.746 | 0.000 | 77 | 509667 | 20.0 | 20.0 | |
| 91 Cyclohexanone | 55 | 8.799 | 8.799 | 0.000 | 91 | 207270 | 200.0 | 166.3 | |
| 103 Pentachloroethane | 167 | 9.616 | 9.604 | 0.012 | 90 | 414906 | 40.0 | 38.9 | |
| 109 1,2,3-Trimethylbenzene | 105 | 10.042 | 10.042 | 0.000 | 98 | 1417952 | 20.0 | 20.0 | |
| 110 Benzyl chloride | 91 | 10.136 | 10.136 | 0.000 | 98 | 938954 | 20.0 | 18.3 | |
| 114 1,3,5-Trichlorobenzene | 180 | 11.343 | 11.343 | 0.000 | 98 | 533529 | 20.0 | 17.6 | |
| 119 2-Methylnaphthalene | 142 | 13.378 | 13.378 | 0.000 | 93 | 1525808 | 40.0 | 25.6 | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| VMFASA9W_00228 | Amount Added: | 16.00 | Units: uL | |
| vmDist_H2o_00144 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |

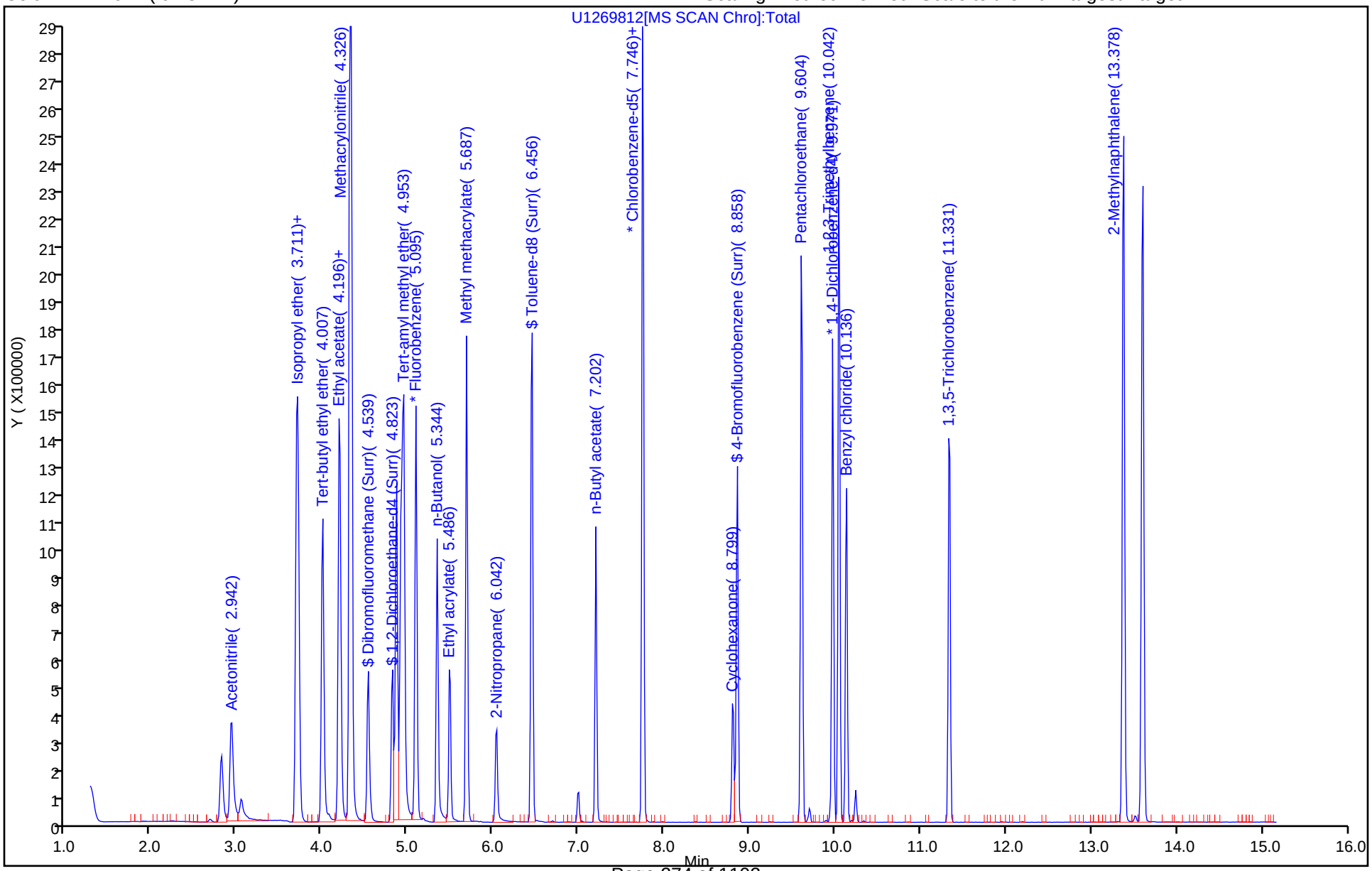
Report Date: 02-May-2019 12:09:34 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269812.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 20:27:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | ICV | | | Worklist Smp#: | 25 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVIS 240-381514/4  Calibration Date: 05/15/2019 18:42

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1270187.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.3850 | 0.3317 | 0.1000 | 0.0172 | 0.0200 | -13.8 | 20.0 |
| Chloromethane | Ave | 0.3374 | 0.2831 | 0.1000 | 0.0168 | 0.0200 | -16.1 | 20.0 |
| Butadiene | Ave | 0.3709 | 0.3667 | | 0.0198 | 0.0200 | -1.1 | 20.0 |
| Vinyl chloride | Ave | 0.3771 | 0.3679 | 0.1000 | 0.0195 | 0.0200 | -2.4 | 20.0 |
| Bromomethane | Ave | 0.2328 | 0.2248 | 0.0500 | 0.0193 | 0.0200 | -3.4 | 20.0 |
| Chloroethane | Ave | 0.2368 | 0.2262 | 0.0500 | 0.0191 | 0.0200 | -4.5 | 20.0 |
| Dichlorofluoromethane | Ave | 0.4732 | 0.4526 | | 0.0191 | 0.0200 | -4.4 | 20.0 |
| Trichlorofluoromethane | Ave | 0.4204 | 0.4149 | 0.1000 | 0.0197 | 0.0200 | -1.3 | 20.0 |
| Ethyl ether | Ave | 0.2526 | 0.2438 | | 0.0193 | 0.0200 | -3.5 | 20.0 |
| Acrolein | Ave | 0.0755 | 0.0545 | | 0.0722 | 0.100 | -27.8 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.4135 | 0.4017 | 0.1000 | 0.0194 | 0.0200 | -2.8 | 20.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave | 0.2737 | 0.2806 | 0.0500 | 0.0205 | 0.0200 | 2.5 | 20.0 |
| Acetone | Lin1 | | 0.1048 | 0.0100 | 0.0278 | 0.0400 | -30.6 | 50.0 |
| Iodomethane | Ave | 0.4395 | 0.4404 | | 0.0200 | 0.0200 | 0.2 | 20.0 |
| Carbon disulfide | Ave | 0.9516 | 0.8942 | 0.1000 | 0.0188 | 0.0200 | -6.0 | 20.0 |
| 3-Chloro-1-propene | Ave | 0.4714 | 0.4460 | | 0.0189 | 0.0200 | -5.4 | 20.0 |
| Methyl acetate | Ave | 0.3480 | 0.2984 | 0.1000 | 0.0343 | 0.0400 | -14.3 | 20.0 |
| Methylene Chloride | Lin1 | | 0.3447 | 0.1000 | 0.0177 | 0.0200 | -11.3 | 50.0 |
| 2-Methyl-2-propanol | Ave | 0.0732 | 0.0495 | | 0.135 | 0.200 | -32.4 | 50.0 |
| Acrylonitrile | Ave | 0.1811 | 0.1512 | | 0.167 | 0.200 | -16.5 | 20.0 |
| trans-1,2-Dichloroethene | Ave | 0.4063 | 0.3898 | 0.1000 | 0.0192 | 0.0200 | -4.1 | 20.0 |
| Methyl tert-butyl ether | Ave | 0.8398 | 0.7895 | 0.1000 | 0.0188 | 0.0200 | -6.0 | 20.0 |
| Hexane | Ave | 0.4435 | 0.4778 | | 0.0215 | 0.0200 | 7.7 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.5067 | 0.4912 | 0.2000 | 0.0194 | 0.0200 | -3.1 | 20.0 |
| Vinyl acetate | Ave | 0.5694 | 0.5336 | | 0.0187 | 0.0200 | -6.3 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.3288 | 0.2916 | | 0.0177 | 0.0200 | -11.3 | 20.0 |
| cis-1,2-Dichloroethene | Ave | 0.3444 | 0.3341 | 0.1000 | 0.0194 | 0.0200 | -3.0 | 20.0 |
| 2-Butanone (MEK) | Ave | 0.0623 | 0.0547 | 0.0100 | 0.0351 | 0.0400 | -12.2 | 20.0 |
| Chlorobromomethane | Ave | 0.2413 | 0.2200 | | 0.0182 | 0.0200 | -8.9 | 20.0 |
| Tetrahydrofuran | Ave | 0.1500 | 0.1270 | | 0.0339 | 0.0400 | -15.3 | 20.0 |
| Chloroform | Ave | 0.4844 | 0.4622 | 0.2000 | 0.0191 | 0.0200 | -4.6 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.4157 | 0.4019 | 0.1000 | 0.0193 | 0.0200 | -3.3 | 20.0 |
| Cyclohexane | Ave | 0.5049 | 0.5038 | 0.1000 | 0.0200 | 0.0200 | -0.2 | 20.0 |
| 1,1-Dichloropropene | Ave | 0.4109 | 0.4048 | | 0.0197 | 0.0200 | -1.5 | 20.0 |
| Carbon tetrachloride | Ave | 0.3534 | 0.3306 | 0.1000 | 0.0187 | 0.0200 | -6.5 | 20.0 |
| Isobutyl alcohol | Ave | 0.0199 | 0.0113 | | 0.284 | 0.500 | -43.2* | 20.0 |
| Benzene | Ave | 1.178 | 1.196 | 0.5000 | 0.0203 | 0.0200 | 1.6 | 20.0 |
| 1,2-Dichloroethane | Ave | 0.3625 | 0.3234 | 0.1000 | 0.0178 | 0.0200 | -10.8 | 20.0 |
| n-Heptane | Lin1 | | 0.2472 | | 0.0208 | 0.0200 | 3.8 | 20.0 |
| Trichloroethene | Ave | 0.3152 | 0.3111 | 0.1500 | 0.0197 | 0.0200 | -1.3 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVIS 240-381514/4  Calibration Date: 05/15/2019 18:42

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1270187.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.5644 | 0.5491 | 0.1000 | 0.0195 | 0.0200 | -2.7 | 20.0 |
| 1,2-Dichloropropane | Ave | 0.2488 | 0.2513 | 0.1000 | 0.0202 | 0.0200 | 1.0 | 20.0 |
| 1,4-Dioxane | Ave | 0.0040 | 0.0040 | | 0.402 | 0.400 | 0.4 | 50.0 |
| Dibromomethane | Ave | 0.2110 | 0.1976 | | 0.0187 | 0.0200 | -6.4 | 20.0 |
| Dichlorobromomethane | Ave | 0.3396 | 0.3239 | 0.1500 | 0.0191 | 0.0200 | -4.6 | 20.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1806 | 0.1838 | | 0.0407 | 0.0400 | 1.8 | 20.0 |
| cis-1,3-Dichloropropene | Ave | 0.4134 | 0.4106 | 0.1500 | 0.0199 | 0.0200 | -0.7 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.3834 | 0.3555 | 0.0500 | 0.0371 | 0.0400 | -7.3 | 20.0 |
| Toluene | Ave | 1.674 | 1.693 | 0.4000 | 0.0202 | 0.0200 | 1.2 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.5418 | 0.5262 | 0.1000 | 0.0194 | 0.0200 | -2.9 | 20.0 |
| Ethyl methacrylate | Ave | 0.5220 | 0.5424 | | 0.0208 | 0.0200 | 3.9 | 20.0 |
| 1,1,2-Trichloroethane | Ave | 0.3327 | 0.3281 | 0.1000 | 0.0197 | 0.0200 | -1.4 | 20.0 |
| Tetrachloroethene | Ave | 0.4449 | 0.4442 | 0.1500 | 0.0200 | 0.0200 | -0.1 | 20.0 |
| 1,3-Dichloropropane | Ave | 0.5898 | 0.5892 | | 0.0200 | 0.0200 | -0.1 | 20.0 |
| 2-Hexanone | Ave | 0.4000 | 0.3647 | 0.0500 | 0.0365 | 0.0400 | -8.8 | 20.0 |
| Chlorodibromomethane | Ave | 0.3454 | 0.3212 | | 0.0186 | 0.0200 | -7.0 | 20.0 |
| Ethylene Dibromide | Ave | 0.3578 | 0.3494 | | 0.0195 | 0.0200 | -2.3 | 20.0 |
| Chlorobenzene | Ave | 1.080 | 1.056 | 0.3000 | 0.0196 | 0.0200 | -2.2 | 20.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3776 | 0.3596 | | 0.0190 | 0.0200 | -4.8 | 20.0 |
| Ethylbenzene | Ave | 0.6029 | 0.6008 | | 0.0199 | 0.0200 | -0.4 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.7480 | 0.7517 | | 0.0201 | 0.0200 | 0.5 | 20.0 |
| o-Xylene | Ave | 0.7560 | 0.7420 | | 0.0196 | 0.0200 | -1.9 | 20.0 |
| Styrene | Ave | 1.213 | 1.204 | 0.3000 | 0.0198 | 0.0200 | -0.8 | 20.0 |
| Bromoform | Ave | 0.2499 | 0.2266 | 0.1000 | 0.0181 | 0.0200 | -9.3 | 20.0 |
| Isopropylbenzene | Ave | 1.969 | 1.936 | 0.1000 | 0.0197 | 0.0200 | -1.6 | 20.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.9843 | 1.059 | 0.3000 | 0.0215 | 0.0200 | 7.6 | 20.0 |
| Bromobenzene | Ave | 0.8666 | 0.8791 | | 0.0203 | 0.0200 | 1.4 | 20.0 |
| 1,2,3-Trichloropropane | Ave | 0.3726 | 0.3721 | | 0.0200 | 0.0200 | -0.1 | 20.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.3189 | 0.2834 | | 0.0178 | 0.0200 | -11.1 | 20.0 |
| N-Propylbenzene | Ave | 0.9864 | 1.031 | | 0.0209 | 0.0200 | 4.5 | 20.0 |
| 2-Chlorotoluene | Ave | 0.8263 | 0.8603 | | 0.0208 | 0.0200 | 4.1 | 20.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.842 | 3.011 | | 0.0212 | 0.0200 | 5.9 | 20.0 |
| 4-Chlorotoluene | Ave | 0.8528 | 0.8589 | | 0.0201 | 0.0200 | 0.7 | 20.0 |
| tert-Butylbenzene | Ave | 2.582 | 2.745 | | 0.0213 | 0.0200 | 6.3 | 20.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.944 | 3.032 | | 0.0206 | 0.0200 | 3.0 | 20.0 |
| sec-Butylbenzene | Ave | 3.717 | 3.896 | | 0.0210 | 0.0200 | 4.8 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.707 | 1.657 | 0.6000 | 0.0194 | 0.0200 | -2.9 | 20.0 |
| 4-Isopropyltoluene | Ave | 3.214 | 3.328 | | 0.0207 | 0.0200 | 3.6 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.756 | 1.694 | 0.5000 | 0.0193 | 0.0200 | -3.6 | 20.0 |
| n-Butylbenzene | Ave | 2.741 | 2.743 | | 0.0200 | 0.0200 | 0.0 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.655 | 1.571 | 0.4000 | 0.0190 | 0.0200 | -5.1 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVIS 240-381514/4  Calibration Date: 05/15/2019 18:42

Instrument ID: A3UX12  Calib Start Date: 04/30/2019 14:10

GC Column: DB-624  ID: 0.18(mm)  Calib End Date: 04/30/2019 16:24

Lab File ID: U1270187.D  Conc. Units: ng/uL  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.3213 | 0.2925 | 0.0500 | 0.0182 | 0.0200 | -9.0 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 1.156 | 1.002 | 0.2000 | 0.0173 | 0.0200 | -13.3 | 50.0 |
| Hexachlorobutadiene | Ave | 0.5105 | 0.4163 | | 0.0163 | 0.0200 | -18.5 | 20.0 |
| Naphthalene | Ave | 3.623 | 3.442 | | 0.0190 | 0.0200 | -5.0 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 1.070 | 0.9251 | | 0.0173 | 0.0200 | -13.5 | 20.0 |
| Dibromofluoromethane (Surr) | Ave | 0.2660 | 0.2444 | | 0.0184 | 0.0200 | -8.1 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2988 | 0.2589 | | 0.0173 | 0.0200 | -13.4 | 20.0 |
| Toluene-d8 (Surr) | Ave | 1.417 | 1.331 | | 0.0188 | 0.0200 | -6.0 | 20.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.5219 | 0.4732 | | 0.0181 | 0.0200 | -9.3 | 20.0 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270187.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 15-May-2019 18:42:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-004
Operator ID: 001904 Instrument ID: A3UX12
Sublist: chrom-8260_12_h2o*sub2

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 19:03:41 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 19:03:41

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1070584 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.758 | 7.758 | 0.000 | 83 | 722465 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 93 | 368199 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 261592 | 20.0 | 18.4 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 95 | 277123 | 20.0 | 17.3 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 961666 | 20.0 | 18.8 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 95 | 341872 | 20.0 | 18.1 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 99 | 355157 | 20.0 | 17.2 | |
| 10 Chloromethane | 50 | 1.593 | 1.593 | 0.000 | 99 | 303043 | 20.0 | 16.8 | M |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 88 | 392627 | 20.0 | 19.8 | |
| 12 Vinyl chloride | 62 | 1.687 | 1.687 | 0.000 | 98 | 393912 | 20.0 | 19.5 | |
| 14 Bromomethane | 94 | 1.912 | 1.912 | 0.000 | 89 | 240690 | 20.0 | 19.3 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 99 | 242212 | 20.0 | 19.1 | |
| 16 Dichlorofluoromethane | 67 | 2.173 | 2.173 | 0.000 | 97 | 484523 | 20.0 | 19.1 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 98 | 444182 | 20.0 | 19.7 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 88 | 260979 | 20.0 | 19.3 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 291743 | 100.0 | 72.2 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 430098 | 20.0 | 19.4 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 92 | 300432 | 20.0 | 20.5 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 224399 | 40.0 | 27.8 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 96 | 471511 | 20.0 | 20.0 | |
| 25 Carbon disulfide | 76 | 2.835 | 2.835 | 0.000 | 98 | 957277 | 20.0 | 18.8 | |
| 27 3-Chloro-1-propene | 41 | 2.953 | 2.953 | 0.000 | 95 | 477423 | 20.0 | 18.9 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 96 | 638834 | 40.0 | 34.3 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 90 | 368996 | 20.0 | 17.7 | |
| 30 2-Methyl-2-propanol | 59 | 3.166 | 3.166 | 0.000 | 100 | 529585 | 200.0 | 135.1 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 100 | 1618794 | 200.0 | 167.0 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 96 | 417326 | 20.0 | 19.2 | |
| 33 Methyl tert-butyl ether | 73 | 3.297 | 3.297 | 0.000 | 94 | 845237 | 20.0 | 18.8 | |
| 34 Hexane | 57 | 3.510 | 3.510 | 0.000 | 88 | 511475 | 20.0 | 21.5 | |
| 35 1,1-Dichloroethane | 63 | 3.652 | 3.652 | 0.000 | 96 | 525844 | 20.0 | 19.4 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 571218 | 20.0 | 18.7 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 58 | 312154 | 20.0 | 17.7 | |
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 79 | 357663 | 20.0 | 19.4 | |
| 42 2-Butanone (MEK) | 72 | 4.149 | 4.149 | 0.000 | 98 | 117095 | 40.0 | 35.1 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 235493 | 20.0 | 18.2 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 88 | 272001 | 40.0 | 33.9 | |
| 48 Chloroform | 83 | 4.409 | 4.409 | 0.000 | 93 | 494776 | 20.0 | 19.1 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 430268 | 20.0 | 19.3 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 86 | 539309 | 20.0 | 20.0 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 75 | 353935 | 20.0 | 18.7 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 97 | 433395 | 20.0 | 19.7 | |
| 53 Isobutyl alcohol | 41 | 4.788 | 4.788 | 0.000 | 95 | 302431 | 500.0 | 284.1 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 95 | 1280533 | 20.0 | 20.3 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 97 | 346178 | 20.0 | 17.8 | |
| 57 n-Heptane | 57 | 5.072 | 5.072 | 0.000 | 91 | 264645 | 20.0 | 20.8 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 97 | 333033 | 20.0 | 19.7 | |
| 61 Methylcyclohexane | 83 | 5.569 | 5.569 | 0.000 | 86 | 587809 | 20.0 | 19.5 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 96 | 269059 | 20.0 | 20.2 | |
| 64 Dibromomethane | 174 | 5.711 | 5.711 | 0.000 | 97 | 211533 | 20.0 | 18.7 | |
| 65 1,4-Dioxane | 88 | 5.711 | 5.711 | 0.000 | 89 | 86016 | 400.0 | 401.6 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 100 | 346718 | 20.0 | 19.1 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 393599 | 40.0 | 40.7 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 98 | 439547 | 20.0 | 19.9 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.350 | 6.350 | 0.000 | 93 | 761070 | 40.0 | 37.1 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 100 | 1223459 | 20.0 | 20.2 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.705 | 6.705 | 0.000 | 90 | 380160 | 20.0 | 19.4 | |
| 74 Ethyl methacrylate | 69 | 6.776 | 6.776 | 0.000 | 88 | 391882 | 20.0 | 20.8 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 90 | 237041 | 20.0 | 19.7 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 96 | 320928 | 20.0 | 20.0 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 86 | 425656 | 20.0 | 20.0 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 92 | 527027 | 40.0 | 36.5 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 232057 | 20.0 | 18.6 | |
| 81 Ethylene Dibromide | 107 | 7.332 | 7.332 | 0.000 | 98 | 252426 | 20.0 | 19.5 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 763012 | 20.0 | 19.6 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 259785 | 20.0 | 19.0 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 434064 | 20.0 | 19.9 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 100 | 543066 | 20.0 | 20.1 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 536049 | 20.0 | 19.6 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 95 | 869506 | 20.0 | 19.8 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 98 | 163711 | 20.0 | 18.1 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 1399008 | 20.0 | 19.7 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 86 | 389837 | 20.0 | 21.5 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 87 | 323677 | 20.0 | 20.3 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 83 | 136992 | 20.0 | 20.0 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.047 | 9.047 | 0.000 | 90 | 104341 | 20.0 | 17.8 | |
| 96 N-Propylbenzene | 120 | 9.107 | 9.107 | 0.000 | 99 | 379464 | 20.0 | 20.9 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 97 | 316762 | 20.0 | 20.8 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 1108470 | 20.0 | 21.2 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 98 | 316245 | 20.0 | 20.1 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 90 | 1010623 | 20.0 | 21.3 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 95 | 1116210 | 20.0 | 20.6 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 1434448 | 20.0 | 21.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 610131 | 20.0 | 19.4 | |
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 97 | 1225483 | 20.0 | 20.7 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 95 | 623559 | 20.0 | 19.3 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 1009970 | 20.0 | 20.0 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 578340 | 20.0 | 19.0 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 92 | 107708 | 20.0 | 18.2 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.946 | 11.946 | 0.000 | 94 | 368833 | 20.0 | 17.3 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 95 | 153267 | 20.0 | 16.3 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 1267203 | 20.0 | 19.0 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 96 | 340621 | 20.0 | 17.3 | |
| S 125 Total BTEX | 1 | | | | 0 | | 100.0 | 100.2 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 74.9 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 39.7 | |

## QC Flag Legend

Review Flags

M - Manually Integrated

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmrgas_00292 | Amount Added: | 16.00 | Units: uL | |
| vmarolistdw_00296 | Amount Added: | 16.00 | Units: uL | |
| vmrprimw_00333 | Amount Added: | 16.00 | Units: uL | |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm40ml_vials_00013 | Amount Added: | 0.00 | Units: | Run Reagent |

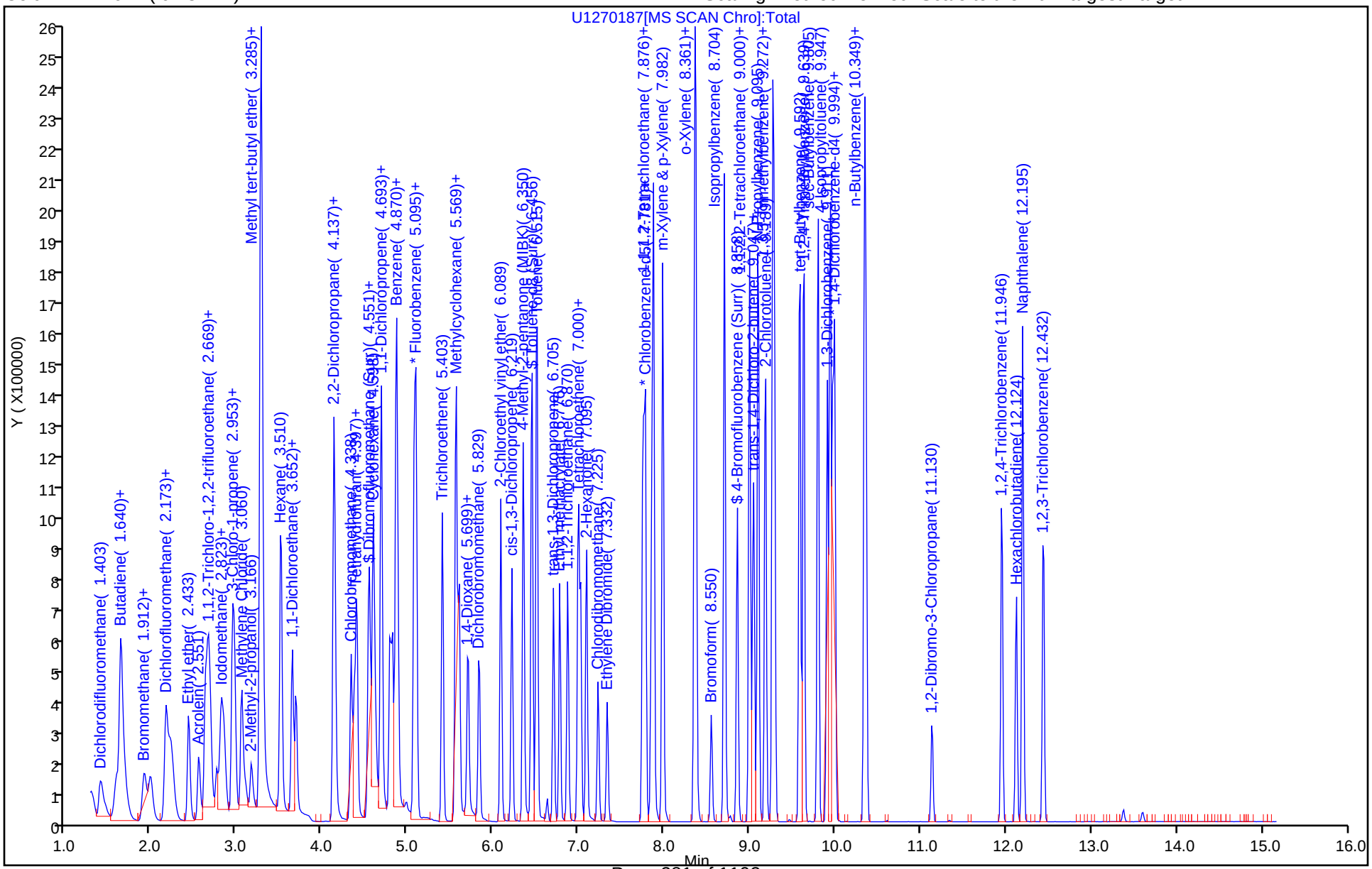
Report Date: 15-May-2019 19:03:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270187.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 18:42:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | CCVIS | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

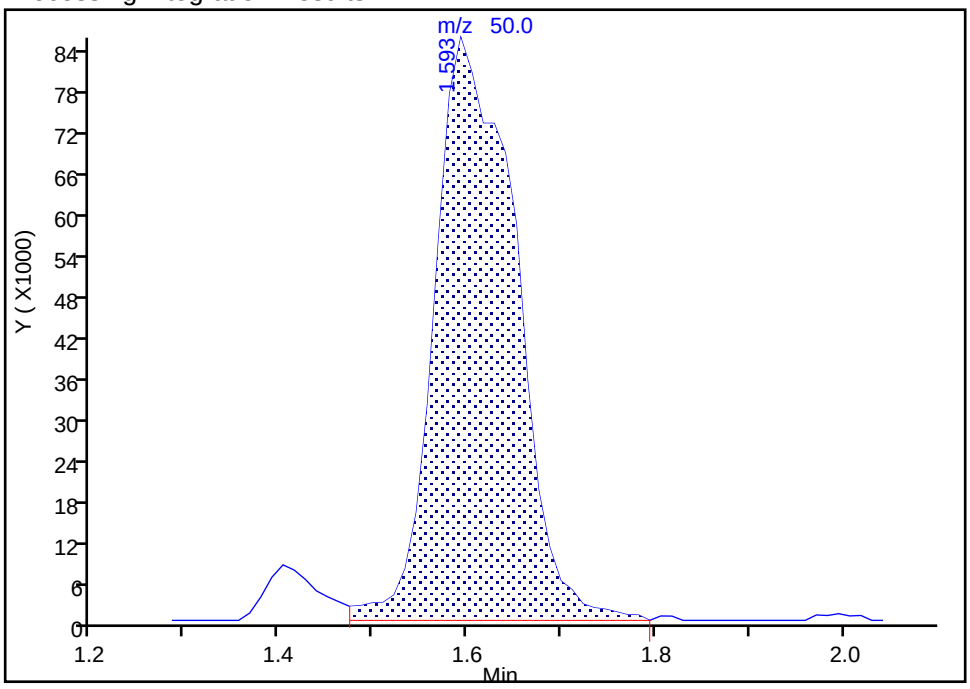
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270187.D
Injection Date: 15-May-2019 18:42:30 Instrument ID: A3UX12
Lims ID: CCVIS
Client ID:
Operator ID: 001904 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 10 Chloromethane, CAS: 74-87-3

Signal: 1

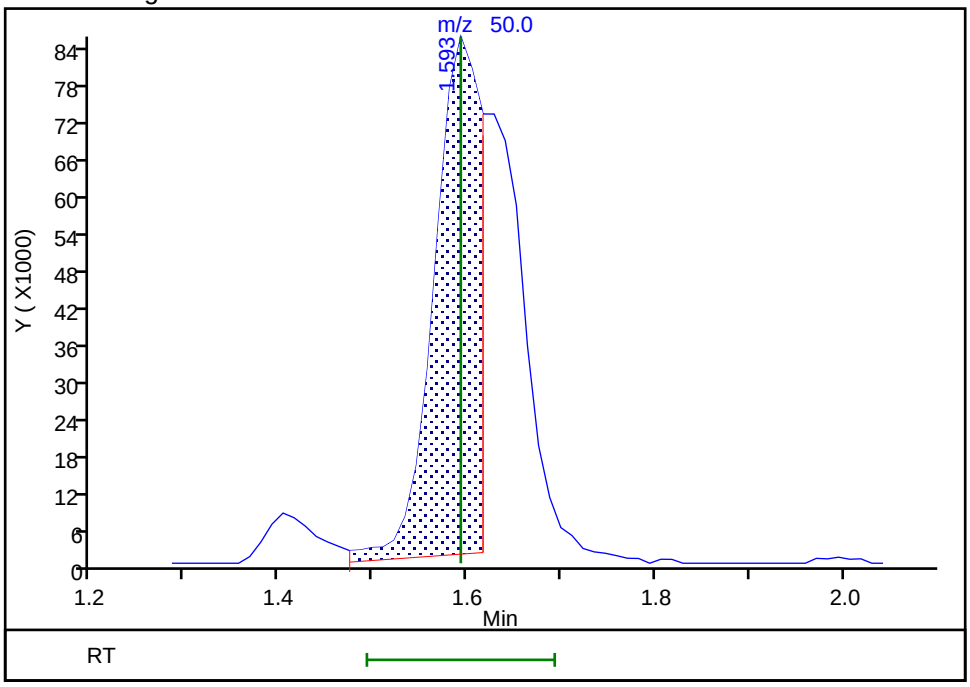
Processing Integration Results

RT: 1.59
Area: 513012
Amount: 28.403313
Amount Units: ug/l




Manual Integration Results

RT: 1.59
Area: 303043
Amount: 16.778214
Amount Units: ug/l




Reviewer: laveyt, 15-May-2019 19:02:15
Audit Action: Manually Integrated Audit Reason: Split Peak

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-Apr-2019 13:47:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0086631-001
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 30-Apr-2019 17:21:58 Calib Date: 30-Apr-2019 16:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269801.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0333

First Level Reviewer: laveyt Date: 30-Apr-2019 14:30:05

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 3.433 | 3.433 | 0.000 | 0 | 656639 | NR | NR | |

## QC Flag Legend

Processing Flags
NR - Missing Quant Standard

## Reagents:

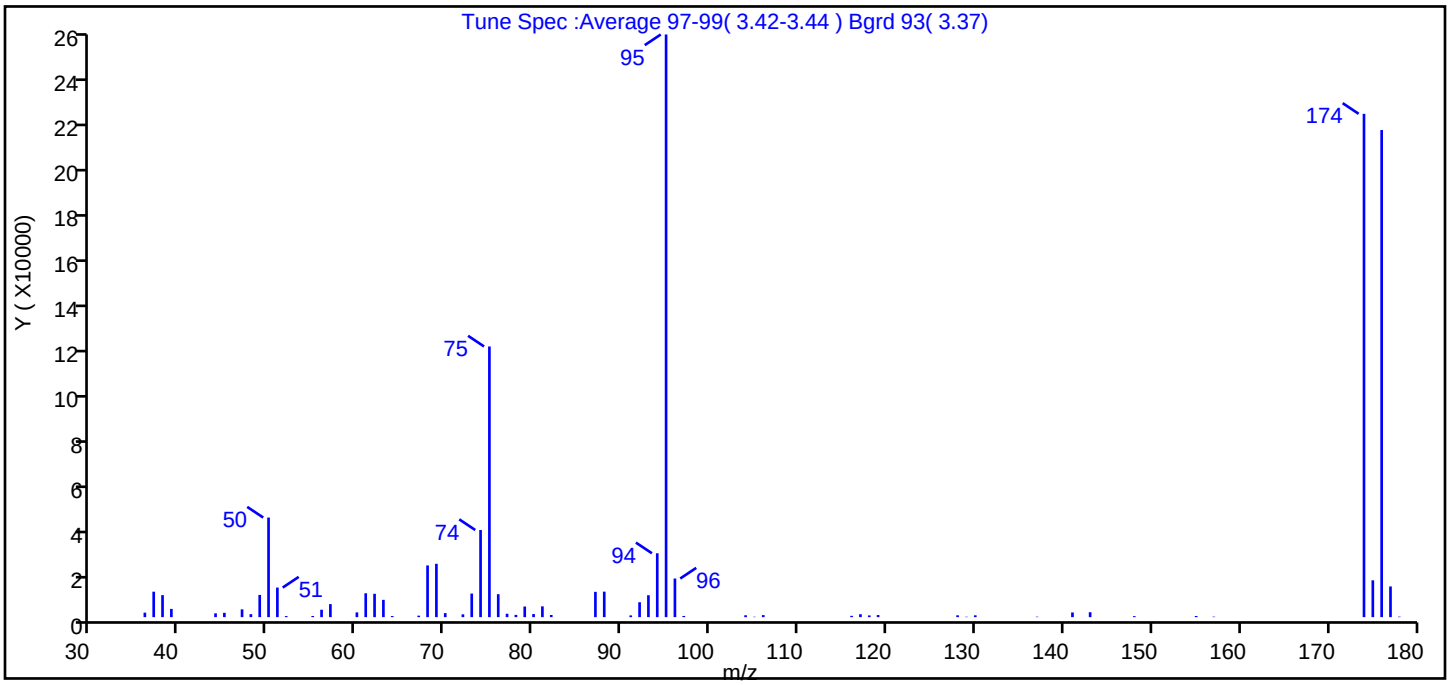
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D
Injection Date: 30-Apr-2019 13:47:30 Instrument ID: A3UX12
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 17.1 |
| 75 | 30 to 60% of m/z 95 | 46.5 |
| 96 | 5 to 9% of m/z 95 | 6.6 |
| 173 | Less than 2% of m/z 174 | 0.0 (0.0) |
| 174 | 50 to 120% of m/z 95 | 86.4 |
| 175 | 5 to 9% of m/z 174 | 6.3 (7.3) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 83.6 (96.8) |
| 177 | 5 to 9% of m/z 176 | 5.3 (6.3) |

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D\8260_12_h2o.rslt\spectra.d
Injection Date: 30-Apr-2019 13:47:30
Spectrum: Tune Spec :Average 97-99( 3.42-3.44 ) Bgrd 93( 3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 65

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1949 | 62.00 | 10132 | 82.00 | 933 | 128.00 | 791 |
| 37.00 | 11044 | 63.00 | 7504 | 87.00 | 10980 | 129.00 | 174 |
| 38.00 | 9555 | 64.00 | 476 | 88.00 | 11070 | 130.00 | 792 |
| 39.00 | 3574 | 67.00 | 648 | 91.00 | 753 | 137.00 | 198 |
| 44.00 | 1655 | 68.00 | 22440 | 92.00 | 6468 | 141.00 | 2039 |
| 45.00 | 1879 | 69.00 | 23152 | 93.00 | 9506 | 143.00 | 2139 |
| 47.00 | 3381 | 70.00 | 1747 | 94.00 | 27720 | 148.00 | 438 |
| 48.00 | 1302 | 72.00 | 1224 | 95.00 | 252864 | 155.00 | 497 |
| 49.00 | 9643 | 73.00 | 10230 | 96.00 | 16760 | 157.00 | 207 |
| 50.00 | 43216 | 74.00 | 37816 | 97.00 | 508 | 174.00 | 218432 |
| 51.00 | 12836 | 75.00 | 117464 | 104.00 | 812 | 175.00 | 15985 |
| 52.00 | 474 | 76.00 | 9966 | 105.00 | 167 | 176.00 | 211392 |
| 55.00 | 510 | 77.00 | 1482 | 106.00 | 890 | 177.00 | 13318 |
| 56.00 | 3216 | 78.00 | 977 | 116.00 | 563 | 178.00 | 214 |
| 57.00 | 5655 | 79.00 | 4608 | 117.00 | 1264 | | |
| 60.00 | 2066 | 80.00 | 1344 | 118.00 | 750 | | |
| 61.00 | 10369 | 81.00 | 4681 | 119.00 | 914 | | |

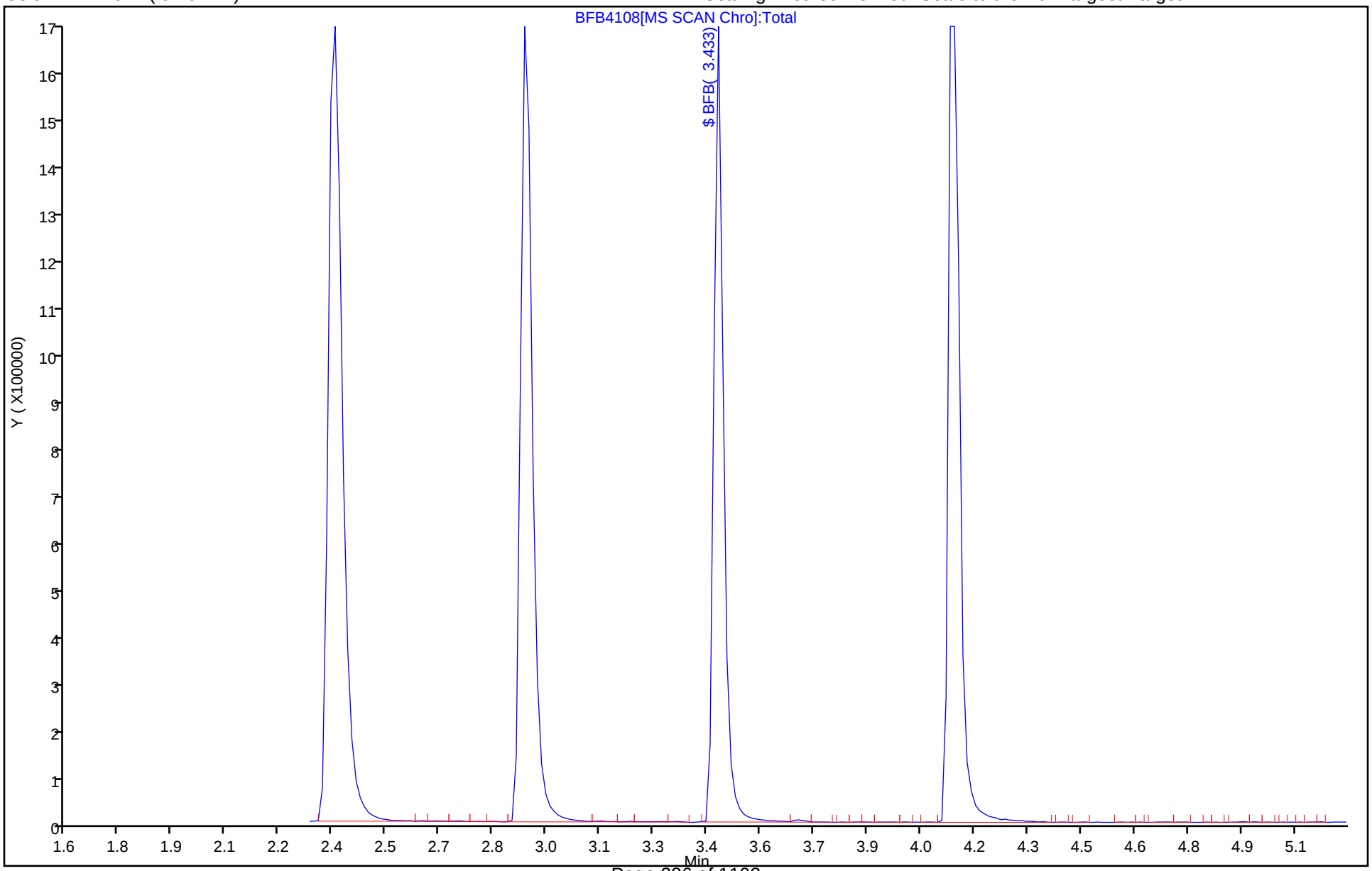
Report Date: 30-Apr-2019 17:21:59 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\BFB4108.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 30-Apr-2019 13:47:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 1 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\BFB4121.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-May-2019 17:56:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-001
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 18:07:06 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 18:07:06

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| $ 8 BFB | 95 | 3.421 | 3.421 | 0.000 | 0 | 520031 | NR | NR | |

## QC Flag Legend

Processing Flags
NR - Missing Quant Standard

## Reagents:

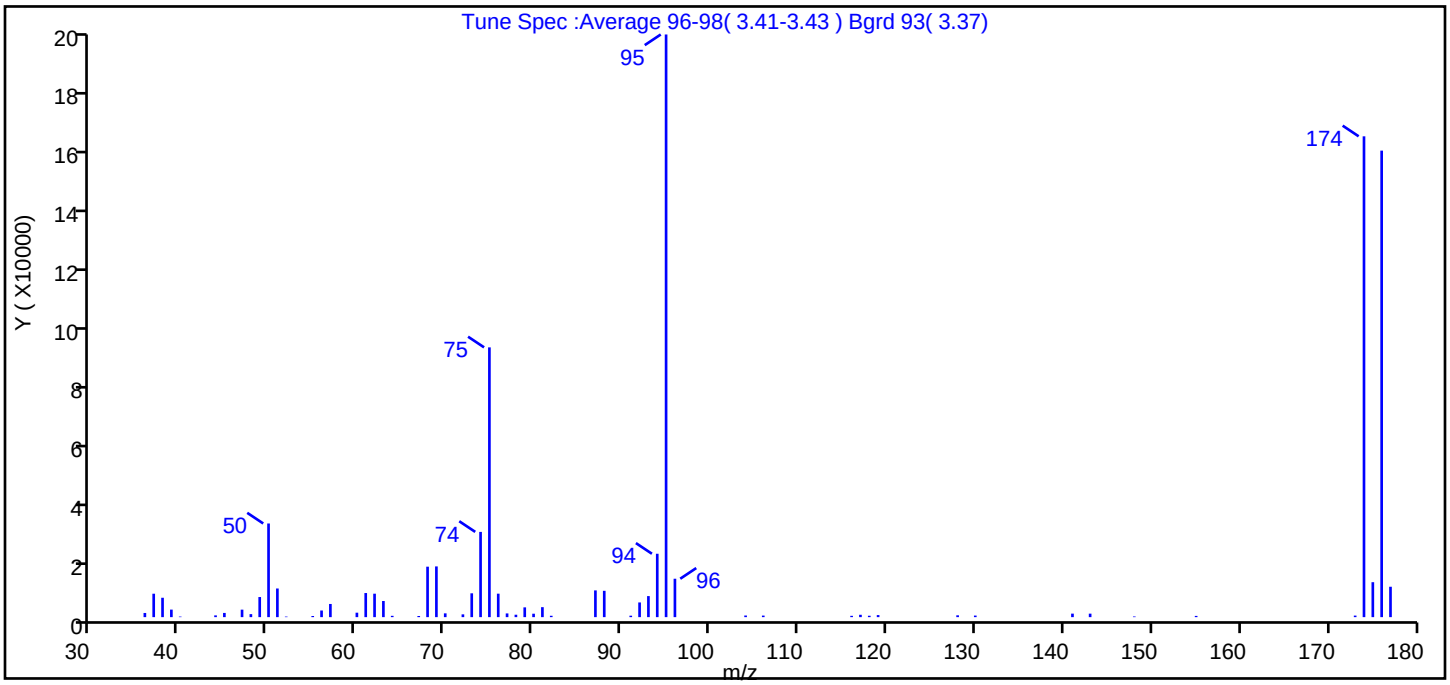
vmbfb_00021 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\BFB4121.D
Injection Date: 15-May-2019 17:56:30 Instrument ID: A3UX12
Lims ID: BFB
Client ID:
Operator ID: 001904 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Tune Method: BFB Method 8260

$ 8 BFB




| m/z | Ion Abundance Criteria | % Relative Abundance |
|---|---|---|
| 95 | Base peak, 100% relative abundance | 100.0 |
| 50 | 15 to 40% of m/z 95 | 16.1 |
| 75 | 30 to 60% of m/z 95 | 46.3 |
| 96 | 5 to 9% of m/z 95 | 6.6 |
| 173 | Less than 2% of m/z 174 | 0.3 (0.3) |
| 174 | 50 to 120% of m/z 95 | 82.5 |
| 175 | 5 to 9% of m/z 174 | 6.0 (7.3) |
| 176 | Greater than 95% but less than 101% of m/z 174 | 80.1 (97.0) |
| 177 | 5 to 9% of m/z 176 | 5.2 (6.5) |

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\BFB4121.D\8260_12_h2o.rslt\spectra.d
Injection Date: 15-May-2019 17:56:30
Spectrum: Tune Spec :Average 96-98( 3.41-3.43 ) Bgrd 93( 3.37)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 61

| m/z | Y | m/z | Y | m/z | Y | m/z | Y |
|---|---|---|---|---|---|---|---|
| 36.00 | 1381 | 60.00 | 1472 | 79.00 | 3237 | 118.00 | 463 |
| 37.00 | 7760 | 61.00 | 7984 | 80.00 | 1138 | 119.00 | 683 |
| 38.00 | 6421 | 62.00 | 7766 | 81.00 | 3305 | 128.00 | 607 |
| 39.00 | 2498 | 63.00 | 5342 | 82.00 | 454 | 130.00 | 521 |
| 40.00 | 183 | 64.00 | 437 | 87.00 | 8856 | 141.00 | 1165 |
| 44.00 | 584 | 67.00 | 378 | 88.00 | 8721 | 143.00 | 1157 |
| 45.00 | 1394 | 68.00 | 16712 | 91.00 | 479 | 148.00 | 218 |
| 47.00 | 2481 | 69.00 | 16800 | 92.00 | 4867 | 155.00 | 410 |
| 48.00 | 998 | 70.00 | 1256 | 93.00 | 6972 | 173.00 | 512 |
| 49.00 | 6660 | 72.00 | 926 | 94.00 | 20992 | 174.00 | 159232 |
| 50.00 | 31016 | 73.00 | 7892 | 95.00 | 192960 | 175.00 | 11572 |
| 51.00 | 9488 | 74.00 | 28232 | 96.00 | 12720 | 176.00 | 154496 |
| 52.00 | 187 | 75.00 | 89344 | 104.00 | 541 | 177.00 | 10065 |
| 55.00 | 376 | 76.00 | 7774 | 106.00 | 515 | | |
| 56.00 | 2201 | 77.00 | 1230 | 116.00 | 438 | | |
| 57.00 | 4363 | 78.00 | 802 | 117.00 | 784 | | |

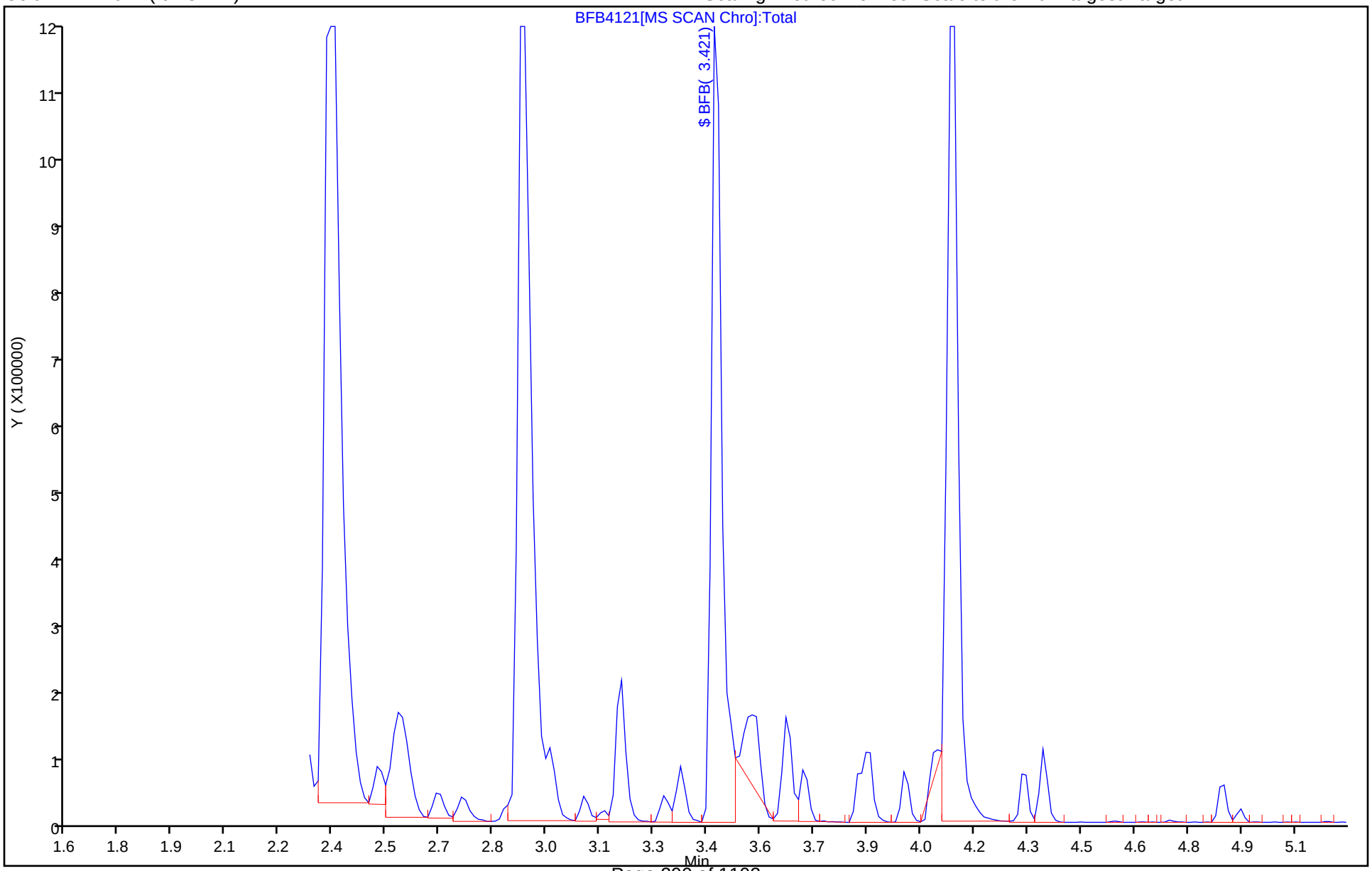
Report Date: 15-May-2019 18:07:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\BFB4121.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 17:56:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | BFB | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 5.0 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 1 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-381514/7

Matrix: Water  Lab File ID: U1270190.D

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 19:49

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 0.24 | U | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.13 | U | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.41 | U | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 0.090 | U | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 0.17 | U | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.26 | U | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.91 | U | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 0.12 | U | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 0.21 | U | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 0.15 | U | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.15 | U | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.16 | U | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 1.2 | U | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 0.54 | U | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.42 | U | 10 | 0.42 |
| 67-64-1 | Acetone | 5.4 | U | 10 | 5.4 |
| 71-43-2 | Benzene | 0.13 | U | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 0.17 | U | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 0.76 | U | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 0.28 | U | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 0.26 | U | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 0.14 | U | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 0.83 | U | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 0.13 | U | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 0.20 | U | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.16 | U | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.61 | U | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 0.24 | U | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 0.39 | U | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 0.35 | U | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 0.11 | U | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 0.090 | U | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-381514/7

Matrix: Water  Lab File ID: U1270190.D

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 19:49

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 1.7 | U | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 0.070 | U | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 0.33 | U | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 2.6 | U | 5.0 | 2.6 |
| 100-42-5 | Styrene | 0.10 | U | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 0.15 | U | 1.0 | 0.15 |
| 108-88-3 | Toluene | 0.14 | U | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.19 | U | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.67 | U | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 0.10 | U | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 0.45 | U | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 0.20 | U | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 0.15 | U | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 93 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 88 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 86 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 88 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270190.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-May-2019 19:49:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-007
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 18:05:37 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 20:10:10

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1166877 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.757 | 7.758 | -0.001 | 84 | 773906 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 95 | 404526 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 94 | 273988 | 20.0 | 17.7 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 93 | 306029 | 20.0 | 17.6 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 92 | 1023890 | 20.0 | 18.7 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 345990 | 20.0 | 17.1 | |
| 9 Dichlorodifluoromethane | 85 | | 1.403 | | | | | ND | |
| 10 Chloromethane | 50 | | 1.593 | | | | | ND | |
| 11 Butadiene | 54 | | 1.640 | | | | | ND | |
| 12 Vinyl chloride | 62 | | 1.687 | | | | | ND | |
| 14 Bromomethane | 94 | | 1.912 | | | | | ND | |
| 13 1-Chloro-1-fluoroethane TI | 47 | | 1.924 | | | | | ND | |
| 15 Chloroethane | 64 | | 1.995 | | | | | ND | |
| 16 Dichlorofluoromethane | 67 | | 2.173 | | | | | ND | |
| 17 Trichlorofluoromethane | 101 | | 2.220 | | | | | ND | |
| 18 Methylal | 45 | | 2.346 | | | | | ND | |
| 19 Ethyl ether | 59 | | 2.433 | | | | | ND | |
| 20 Acrolein | 56 | | 2.551 | | | | | ND | |
| 21 1,1-Dichloroethene | 61 | | 2.634 | | | | | ND | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | | 2.669 | | | | | ND | |
| 23 Acetone | 43 | | 2.693 | | | | | ND | |
| 24 Iodomethane | 142 | | 2.764 | | | | | ND | |
| 25 Carbon disulfide | 76 | | 2.835 | | | | | ND | |
| 26 Acetonitrile | 41 | | 2.942 | | | | | ND | |
| 27 3-Chloro-1-propene | 41 | | 2.953 | | | | | ND | |
| 28 Methyl acetate | 43 | | 2.977 | | | | | ND | |
| 29 Methylene Chloride | 49 | | 3.060 | | | | | ND | |
| 30 2-Methyl-2-propanol | 59 | | 3.166 | | | | | ND | |
| 31 Acrylonitrile | 53 | 3.284 | 3.273 | 0.011 | 86 | 1552 | | 0.1469 | |
| 32 trans-1,2-Dichloroethene | 61 | | 3.285 | | | | | ND | |
| 33 Methyl tert-butyl ether | 73 | | 3.297 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 34 Hexane | 57 | | 3.510 | | | | | ND | |
| 35 1,1-Dichloroethane | 63 | | 3.652 | | | | | ND | |
| 36 Vinyl acetate | 43 | | 3.687 | | | | | ND | |
| 37 Isopropyl ether | 87 | | 3.699 | | | | | ND | |
| 38 2-Chloro-1,3-butadiene | 53 | | 3.723 | | | | | ND | |
| 39 Tert-butyl ethyl ether | 59 | | 4.007 | | | | | ND | |
| 41 2,2-Dichloropropane | 77 | | 4.137 | | | | | ND | |
| 40 cis-1,2-Dichloroethene | 96 | | 4.137 | | | | | ND | |
| 42 2-Butanone (MEK) | 72 | | 4.149 | | | | | ND | |
| 43 Ethyl acetate | 43 | | 4.196 | | | | | ND | |
| 44 Propionitrile | 54 | | 4.208 | | | | | ND | |
| 45 Methacrylonitrile | 41 | | 4.338 | | | | | ND | |
| 46 Chlorobromomethane | 49 | | 4.338 | | | | | ND | |
| 47 Tetrahydrofuran | 42 | | 4.373 | | | | | ND | |
| 48 Chloroform | 83 | | 4.409 | | | | | ND | |
| 49 1,1,1-Trichloroethane | 97 | | 4.551 | | | | | ND | |
| 50 Cyclohexane | 84 | | 4.598 | | | | | ND | |
| 52 Carbon tetrachloride | 117 | | 4.693 | | | | | ND | |
| 51 1,1-Dichloropropene | 75 | | 4.693 | | | | | ND | |
| 53 Isobutyl alcohol | 41 | | 4.788 | | | | | ND | |
| 54 Benzene | 78 | | 4.870 | | | | | ND | |
| 55 1,2-Dichloroethane | 62 | | 4.882 | | | | | ND | |
| 56 Tert-amyl methyl ether | 73 | | 4.953 | | | | | ND | |
| 57 n-Heptane | 57 | | 5.072 | | | | | ND | |
| 58 n-Butanol | 56 | | 5.344 | | | | | ND | |
| 59 Trichloroethene | 130 | | 5.403 | | | | | ND | |
| 60 Ethyl acrylate | 55 | | 5.497 | | | | | ND | |
| 61 Methylcyclohexane | 83 | | 5.569 | | | | | ND | |
| 62 1,2-Dichloropropane | 63 | | 5.604 | | | | | ND | |
| 63 Methyl methacrylate | 41 | | 5.687 | | | | | ND | |
| 64 Dibromomethane | 174 | | 5.711 | | | | | ND | |
| 65 1,4-Dioxane | 88 | | 5.711 | | | | | ND | |
| 66 Dichlorobromomethane | 83 | | 5.829 | | | | | ND | |
| 67 2-Nitropropane | 41 | | 6.042 | | | | | ND | |
| 68 2-Chloroethyl vinyl ether | 63 | | 6.089 | | | | | ND | |
| 69 cis-1,3-Dichloropropene | 75 | | 6.219 | | | | | ND | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | | 6.350 | | | | | ND | |
| 71 Toluene | 91 | | 6.515 | | | | | ND | |
| 72 trans-1,3-Dichloropropene | 75 | | 6.705 | | | | | ND | |
| 73 Tetrahydrothiophene | 60 | | 6.745 | | | | | ND | |
| 74 Ethyl methacrylate | 69 | | 6.776 | | | | | ND | |
| 75 1,1,2-Trichloroethane | 97 | | 6.870 | | | | | ND | |
| 76 Tetrachloroethene | 166 | | 7.000 | | | | | ND | |
| 77 1,3-Dichloropropane | 76 | | 7.024 | | | | | ND | |
| 78 2-Hexanone | 43 | | 7.095 | | | | | ND | |
| 79 n-Butyl acetate | 43 | | 7.201 | | | | | ND | |
| 80 Chlorodibromomethane | 129 | | 7.225 | | | | | ND | |
| 81 Ethylene Dibromide | 107 | | 7.332 | | | | | ND | |
| 82 1-Chlorohexane | 91 | | 7.746 | | | | | ND | |
| 83 Chlorobenzene | 112 | | 7.781 | | | | | ND | |
| 84 1,1,1,2-Tetrachloroethane | 131 | | 7.852 | | | | | ND | |
| 85 Ethylbenzene | 106 | | 7.876 | | | | | ND | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 86 m-Xylene & p-Xylene | 106 | | 7.982 | | | | | ND | |
| 87 o-Xylene | 106 | | 8.361 | | | | | ND | |
| 88 Styrene | 104 | | 8.373 | | | | | ND | |
| 89 Bromoform | 173 | | 8.550 | | | | | ND | |
| 90 Isopropylbenzene | 105 | | 8.704 | | | | | ND | |
| 91 Cyclohexanone | 55 | | 8.811 | | | | | ND | |
| 92 1,1,2,2-Tetrachloroethane | 83 | | 9.000 | | | | | ND | |
| 93 Bromobenzene | 156 | | 9.000 | | | | | ND | |
| 95 1,2,3-Trichloropropane | 110 | | 9.047 | | | | | ND | |
| 94 trans-1,4-Dichloro-2-buten | 53 | | 9.047 | | | | | ND | |
| 96 N-Propylbenzene | 120 | | 9.107 | | | | | ND | |
| 97 2-Chlorotoluene | 126 | | 9.189 | | | | | ND | |
| 98 1,3,5-Trimethylbenzene | 105 | | 9.272 | | | | | ND | |
| 99 4-Chlorotoluene | 126 | | 9.296 | | | | | ND | |
| 100 3-Ethyltoluene | 105 | | 9.324 | | | | | ND | |
| 101 2-Ethyltoluene | 105 | | 9.513 | | | | | ND | |
| 102 tert-Butylbenzene | 119 | | 9.592 | | | | | ND | |
| 103 Pentachloroethane | 167 | | 9.615 | | | | | ND | |
| 104 1,2,4-Trimethylbenzene | 105 | | 9.639 | | | | | ND | |
| 105 sec-Butylbenzene | 105 | | 9.805 | | | | | ND | |
| 106 1,3-Dichlorobenzene | 146 | | 9.911 | | | | | ND | |
| 107 4-Isopropyltoluene | 119 | | 9.947 | | | | | ND | |
| 108 1,4-Dichlorobenzene | 146 | | 9.994 | | | | | ND | |
| 109 1,2,3-Trimethylbenzene | 105 | | 10.041 | | | | | ND | |
| 110 Benzyl chloride | 91 | | 10.136 | | | | | ND | |
| 111 n-Butylbenzene | 91 | | 10.349 | | | | | ND | |
| 112 1,2-Dichlorobenzene | 146 | | 10.361 | | | | | ND | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | | 11.142 | | | | | ND | |
| 114 1,3,5-Trichlorobenzene | 180 | | 11.343 | | | | | ND | |
| 115 1,2,4-Trichlorobenzene | 180 | | 11.946 | | | | | ND | |
| 116 Hexachlorobutadiene | 225 | | 12.124 | | | | | ND | |
| 117 Naphthalene | 128 | | 12.195 | | | | | ND | |
| 118 1,2,3-Trichlorobenzene | 180 | | 12.443 | | | | | ND | |
| 119 2-Methylnaphthalene | 142 | | 13.378 | | | | | ND | |
| 122 Epichlorohydrin | 1 | | -0.510 | | | | | ND | |
| 120 Propene oxide | 1 | | -0.510 | | | | | ND | |
| 121 1,4-Dichlorobutane | 1 | | -0.510 | | | | | ND | |
| 123 Ethylene oxide | 1 | | -0.510 | | | | | ND | |
| S 125 Total BTEX | 1 | | -0.510 | | | | | ND | |
| S 124 Trihalomethanes, Total | 1 | | -0.510 | | | | | ND | |
| S 126 1,2-Dichloroethene, Total | 96 | | 0.630 | | | | | ND | |
| S 127 1,3-Dichloropropene, Total | 75 | | 6.250 | | | | | ND | |
| S 128 Xylenes, Total | 106 | | 16.020 | | | | | ND | |

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm40ml_vials_00013 | Amount Added: | 0.00 | Units: | Run Reagent |

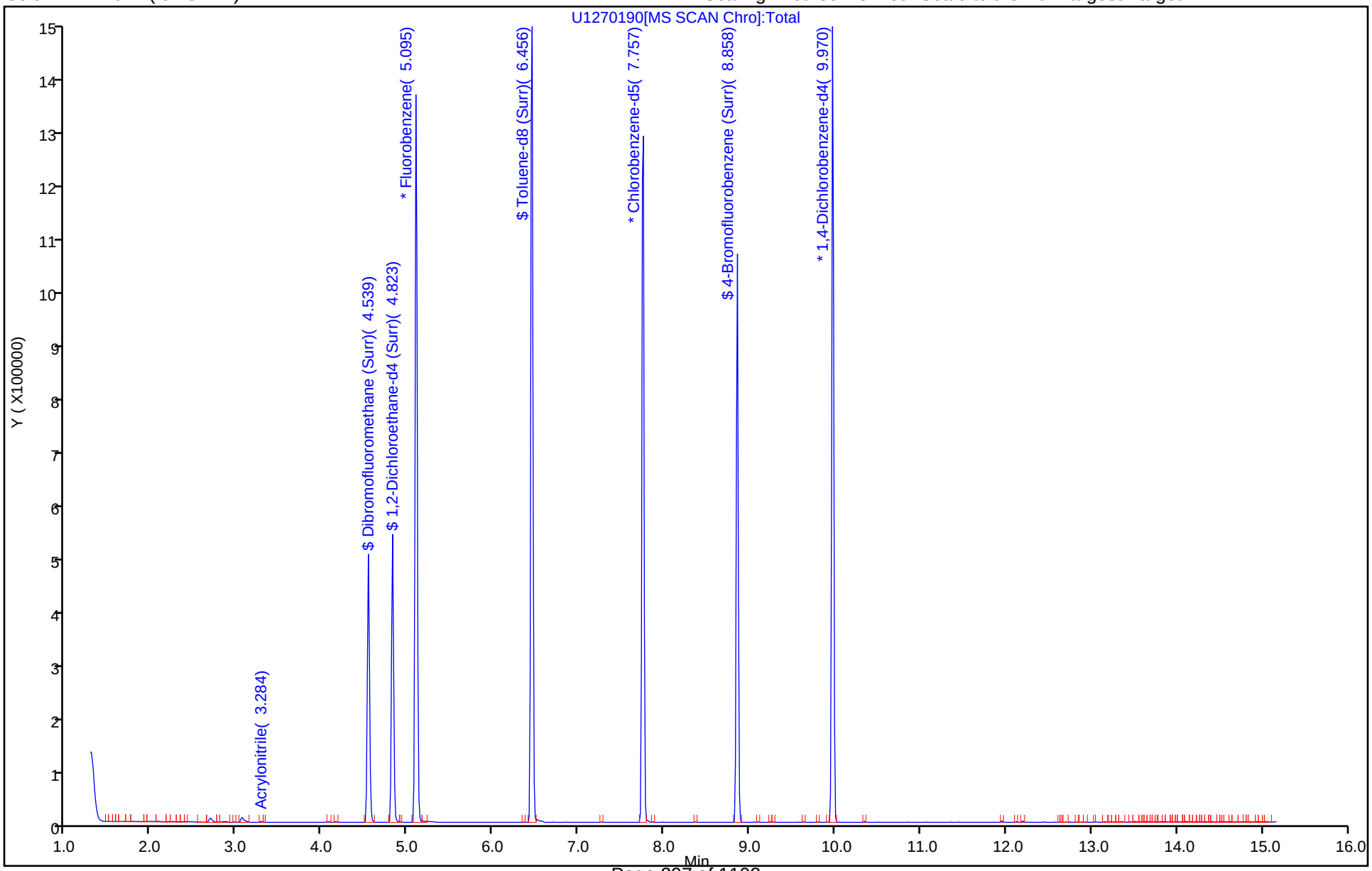
Report Date: 15-May-2019 20:10:10 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270190.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 19:49:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | MB | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 6 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270190.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-May-2019 19:49:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-007
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 18:05:37 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 20:10:10

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 17.7 | 88.28 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.6 | 87.78 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 18.7 | 93.38 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 17.1 | 85.66 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-381514/5

Matrix: Water  Lab File ID: U1270188.D

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 19:04

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624 ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 19.1 | | 1.0 | 0.24 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 20.5 | | 1.0 | 0.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 19.8 | | 1.0 | 0.41 |
| 79-00-5 | 1,1,2-Trichloroethane | 19.5 | | 1.0 | 0.090 |
| 75-34-3 | 1,1-Dichloroethane | 19.2 | | 1.0 | 0.17 |
| 75-35-4 | 1,1-Dichloroethene | 19.0 | | 1.0 | 0.19 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 16.7 | | 1.0 | 0.26 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 18.2 | | 2.0 | 0.91 |
| 106-93-4 | Ethylene Dibromide | 18.9 | | 1.0 | 0.12 |
| 95-50-1 | 1,2-Dichlorobenzene | 18.8 | | 1.0 | 0.15 |
| 107-06-2 | 1,2-Dichloroethane | 17.7 | | 1.0 | 0.21 |
| 78-87-5 | 1,2-Dichloropropane | 20.6 | | 1.0 | 0.15 |
| 541-73-1 | 1,3-Dichlorobenzene | 19.0 | | 1.0 | 0.15 |
| 106-46-7 | 1,4-Dichlorobenzene | 18.8 | | 1.0 | 0.16 |
| 78-93-3 | 2-Butanone (MEK) | 36.2 | | 10 | 1.2 |
| 591-78-6 | 2-Hexanone | 35.5 | | 10 | 0.54 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 36.7 | | 10 | 0.42 |
| 67-64-1 | Acetone | 30.2 | | 10 | 5.4 |
| 71-43-2 | Benzene | 20.0 | | 1.0 | 0.13 |
| 75-27-4 | Dichlorobromomethane | 19.2 | | 1.0 | 0.17 |
| 75-25-2 | Bromoform | 18.3 | | 1.0 | 0.76 |
| 74-83-9 | Bromomethane | 19.6 | | 1.0 | 0.42 |
| 75-15-0 | Carbon disulfide | 17.9 | | 1.0 | 0.28 |
| 56-23-5 | Carbon tetrachloride | 18.7 | | 1.0 | 0.26 |
| 108-90-7 | Chlorobenzene | 19.0 | | 1.0 | 0.14 |
| 75-00-3 | Chloroethane | 19.1 | | 1.0 | 0.83 |
| 67-66-3 | Chloroform | 19.0 | | 1.0 | 0.13 |
| 74-87-3 | Chloromethane | 17.9 | | 1.0 | 0.20 |
| 156-59-2 | cis-1,2-Dichloroethene | 19.4 | | 1.0 | 0.16 |
| 10061-01-5 | cis-1,3-Dichloropropene | 20.5 | | 1.0 | 0.61 |
| 110-82-7 | Cyclohexane | 20.1 | | 1.0 | 0.24 |
| 124-48-1 | Chlorodibromomethane | 18.7 | | 1.0 | 0.39 |
| 75-71-8 | Dichlorodifluoromethane | 17.2 | | 1.0 | 0.35 |
| 100-41-4 | Ethylbenzene | 19.3 | | 1.0 | 0.11 |
| 98-82-8 | Isopropylbenzene | 19.6 | | 1.0 | 0.090 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-381514/5

Matrix: Water  Lab File ID: U1270188.D

Analysis Method: 8260C  Date Collected:

Sample wt/vol: 5(mL)  Date Analyzed: 05/15/2019 19:04

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: DB-624  ID: 0.18(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381514  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 79-20-9 | Methyl acetate | 33.4 | | 10 | 1.7 |
| 1634-04-4 | Methyl tert-butyl ether | 19.2 | | 1.0 | 0.070 |
| 108-87-2 | Methylcyclohexane | 20.1 | | 1.0 | 0.33 |
| 75-09-2 | Methylene Chloride | 17.2 | | 5.0 | 2.6 |
| 100-42-5 | Styrene | 18.6 | | 1.0 | 0.10 |
| 127-18-4 | Tetrachloroethene | 19.1 | | 1.0 | 0.15 |
| 108-88-3 | Toluene | 19.4 | | 1.0 | 0.14 |
| 156-60-5 | trans-1,2-Dichloroethene | 19.1 | | 1.0 | 0.19 |
| 10061-02-6 | trans-1,3-Dichloropropene | 18.7 | | 1.0 | 0.67 |
| 79-01-6 | Trichloroethene | 19.5 | | 1.0 | 0.10 |
| 75-69-4 | Trichlorofluoromethane | 19.8 | | 1.0 | 0.45 |
| 75-01-4 | Vinyl chloride | 20.0 | | 1.0 | 0.20 |
| 1330-20-7 | Xylenes, Total | 39.1 | | 2.0 | 0.15 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 2037-26-5 | Toluene-d8 (Surr) | 93 | | 70-123 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 92 | | 75-128 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 91 | | 59-120 |
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 89 | | 70-121 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270188.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-May-2019 19:04:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-005
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 19:35:24 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 19:35:24

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| * 1 Fluorobenzene | 96 | 5.095 | 5.095 | 0.000 | 99 | 1077943 | 20.0 | 20.0 | |
| * 2 Chlorobenzene-d5 | 117 | 7.757 | 7.758 | -0.001 | 83 | 749396 | 20.0 | 20.0 | |
| * 3 1,4-Dichlorobenzene-d4 | 152 | 9.970 | 9.970 | 0.000 | 93 | 394844 | 20.0 | 20.0 | |
| $ 4 Dibromofluoromethane (Surr | 111 | 4.539 | 4.539 | 0.000 | 95 | 264942 | 20.0 | 18.5 | |
| $ 5 1,2-Dichloroethane-d4 (Sur | 65 | 4.823 | 4.823 | 0.000 | 95 | 285269 | 20.0 | 17.7 | |
| $ 6 Toluene-d8 (Surr) | 98 | 6.456 | 6.456 | 0.000 | 91 | 982707 | 20.0 | 18.5 | |
| $ 7 4-Bromofluorobenzene (Surr | 95 | 8.858 | 8.858 | 0.000 | 94 | 356769 | 20.0 | 18.2 | |
| 9 Dichlorodifluoromethane | 85 | 1.403 | 1.403 | 0.000 | 99 | 356578 | 20.0 | 17.2 | |
| 10 Chloromethane | 50 | 1.592 | 1.593 | -0.001 | 98 | 325787 | 20.0 | 17.9 | M |
| 11 Butadiene | 54 | 1.640 | 1.640 | 0.000 | 87 | 372745 | 20.0 | 18.6 | |
| 12 Vinyl chloride | 62 | 1.675 | 1.687 | -0.012 | 97 | 406449 | 20.0 | 20.0 | |
| 14 Bromomethane | 94 | 1.924 | 1.912 | 0.012 | 90 | 245478 | 20.0 | 19.6 | |
| 15 Chloroethane | 64 | 1.995 | 1.995 | 0.000 | 99 | 244450 | 20.0 | 19.1 | |
| 16 Dichlorofluoromethane | 67 | 2.172 | 2.173 | 0.000 | 97 | 522046 | 20.0 | 20.5 | |
| 17 Trichlorofluoromethane | 101 | 2.220 | 2.220 | 0.000 | 98 | 449095 | 20.0 | 19.8 | |
| 19 Ethyl ether | 59 | 2.433 | 2.433 | 0.000 | 88 | 267480 | 20.0 | 19.6 | |
| 20 Acrolein | 56 | 2.551 | 2.551 | 0.000 | 99 | 292673 | 100.0 | 71.9 | |
| 21 1,1-Dichloroethene | 61 | 2.634 | 2.634 | 0.000 | 97 | 424454 | 20.0 | 19.0 | |
| 22 1,1,2-Trichloro-1,2,2-trif | 101 | 2.669 | 2.669 | 0.000 | 93 | 292720 | 20.0 | 19.8 | |
| 23 Acetone | 43 | 2.693 | 2.693 | 0.000 | 100 | 244461 | 40.0 | 30.2 | |
| 24 Iodomethane | 142 | 2.764 | 2.764 | 0.000 | 97 | 462060 | 20.0 | 19.5 | |
| 25 Carbon disulfide | 76 | 2.823 | 2.835 | -0.012 | 98 | 918831 | 20.0 | 17.9 | |
| 27 3-Chloro-1-propene | 41 | 2.953 | 2.953 | 0.000 | 94 | 472181 | 20.0 | 18.6 | |
| 28 Methyl acetate | 43 | 2.977 | 2.977 | 0.000 | 97 | 625747 | 40.0 | 33.4 | |
| 29 Methylene Chloride | 49 | 3.060 | 3.060 | 0.000 | 89 | 362376 | 20.0 | 17.2 | |
| 30 2-Methyl-2-propanol | 59 | 3.166 | 3.166 | 0.000 | 100 | 498556 | 200.0 | 126.4 | |
| 31 Acrylonitrile | 53 | 3.273 | 3.273 | 0.000 | 99 | 1680799 | 200.0 | 172.2 | |
| 32 trans-1,2-Dichloroethene | 61 | 3.285 | 3.285 | 0.000 | 96 | 418173 | 20.0 | 19.1 | |
| 33 Methyl tert-butyl ether | 73 | 3.296 | 3.297 | -0.001 | 93 | 870480 | 20.0 | 19.2 | |
| 34 Hexane | 57 | 3.521 | 3.510 | 0.011 | 88 | 489191 | 20.0 | 20.5 | |
| 35 1,1-Dichloroethane | 63 | 3.651 | 3.652 | -0.001 | 96 | 525256 | 20.0 | 19.2 | |
| 36 Vinyl acetate | 43 | 3.687 | 3.687 | 0.000 | 97 | 636629 | 20.0 | 20.7 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 40 cis-1,2-Dichloroethene | 96 | 4.137 | 4.137 | 0.000 | 79 | 359567 | 20.0 | 19.4 | |
| 41 2,2-Dichloropropane | 77 | 4.137 | 4.137 | 0.000 | 59 | 326761 | 20.0 | 18.4 | |
| 42 2-Butanone (MEK) | 72 | 4.148 | 4.149 | -0.001 | 98 | 121734 | 40.0 | 36.2 | |
| 46 Chlorobromomethane | 49 | 4.338 | 4.338 | 0.000 | 94 | 241293 | 20.0 | 18.5 | |
| 47 Tetrahydrofuran | 42 | 4.373 | 4.373 | 0.000 | 86 | 289006 | 40.0 | 35.7 | |
| 48 Chloroform | 83 | 4.409 | 4.409 | 0.000 | 92 | 497366 | 20.0 | 19.0 | |
| 49 1,1,1-Trichloroethane | 97 | 4.551 | 4.551 | 0.000 | 98 | 427409 | 20.0 | 19.1 | |
| 50 Cyclohexane | 84 | 4.598 | 4.598 | 0.000 | 86 | 546015 | 20.0 | 20.1 | |
| 51 1,1-Dichloropropene | 75 | 4.693 | 4.693 | 0.000 | 98 | 428484 | 20.0 | 19.3 | |
| 52 Carbon tetrachloride | 117 | 4.693 | 4.693 | 0.000 | 78 | 355648 | 20.0 | 18.7 | |
| 53 Isobutyl alcohol | 41 | 4.787 | 4.788 | -0.001 | 95 | 366756 | 500.0 | 342.2 | |
| 54 Benzene | 78 | 4.870 | 4.870 | 0.000 | 94 | 1267786 | 20.0 | 20.0 | |
| 55 1,2-Dichloroethane | 62 | 4.882 | 4.882 | 0.000 | 96 | 345182 | 20.0 | 17.7 | |
| 57 n-Heptane | 57 | 5.071 | 5.072 | -0.001 | 88 | 266640 | 20.0 | 20.8 | |
| 59 Trichloroethene | 130 | 5.403 | 5.403 | 0.000 | 96 | 331055 | 20.0 | 19.5 | |
| 61 Methylcyclohexane | 83 | 5.568 | 5.569 | -0.001 | 85 | 610872 | 20.0 | 20.1 | |
| 62 1,2-Dichloropropane | 63 | 5.604 | 5.604 | 0.000 | 95 | 276532 | 20.0 | 20.6 | |
| 65 1,4-Dioxane | 88 | 5.710 | 5.711 | -0.001 | 90 | 73662 | 400.0 | 341.6 | |
| 64 Dibromomethane | 174 | 5.710 | 5.711 | -0.001 | 94 | 206804 | 20.0 | 18.2 | |
| 66 Dichlorobromomethane | 83 | 5.829 | 5.829 | 0.000 | 99 | 351173 | 20.0 | 19.2 | |
| 68 2-Chloroethyl vinyl ether | 63 | 6.089 | 6.089 | 0.000 | 92 | 211724 | 20.0 | 21.7 | |
| 69 cis-1,3-Dichloropropene | 75 | 6.219 | 6.219 | 0.000 | 98 | 456824 | 20.0 | 20.5 | |
| 70 4-Methyl-2-pentanone (MIBK | 43 | 6.349 | 6.350 | -0.001 | 95 | 758149 | 40.0 | 36.7 | |
| 71 Toluene | 91 | 6.515 | 6.515 | 0.000 | 99 | 1217847 | 20.0 | 19.4 | |
| 72 trans-1,3-Dichloropropene | 75 | 6.704 | 6.705 | -0.001 | 90 | 380265 | 20.0 | 18.7 | |
| 74 Ethyl methacrylate | 69 | 6.775 | 6.776 | -0.001 | 89 | 383352 | 20.0 | 19.6 | |
| 75 1,1,2-Trichloroethane | 97 | 6.870 | 6.870 | 0.000 | 91 | 242931 | 20.0 | 19.5 | |
| 76 Tetrachloroethene | 166 | 7.000 | 7.000 | 0.000 | 95 | 318022 | 20.0 | 19.1 | |
| 77 1,3-Dichloropropane | 76 | 7.024 | 7.024 | 0.000 | 87 | 424403 | 20.0 | 19.2 | |
| 78 2-Hexanone | 43 | 7.095 | 7.095 | 0.000 | 92 | 532264 | 40.0 | 35.5 | |
| 80 Chlorodibromomethane | 129 | 7.225 | 7.225 | 0.000 | 90 | 241843 | 20.0 | 18.7 | |
| 81 Ethylene Dibromide | 107 | 7.331 | 7.332 | -0.001 | 99 | 253459 | 20.0 | 18.9 | |
| 83 Chlorobenzene | 112 | 7.781 | 7.781 | 0.000 | 96 | 769653 | 20.0 | 19.0 | |
| 84 1,1,1,2-Tetrachloroethane | 131 | 7.852 | 7.852 | 0.000 | 95 | 272412 | 20.0 | 19.3 | |
| 85 Ethylbenzene | 106 | 7.876 | 7.876 | 0.000 | 98 | 437076 | 20.0 | 19.3 | |
| 86 m-Xylene & p-Xylene | 106 | 7.982 | 7.982 | 0.000 | 99 | 555912 | 20.0 | 19.8 | |
| 87 o-Xylene | 106 | 8.361 | 8.361 | 0.000 | 95 | 546613 | 20.0 | 19.3 | |
| 88 Styrene | 104 | 8.373 | 8.373 | 0.000 | 95 | 844659 | 20.0 | 18.6 | |
| 89 Bromoform | 173 | 8.550 | 8.550 | 0.000 | 98 | 171606 | 20.0 | 18.3 | |
| 90 Isopropylbenzene | 105 | 8.704 | 8.704 | 0.000 | 95 | 1444715 | 20.0 | 19.6 | |
| 92 1,1,2,2-Tetrachloroethane | 83 | 9.000 | 9.000 | 0.000 | 84 | 397885 | 20.0 | 20.5 | |
| 93 Bromobenzene | 156 | 9.000 | 9.000 | 0.000 | 88 | 329844 | 20.0 | 19.3 | |
| 95 1,2,3-Trichloropropane | 110 | 9.047 | 9.047 | 0.000 | 83 | 142921 | 20.0 | 19.4 | |
| 94 trans-1,4-Dichloro-2-buten | 53 | 9.047 | 9.047 | 0.000 | 91 | 111699 | 20.0 | 17.7 | |
| 96 N-Propylbenzene | 120 | 9.106 | 9.107 | -0.001 | 99 | 392667 | 20.0 | 20.2 | |
| 97 2-Chlorotoluene | 126 | 9.189 | 9.189 | 0.000 | 98 | 326047 | 20.0 | 20.0 | |
| 98 1,3,5-Trimethylbenzene | 105 | 9.272 | 9.272 | 0.000 | 96 | 1134537 | 20.0 | 20.2 | |
| 99 4-Chlorotoluene | 126 | 9.296 | 9.296 | 0.000 | 99 | 332399 | 20.0 | 19.7 | |
| 102 tert-Butylbenzene | 119 | 9.592 | 9.592 | 0.000 | 91 | 1035551 | 20.0 | 20.3 | |
| 104 1,2,4-Trimethylbenzene | 105 | 9.639 | 9.639 | 0.000 | 95 | 1148591 | 20.0 | 19.8 | |
| 105 sec-Butylbenzene | 105 | 9.805 | 9.805 | 0.000 | 93 | 1516042 | 20.0 | 20.7 | |
| 106 1,3-Dichlorobenzene | 146 | 9.911 | 9.911 | 0.000 | 98 | 641488 | 20.0 | 19.0 | |

| Compound | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|---|---|
| 107 4-Isopropyltoluene | 119 | 9.947 | 9.947 | 0.000 | 98 | 1306152 | 20.0 | 20.6 | |
| 108 1,4-Dichlorobenzene | 146 | 9.994 | 9.994 | 0.000 | 96 | 651060 | 20.0 | 18.8 | |
| 111 n-Butylbenzene | 91 | 10.349 | 10.349 | 0.000 | 96 | 1100698 | 20.0 | 20.3 | |
| 112 1,2-Dichlorobenzene | 146 | 10.361 | 10.361 | 0.000 | 99 | 614649 | 20.0 | 18.8 | |
| 113 1,2-Dibromo-3-Chloropropan | 157 | 11.142 | 11.142 | 0.000 | 91 | 115693 | 20.0 | 18.2 | |
| 115 1,2,4-Trichlorobenzene | 180 | 11.958 | 11.946 | 0.012 | 94 | 381058 | 20.0 | 16.7 | |
| 116 Hexachlorobutadiene | 225 | 12.124 | 12.124 | 0.000 | 96 | 169457 | 20.0 | 16.8 | |
| 117 Naphthalene | 128 | 12.195 | 12.195 | 0.000 | 97 | 1326275 | 20.0 | 18.5 | |
| 118 1,2,3-Trichlorobenzene | 180 | 12.443 | 12.443 | 0.000 | 95 | 353270 | 20.0 | 16.7 | |
| S 125 Total BTEX | 1 | | | | 0 | | 100.0 | 97.9 | |
| S 124 Trihalomethanes, Total | 1 | | | | 0 | | 80.0 | 75.2 | |
| S 128 Xylenes, Total | 106 | | | | 0 | | 40.0 | 39.1 | |

## QC Flag Legend

Review Flags

M - Manually Integrated

## Reagents:

| | | | | |
|---|---|---|---|---|
| vmfasgw_00309 | Amount Added: | 16.00 | Units: uL | |
| vmfaspw_00299 | Amount Added: | 16.00 | Units: uL | |
| vmfasaw_00280 | Amount Added: | 16.00 | Units: uL | |
| vmDist_H2o_00146 | Amount Added: | 0.00 | Units: | Run Reagent |
| vm50ss_stk_00080 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm50is_stk_A_00003 | Amount Added: | 2.00 | Units: uL | Run Reagent |
| vm40ml_vials_00013 | Amount Added: | 0.00 | Units: | Run Reagent |

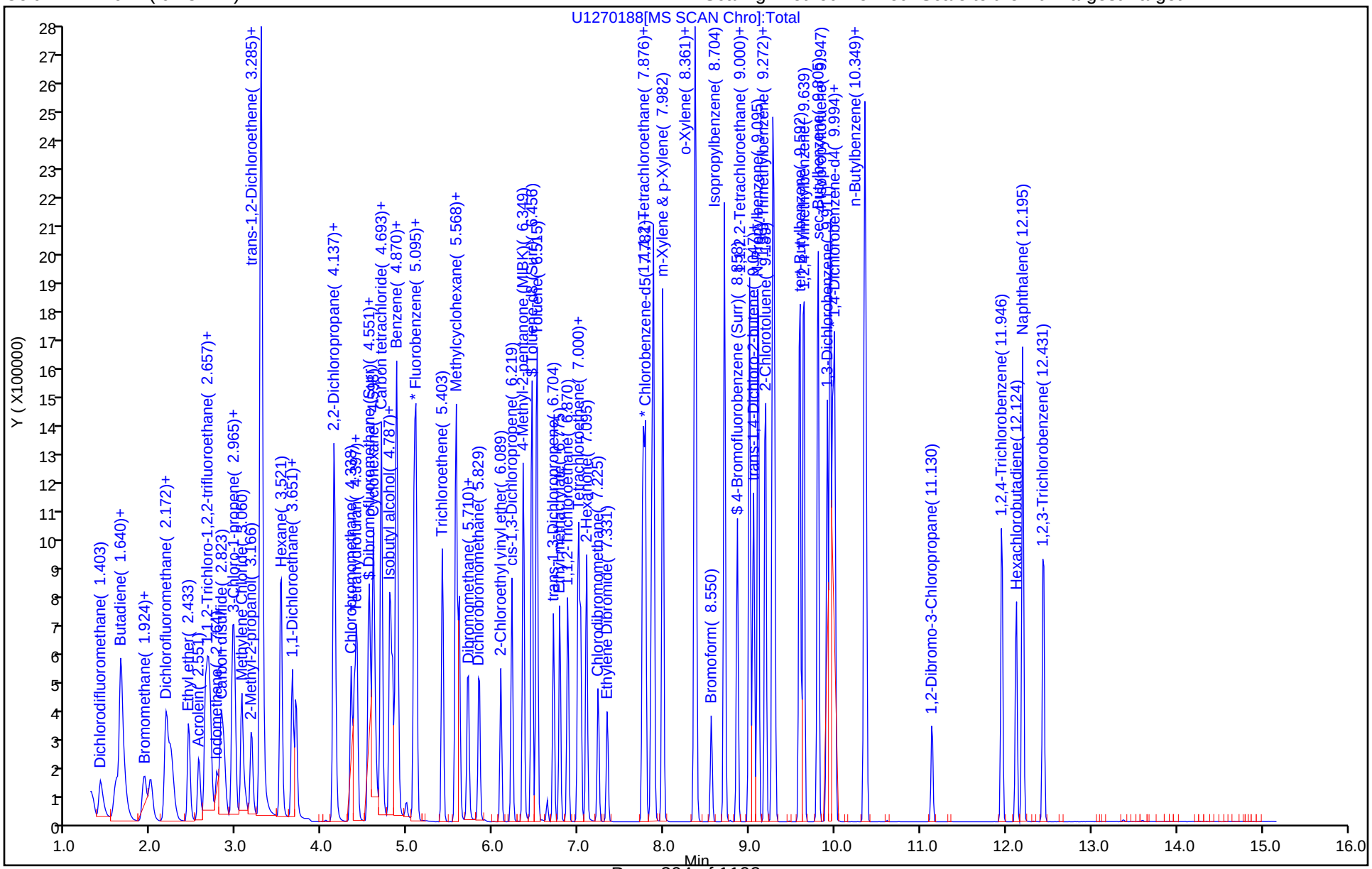
Report Date: 15-May-2019 19:35:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270188.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 15-May-2019 19:04:30 | Instrument ID: | A3UX12 | Operator ID: | 001904 |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 5.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | 8260_12_h2o | Limit Group: | MSV 8260C ICAL | | |

Column: DB-624 ( 0.18 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270188.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-May-2019 19:04:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087163-005
Operator ID: 001904 Instrument ID: A3UX12

Method: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\8260_12_h2o.m
Limit Group: MSV 8260C ICAL
Last Update: 15-May-2019 19:35:24 Calib Date: 30-Apr-2019 20:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A3UX12\20190430-86631.b\U1269811.D

Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: laveyt Date: 15-May-2019 19:35:24

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 4 Dibromofluoromethane (Surr) | 20.0 | 18.5 | 92.40 |
| $ 5 1,2-Dichloroethane-d4 (Surr) | 20.0 | 17.7 | 88.58 |
| $ 6 Toluene-d8 (Surr) | 20.0 | 18.5 | 92.56 |
| $ 7 4-Bromofluorobenzene (Surr) | 20.0 | 18.2 | 91.22 |

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

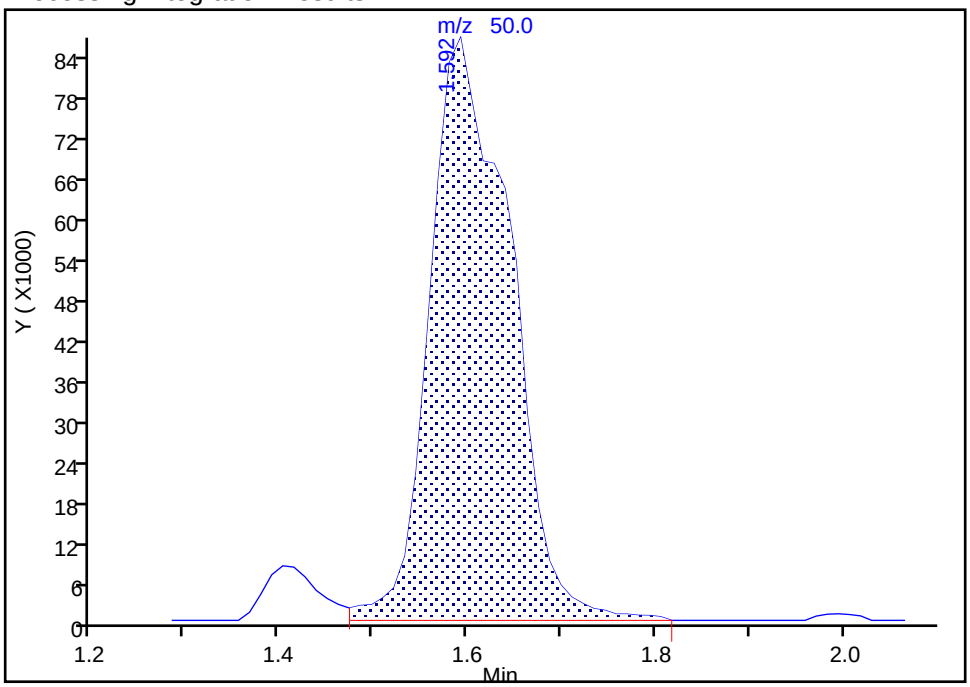
Data File: \\chromna\Canton\ChromData\A3UX12\20190515-87163.b\U1270188.D
Injection Date: 15-May-2019 19:04:30 Instrument ID: A3UX12
Lims ID: LCS
Client ID:
Operator ID: 001904 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: 8260_12_h2o Limit Group: MSV 8260C ICAL
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 10 Chloromethane, CAS: 74-87-3

Signal: 1

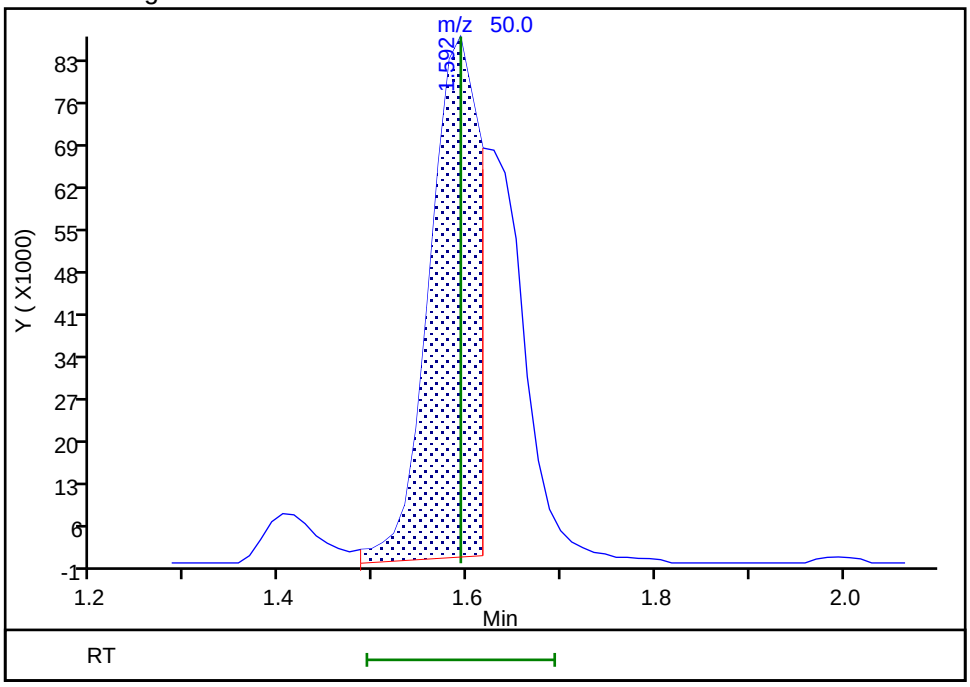
Processing Integration Results

RT: 1.59
Area: 515741
Amount: 28.359468
Amount Units: ug/l




Manual Integration Results

RT: 1.59
Area: 325787
Amount: 17.914314
Amount Units: ug/l




Reviewer: laveyt, 15-May-2019 19:33:09
Audit Action: Manually Integrated Audit Reason: Split Peak

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Instrument ID: A3UX12 Start Date: 04/30/2019 13:47

Analysis Batch Number: 378870 End Date: 04/30/2019 21:12

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-378870/1 | | 04/30/2019 13:47 | 1 | BFB4108.D | DB-624 0.18(mm) |
| STD8260 240-378870/8 IC | | 04/30/2019 14:10 | 1 | U1269795.D | DB-624 0.18(mm) |
| STD8260 240-378870/9 IC | | 04/30/2019 14:33 | 1 | U1269796.D | DB-624 0.18(mm) |
| STD8260 240-378870/10 IC | | 04/30/2019 14:55 | 1 | U1269797.D | DB-624 0.18(mm) |
| ICIS 240-378870/11 | | 04/30/2019 15:17 | 1 | U1269798.D | DB-624 0.18(mm) |
| STD8260 240-378870/12 IC | | 04/30/2019 15:39 | 1 | U1269799.D | DB-624 0.18(mm) |
| STD8260 240-378870/13 IC | | 04/30/2019 16:02 | 1 | U1269800.D | DB-624 0.18(mm) |
| STD8260 240-378870/14 IC | | 04/30/2019 16:24 | 1 | U1269801.D | DB-624 0.18(mm) |
| ICV 240-378870/15 | | 04/30/2019 16:46 | 1 | U1269802.D | DB-624 0.18(mm) |
| MRL 240-378870/16 MDLV | | 04/30/2019 17:09 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/18 IC | | 04/30/2019 17:52 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/19 IC | | 04/30/2019 18:14 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/20 IC | | 04/30/2019 18:37 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/21 IC | | 04/30/2019 18:59 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/22 IC | | 04/30/2019 19:21 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/23 IC | | 04/30/2019 19:43 | 1 | | DB-624 0.18(mm) |
| STDA9 240-378870/24 IC | | 04/30/2019 20:05 | 1 | | DB-624 0.18(mm) |
| ICV 240-378870/25 | | 04/30/2019 20:27 | 1 | U1269812.D | DB-624 0.18(mm) |
| MRL 240-378870/26 MDLV | | 04/30/2019 20:50 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/30/2019 21:12 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Instrument ID: A3UX12 Start Date: 05/15/2019 17:56

Analysis Batch Number: 381514 End Date: 05/16/2019 01:01

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-381514/1 | | 05/15/2019 17:56 | 1 | BFB4121.D | DB-624 0.18(mm) |
| CCV 240-381514/3 | | 05/15/2019 18:20 | 1 | U1270186.D | DB-624 0.18(mm) |
| ZZZZZ | | 05/15/2019 18:20 | 1 | | DB-624 0.18(mm) |
| CCVIS 240-381514/4 | | 05/15/2019 18:42 | 1 | U1270187.D | DB-624 0.18(mm) |
| LCS 240-381514/5 | | 05/15/2019 19:04 | 1 | U1270188.D | DB-624 0.18(mm) |
| MRL 240-381514/6 MDLV | | 05/15/2019 19:27 | 1 | | DB-624 0.18(mm) |
| MB 240-381514/7 | | 05/15/2019 19:49 | 1 | U1270190.D | DB-624 0.18(mm) |
| MRL 240-381514/8 MDLV | | 05/15/2019 20:11 | 1 | | DB-624 0.18(mm) |
| MRL 240-381514/9 MDLV | | 05/15/2019 20:33 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/15/2019 21:41 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/15/2019 22:25 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/15/2019 22:48 | 1 | | DB-624 0.18(mm) |
| 240-112234-1 | | 05/15/2019 23:10 | 1 | U1270199.D | DB-624 0.18(mm) |
| 240-112234-2 | | 05/15/2019 23:32 | 1 | U1270200.D | DB-624 0.18(mm) |
| ZZZZZ | | 05/15/2019 23:54 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/16/2019 00:16 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/16/2019 00:38 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 05/16/2019 01:01 | 1 | | DB-624 0.18(mm) |

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 378870  Batch Start Date: 04/30/19 13:47  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | vm50is_stk_A 00003 | vm50ss 00362 | vm50ss_stk 00080 | vmarolistdw 00294 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-378870/1 | | 8260C | | 5 mL | 5 mL | | | | |
| STD8260 240-378870/8 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 64 uL | | 64 uL |
| STD8260 240-378870/9 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 48 uL | | 48 uL |
| STD8260 240-378870/10 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 32 uL | | 32 uL |
| ICIS 240-378870/11 | | 8260C | | 5 mL | 5 mL | 2 uL | 16 uL | | 16 uL |
| STD8260 240-378870/12 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 8 uL | | 8 uL |
| STD8260 240-378870/13 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 0.8 uL | | 0.8 uL |
| STD8260 240-378870/14 IC | | 8260C | | 5 mL | 5 mL | 2 uL | 0.4 uL | | 0.4 uL |
| ICV 240-378870/15 | | 8260C | | 5 mL | 5 mL | 2 uL | | 2 uL | |
| ICV 240-378870/25 | | 8260C | | 5 mL | 5 mL | 2 uL | | 2 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmDist_H2o 00144 | VMFASA9W 00228 | vmfasaw 00277 | vmfasgw 00307 | vmfaspw 00297 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-378870/1 | | 8260C | | 1 uL | | | | | |
| STD8260 240-378870/8 IC | | 8260C | | | | | | | |
| STD8260 240-378870/9 IC | | 8260C | | | | | | | |
| STD8260 240-378870/10 IC | | 8260C | | | | | | | |
| ICIS 240-378870/11 | | 8260C | | | | | | | |
| STD8260 240-378870/12 IC | | 8260C | | | | | | | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 378870  Batch Start Date: 04/30/19 13:47  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmDist_H2o 00144 | VMFASA9W 00228 | vmfasaw 00277 | vmfasgw 00307 | vmfaspw 00297 |
|---|---|---|---|---|---|---|---|---|---|
| STD8260 240-378870/13 IC | | 8260C | | | | | | | |
| STD8260 240-378870/14 IC | | 8260C | | | | | | | |
| ICV 240-378870/15 | | 8260C | | | | | 16 uL | 16 uL | 16 uL |
| ICV 240-378870/25 | | 8260C | | | 0 | 16 uL | | | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrgas 00291 | vmrprimw 00331 | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-378870/1 | | 8260C | | | | | | | |
| STD8260 240-378870/8 IC | | 8260C | | 64 uL | 64 uL | | | | |
| STD8260 240-378870/9 IC | | 8260C | | 48 uL | 48 uL | | | | |
| STD8260 240-378870/10 IC | | 8260C | | 32 uL | 32 uL | | | | |
| ICIS 240-378870/11 | | 8260C | | 16 uL | 16 uL | | | | |
| STD8260 240-378870/12 IC | | 8260C | | 8 uL | 8 uL | | | | |
| STD8260 240-378870/13 IC | | 8260C | | 0.8 uL | 0.8 uL | | | | |
| STD8260 240-378870/14 IC | | 8260C | | 0.4 uL | 0.4 uL | | | | |
| ICV 240-378870/15 | | 8260C | | | | | | | |
| ICV 240-378870/25 | | 8260C | | | | | | | |

| Batch Notes | |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 378870  Batch Start Date: 04/30/19 13:47  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 381514  Batch Start Date: 05/15/19 17:56  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | vm50is_stk_A 00003 | vm50ss_stk 00080 | vmarolistdw 00296 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-381514/1 | | 8260C | | 5 mL | 5 mL | | | | |
| CCV 240-381514/3 | | 8260C | | 5 mL | 5 mL | | 2 uL | | |
| CCVIS 240-381514/4 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | 16 uL |
| LCS 240-381514/5 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| MB 240-381514/7 | | 8260C | | 5 mL | 5 mL | | 2 uL | 2 uL | |
| 240-112234-A-1 | TB-050719 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |
| 240-112234-B-2 | MRC-NMW-2S-050719 | 8260C | T | 5 mL | 5 mL | <2 SU | 2 uL | 2 uL | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmbfb 00021 | vmfasaw 00280 | vmfasgw 00309 | vmfaspw 00299 | vmra9w 00297 | vmrgas 00292 |
|---|---|---|---|---|---|---|---|---|---|
| BFB 240-381514/1 | | 8260C | | 1 uL | | | | | |
| CCV 240-381514/3 | | 8260C | | | | | | 16 uL | |
| CCVIS 240-381514/4 | | 8260C | | | | | | | 16 uL |
| LCS 240-381514/5 | | 8260C | | | 16 uL | 16 uL | 16 uL | | |
| MB 240-381514/7 | | 8260C | | | | | | | |
| 240-112234-A-1 | TB-050719 | 8260C | T | | | | | | |
| 240-112234-B-2 | MRC-NMW-2S-050719 | 8260C | T | | | | | | |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrprimw 00333 |
|---|---|---|---|---|
| BFB 240-381514/1 | | 8260C | | |
| CCV 240-381514/3 | | 8260C | | |
| CCVIS 240-381514/4 | | 8260C | | 16 uL |
| LCS 240-381514/5 | | 8260C | | |
| MB 240-381514/7 | | 8260C | | |
| 240-112234-A-1 | TB-050719 | 8260C | T | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 381514  Batch Start Date: 05/15/19 17:56  Batch Analyst: Lavey, Tim

Batch Method: 8260C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | vmrprimw 00333 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-112234-B-2 | MRC-NMW-2S-050719 | 8260C | T | | | | | | |

| Batch Notes | |
|---|---|
| pH Indicator ID | HC861525 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method RSK-175

## Dissolved Gases (GC) by Method RSK_175

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low

GC Column (1): HP-PLOT/Q  ID: 0.53(mm)

| Client Sample ID | Lab Sample ID | TFE1 # |
|---|---|---|
| MRC-NMW-2S-050719 | 240-112234-2 | 80 |
| MRC-NMW-2S-050719 | 240-112234-2 | 83 |
| | MB 240-381892/4 | 86 |
| | MB 240-382383/4 | 82 |
| | LCS 240-381892/5 | 87 |
| | LCS 240-382383/5 | 82 |
| | 240-112111-D-5 MS | 86 |
| | 240-112371-P-3 MS | 79 |
| | 240-112111-D-5 MSD | 87 |
| | 240-112371-T-3 MSD | 78 |

| | QC LIMITS |
|---|---|
| TFE = 1,1,1-Trifluoroethane | 60-140 |

# Column to be used to flag recovery values

FORM II RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0517005.D

Lab ID: LCS 240-381892/5 Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Ethene | 387 | 338 | 87 | 80-120 | |
| Ethane | 475 | 387 | 81 | 80-120 | |
| Methane | 480 | 399 | 83 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: Z0521005.D

Lab ID: LCS 240-382383/5  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Ethene | 387 | 336 | 87 | 80-120 | |
| Ethane | 475 | 385 | 81 | 80-120 | |
| Methane | 480 | 384 | 80 | 80-120 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0517011.D

Lab ID: 240-112111-D-5 MS Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Ethene | 5010 | 100 | 4870 | 95 | 50-150 | |
| Ethane | 5360 | 110 | 5140 | 94 | 50-150 | |
| Methane | 2850 | 9500 | 12600 | 106 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water  Level: Low  Lab File ID: Z0521020.D

Lab ID: 240-112371-P-3 MS  Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Ethene | 501 | 0.11 U | 526 | 105 | 50-150 | |
| Ethane | 536 | 4.4 | 565 | 104 | 50-150 | |
| Methane | 285 | 980 | 1190 | 74 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0517012.D

Lab ID: 240-112111-D-5 MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Ethene | 5010 | 4920 | 96 | 1 | 30 | 50-150 | |
| Ethane | 5360 | 5190 | 95 | 1 | 30 | 50-150 | |
| Methane | 2850 | 12500 | 103 | 1 | 30 | 50-150 | |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Z0521021.D

Lab ID: 240-112371-T-3 MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Ethene | 501 | 533 | 106 | 1 | 30 | 50-150 | |
| Ethane | 536 | 574 | 106 | 2 | 30 | 50-150 | |
| Methane | 285 | 1050 | 24 | 13 | 30 | 50-150 | F1 |

# Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: MB 240-381892/4

Matrix: Water  Date Extracted:

Lab File ID:(1) Z0517004.D  Lab File ID:(2)

Date Analyzed:(1) 05/17/2019 15:00  Date Analyzed:(2)

Instrument ID:(1) ZPID  Instrument ID:(2)

GC Column:(1) HP-PLOT/Q  ID: 0.53(mm)  GC Column:(2)  ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-381892/5 | 05/17/2019 15:17 | |
| | 240-112111-D-5 MS | 05/17/2019 17:02 | |
| | 240-112111-D-5 MSD | 05/17/2019 17:20 | |
| MRC-NMW-2S-050719 | 240-112234-2 | 05/17/2019 21:05 | |

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: MB 240-382383/4

Matrix: Water  Date Extracted:

Lab File ID:(1) Z0521004.D  Lab File ID:(2)

Date Analyzed:(1) 05/21/2019 15:02  Date Analyzed:(2)

Instrument ID:(1) ZPID  Instrument ID:(2)

GC Column:(1) HP-PLOT/Q  ID: 0.53(mm)  GC Column:(2)  ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-382383/5 | 05/21/2019 15:19 | |
| MRC-NMW-2S-050719 | 240-112234-2 | 05/21/2019 15:53 | |
| | 240-112371-P-3 MS | 05/21/2019 19:36 | |
| | 240-112371-T-3 MSD | 05/21/2019 19:53 | |

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Sample No.: CCVRT 240-381892/3  Date Analyzed: 05/17/2019 14:43

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)

Lab File ID (Standard): Z0517003.D  Heated Purge: (Y/N) N

Calibration ID: 49918

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TFE | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 3.35 | | |
| UPPER LIMIT | | | | 3.40 | | |
| LOWER LIMIT | | | | 3.30 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCVRT 240-381892/3 | | 05/17/2019 14:43 | Z0517003.D | 3.35 | | |
| MB 240-381892/4 | | 05/17/2019 15:00 | Z0517004.D | 3.35 | | |
| LCS 240-381892/5 | | 05/17/2019 15:17 | Z0517005.D | 3.35 | | |
| 240-112111-D-5 MS | | 05/17/2019 17:02 | Z0517011.D | 3.35 | | |
| 240-112111-D-5 MSD | | 05/17/2019 17:20 | Z0517012.D | 3.35 | | |
| CCV 240-381892/19 | | 05/17/2019 19:22 | Z0517019.D | 3.35 | | |
| 240-112234-2 | MRC-NMW-2S-050719 | 05/17/2019 21:05 | Z0517025.D | 3.35 | | |
| CCV 240-381892/26 | | 05/17/2019 21:23 | Z0517026.D | 3.35 | | |

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII RSK-175

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Sample No.: CCVRT 240-382383/3  Date Analyzed: 05/21/2019 14:45

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)

Lab File ID (Standard): Z0521003.D  Heated Purge: (Y/N) N

Calibration ID: 49918

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TFE | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 3.35 | | |
| UPPER LIMIT | | | | 3.40 | | |
| LOWER LIMIT | | | | 3.30 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCVRT 240-382383/3 | | 05/21/2019 14:45 | Z0521003.D | 3.35 | | |
| MB 240-382383/4 | | 05/21/2019 15:02 | Z0521004.D | 3.35 | | |
| LCS 240-382383/5 | | 05/21/2019 15:19 | Z0521005.D | 3.35 | | |
| 240-112234-2 | MRC-NMW-2S-050719 | 05/21/2019 15:53 | Z0521007.D | 3.35 | | |
| CCV 240-382383/19 | | 05/21/2019 19:19 | Z0521019.D | 3.35 | | |
| 240-112371-P-3 MS | | 05/21/2019 19:36 | Z0521020.D | 3.35 | | |
| 240-112371-T-3 MSD | | 05/21/2019 19:53 | Z0521021.D | 3.35 | | |
| CCV 240-382383/24 | | 05/21/2019 20:44 | Z0521024.D | 3.35 | | |

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII RSK-175

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: MRC-NMW-2S-050719  Lab Sample ID: 240-112234-2

Matrix: Water  Lab File ID: Z0517025.D

Analysis Method: RSK-175  Date Collected: 05/07/2019 12:00

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 21:05

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 17 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 75 | | 1.0 | 0.10 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 80 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517025.D
Lims ID: 240-112234-D-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 17-May-2019 21:05:58 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-025
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: matthewsb Date: 20-May-2019 10:13:41

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.182 | 1.183 | -0.001 | 79846565 | 12436 | E |
| 2 | Ethylene | | | | | M |
| | 1.882 | 1.883 | -0.001 | 105219 | 16.5 | M |
| 4 | Ethane | | | | | |
| | 2.204 | 2.205 | -0.001 | 503800 | 75.4 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | |
| | 3.347 | 3.348 | -0.001 | 24419139 | 7804.1 | |

## QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

## Reagents:

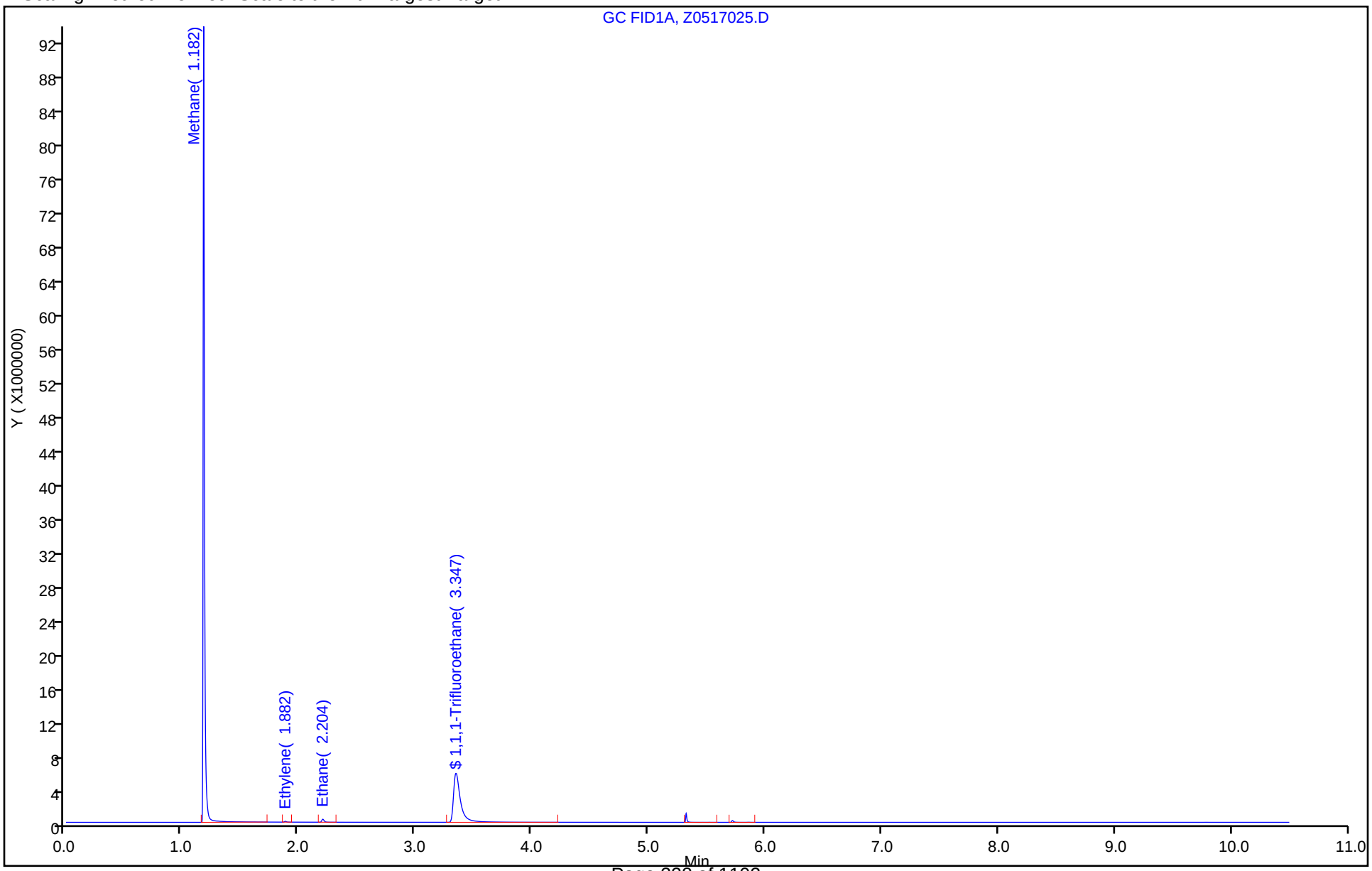
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 20-May-2019 10:18:37 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517025.D | | | | |
| Injection Date: | 17-May-2019 21:05:58 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112234-D-2 | Lab Sample ID: | 240-112234-2 | Worklist Smp#: | 25 |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 25 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517025.D
Lims ID: 240-112234-D-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 17-May-2019 21:05:58 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-025
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

First Level Reviewer: matthewsb Date: 20-May-2019 10:13:41

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 7804.1 | 80.20 |

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

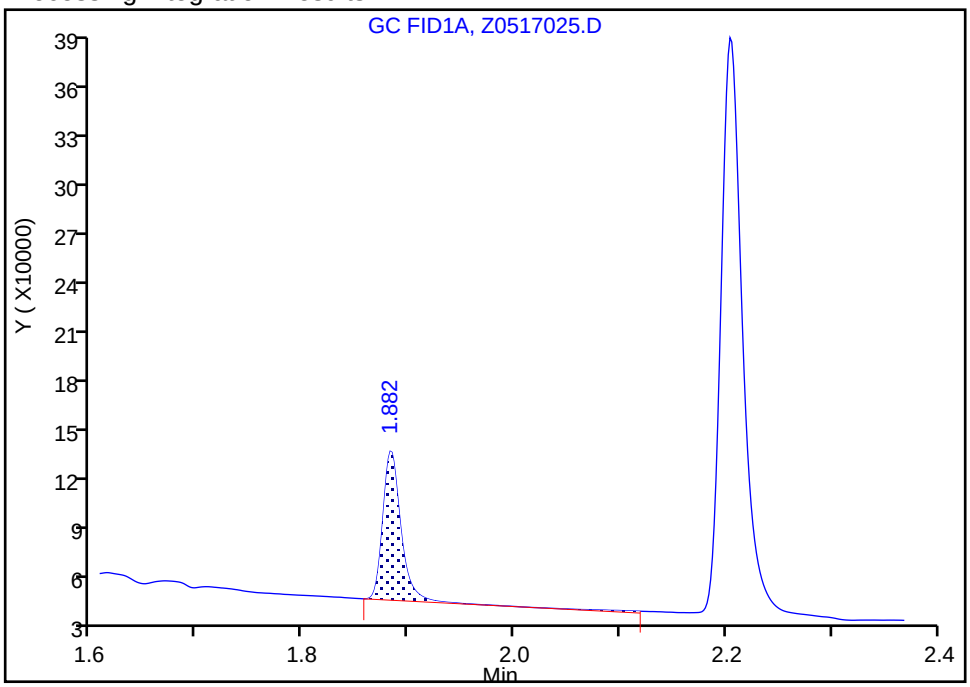
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517025.D | | | | |
| Injection Date: | 17-May-2019 21:05:58 | Instrument ID: | ZPID | | |
| Lims ID: | 240-112234-D-2 | Lab Sample ID: | 240-112234-2 | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Operator ID: | | ALS Bottle#: | 25 | Worklist Smp#: | 25 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |
| Column: | | Detector | GC FID1A | | |

## 2 Ethylene, CAS: 74-85-1

Signal: 1

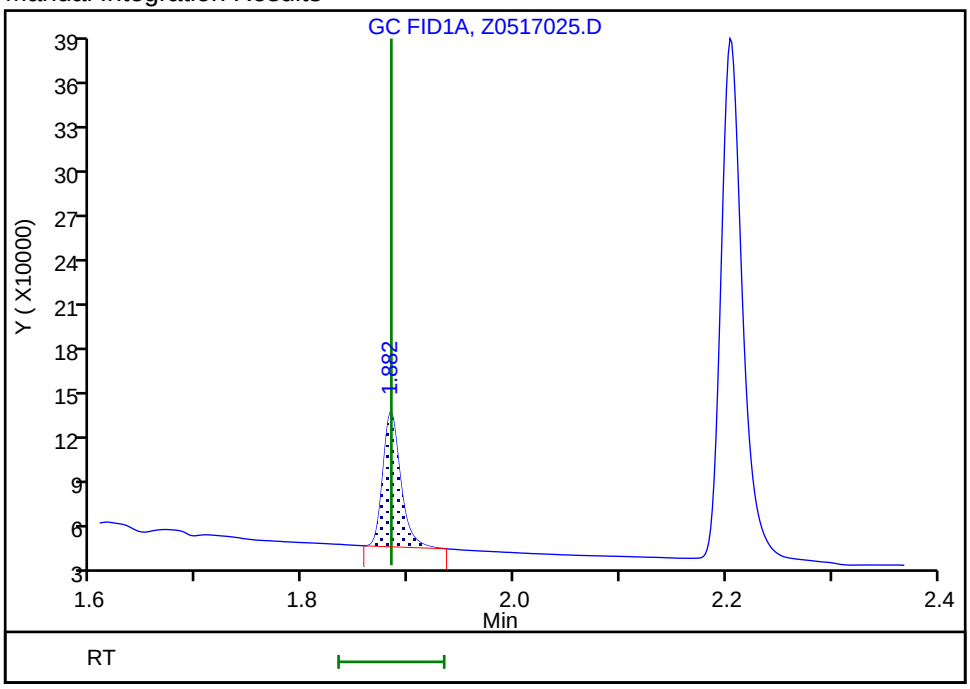
Processing Integration Results

RT: 1.88
Area: 110294
Amount: 17.344766
Amount Units: ug/l




Manual Integration Results

RT: 1.88
Area: 105219
Amount: 16.546674
Amount Units: ug/l




Reviewer: matthewsb, 20-May-2019 10:13:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID: MRC-NMW-2S-050719  Lab Sample ID: 240-112234-2

Matrix: Water  Lab File ID: Z0521007.D

Analysis Method: RSK-175  Date Collected: 05/07/2019 12:00

Sample wt/vol: 23(mL)  Date Analyzed: 05/21/2019 15:53

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 382383  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-82-8 | Methane | 10000 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 83 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521007.D
Lims ID: 240-112234-E-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 21-May-2019 15:53:58 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087330-007
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 | Methane | | | | | |
| | 1.185 | 1.186 | -0.001 | 6624431 | 1031.8 | |
| 2 | Ethylene | | | | | |
| | | 1.886 | | | ND | |
| 4 | Ethane | | | | | |
| | 2.208 | 2.207 | 0.001 | 42086 | 6.30 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | |
| | 3.350 | 3.351 | -0.001 | 25229632 | 8063.1 | |

## Reagents:

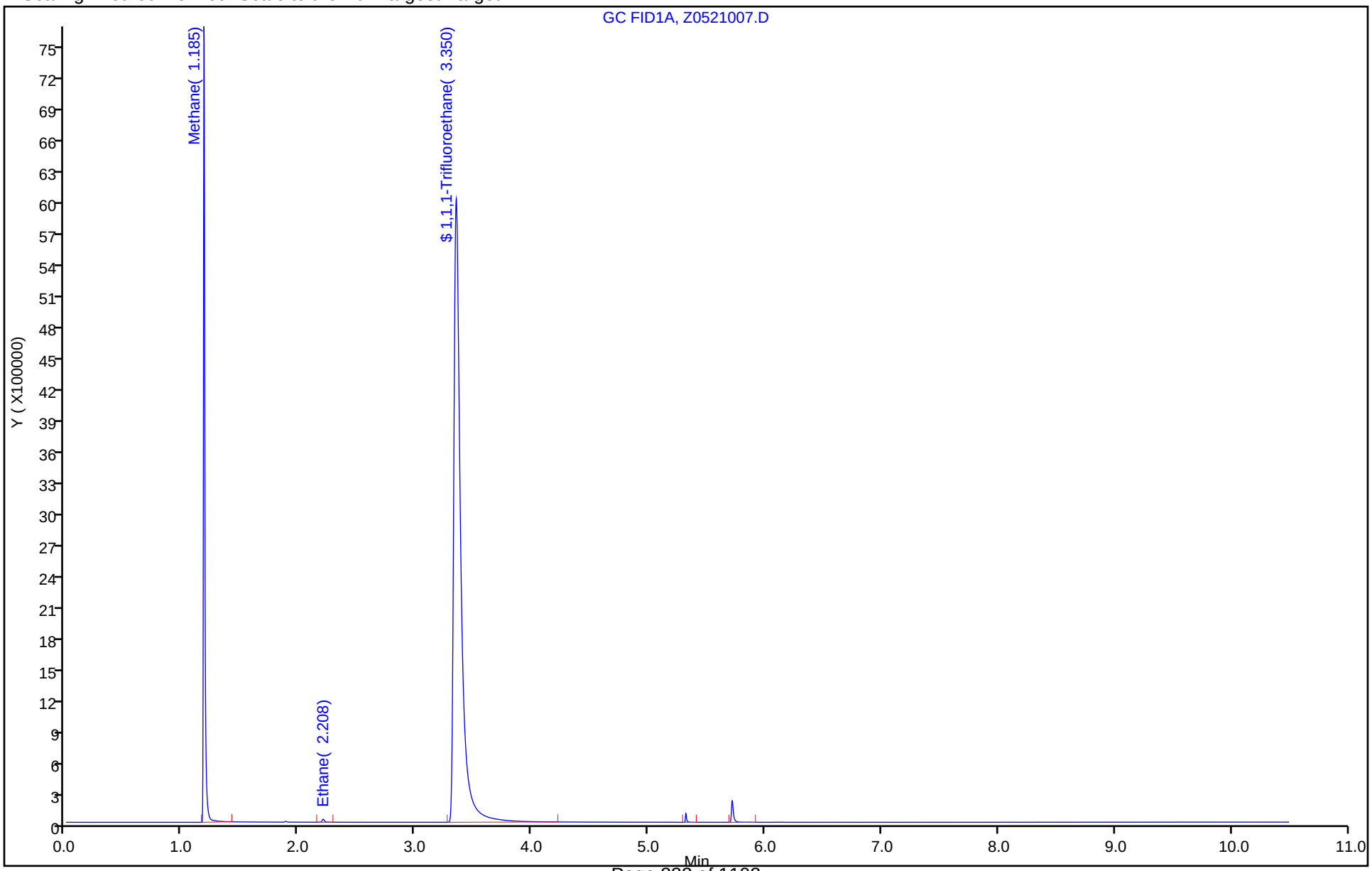
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 22-May-2019 07:26:14 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521007.D | | | | |
| Injection Date: | 21-May-2019 15:53:58 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112234-E-2 | Lab Sample ID: | 240-112234-2 | Worklist Smp#: | 7 |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 7 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521007.D
Lims ID: 240-112234-E-2
Client ID: MRC-NMW-2S-050719
Sample Type: Client
Inject. Date: 21-May-2019 15:53:58 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087330-007
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8063.1 | 82.87 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32 Calibration End Date: 03/25/2019 15:57 Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methane | 1.182 | 1.182 | 1.182 | 1.181 | 1.181 | 1.179 | | | | | 1.129 - 1.229 | 1.181 |
| Ethene | 1.881 | 1.880 | 1.880 | 1.880 | 1.878 | 1.873 | | | | | 1.823 - 1.923 | 1.879 |
| Acetylene | 1.996 | 1.995 | 1.993 | 1.993 | 1.993 | +++++ | | | | | 1.939 - 2.039 | 1.994 |
| Ethane | 2.202 | 2.202 | 2.200 | 2.200 | 2.199 | 2.191 | | | | | 1.991 - 2.391 | 2.199 |
| Propane | 4.549 | 4.548 | 4.548 | 4.546 | 4.543 | 4.519 | | | | | 4.469 - 4.569 | 4.542 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32 Calibration End Date: 03/25/2019 15:57 Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| Methane | 6779.3<br>5971.4 | 6638.4<br>6357.3 | 6547.8 | 6228.5 | Ave | | 6420.43964 | | | | 4.6 | | 20.0 | | | |
| Ethene | 5472.3<br>6503.0 | 6489.6<br>6851.4 | 6599.4 | 6237.9 | Ave | | 6358.92133 | | | | 7.5 | | 20.0 | | | |
| Acetylene | 2456.6<br>3914.5 | 2993.1<br>+++++ | 3464.1 | 3746.4 | Ave | | 3314.91689 | | | | 17.9 | | 30.0 | | | |
| Ethane | 5599.4<br>7050.0 | 6661.7<br>7426.5 | 6819.1 | 6522.4 | Ave | | 6679.85645 | | | | 9.2 | | 20.0 | | | |
| Propane | 5750.6<br>7980.4 | 7063.7<br>8394.9 | 7233.7 | 6983.7 | Ave | | 7234.51455 | | | | 12.7 | | 20.0 | | | |

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 14:32 Calibration End Date: 03/25/2019 15:57 Calibration ID: 49917

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD 240-373146/3 | Z0325003.D |
| Level 2 | STD 240-373146/4 | Z0325004.D |
| Level 3 | STD 240-373146/5 | Z0325005.D |
| Level 4 | STD 240-373146/6 | Z0325006.D |
| Level 5 | STD 240-373146/7 | Z0325007.D |
| Level 6 | STD 240-373146/8 | Z0325008.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Methane | Ave | 1966<br>27189706 | 13476 | 66460 | 632192 | 2553930 | 0.290<br>4277 | 2.03 | 10.2 | 102 | 428 |
| Ethene | Ave | 2798<br>51465960 | 23227 | 118101 | 1116304 | 4884888 | 0.511<br>7512 | 3.58 | 17.9 | 179 | 751 |
| Acetylene | Ave | 1161<br>+++++ | 9902 | 57300 | 619698 | 2720642 | 0.473<br>+++++ | 3.31 | 16.5 | 165 | 695 |
| Ethane | Ave | 3048<br>59757636 | 25384 | 129919 | 1242663 | 5672810 | 0.544<br>8047 | 3.81 | 19.1 | 191 | 805 |
| Propane | Ave | 4588<br>98970444 | 39449 | 201994 | 1950136 | 9408395 | 0.798<br>11789 | 5.58 | 27.9 | 279 | 1179 |

Curve Type Legend:

Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Lims ID: STD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Mar-2019 14:32:27 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:28 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:00

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | Ma |
| 1.182 | 1.179 | 0.003 | 1966 | 0.2900 | 0.3062 | Ma |
| 2 Ethylene | | | | | | Ma |
| 1.881 | 1.873 | 0.008 | 2798 | 0.5113 | 0.4400 | Ma |
| 3 Acetylene | | | | | | Ma |
| 1.996 | 1.989 | 0.007 | 1161 | 0.4726 | 0.3502 | M |
| 4 Ethane | | | | | | Ma |
| 2.202 | 2.191 | 0.011 | 3048 | 0.5443 | 0.4563 | Ma |
| 6 Propane | | | | | | Ma |
| 4.549 | 4.519 | 0.030 | 4588 | 0.7978 | 0.6342 | Ma |

## QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

## Reagents:

SARSKLOWCAL_00013 Amount Added: 10.00 Units: uL

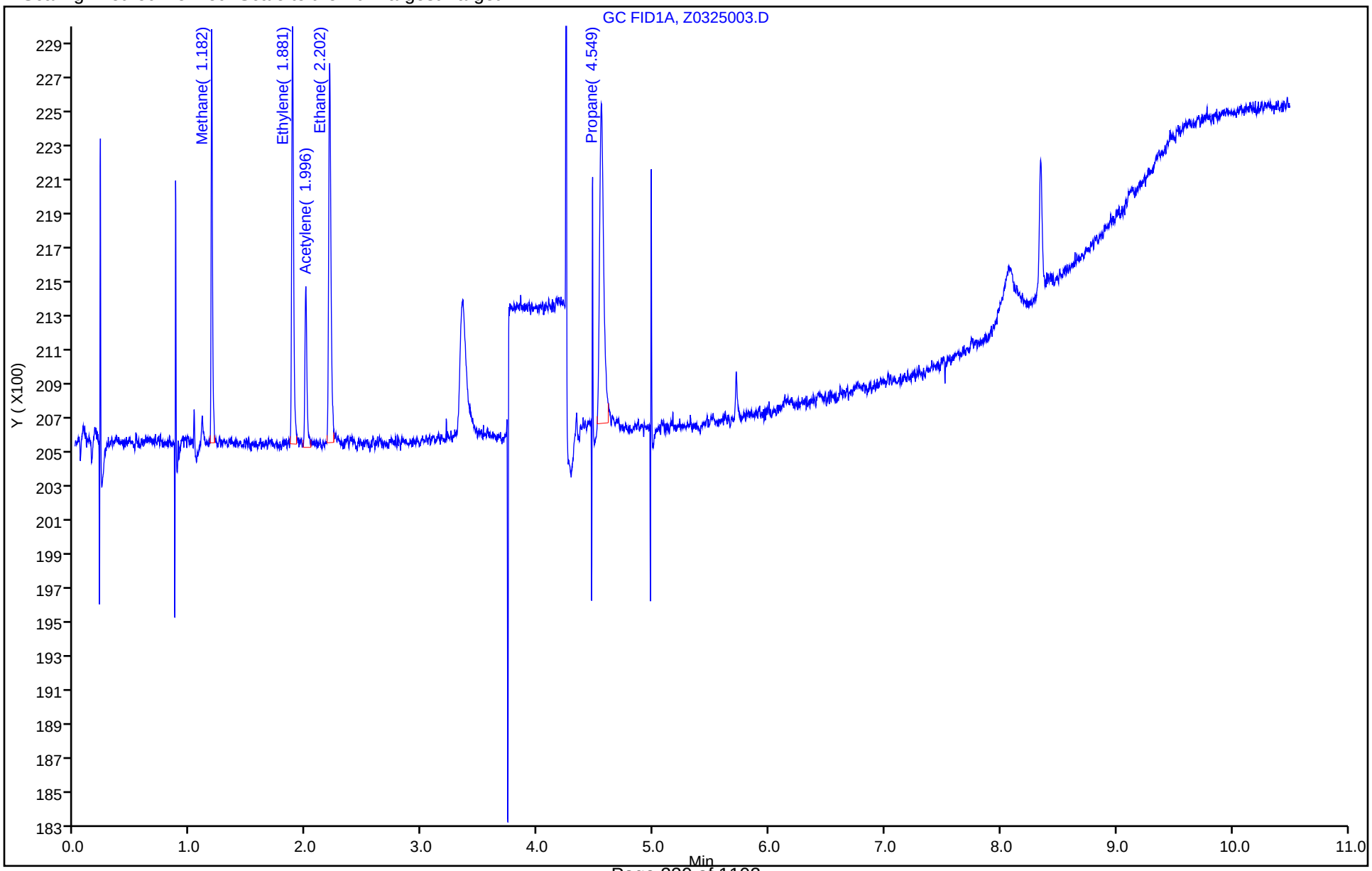
Report Date: 26-Mar-2019 07:54:28 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 14:32:27 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 1 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

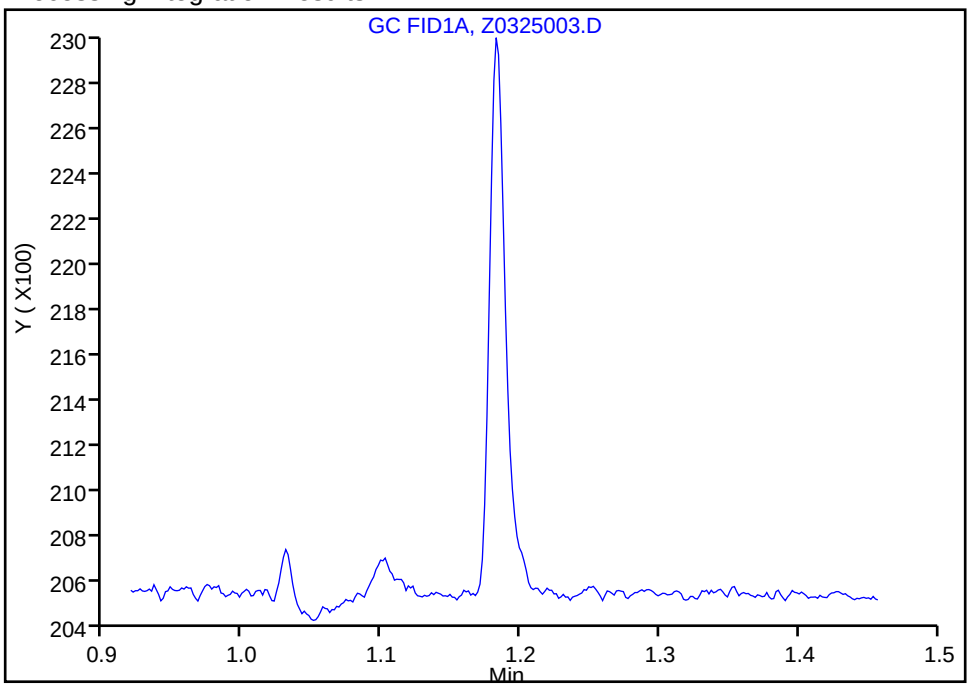
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 1 Methane, CAS: 74-82-8

Signal: 1

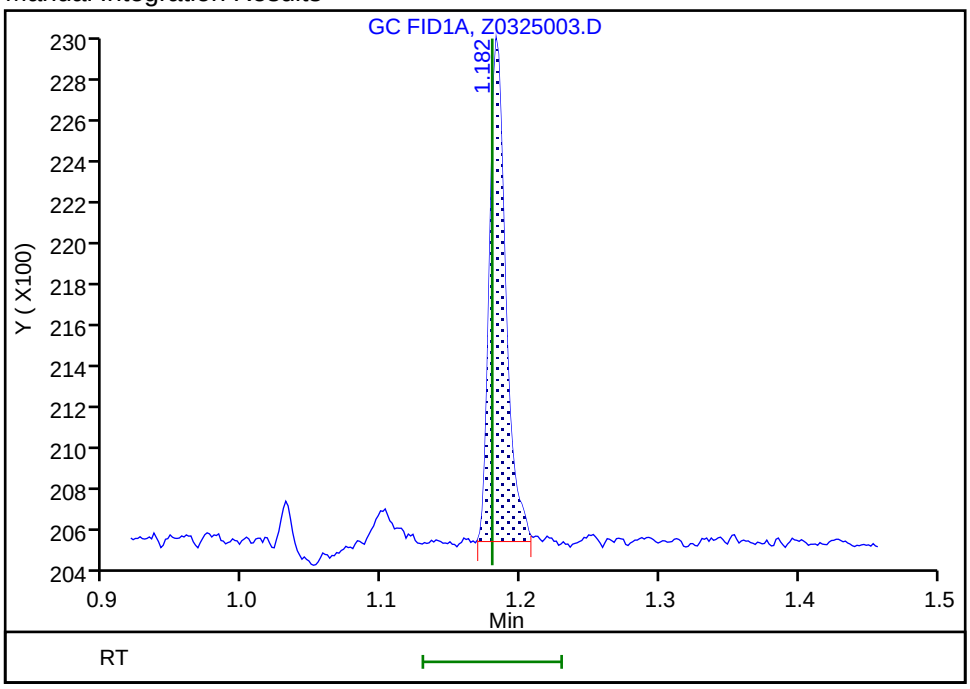
Not Detected
Expected RT: 1.18

Processing Integration Results




Manual Integration Results

RT: 1.18
Area: 1966
Amount: 0.306210
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:24
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

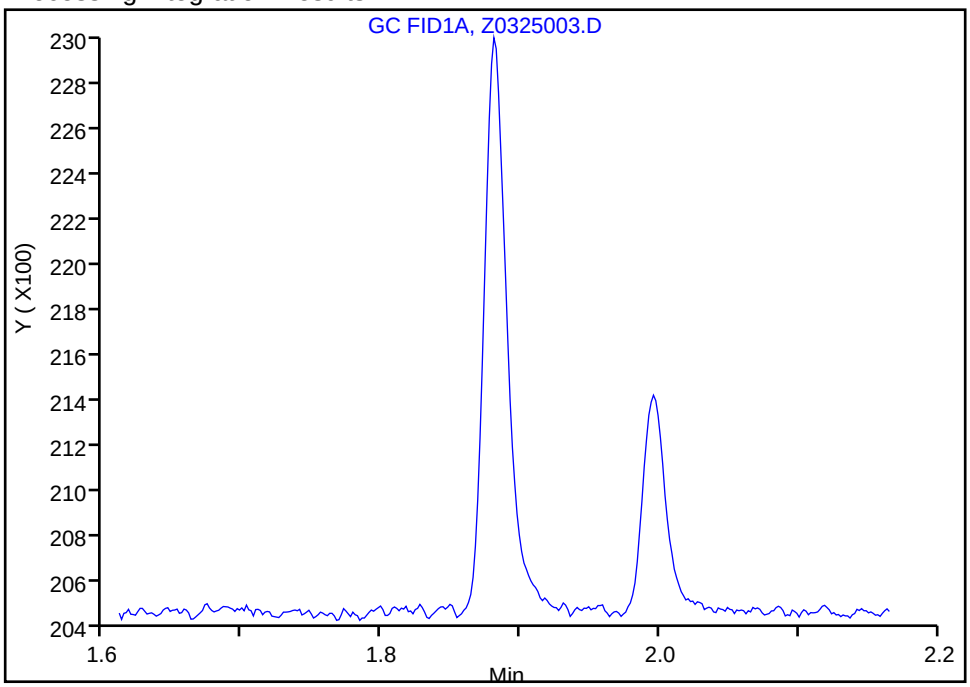
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 2 Ethylene, CAS: 74-85-1

Signal: 1

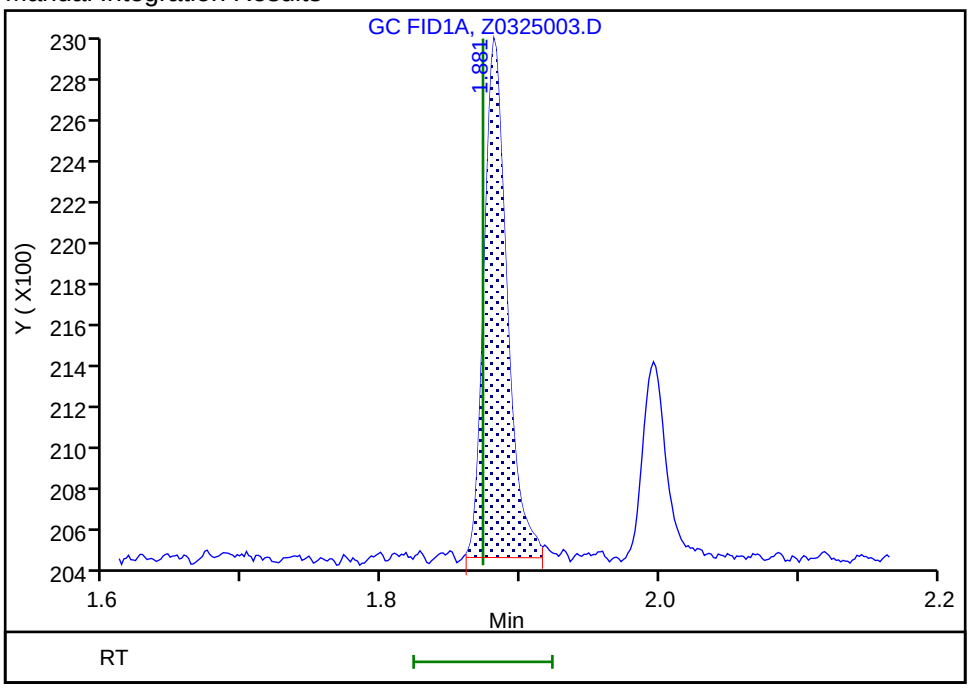
Not Detected
Expected RT: 1.87

Processing Integration Results




Manual Integration Results

RT: 1.88
Area: 2798
Amount: 0.440012
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:32
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

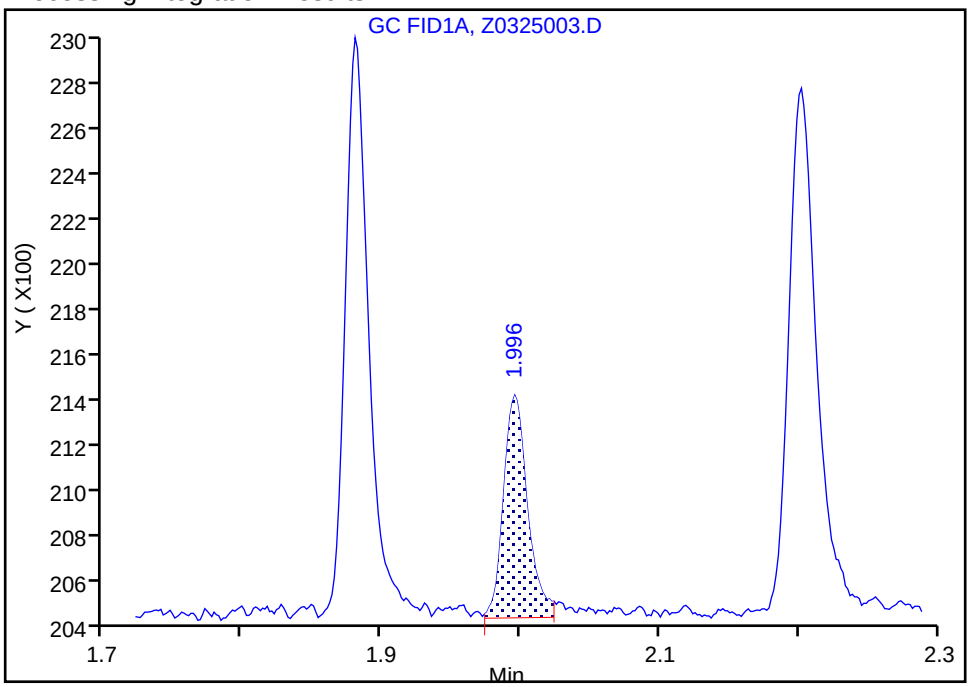
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 3 Acetylene, CAS: 74-86-2

Signal: 1

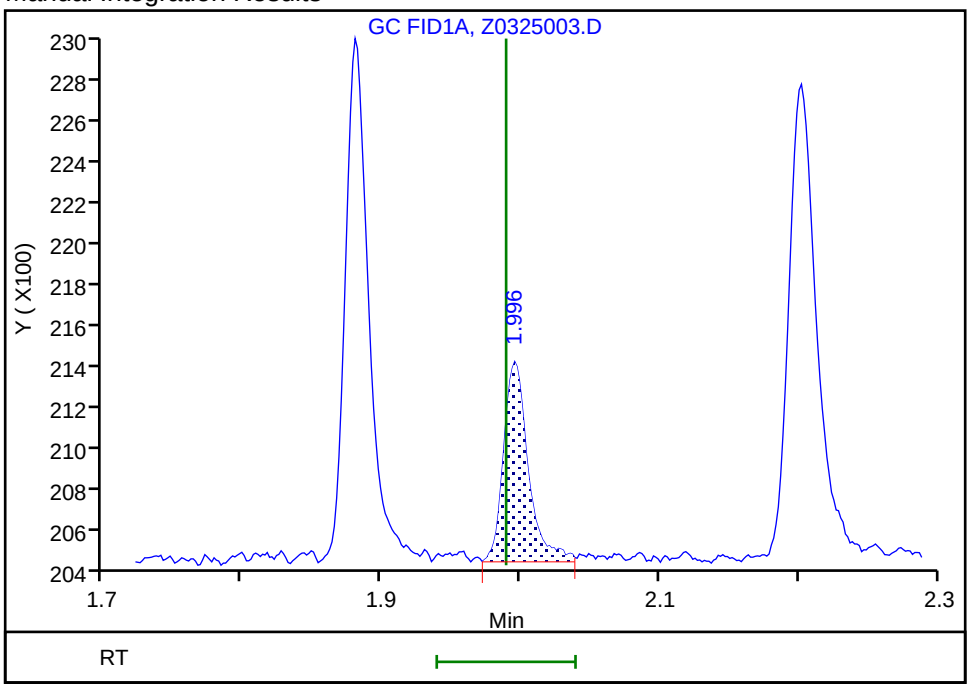
Processing Integration Results

RT: 2.00
Area: 1134
Amount: 0.326116
Amount Units: ug/l




Manual Integration Results

RT: 2.00
Area: 1161
Amount: 0.350235
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:52:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

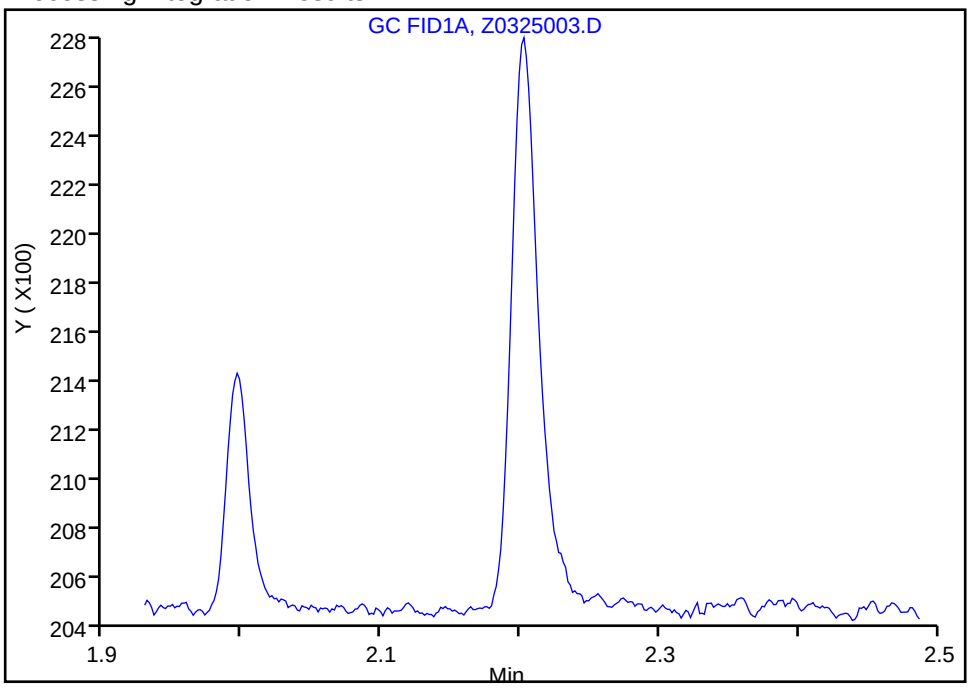
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 4 Ethane, CAS: 74-84-0

Signal: 1

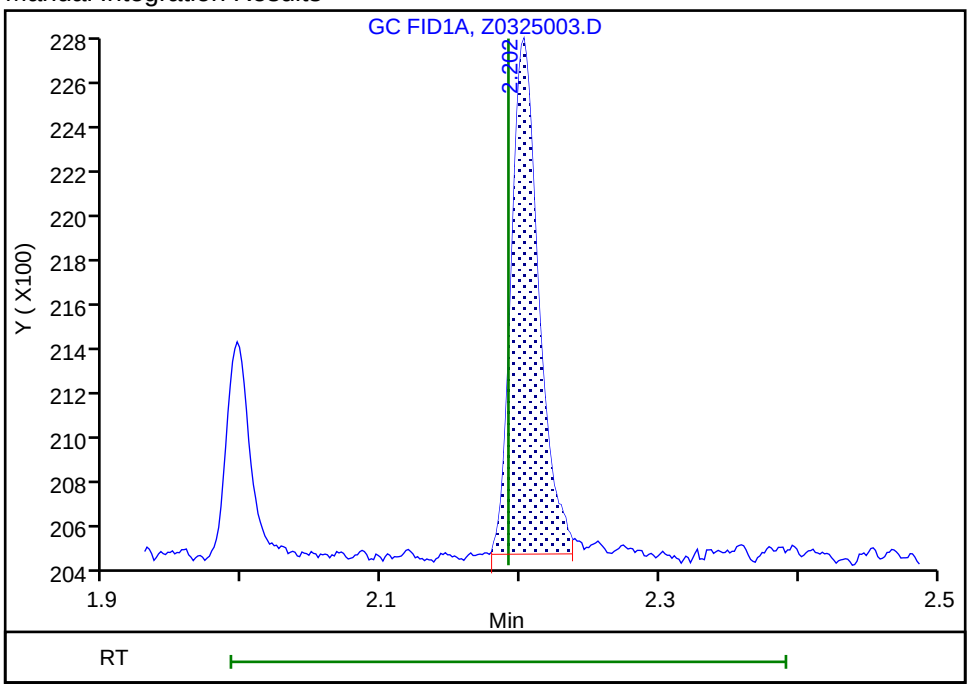
Not Detected
Expected RT: 2.19

Processing Integration Results




Manual Integration Results

RT: 2.20
Area: 3048
Amount: 0.456297
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

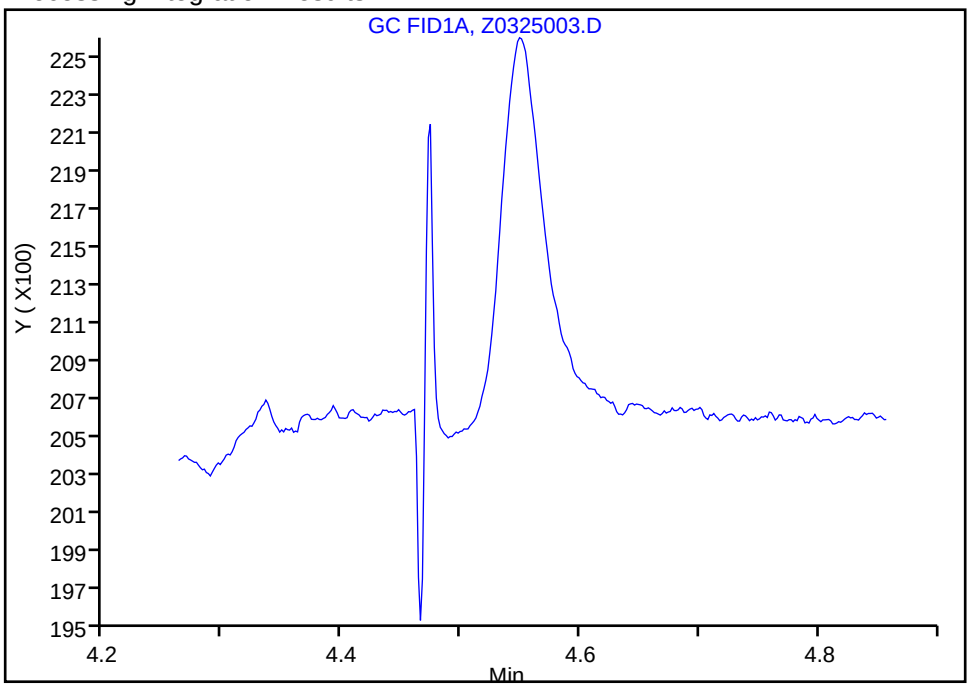
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325003.D
Injection Date: 25-Mar-2019 14:32:27 Instrument ID: ZPID
Lims ID: STD 1
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

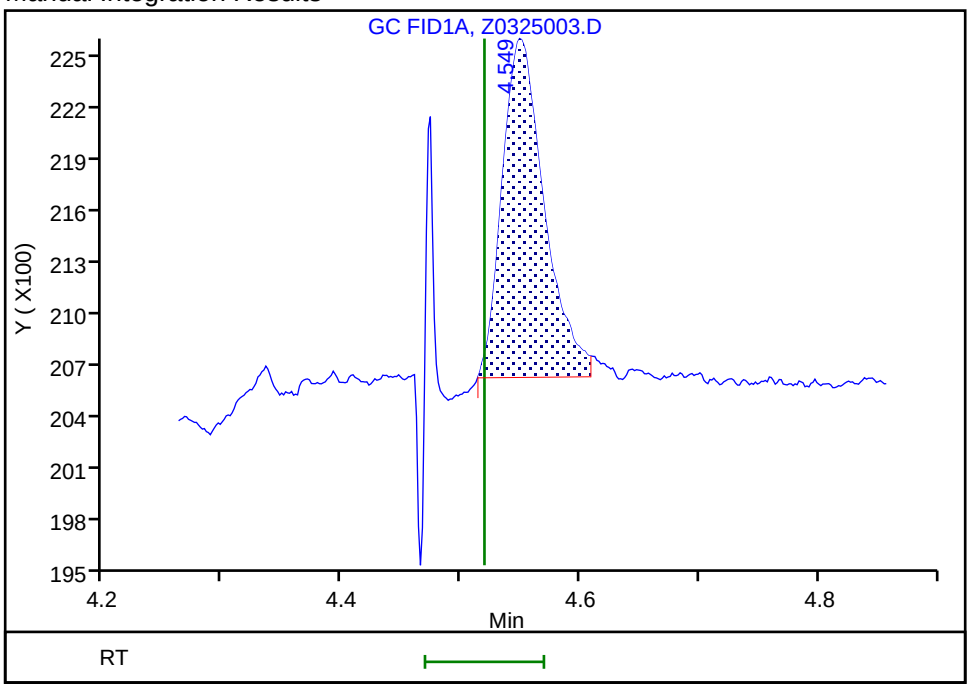
Not Detected
Expected RT: 4.52

Processing Integration Results




Manual Integration Results

RT: 4.55
Area: 4588
Amount: 0.634182
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:47:58
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Lims ID: STD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Mar-2019 14:49:29 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-004
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:29 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:29

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.182 | 1.179 | 0.003 | 13476 | 2.03 | 2.10 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.873 | 0.007 | 23227 | 3.58 | 3.65 | |
| 3 Acetylene | | | | | | Ma |
| 1.995 | 1.989 | 0.006 | 9902 | 3.31 | 2.99 | Ma |
| 4 Ethane | | | | | | |
| 2.202 | 2.191 | 0.011 | 25384 | 3.81 | 3.80 | |
| 6 Propane | | | | | | M |
| 4.548 | 4.519 | 0.029 | 39449 | 5.58 | 5.45 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated
a - User Assigned ID

## Reagents:

SARSKLOWCAL_00013 Amount Added: 70.00 Units: uL

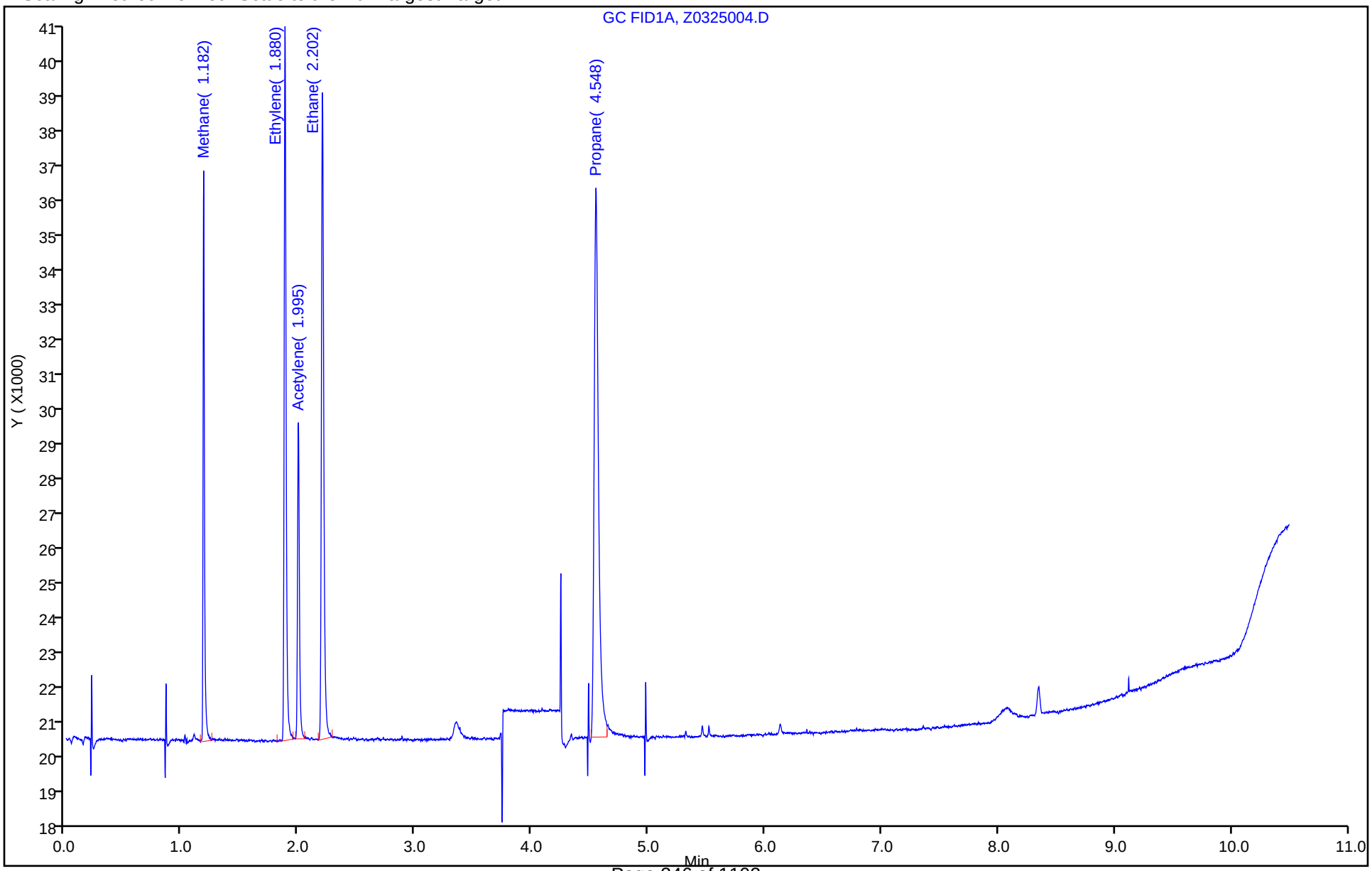
Report Date: 26-Mar-2019 07:54:29 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 14:49:29 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 2 | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

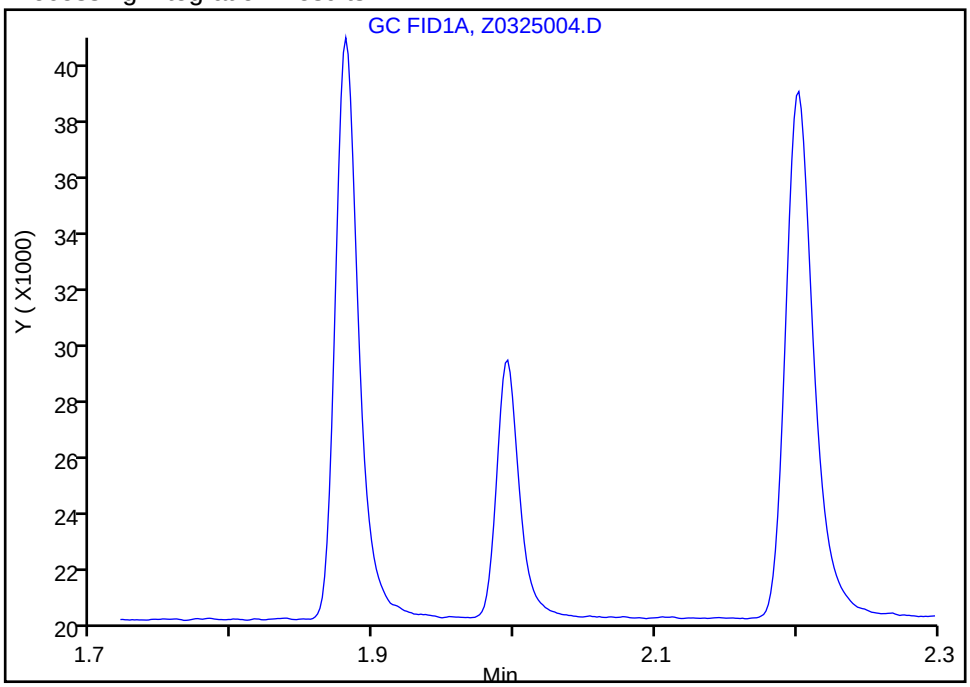
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Injection Date: 25-Mar-2019 14:49:29 Instrument ID: ZPID
Lims ID: STD 2
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 3 Acetylene, CAS: 74-86-2

Signal: 1

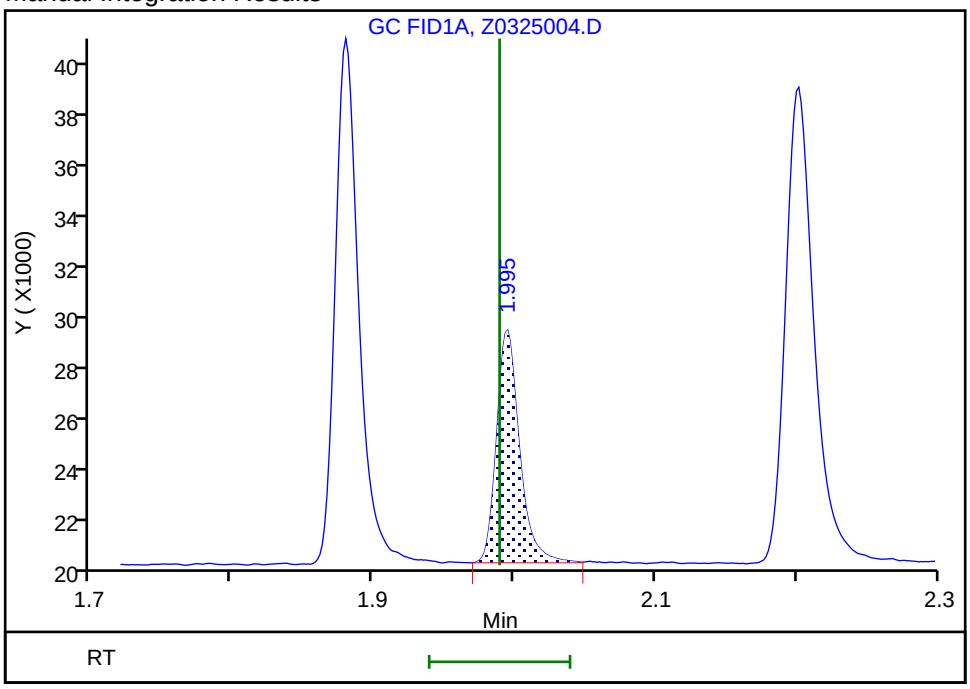
Not Detected
Expected RT: 1.99

Processing Integration Results




Manual Integration Results

RT: 2.00
Area: 9902
Amount: 2.987104
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:27
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Canton

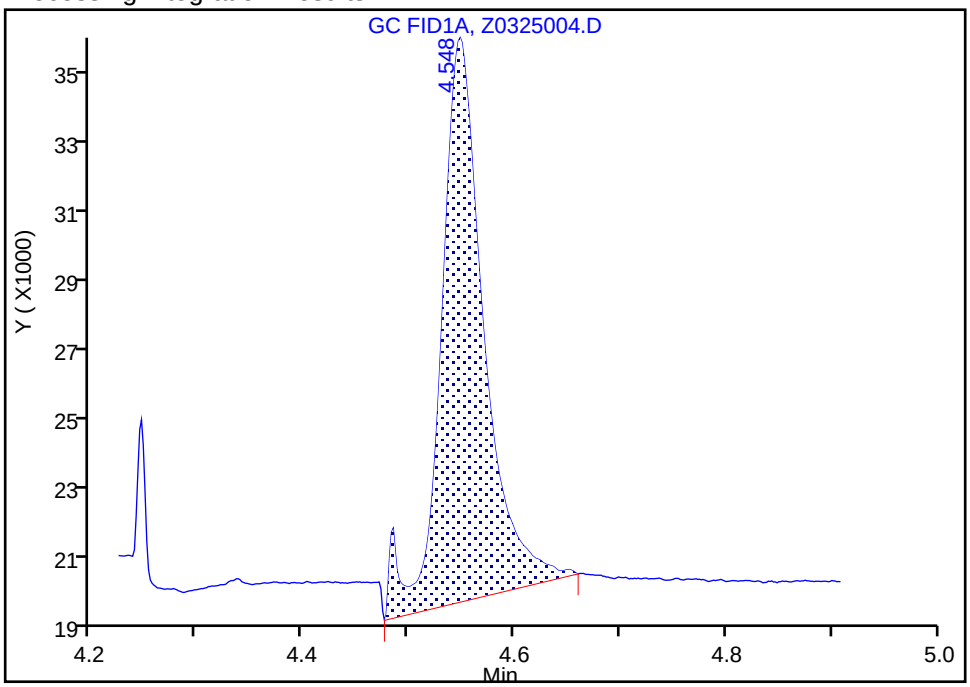
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325004.D
Injection Date: 25-Mar-2019 14:49:29 Instrument ID: ZPID
Lims ID: STD 2
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

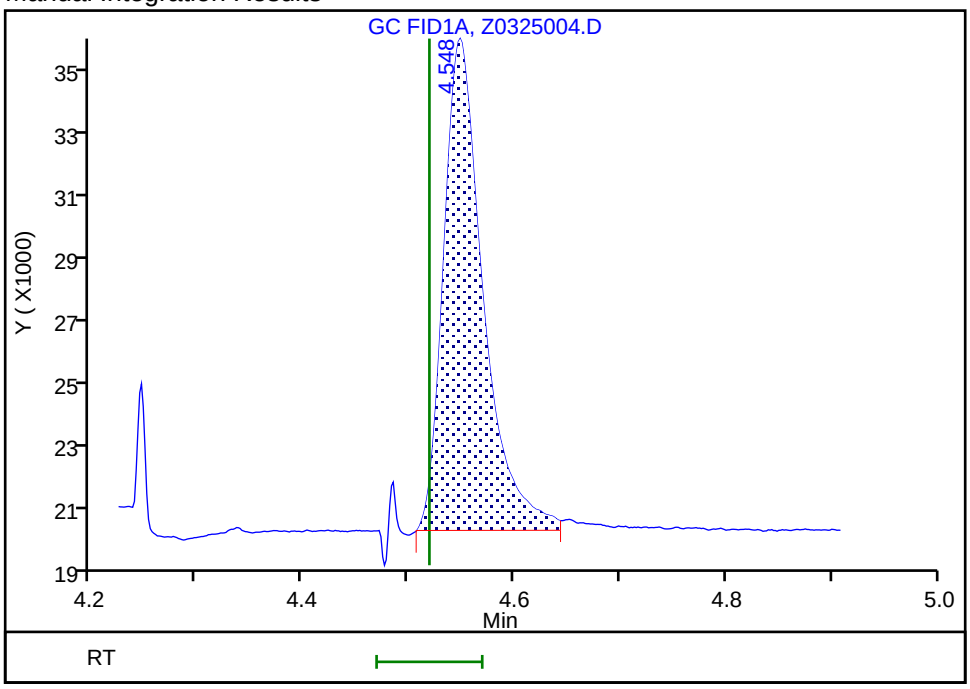
Processing Integration Results

RT: 4.55
Area: 44723
Amount: 6.005193
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 39449
Amount: 5.452888
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D
Lims ID: STD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Mar-2019 15:06:32 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-005
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:30 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:45

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.182 | 1.182 | 0.000 | 66460 | 10.2 | 10.4 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.880 | 0.000 | 118101 | 17.9 | 18.6 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 57300 | 16.5 | 17.3 | |
| 4 Ethane | | | | | | |
| 2.200 | 2.200 | 0.000 | 129919 | 19.1 | 19.4 | |
| 6 Propane | | | | | | M |
| 4.548 | 4.548 | 0.000 | 201994 | 27.9 | 27.9 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKLOWCAL_00013 Amount Added: 350.00 Units: uL

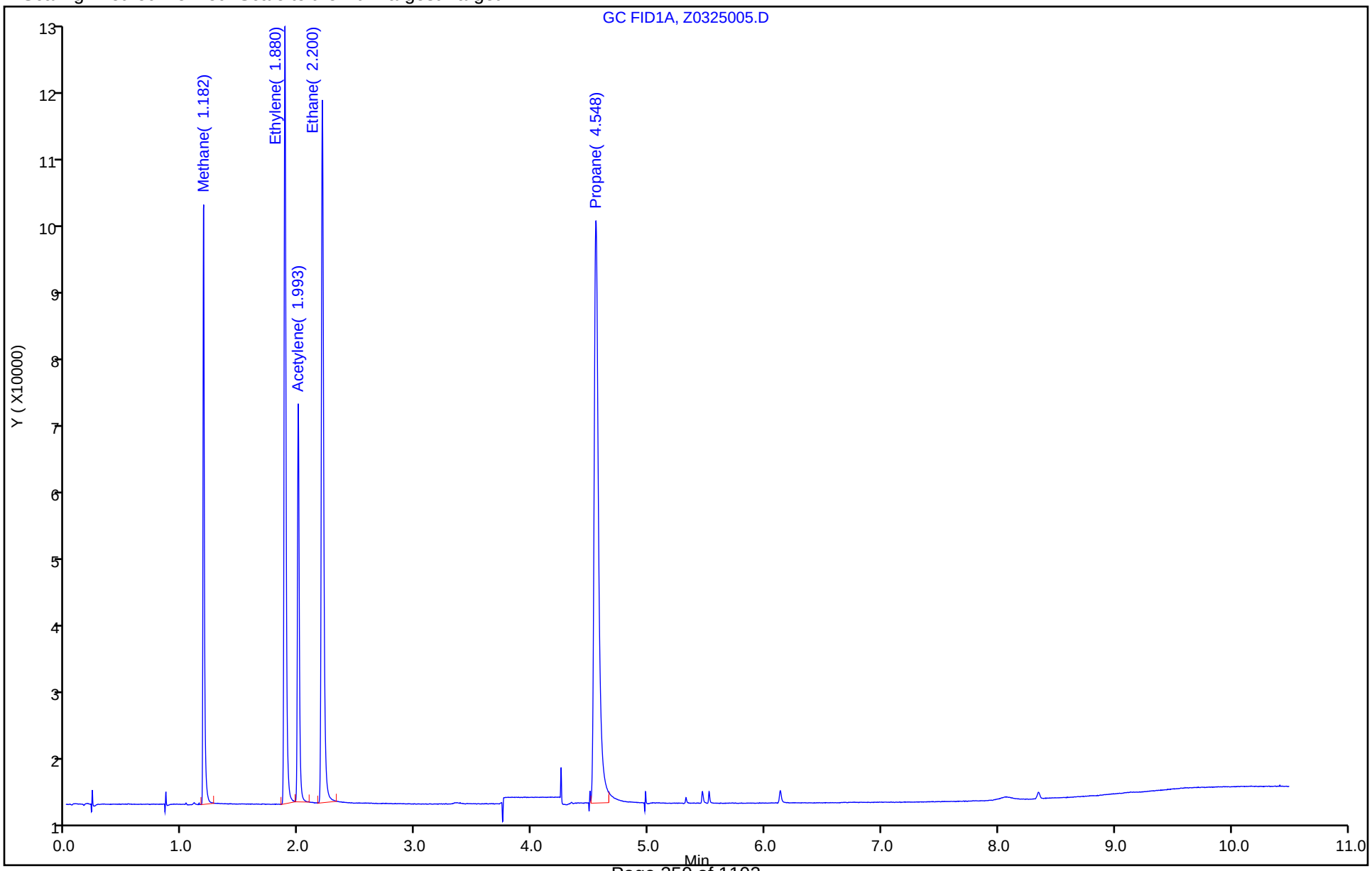
Report Date: 26-Mar-2019 07:54:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:06:32 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 3 | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

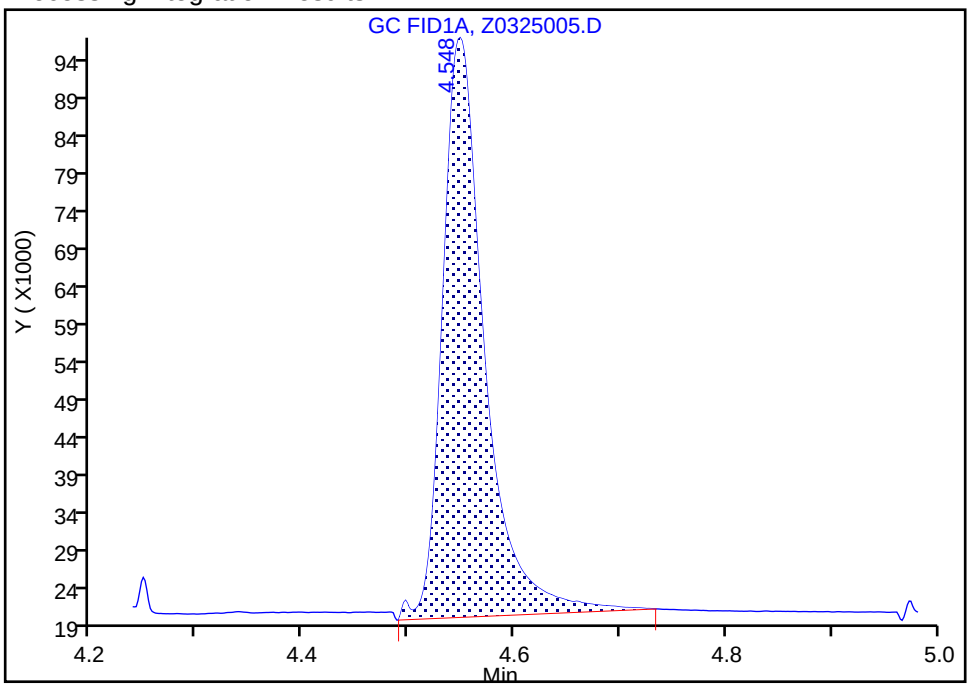
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325005.D
Injection Date: 25-Mar-2019 15:06:32 Instrument ID: ZPID
Lims ID: STD 3
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

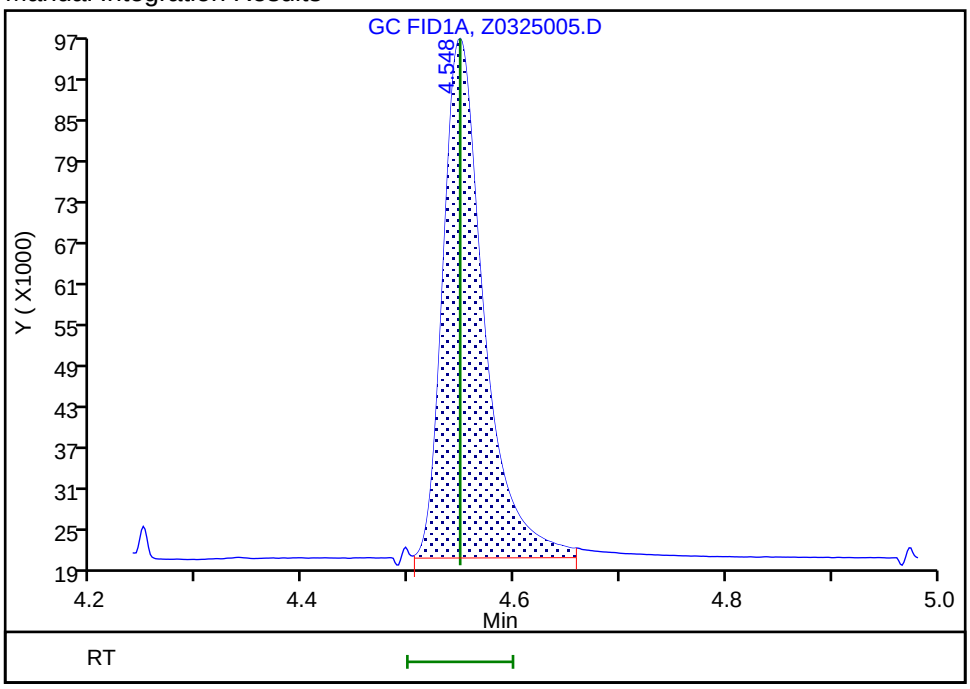
Processing Integration Results

RT: 4.55
Area: 210425
Amount: 28.864903
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 201994
Amount: 27.920878
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:43
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D
Lims ID: STD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Mar-2019 15:23:39 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-006
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:30 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:48:59

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.181 | 1.182 | -0.001 | 632192 | 101.5 | 98.5 | |
| 2 Ethylene | | | | | | |
| 1.880 | 1.880 | 0.000 | 1116304 | 179.0 | 175.5 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 619698 | 165.4 | 186.9 | |
| 4 Ethane | | | | | | |
| 2.200 | 2.200 | 0.000 | 1242663 | 190.5 | 186.0 | |
| 6 Propane | | | | | | M |
| 4.546 | 4.548 | -0.002 | 1950136 | 279.2 | 269.6 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKLOWCAL_00013 Amount Added: 3.50 Units: mL

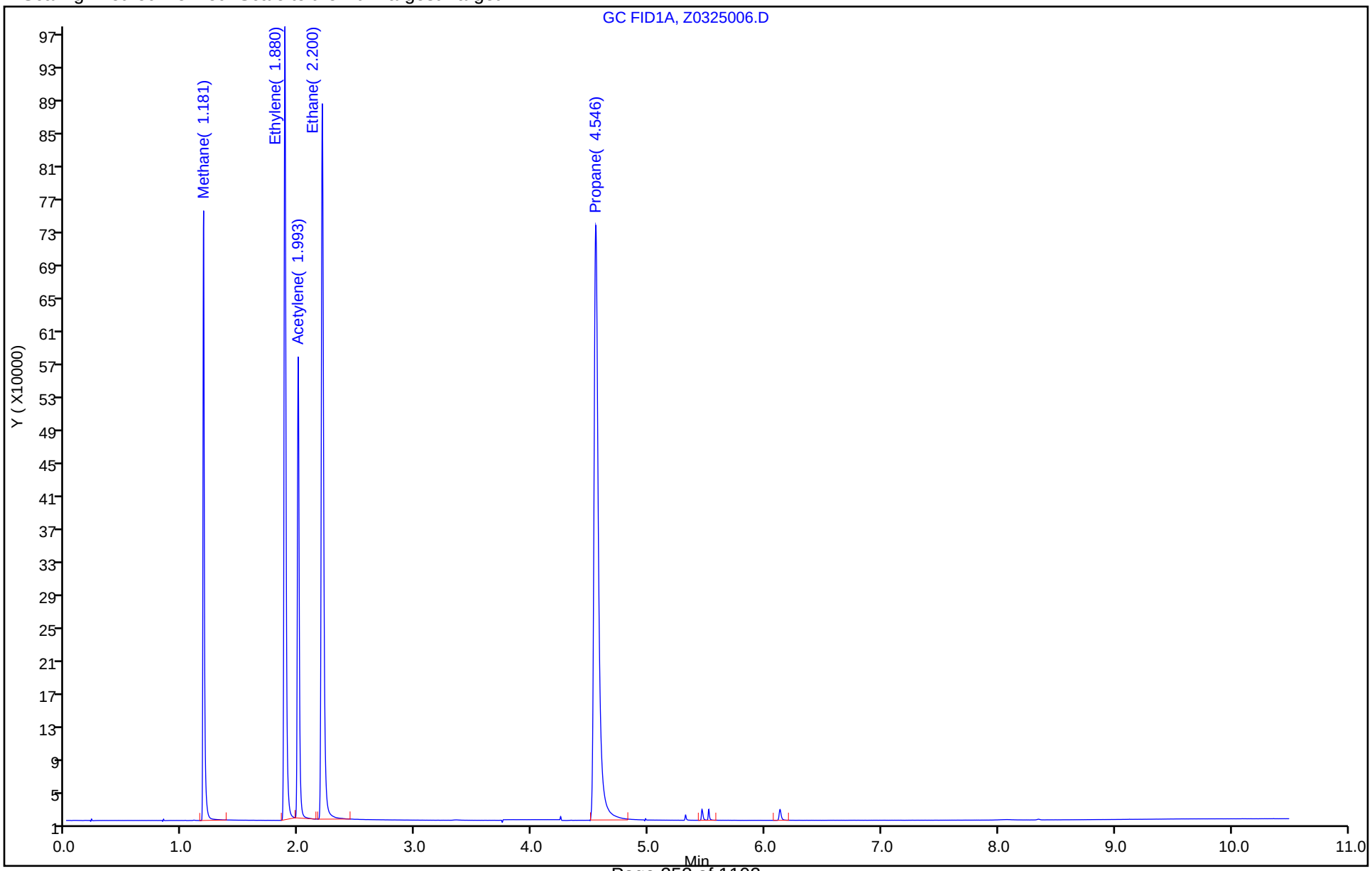
Report Date: 26-Mar-2019 07:54:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:23:39 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 4 | | | Worklist Smp#: | 6 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 6 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

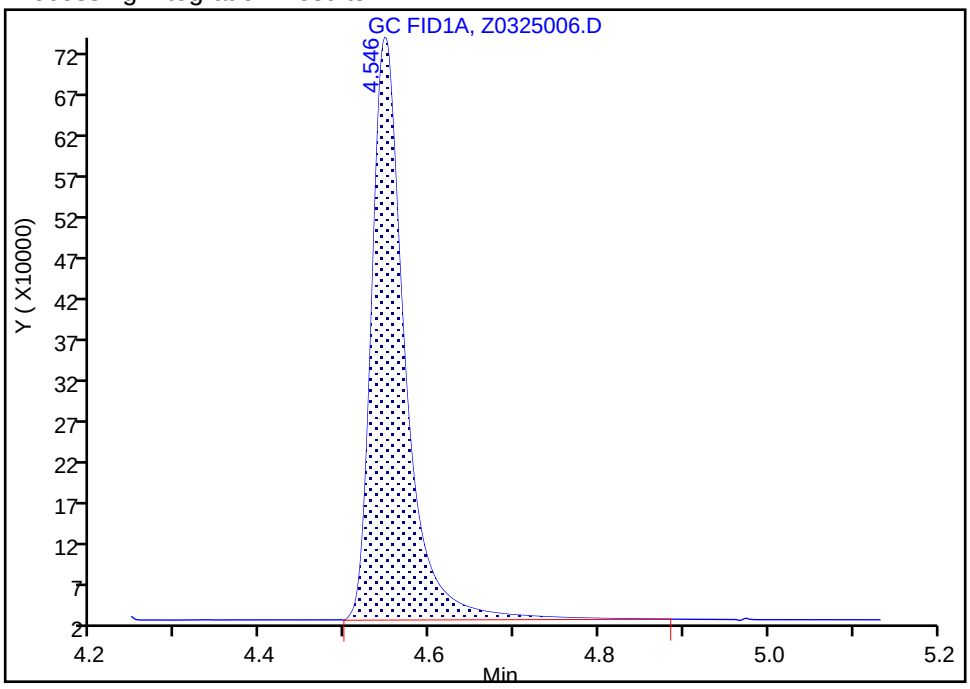
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325006.D
Injection Date: 25-Mar-2019 15:23:39 Instrument ID: ZPID
Lims ID: STD 4
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

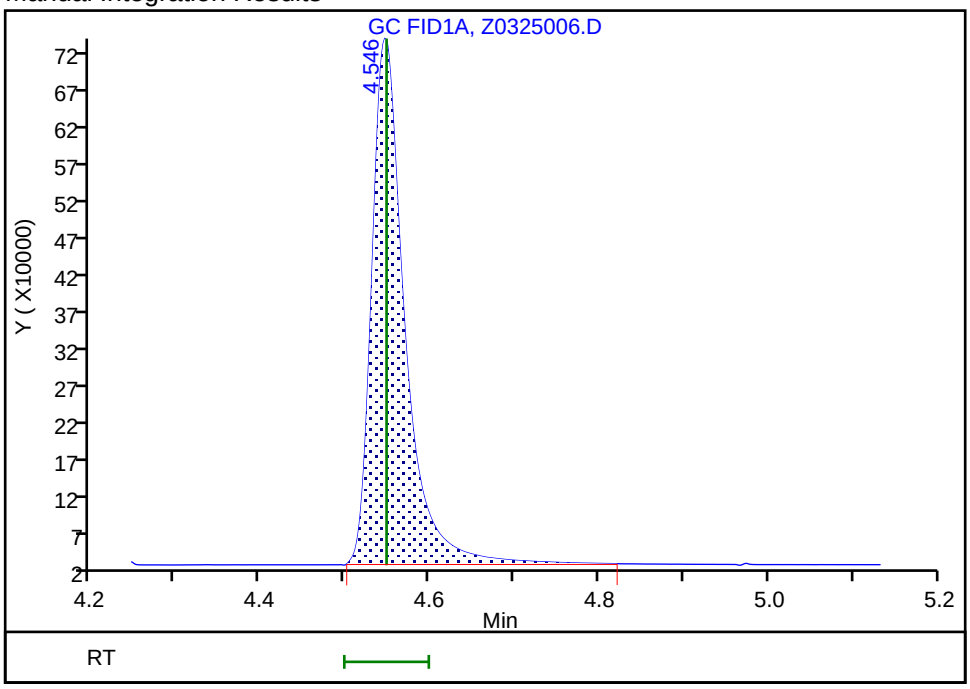
Processing Integration Results

RT: 4.55
Area: 1957668
Amount: 270.4083
Amount Units: ug/l




Manual Integration Results

RT: 4.55
Area: 1950136
Amount: 269.5600
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:48:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D
Lims ID: STD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Mar-2019 15:40:45 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-007
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:31 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:49:15

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.181 | 1.182 | -0.001 | 2553930 | 427.7 | 397.8 | |
| 2 Ethylene | | | | | | |
| 1.878 | 1.880 | -0.002 | 4884888 | 751.2 | 768.2 | |
| 3 Acetylene | | | | | | |
| 1.993 | 1.993 | 0.000 | 2720642 | 695.0 | 820.7 | |
| 4 Ethane | | | | | | |
| 2.199 | 2.200 | -0.001 | 5672810 | 804.7 | 849.2 | |
| 6 Propane | | | | | | M |
| 4.543 | 4.548 | -0.005 | 9408395 | 1178.9 | 1300.5 | M |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

SARSKHighCal_00006 Amount Added: 1.50 Units: mL

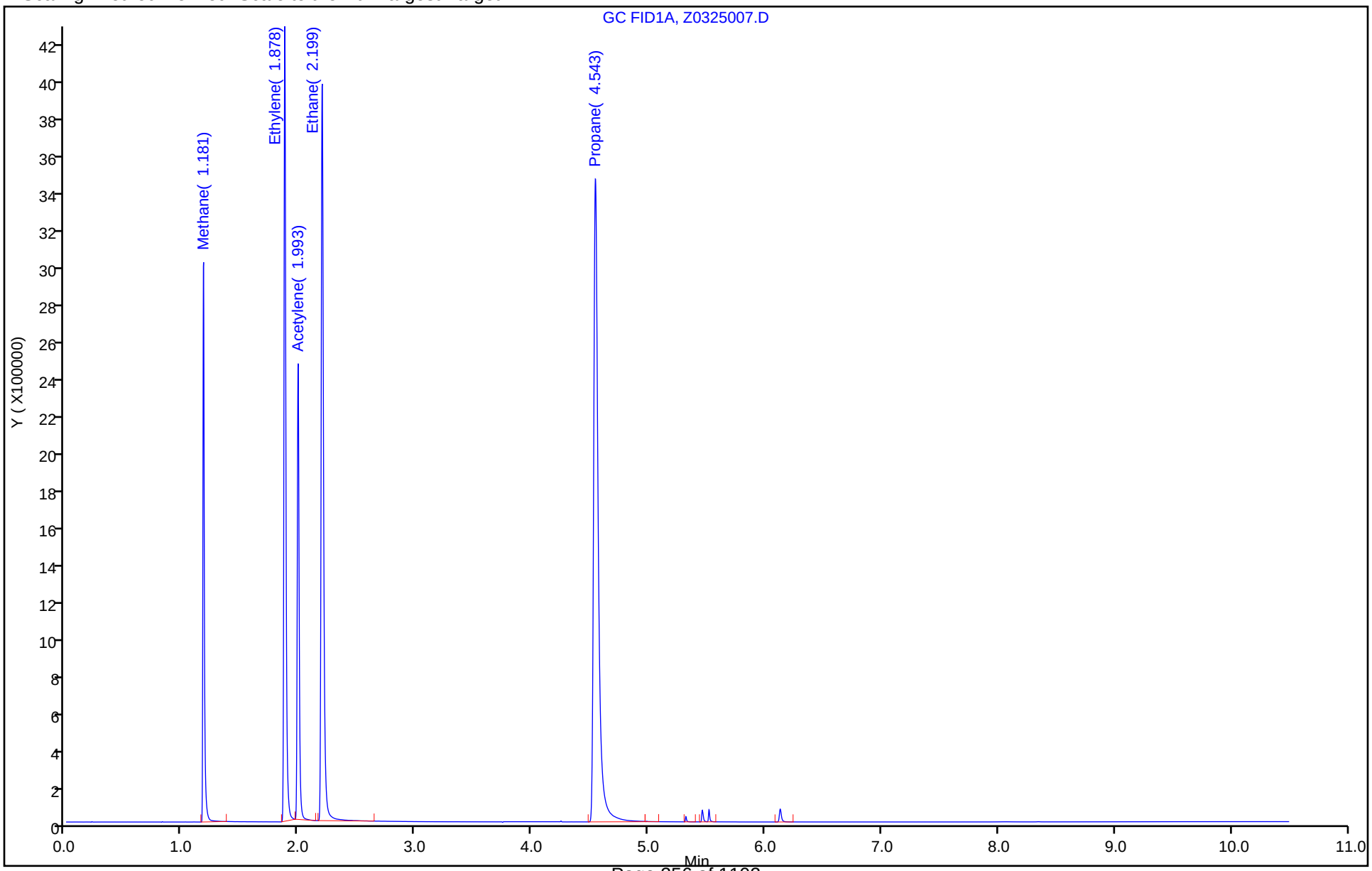
Report Date: 26-Mar-2019 07:54:31 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:40:45 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 5 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 7 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Canton

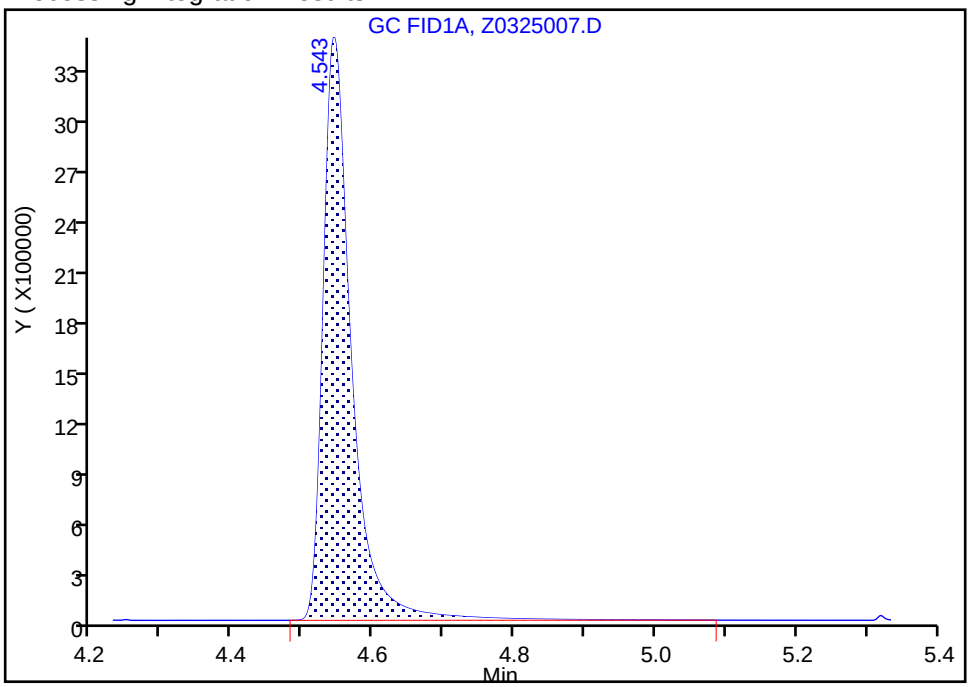
Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325007.D
Injection Date: 25-Mar-2019 15:40:45 Instrument ID: ZPID
Lims ID: STD 5
Client ID:
Operator ID: ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK175 Limit Group: GCV RSK 175 ICAL
Column: Detector GC FID1A

## 6 Propane, CAS: 74-98-6

Signal: 1

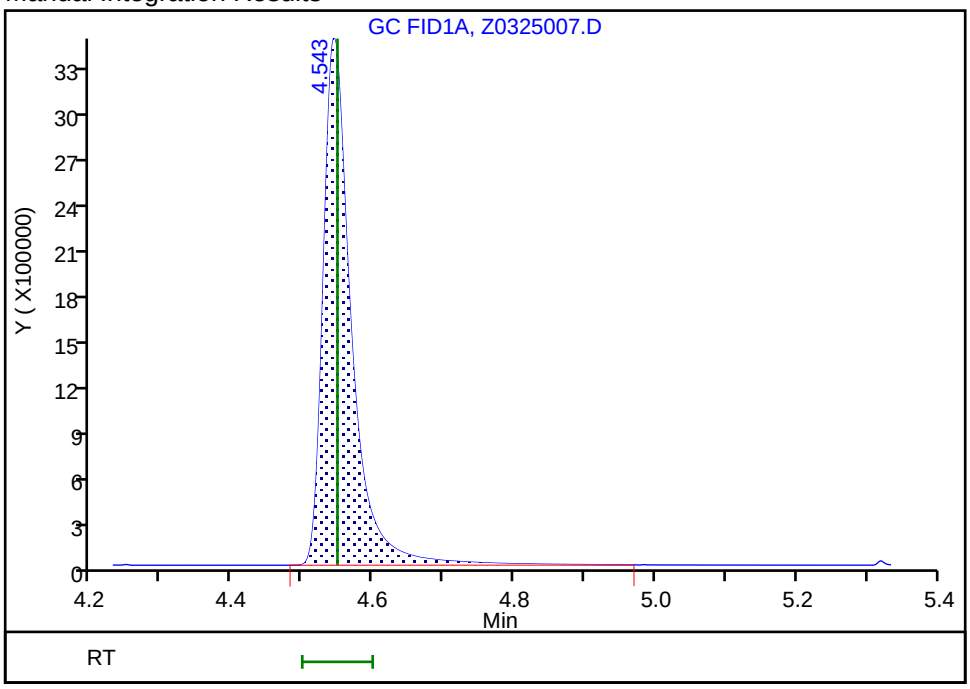
Processing Integration Results

RT: 4.54
Area: 9413090
Amount: 1301.0170
Amount Units: ug/l




Manual Integration Results

RT: 4.54
Area: 9408395
Amount: 1300.4874
Amount Units: ug/l




Reviewer: matthewsb, 26-Mar-2019 07:49:11
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325008.D
Lims ID: STD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Mar-2019 15:57:51 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-008
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub18

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:31 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:50:50

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.179 | 1.179 | 0.000 | 27189706 | 4277.0 | 4234.9 | |
| 2 Ethylene | | | | | | |
| 1.873 | 1.873 | 0.000 | 51465960 | 7511.7 | 8093.5 | |
| 3 Acetylene | | | | | | |
| 1.989 | 1.989 | 0.000 | 30207799 | 6950.2 | 9112.7 | |
| 4 Ethane | | | | | | |
| 2.191 | 2.191 | 0.000 | 59757636 | 8046.5 | 8945.9 | |
| 6 Propane | | | | | | |
| 4.519 | 4.519 | 0.000 | 98970444 | 11789 | 13680 | |

## Reagents:

SARSKHighCal_00006 Amount Added: 15.00 Units: mL

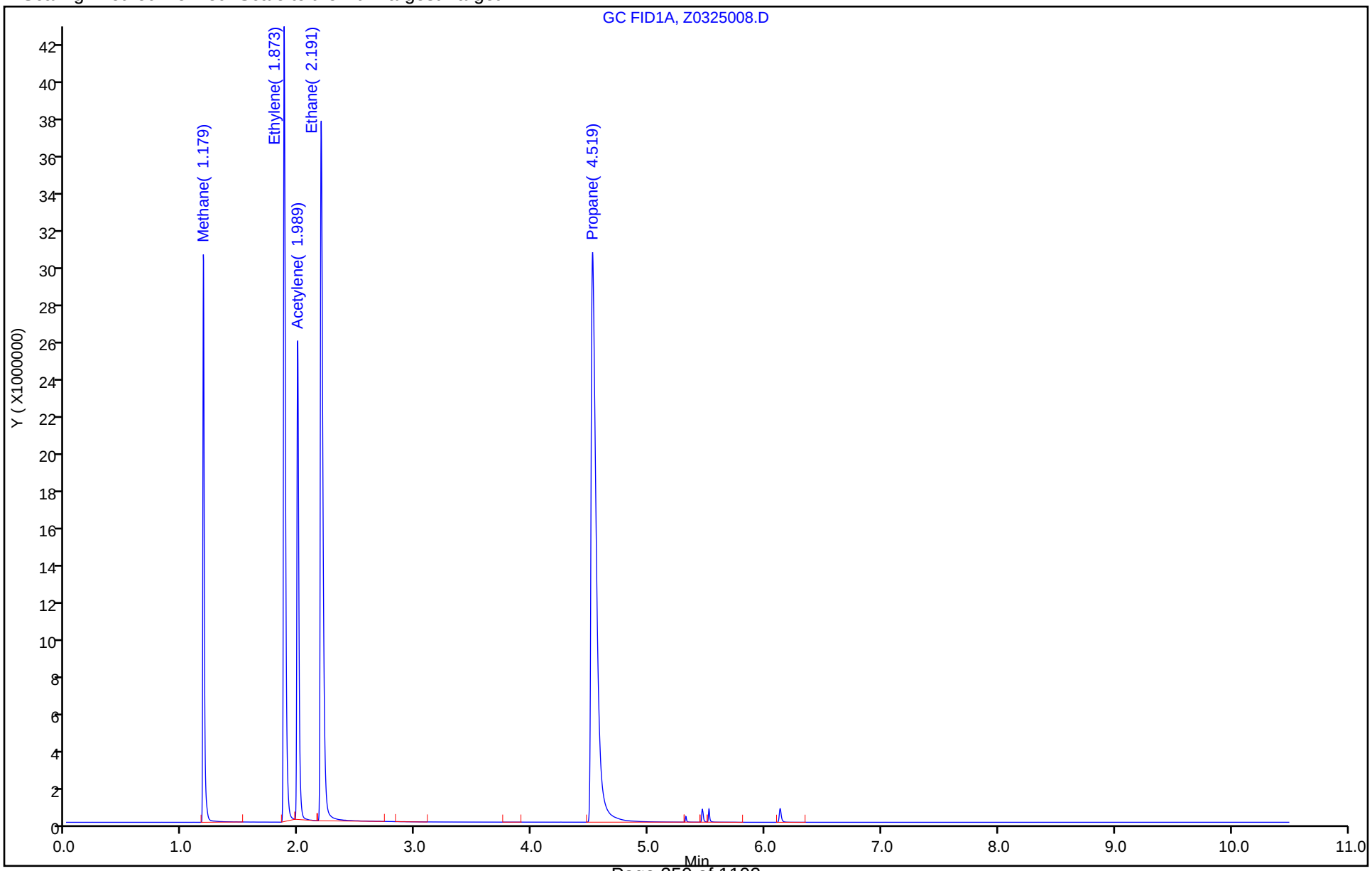
Report Date: 26-Mar-2019 07:54:31 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325008.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 15:57:51 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD 6 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 8 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14  Calibration End Date: 03/25/2019 17:40  Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | 3.348 | 3.347 | 3.347 | 3.344 | 3.342 | 3.340 | | | | | 3.240 - 3.440 | 3.345 |

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1  Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID  GC Column: HP-PLOT/Q  ID: 0.53(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14  Calibration End Date: 03/25/2019 17:40  Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| 1,1,1-Trifluoroethane | 3316.6<br>3025.3 | 3329.2<br>3015.1 | 2984.2 | 3103.7 | Ave | | 3129.01094 | | | | 5.0 | | 30.0 | | | |

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1 Analy Batch No.: 373146

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2019 16:14 Calibration End Date: 03/25/2019 17:40 Calibration ID: 49918

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-373146/9 | Z0325009.D |
| Level 2 | STD2 240-373146/10 | Z0325010.D |
| Level 3 | STD3 240-373146/11 | Z0325011.D |
| Level 4 | STD4 240-373146/12 | Z0325012.D |
| Level 5 | STD5 240-373146/13 | Z0325013.D |
| Level 6 | STD6 240-373146/14 | Z0325014.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 1,1,1-Trifluoroethane | Ave | 645431<br>29338129 | 1133825 | 5081580 | 10570180 | 22077771 | 195<br>9730 | 341 | 1703 | 3406 | 7298 |

Curve Type Legend:
Ave = Average

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325009.D
Lims ID: STD1 Surr
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 25-Mar-2019 16:14:57 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-009
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:32 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

First Level Reviewer: matthewsb Date: 26-Mar-2019 07:53:09

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.348 | 3.340 | 0.008 | 645431 | 194.6 | 206.3 | |

## Reagents:

SAICALSURR_00015 Amount Added: 400.00 Units: uL

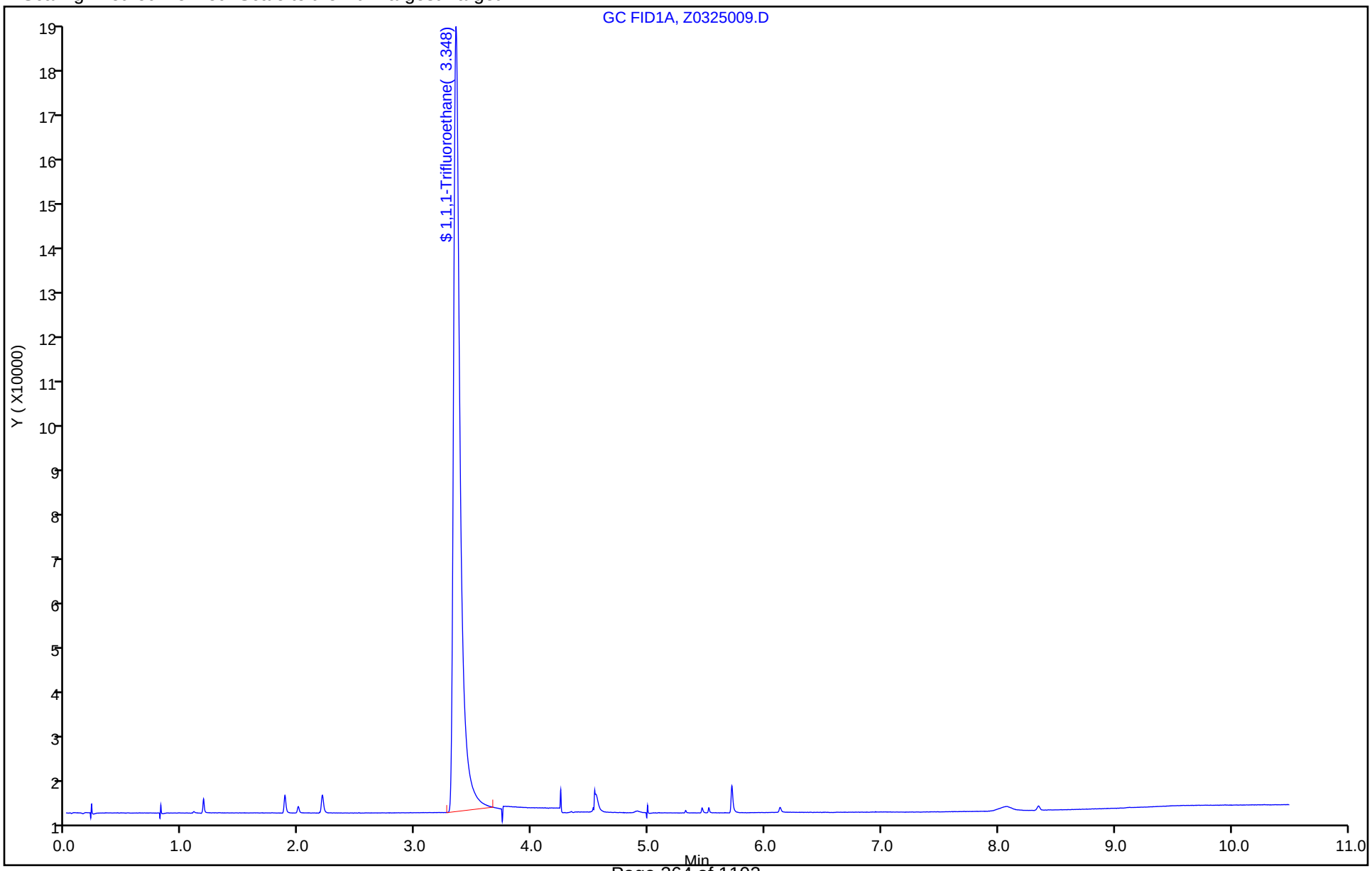
Report Date: 26-Mar-2019 07:54:32 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325009.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:14:57 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD1 Surr | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 9 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325010.D
Lims ID: STD2 Surr
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 25-Mar-2019 16:32:04 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-010
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:32 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.347 | 3.340 | 0.007 | 1133825 | 340.6 | 362.4 | |

## Reagents:

SAICALSURR_00015 Amount Added: 700.00 Units: uL

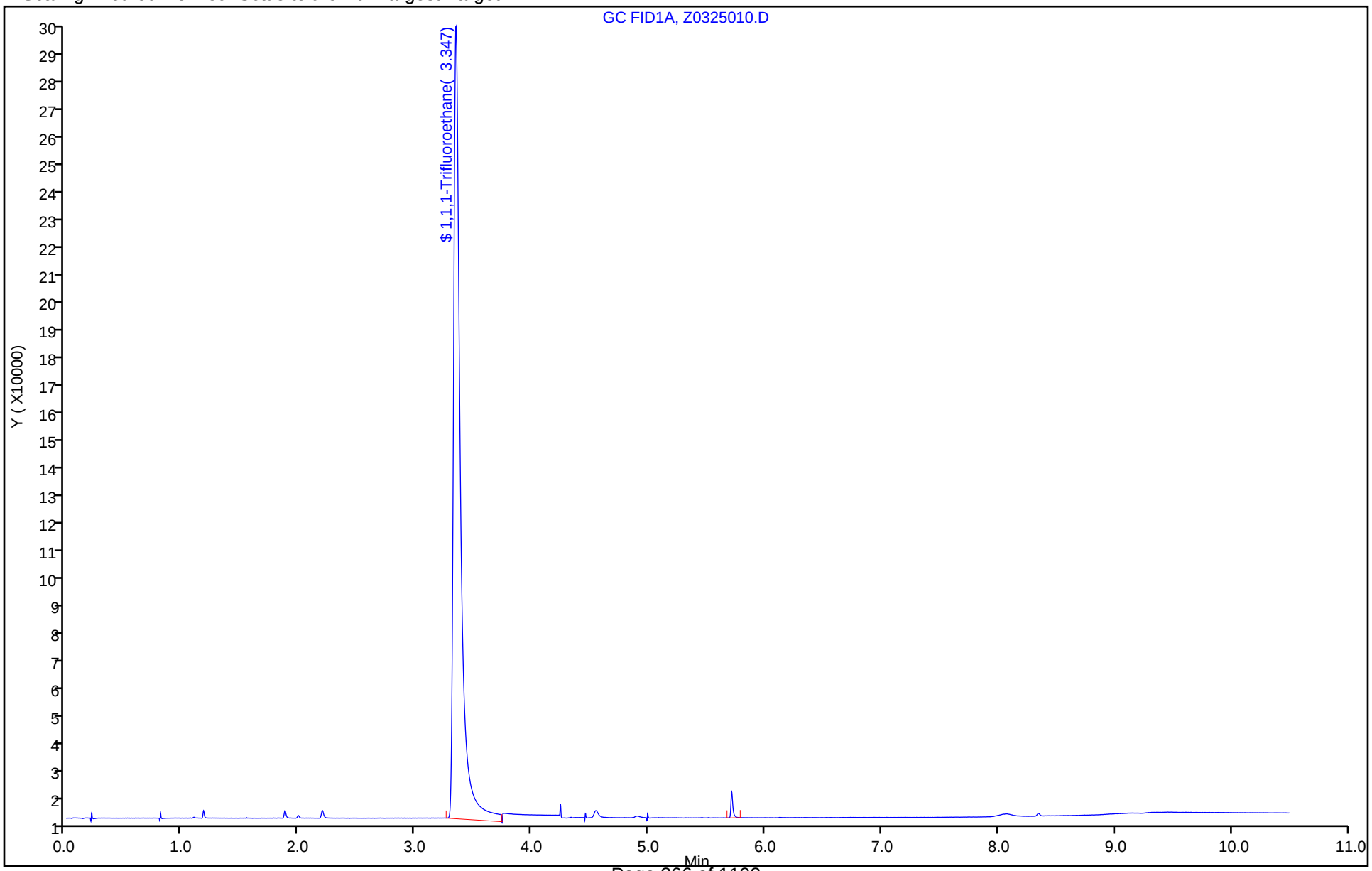
Report Date: 26-Mar-2019 07:54:32 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325010.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:32:04 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD2 Surr | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 10 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325011.D
Lims ID: STD3 Surr
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 25-Mar-2019 16:49:11 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-011
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:33 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.347 | 3.347 | 0.000 | 5081580 | 1702.8 | 1624.0 | |

## Reagents:

SAICALSURR_00015 Amount Added: 3.50 Units: mL

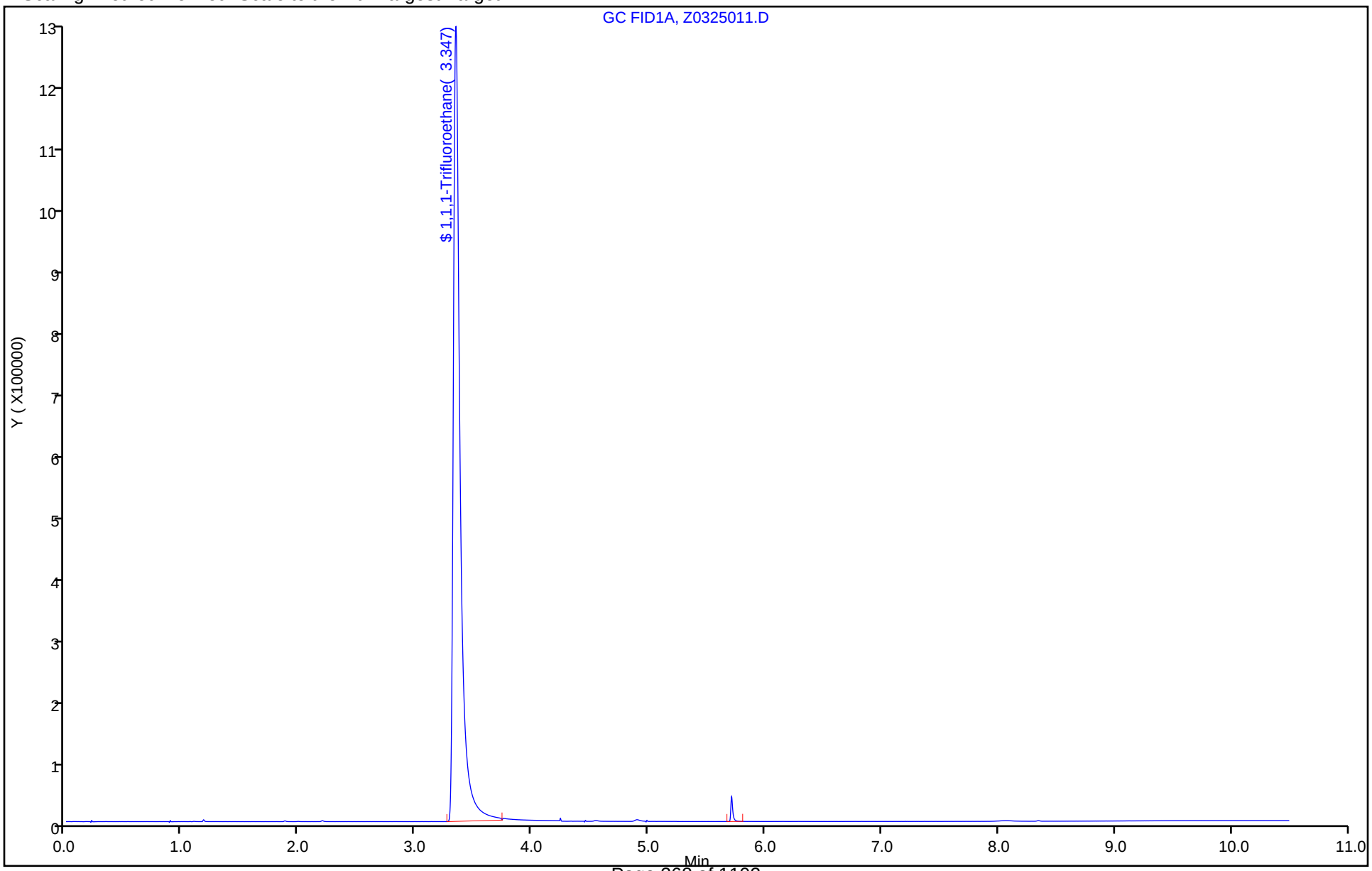
Report Date: 26-Mar-2019 07:54:33 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325011.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 16:49:11 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD3 Surr | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 11 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325012.D
Lims ID: STD4 Surr
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 25-Mar-2019 17:06:17 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-012
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:33 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.344 | 3.347 | -0.003 | 10570180 | 3405.7 | 3378.1 | |

## Reagents:

SAICALSURR_00015 Amount Added: 7.00 Units: mL

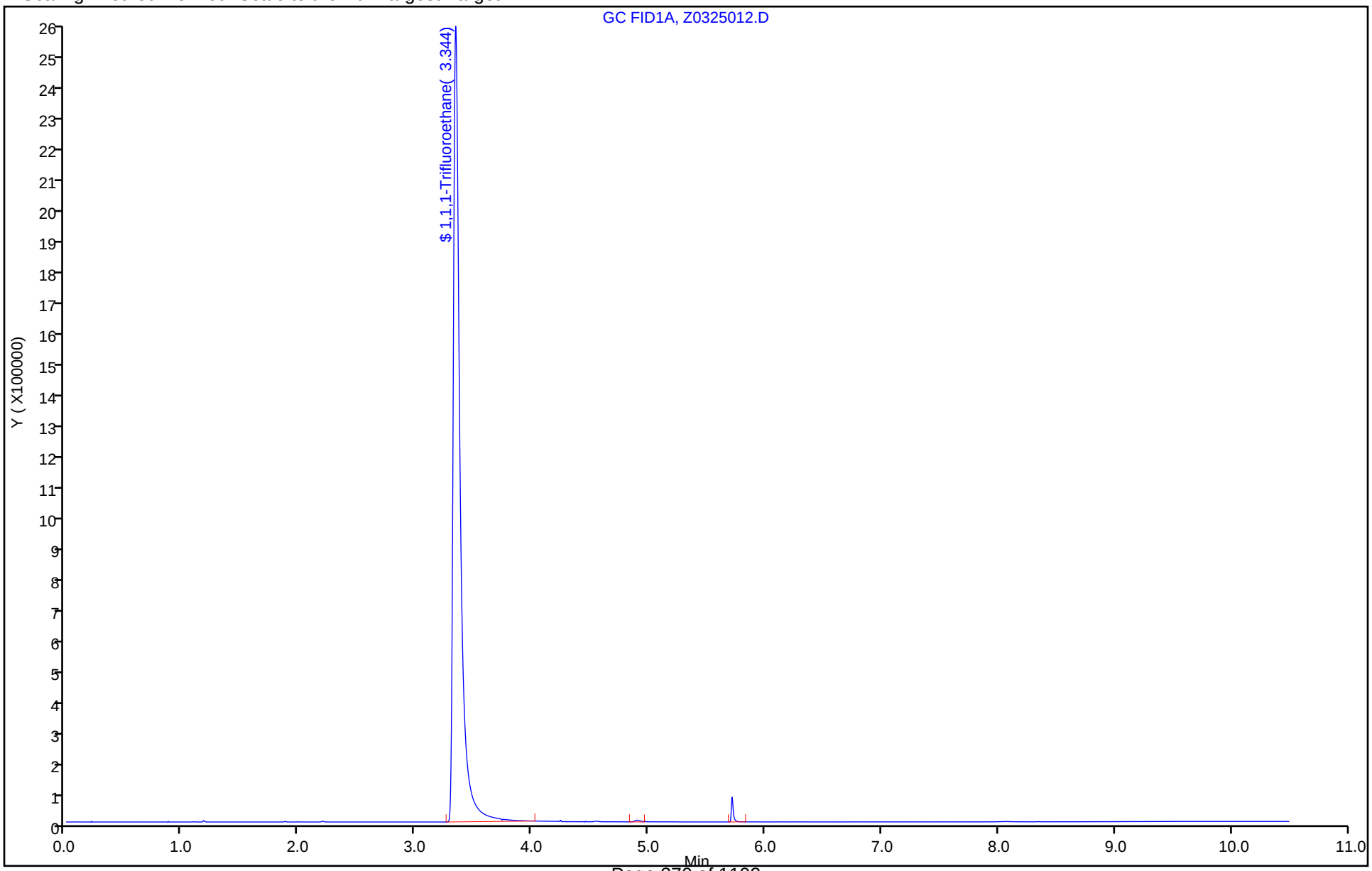
Report Date: 26-Mar-2019 07:54:34 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325012.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:06:17 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD4 Surr | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 12 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325013.D
Lims ID: STD5 Surr
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 25-Mar-2019 17:23:22 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-013
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.342 | 3.347 | -0.005 | 22077771 | 7297.8 | 7055.8 | |

## Reagents:

SAICALSURR_00015 Amount Added: 15.00 Units: mL

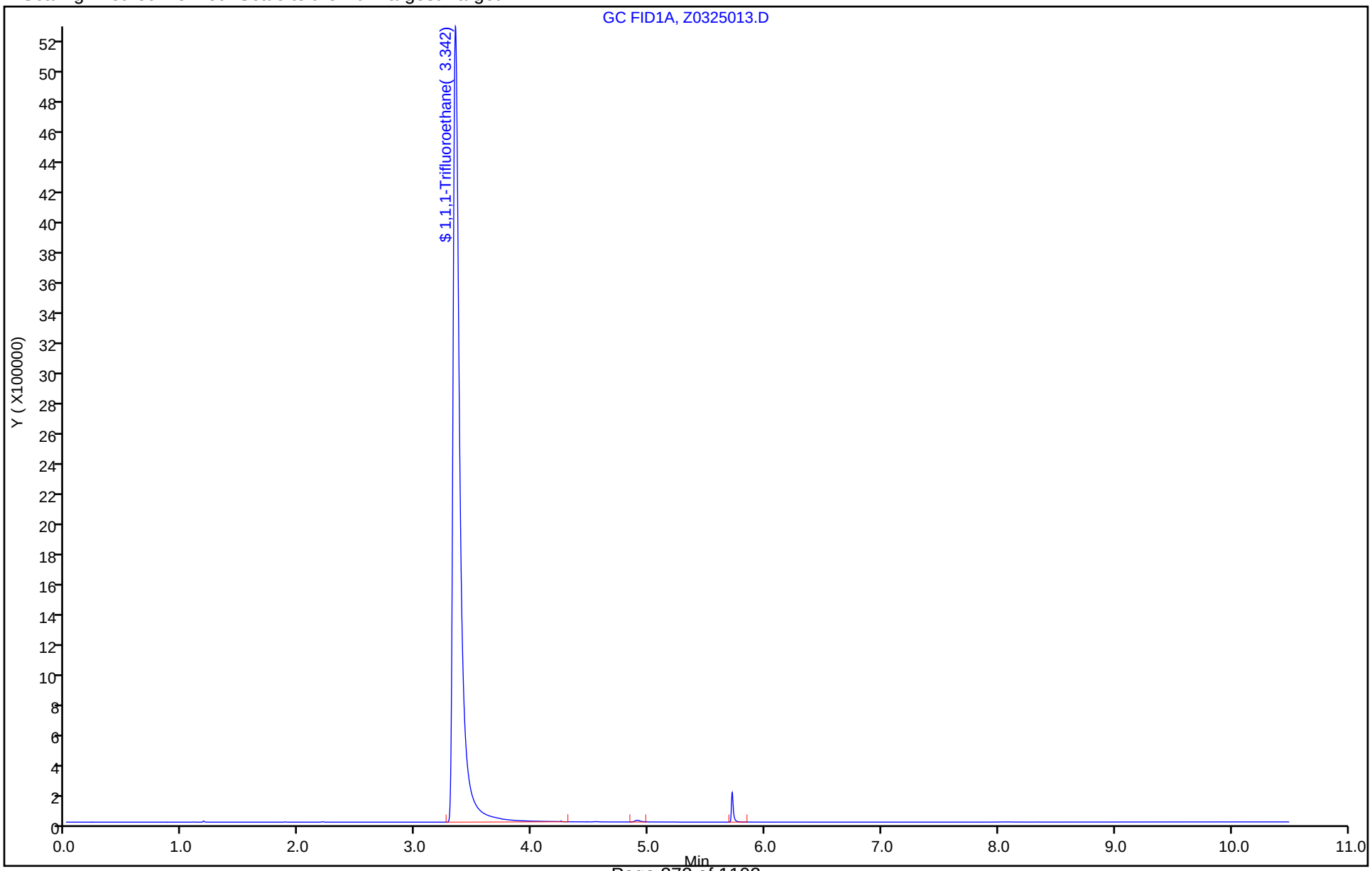
Report Date: 26-Mar-2019 07:54:34 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325013.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:23:22 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD5 Surr | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 13 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D
Lims ID: STD6 Surr
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 25-Mar-2019 17:40:28 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-014
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub20

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.340 | 3.340 | 0.000 | 29338129 | 9730.4 | 9376.2 | |

## Reagents:

SAICALSURR_00015 Amount Added: 20.00 Units: mL

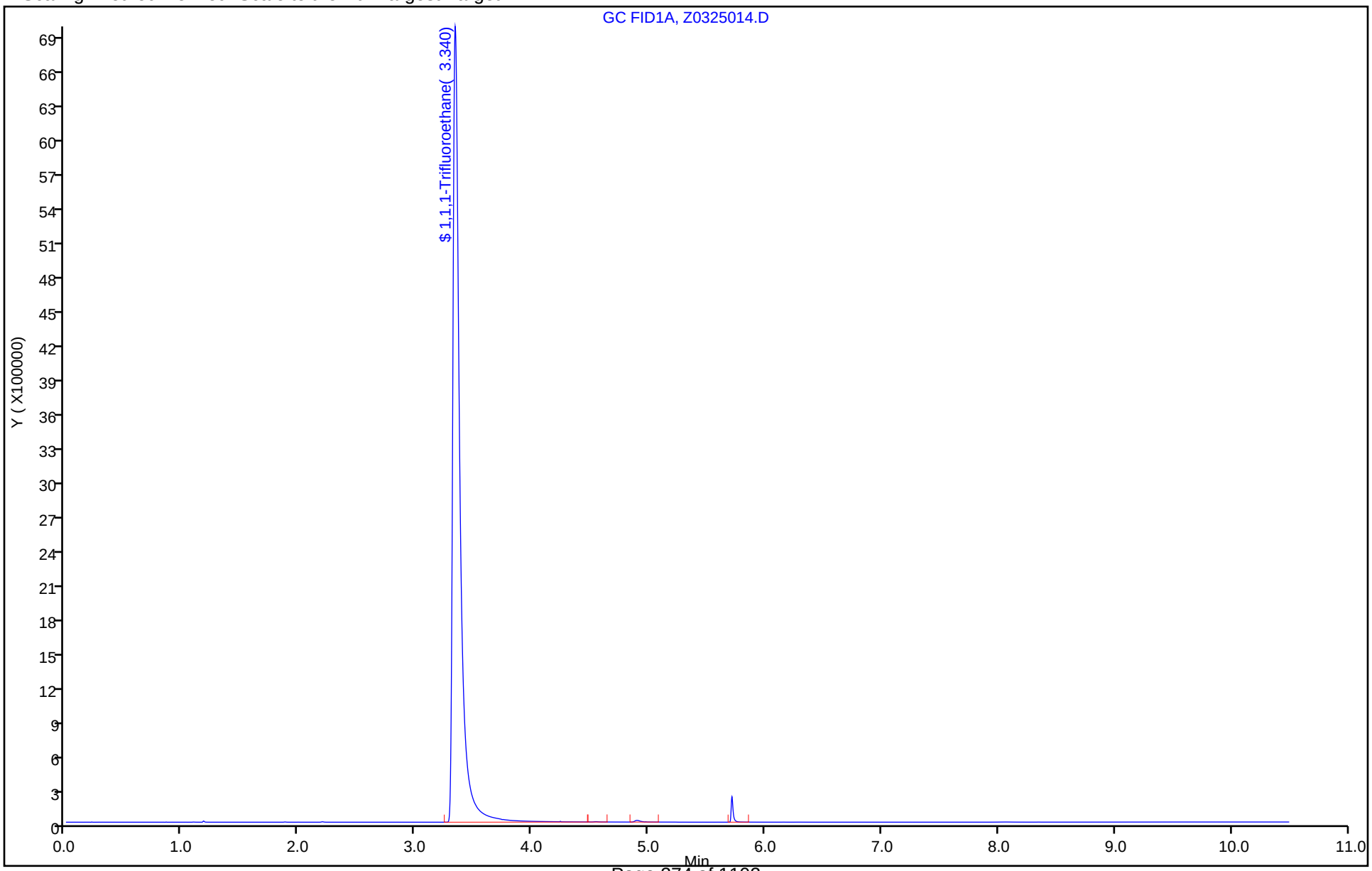
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:40:28 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | STD6 Surr | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 14 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0325015.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6298 | | 280 | 285 | -1.9 | 20.0 |
| Ethene | Ave | 6359 | 5713 | | 450 | 501 | -10.2 | 20.0 |
| Acetylene | Ave | 3315 | 3660 | | 512 | 463 | 10.4 | 30.0 |
| Ethane | Ave | 6680 | 5886 | | 473 | 536 | -11.9 | 20.0 |
| Propane | Ave | 7235 | 6037 | | 656 | 786 | -16.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0325015.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.82 | 1.92 |
| Acetylene | 1.99 | 1.94 | 2.04 |
| Ethane | 2.20 | 1.99 | 2.39 |
| Propane | 4.55 | 4.47 | 4.57 |

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Mar-2019 17:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-015
Operator ID: Instrument ID: ZPID
Sublist:

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.180 | 1.179 | 0.001 | 1795857 | 285.1 | 279.7 | |
| 2 | Ethylene | | | | | | |
| | 1.878 | 1.873 | 0.005 | 2860749 | 500.8 | 449.9 | |
| 3 | Acetylene | | | | | | |
| | 1.993 | 1.989 | 0.004 | 1695677 | 463.3 | 511.5 | |
| 4 | Ethane | | | | | | |
| | 2.200 | 2.191 | 0.009 | 3157388 | 536.4 | 472.7 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.342 | 3.347 | -0.005 | 23382861 | 9243.9 | 7472.9 | |
| 6 | Propane | | | | | | |
| | 4.545 | 4.519 | 0.026 | 4745007 | 786.0 | 655.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSK2ndSourc_00001 Amount Added: 1.00 Units: mL

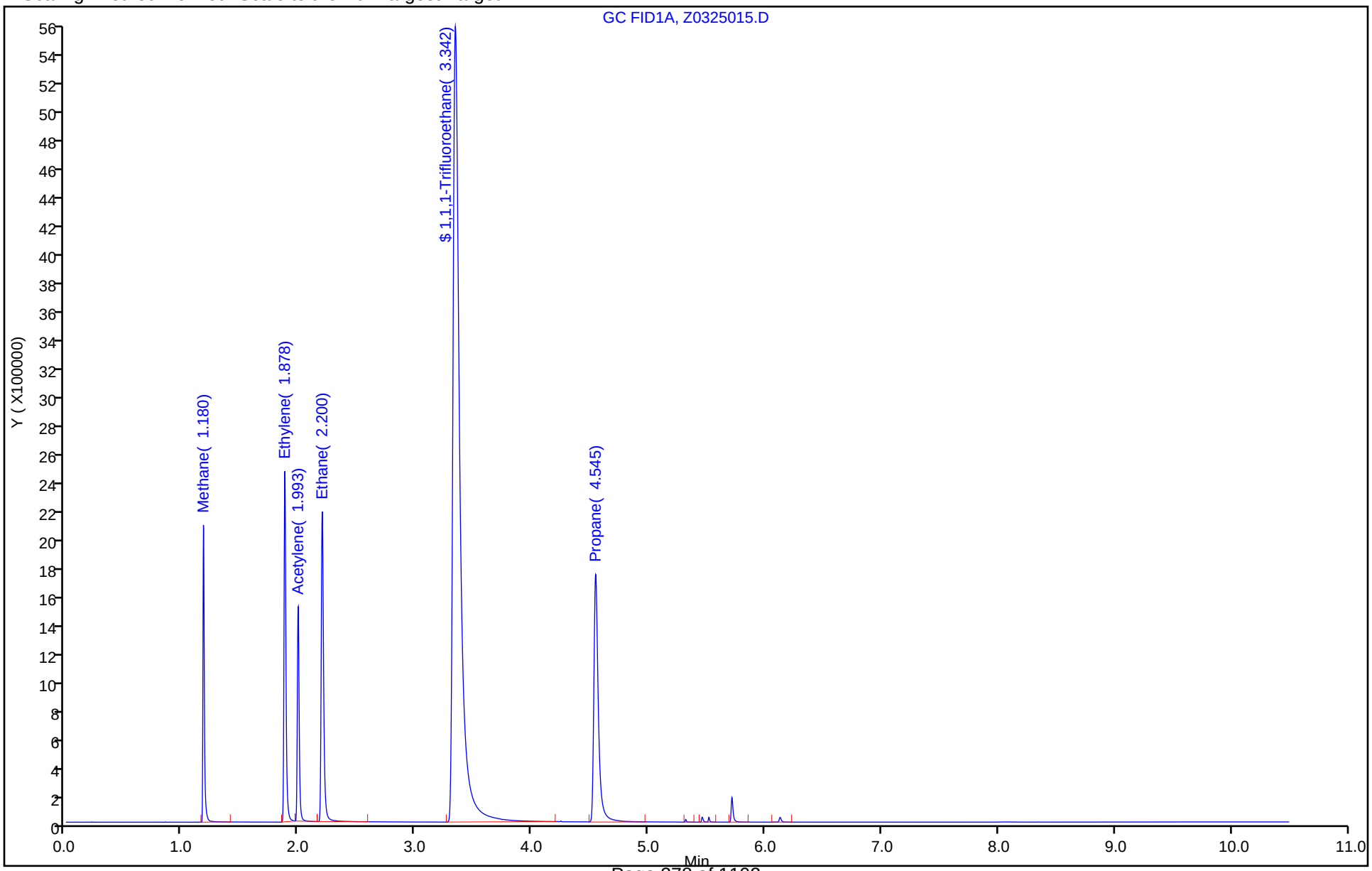
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:57:33 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 15 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0325015.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2530 | | 7470 | 9240 | -19.2 | 30.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICV 240-373146/15  Calibration Date: 03/25/2019 17:57

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0325015.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.34 | 3.25 | 3.45 |

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 25-Mar-2019 17:57:33 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0085484-015
Operator ID: Instrument ID: ZPID
Sublist:

Method: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 26-Mar-2019 07:54:34 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0325

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.180 | 1.179 | 0.001 | 1795857 | 285.1 | 279.7 | |
| 2 | Ethylene | | | | | | |
| | 1.878 | 1.873 | 0.005 | 2860749 | 500.8 | 449.9 | |
| 3 | Acetylene | | | | | | |
| | 1.993 | 1.989 | 0.004 | 1695677 | 463.3 | 511.5 | |
| 4 | Ethane | | | | | | |
| | 2.200 | 2.191 | 0.009 | 3157388 | 536.4 | 472.7 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.342 | 3.347 | -0.005 | 23382861 | 9243.9 | 7472.9 | |
| 6 | Propane | | | | | | |
| | 4.545 | 4.519 | 0.026 | 4745007 | 786.0 | 655.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSK2ndSourc_00001 Amount Added: 1.00 Units: mL

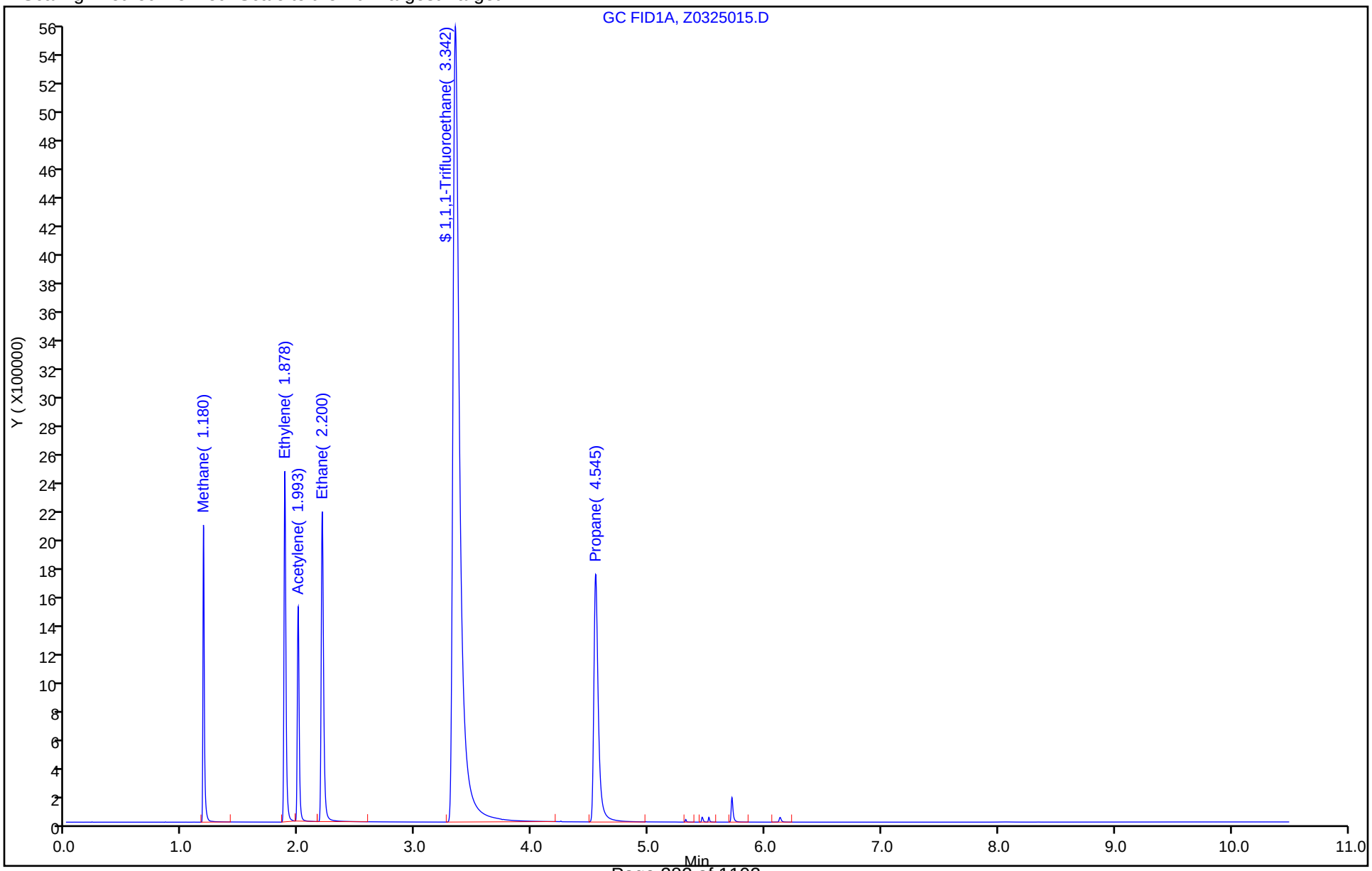
Report Date: 26-Mar-2019 07:54:35 Chrom Revision: 2.3 24-Mar-2019 20:11:04

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325015.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 25-Mar-2019 17:57:33 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 15 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 15 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6674 | | 296 | 285 | 4.0 | 20.0 |
| Ethene | Ave | 6359 | 6250 | | 492 | 501 | -1.7 | 20.0 |
| Acetylene | Ave | 3315 | 4216 | | 589 | 463 | 27.2 | 30.0 |
| Ethane | Ave | 6680 | 6450 | | 518 | 536 | -3.4 | 20.0 |
| Propane | Ave | 7235 | 6743 | | 733 | 786 | -6.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3 Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517003.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.83 | 1.93 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 17-May-2019 14:43:13 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 1903026 | 285.1 | 296.4 | |
| | 2 Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3129670 | 500.8 | 492.2 | |
| | 3 Acetylene | | | | | | |
| | 1.998 | 1.998 | 0.000 | 1953494 | 463.3 | 589.3 | |
| | 4 Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 3459889 | 536.4 | 518.0 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.347 | 0.000 | 25396684 | 9243.9 | 8116.5 | |
| | 6 Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5299860 | 786.0 | 732.6 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

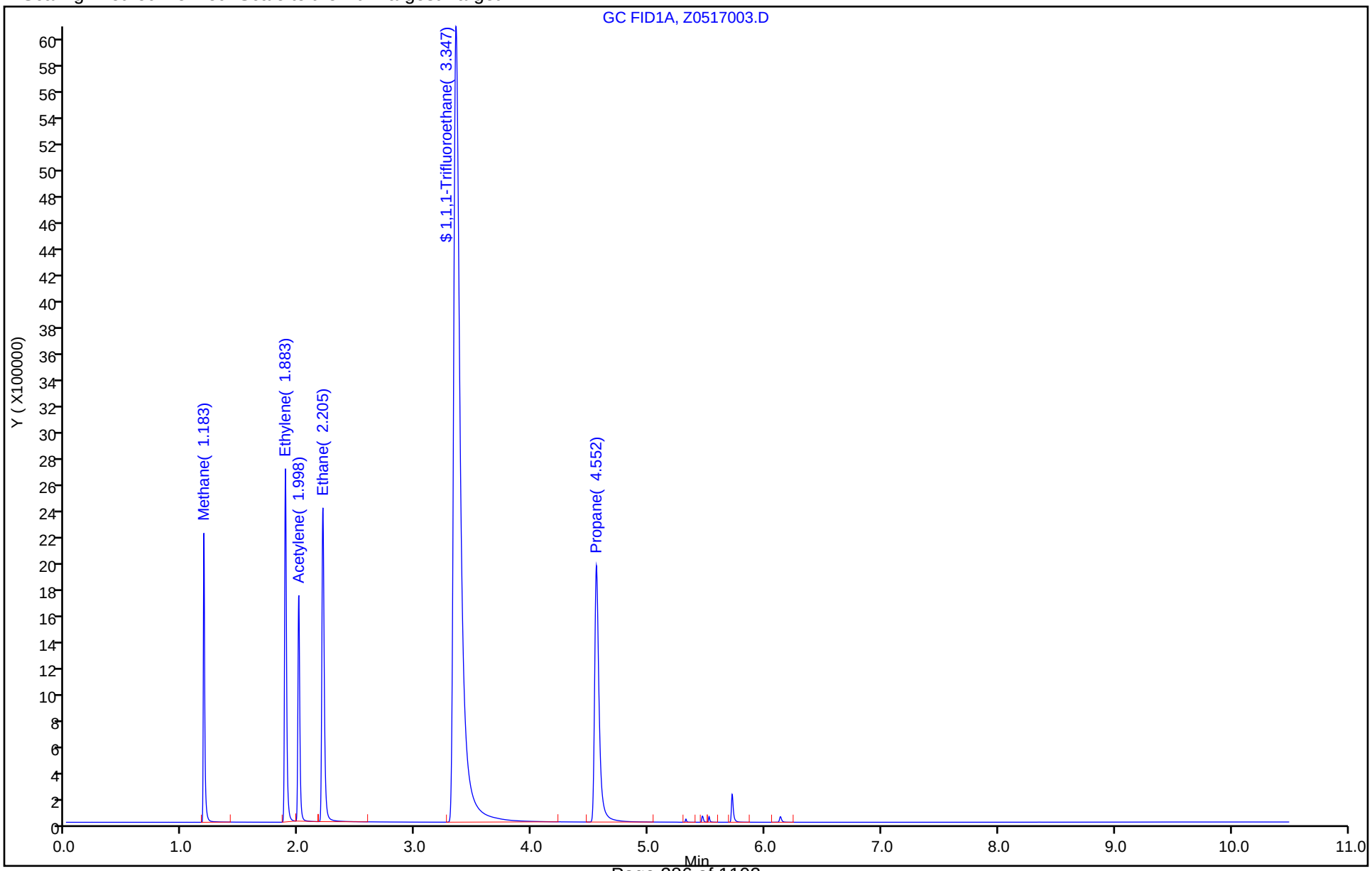
Report Date: 20-May-2019 10:18:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 14:43:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2747 | | 8120 | 9240 | -12.2 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-381892/3  Calibration Date: 05/17/2019 14:43

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517003.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 17-May-2019 14:43:13 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 1903026 | 285.1 | 296.4 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3129670 | 500.8 | 492.2 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.998 | 0.000 | 1953494 | 463.3 | 589.3 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 3459889 | 536.4 | 518.0 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.347 | 0.000 | 25396684 | 9243.9 | 8116.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5299860 | 786.0 | 732.6 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

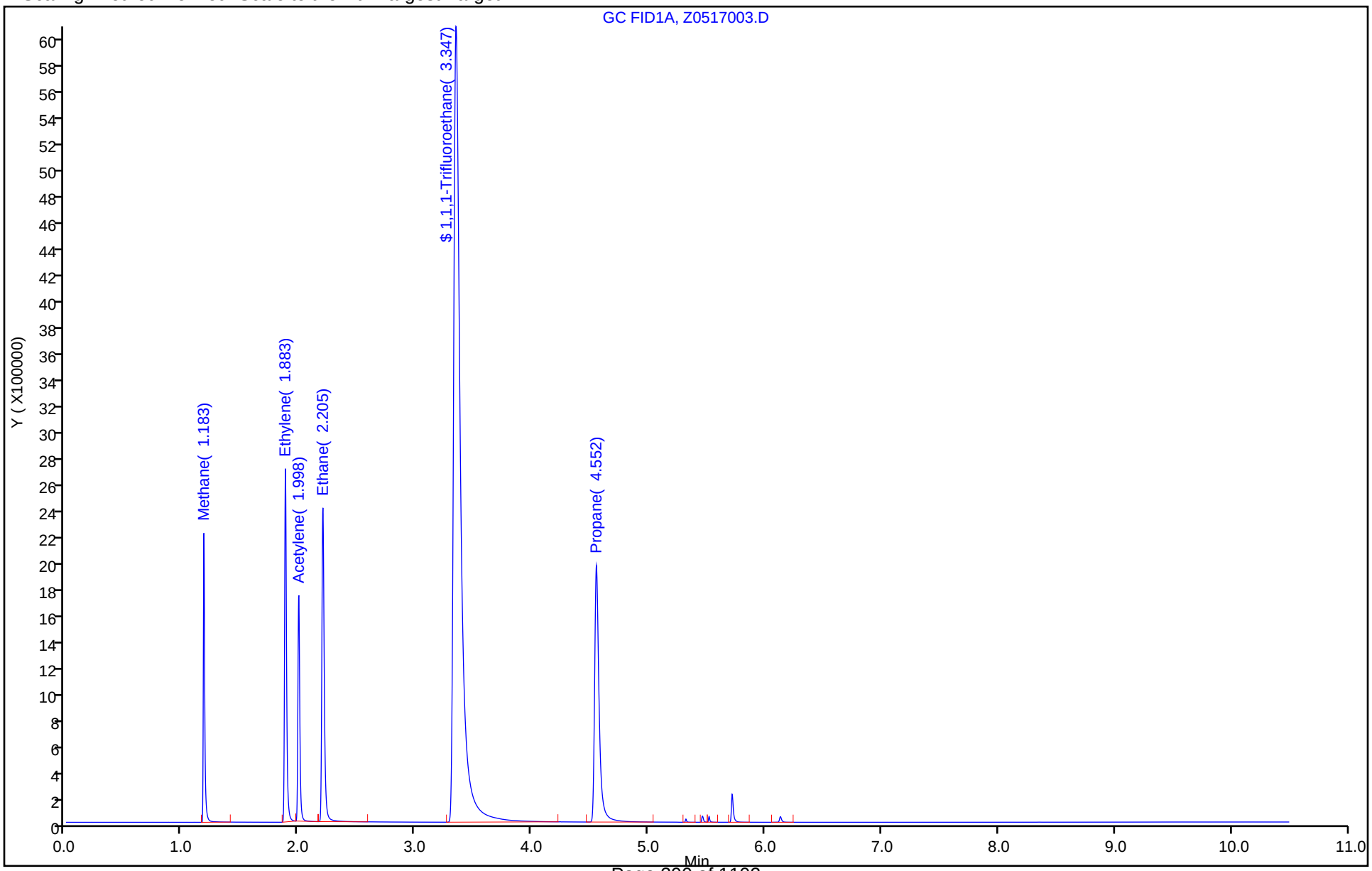
Report Date: 20-May-2019 10:18:00 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 14:43:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6587 | | 293 | 285 | 2.6 | 20.0 |
| Ethene | Ave | 6359 | 6132 | | 483 | 501 | -3.6 | 20.0 |
| Acetylene | Ave | 3315 | 4248 | | 594 | 463 | 28.1 | 30.0 |
| Ethane | Ave | 6680 | 6303 | | 506 | 536 | -5.6 | 20.0 |
| Propane | Ave | 7235 | 6477 | | 704 | 786 | -10.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/19 Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517019.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.13 | 1.23 |
| Ethene | 1.88 | 1.83 | 1.93 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 19:22:20 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 1878063 | 285.1 | 292.5 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.883 | 0.001 | 3070686 | 500.8 | 482.9 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1968296 | 463.3 | 593.8 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.205 | 0.001 | 3381334 | 536.4 | 506.2 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.348 | 0.001 | 24802044 | 9243.9 | 7926.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5090921 | 786.0 | 703.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

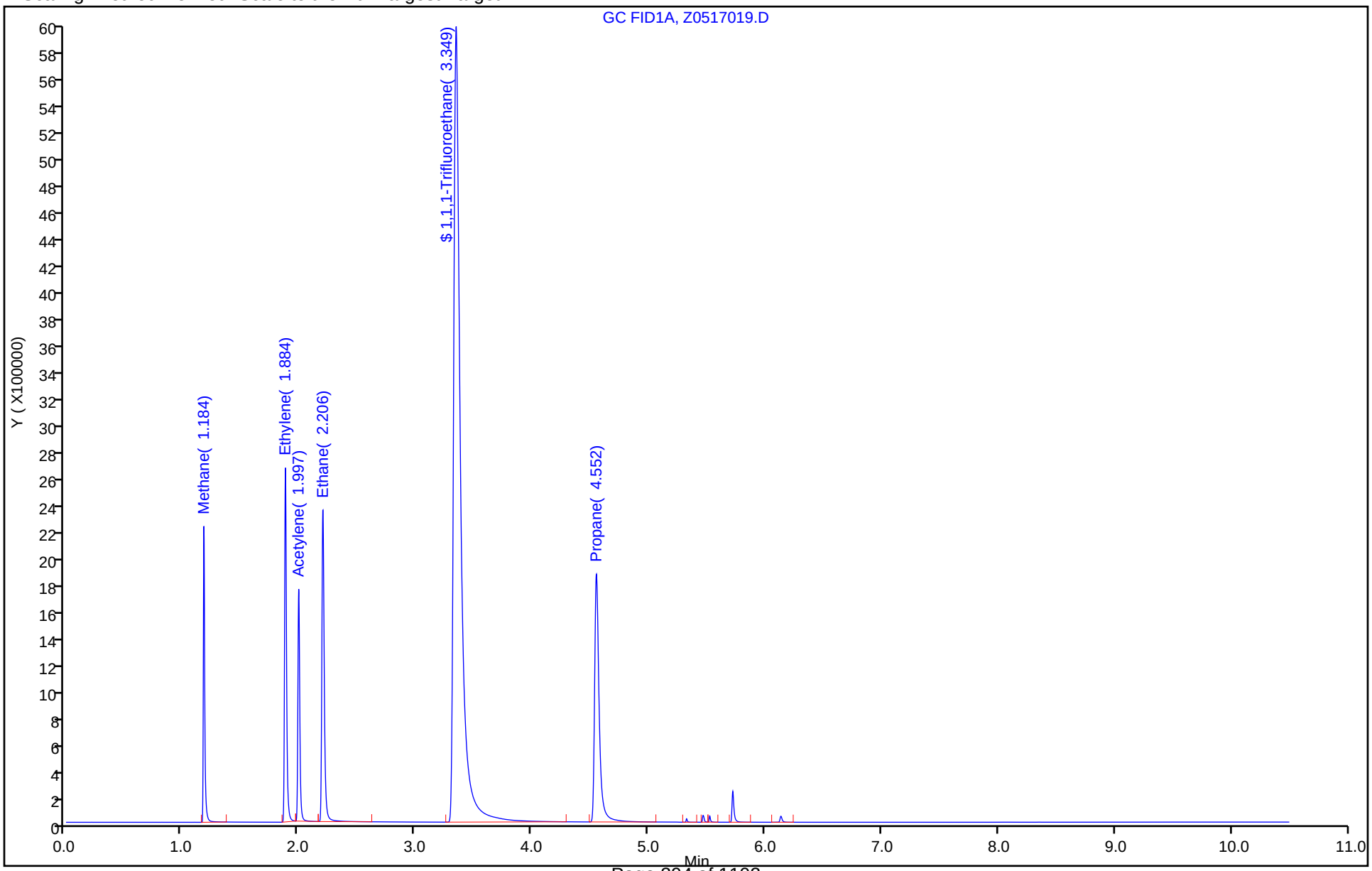
Report Date: 20-May-2019 10:18:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 19:22:20 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2683 | | 7930 | 9240 | -14.3 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/19  Calibration Date: 05/17/2019 19:22

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517019.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 19:22:20 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:27 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 1878063 | 285.1 | 292.5 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.883 | 0.001 | 3070686 | 500.8 | 482.9 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1968296 | 463.3 | 593.8 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.205 | 0.001 | 3381334 | 536.4 | 506.2 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.348 | 0.001 | 24802044 | 9243.9 | 7926.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5090921 | 786.0 | 703.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

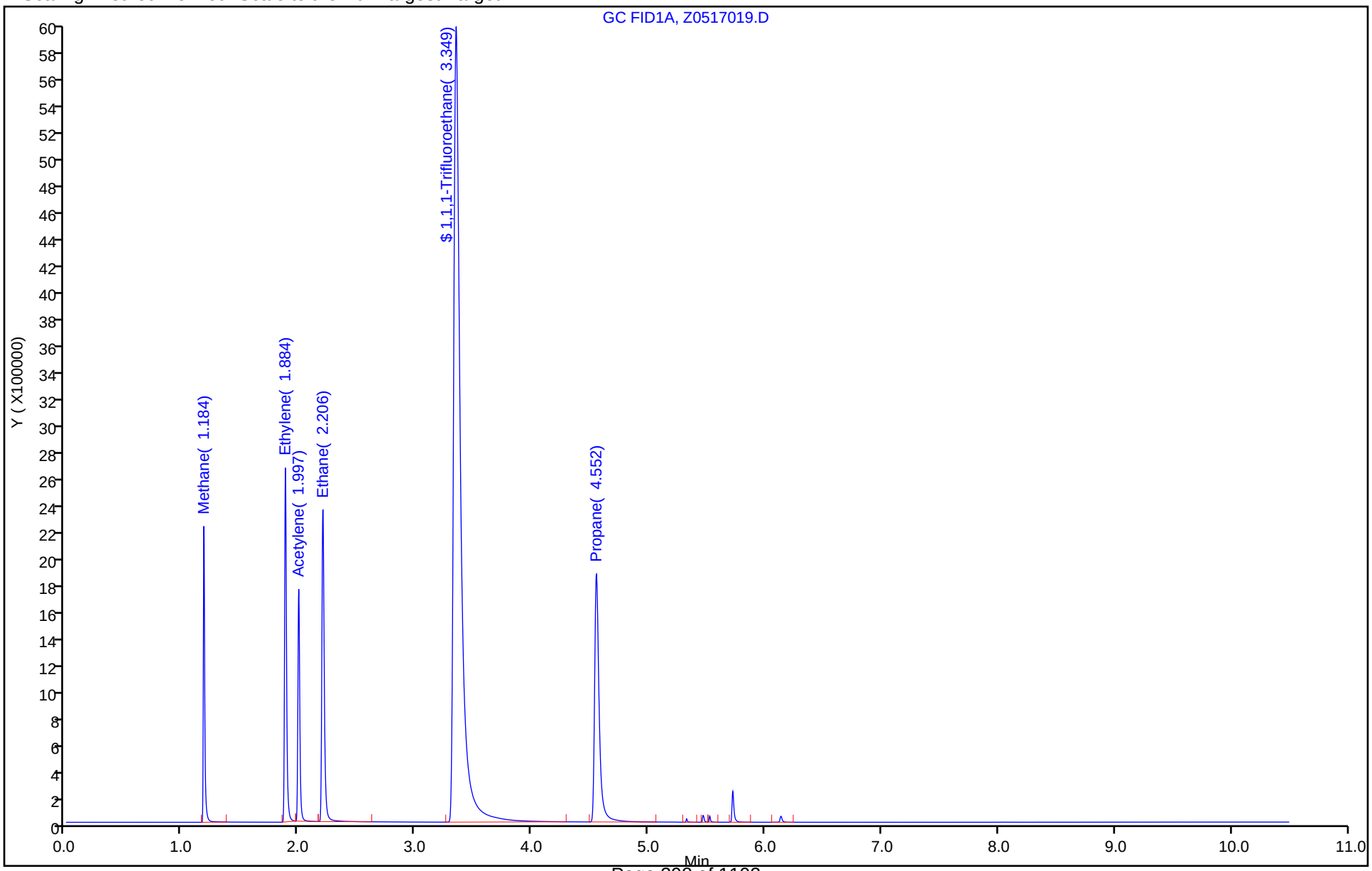
Report Date: 20-May-2019 10:18:28 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 19:22:20 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/26  Calibration Date: 05/17/2019 21:23

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517026.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 6519 | | 290 | 285 | 1.5 | 20.0 |
| Ethene | Ave | 6359 | 6022 | | 474 | 501 | -5.3 | 20.0 |
| Acetylene | Ave | 3315 | 4173 | | 583 | 463 | 25.9 | 30.0 |
| Ethane | Ave | 6680 | 6169 | | 495 | 536 | -7.7 | 20.0 |
| Propane | Ave | 7235 | 6295 | | 684 | 786 | -13.0 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/26  Calibration Date: 05/17/2019 21:23

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0517026.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.19 | 1.13 | 1.23 |
| Ethene | 1.89 | 1.83 | 1.93 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517026.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 21:23:13 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-026
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:37 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.183 | 0.002 | 1858764 | 285.1 | 289.5 | |
| 2 | Ethylene | | | | | | |
| | 1.885 | 1.883 | 0.002 | 3015541 | 500.8 | 474.2 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.997 | 0.002 | 1933772 | 463.3 | 583.4 | |
| 4 | Ethane | | | | | | |
| | 2.207 | 2.205 | 0.002 | 3309157 | 536.4 | 495.4 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.350 | 3.348 | 0.002 | 24851698 | 9243.9 | 7942.3 | |
| 6 | Propane | | | | | | |
| | 4.554 | 4.552 | 0.002 | 4947370 | 786.0 | 683.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

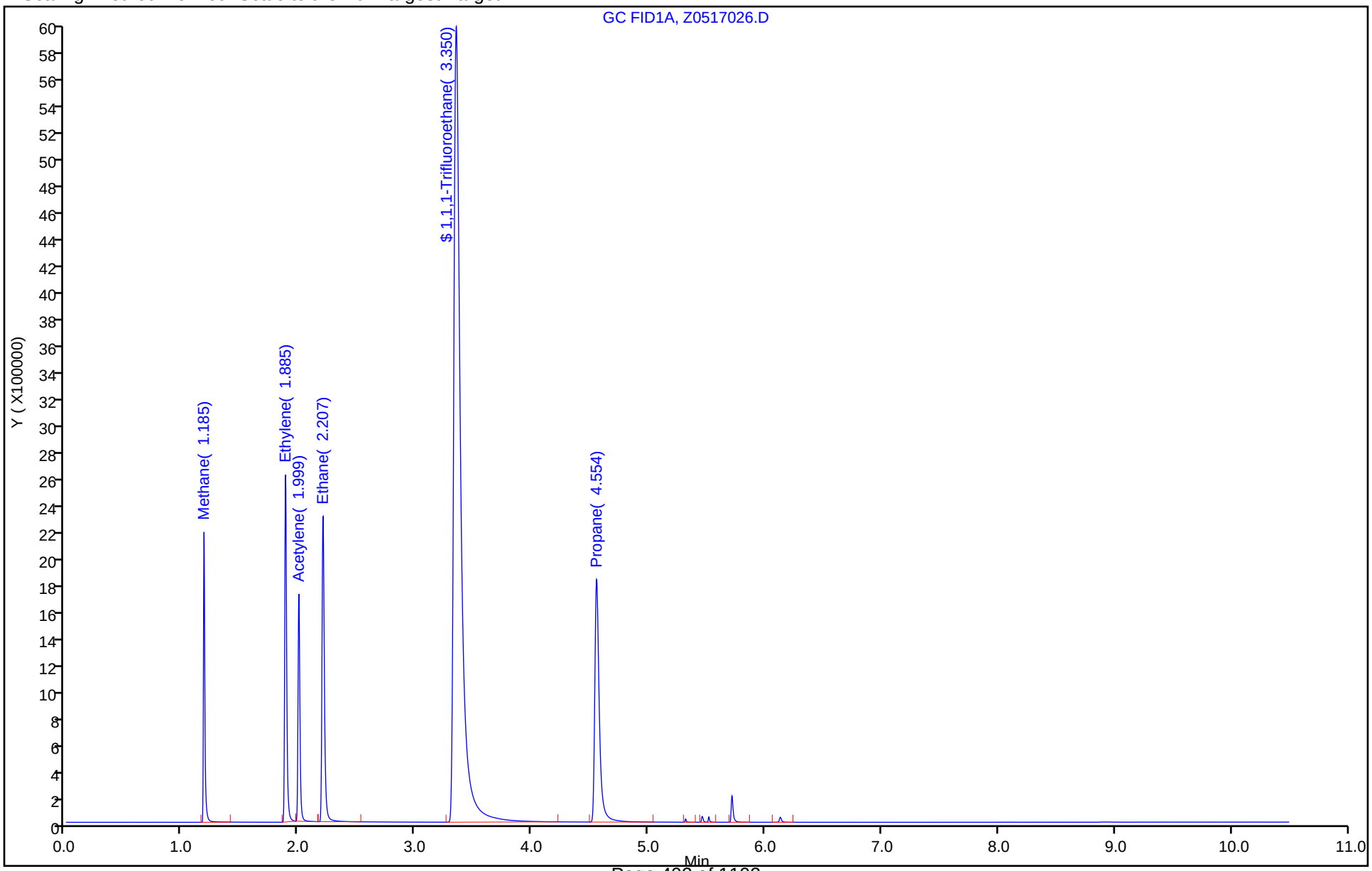
Report Date: 20-May-2019 10:18:38 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517026.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 21:23:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 26 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 26 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/26  Calibration Date: 05/17/2019 21:23

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517026.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2688 | | 7940 | 9240 | -14.1 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-381892/26  Calibration Date: 05/17/2019 21:23

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0517026.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517026.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-May-2019 21:23:13 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-026
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:18:37 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.183 | 0.002 | 1858764 | 285.1 | 289.5 | |
| 2 | Ethylene | | | | | | |
| | 1.885 | 1.883 | 0.002 | 3015541 | 500.8 | 474.2 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.997 | 0.002 | 1933772 | 463.3 | 583.4 | |
| 4 | Ethane | | | | | | |
| | 2.207 | 2.205 | 0.002 | 3309157 | 536.4 | 495.4 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.350 | 3.348 | 0.002 | 24851698 | 9243.9 | 7942.3 | |
| 6 | Propane | | | | | | |
| | 4.554 | 4.552 | 0.002 | 4947370 | 786.0 | 683.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

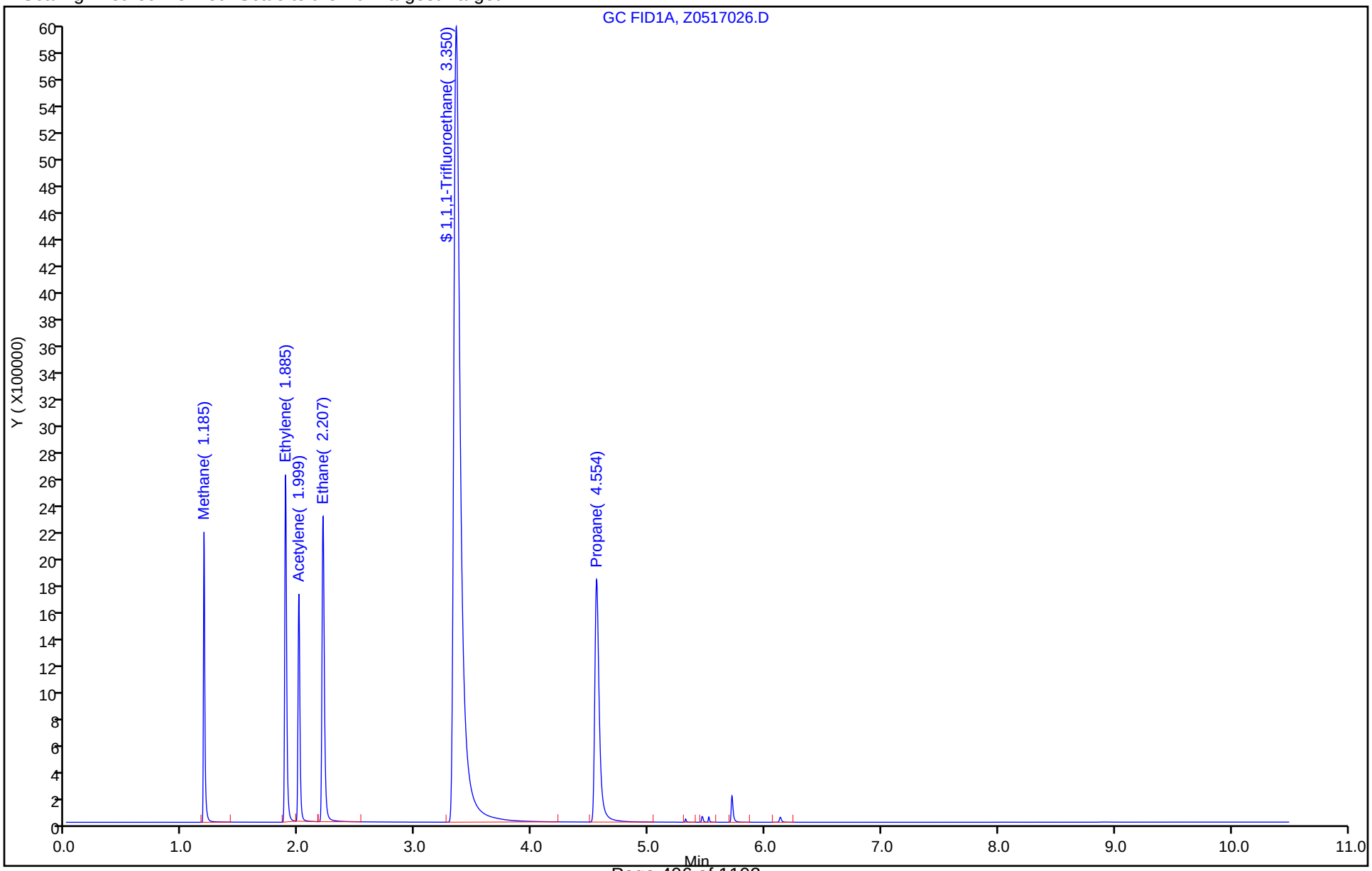
Report Date: 20-May-2019 10:18:38 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517026.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 21:23:13 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 26 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 26 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-382383/3  Calibration Date: 05/21/2019 14:45

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 7140 | | 317 | 285 | 11.2 | 20.0 |
| Ethene | Ave | 6359 | 7024 | | 553 | 501 | 10.5 | 20.0 |
| Acetylene | Ave | 3315 | 4548 | | 636 | 463 | 37.2* | 30.0 |
| Ethane | Ave | 6680 | 7355 | | 591 | 536 | 10.1 | 20.0 |
| Propane | Ave | 7235 | 7895 | | 858 | 786 | 9.1 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-382383/3  Calibration Date: 05/21/2019 14:45

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521003.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.19 | 1.14 | 1.24 |
| Ethene | 1.89 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 21-May-2019 14:45:25 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | 1.186 | 0.000 | 2035866 | 285.1 | 317.1 | |
| 2 | Ethylene | | | | | | |
| | 1.886 | 1.886 | 0.000 | 3517681 | 500.8 | 553.2 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 2107246 | 463.3 | 635.7 | |
| 4 | Ethane | | | | | | |
| | 2.207 | 2.207 | 0.000 | 3945267 | 536.4 | 590.6 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.351 | 3.351 | 0.000 | 23502465 | 9243.9 | 7511.1 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 6204758 | 786.0 | 857.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

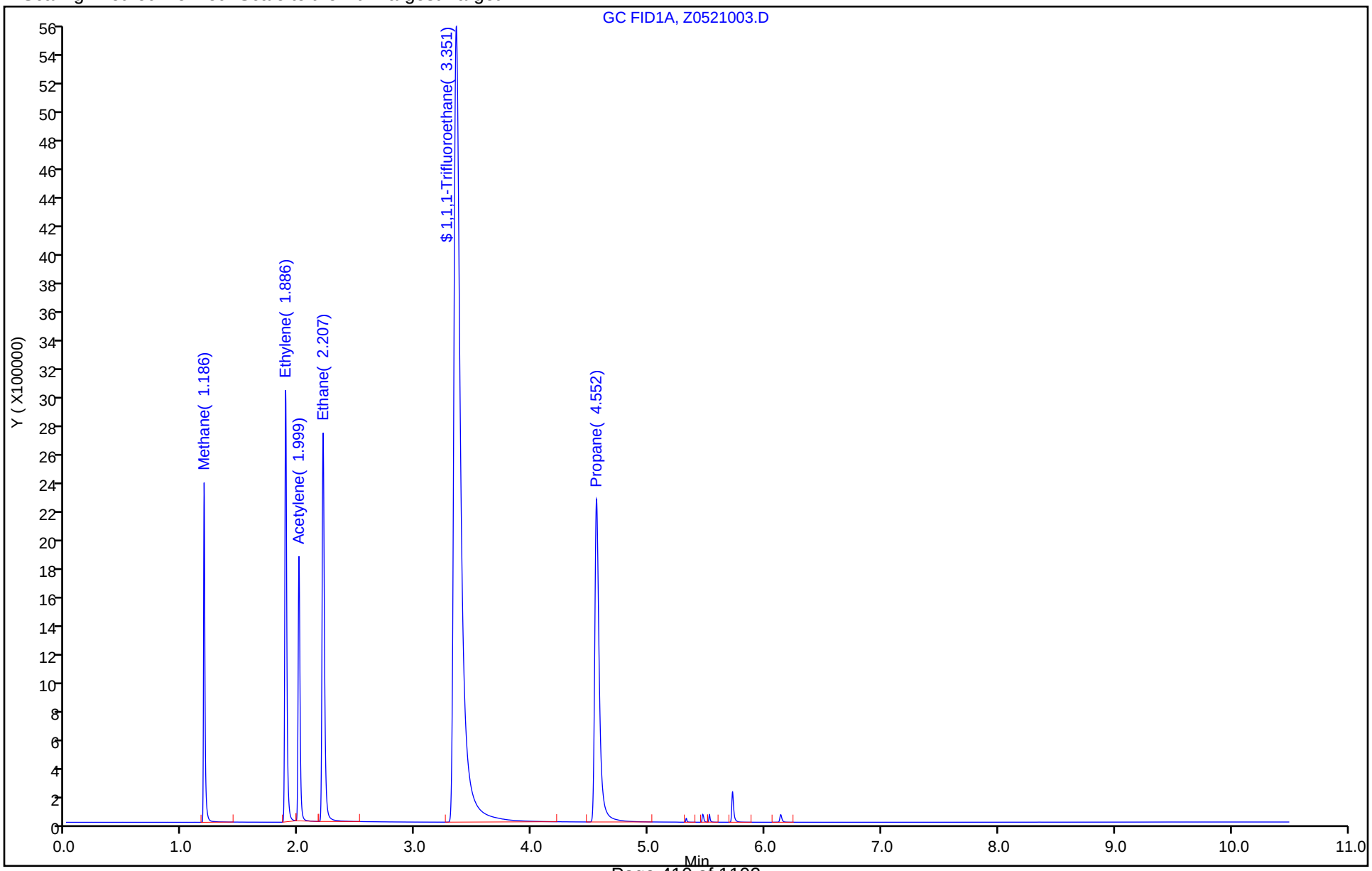
Report Date: 22-May-2019 07:26:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 14:45:25 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-382383/3  Calibration Date: 05/21/2019 14:45

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521003.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2542 | | 7510 | 9240 | -18.7 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCVRT 240-382383/3  Calibration Date: 05/21/2019 14:45

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521003.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521003.D
Lims ID: CCVRT
Client ID:
Sample Type: CCVRT
Inject. Date: 21-May-2019 14:45:25 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-003
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | 1.186 | 0.000 | 2035866 | 285.1 | 317.1 | |
| 2 | Ethylene | | | | | | |
| | 1.886 | 1.886 | 0.000 | 3517681 | 500.8 | 553.2 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 2107246 | 463.3 | 635.7 | |
| 4 | Ethane | | | | | | |
| | 2.207 | 2.207 | 0.000 | 3945267 | 536.4 | 590.6 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.351 | 3.351 | 0.000 | 23502465 | 9243.9 | 7511.1 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 6204758 | 786.0 | 857.7 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

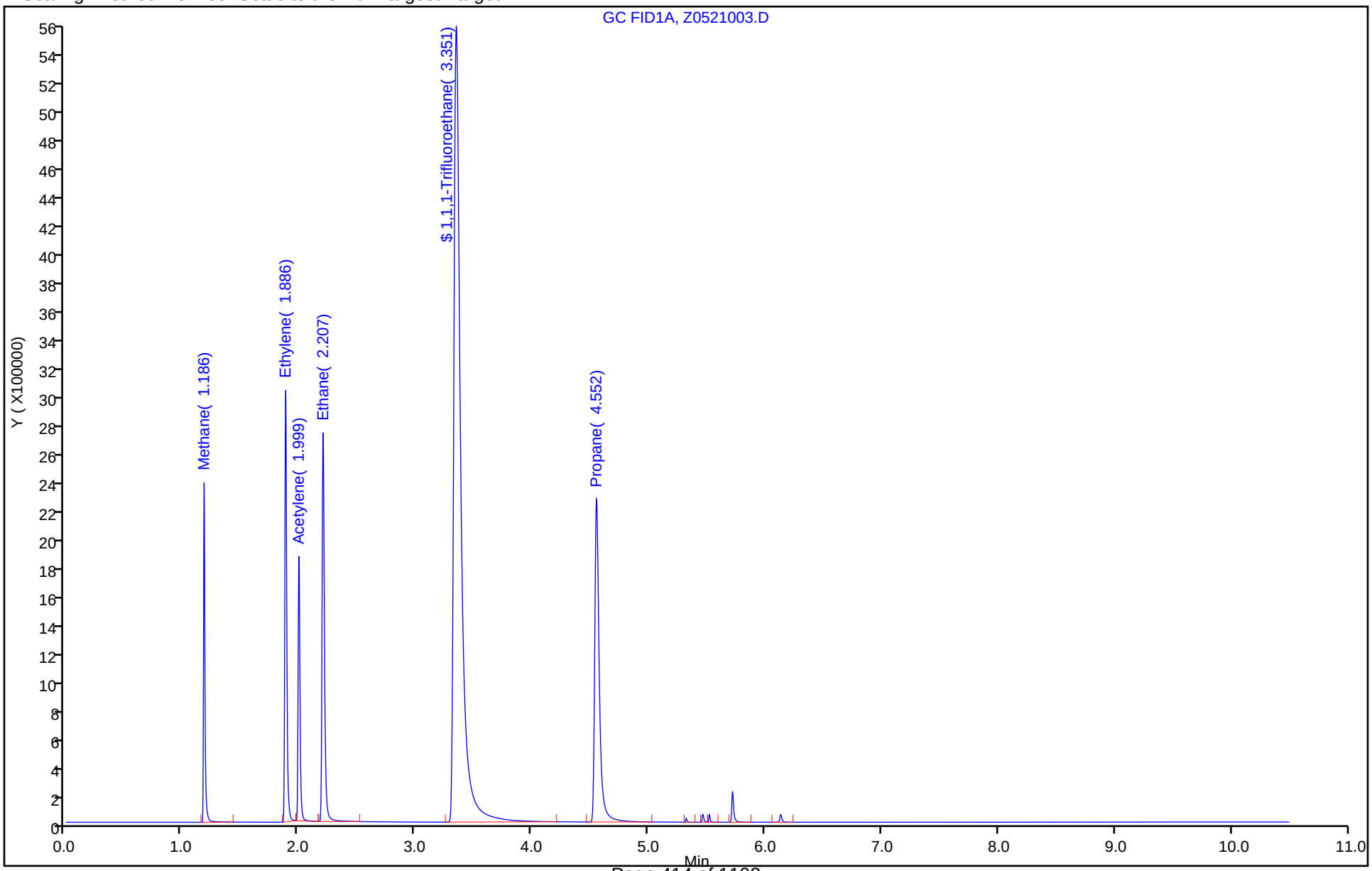
Report Date: 22-May-2019 07:26:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521003.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 14:45:25 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCVRT | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 3 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/19  Calibration Date: 05/21/2019 19:19

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 7135 | | 317 | 285 | 11.1 | 20.0 |
| Ethene | Ave | 6359 | 6936 | | 546 | 501 | 9.1 | 20.0 |
| Acetylene | Ave | 3315 | 4634 | | 648 | 463 | 39.8* | 30.0 |
| Ethane | Ave | 6680 | 7236 | | 581 | 536 | 8.3 | 20.0 |
| Propane | Ave | 7235 | 7586 | | 824 | 786 | 4.9 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/19  Calibration Date: 05/21/2019 19:19

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521019.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.18 | 1.14 | 1.24 |
| Ethene | 1.88 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2019 19:19:21 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:20 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 2034464 | 285.1 | 316.9 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.886 | -0.002 | 3473585 | 500.8 | 546.3 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 2147105 | 463.3 | 647.7 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.207 | -0.001 | 3881489 | 536.4 | 581.1 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.351 | -0.002 | 24426818 | 9243.9 | 7806.6 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.552 | 0.001 | 5962096 | 786.0 | 824.1 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

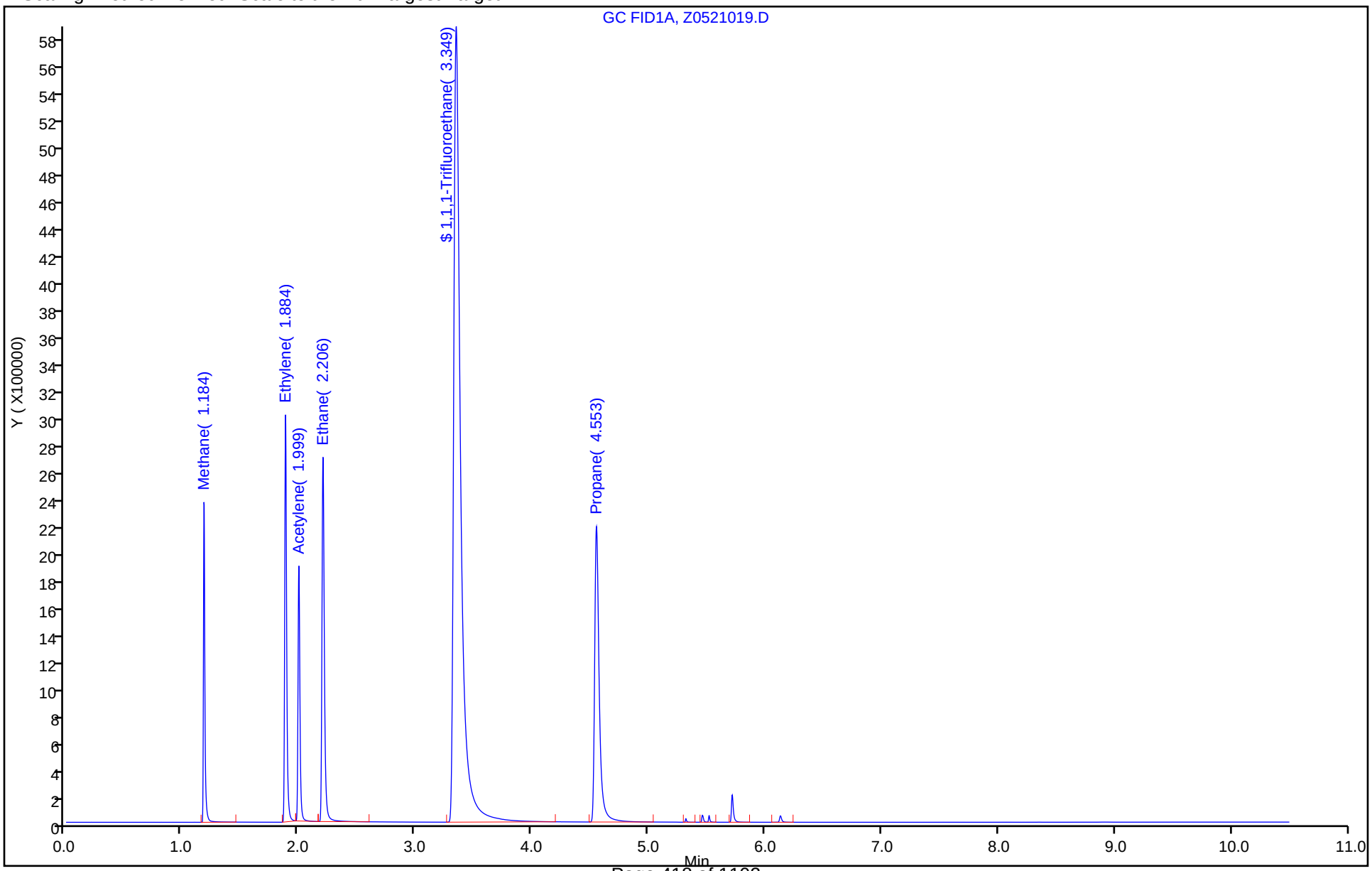
Report Date: 22-May-2019 07:26:20 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 19:19:21 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/19  Calibration Date: 05/21/2019 19:19

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521019.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2642 | | 7810 | 9240 | -15.5 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/19  Calibration Date: 05/21/2019 19:19

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521019.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2019 19:19:21 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-019
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:20 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 2034464 | 285.1 | 316.9 | |
| 2 | Ethylene | | | | | | |
| | 1.884 | 1.886 | -0.002 | 3473585 | 500.8 | 546.3 | |
| 3 | Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 2147105 | 463.3 | 647.7 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.207 | -0.001 | 3881489 | 536.4 | 581.1 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.351 | -0.002 | 24426818 | 9243.9 | 7806.6 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.552 | 0.001 | 5962096 | 786.0 | 824.1 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

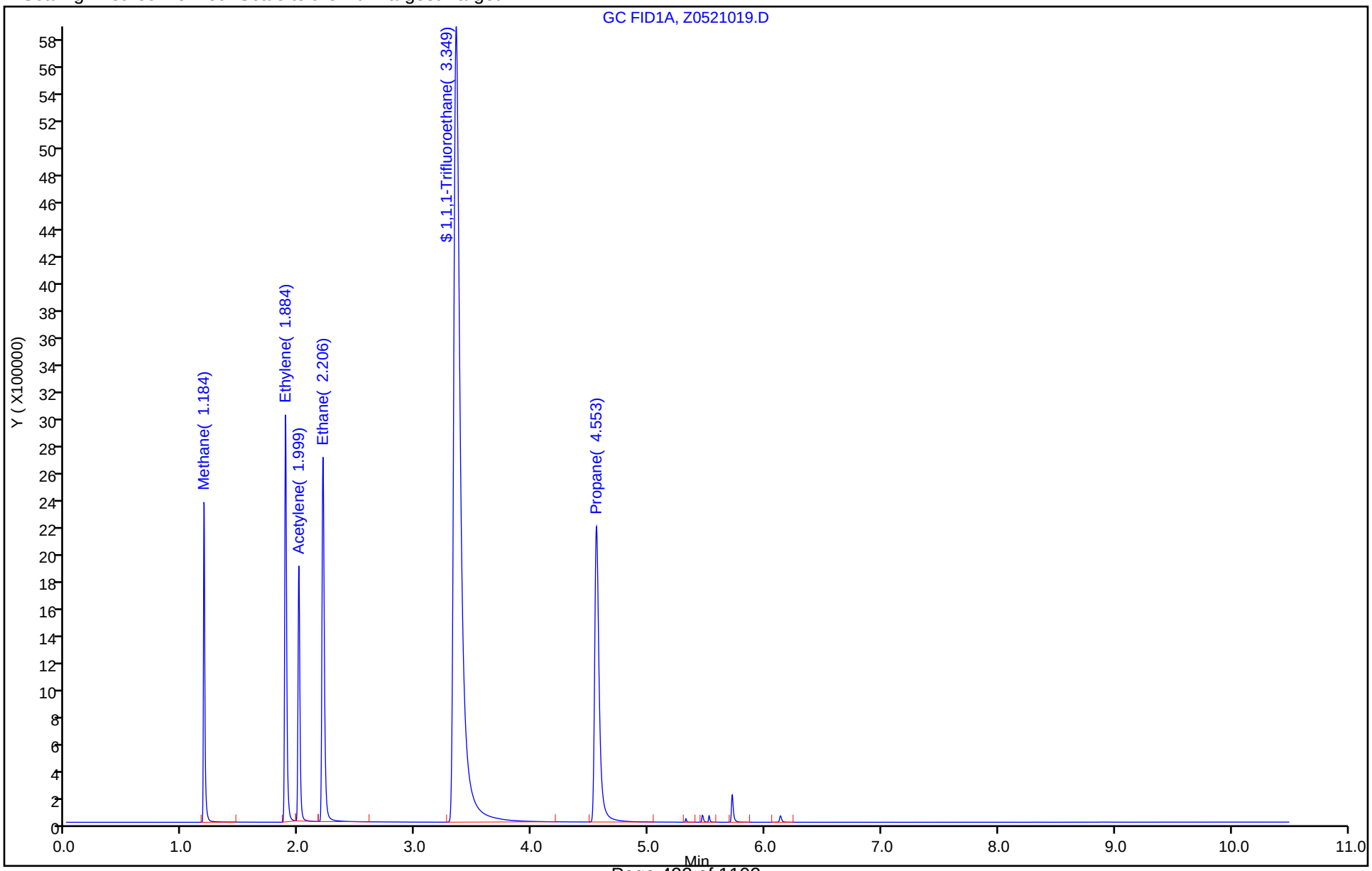
Report Date: 22-May-2019 07:26:20 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521019.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 19:19:21 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 19 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 19 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/24  Calibration Date: 05/21/2019 20:44

Instrument ID: ZPID  Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521024.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methane | Ave | 6420 | 7057 | | 313 | 285 | 9.9 | 20.0 |
| Ethene | Ave | 6359 | 6839 | | 539 | 501 | 7.6 | 20.0 |
| Acetylene | Ave | 3315 | 4542 | | 635 | 463 | 37.0* | 30.0 |
| Ethane | Ave | 6680 | 7138 | | 573 | 536 | 6.9 | 20.0 |
| Propane | Ave | 7235 | 7483 | | 813 | 786 | 3.4 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/24 Calibration Date: 05/21/2019 20:44

Instrument ID: ZPID Calib Start Date: 03/25/2019 14:32

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 03/25/2019 15:57

Lab File ID: Z0521024.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Methane | 1.19 | 1.14 | 1.24 |
| Ethene | 1.89 | 1.84 | 1.94 |
| Acetylene | 2.00 | 1.95 | 2.05 |
| Ethane | 2.21 | 2.01 | 2.41 |
| Propane | 4.55 | 4.50 | 4.60 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521024.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2019 20:44:57 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-024
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:23 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.186 | -0.001 | 2012069 | 285.1 | 313.4 | |
| 2 | Ethylene | | | | | | |
| | 1.885 | 1.886 | -0.001 | 3424946 | 500.8 | 538.6 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 2104554 | 463.3 | 634.9 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.207 | -0.002 | 3829018 | 536.4 | 573.2 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.350 | 3.351 | -0.001 | 23764422 | 9243.9 | 7594.9 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.552 | 0.001 | 5881236 | 786.0 | 812.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

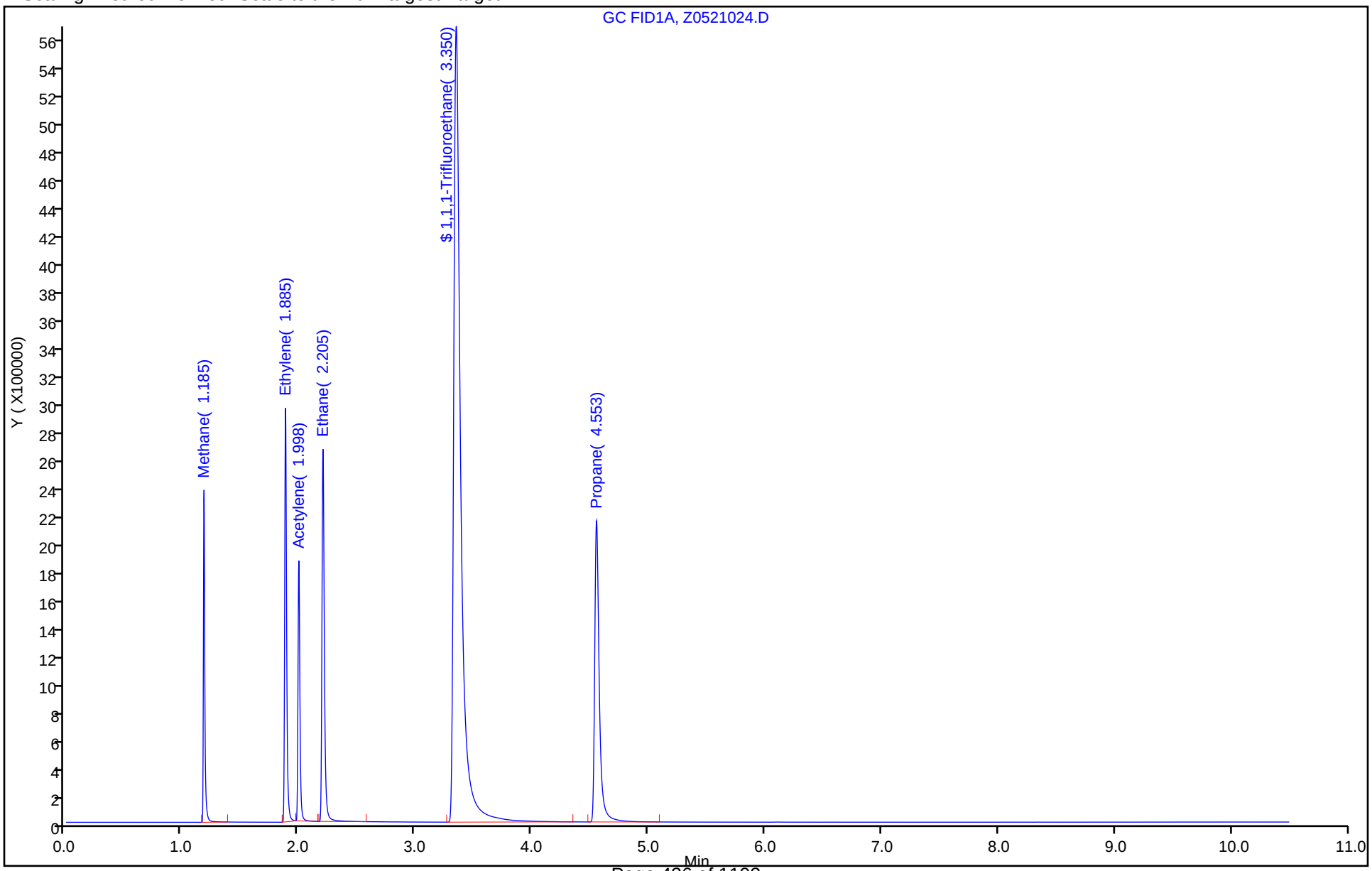
Report Date: 22-May-2019 07:26:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521024.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 20:44:57 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 24 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 24 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/24  Calibration Date: 05/21/2019 20:44

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521024.D  Conc. Units: ug/L  Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trifluoroethane | Ave | 3129 | 2571 | | 7590 | 9240 | -17.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: CCV 240-382383/24  Calibration Date: 05/21/2019 20:44

Instrument ID: ZPID  Calib Start Date: 03/25/2019 16:14

GC Column: HP-PLOT/Q  ID: 0.53(mm)  Calib End Date: 03/25/2019 17:40

Lab File ID: Z0521024.D  Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| 1,1,1-Trifluoroethane | 3.35 | 3.25 | 3.45 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521024.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2019 20:44:57 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-024
Operator ID: Instrument ID: ZPID
Sublist: chrom-RSK175*sub17

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:23 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.186 | -0.001 | 2012069 | 285.1 | 313.4 | |
| 2 | Ethylene | | | | | | |
| | 1.885 | 1.886 | -0.001 | 3424946 | 500.8 | 538.6 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 2104554 | 463.3 | 634.9 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.207 | -0.002 | 3829018 | 536.4 | 573.2 | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.350 | 3.351 | -0.001 | 23764422 | 9243.9 | 7594.9 | |
| 6 | Propane | | | | | | |
| | 4.553 | 4.552 | 0.001 | 5881236 | 786.0 | 812.9 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

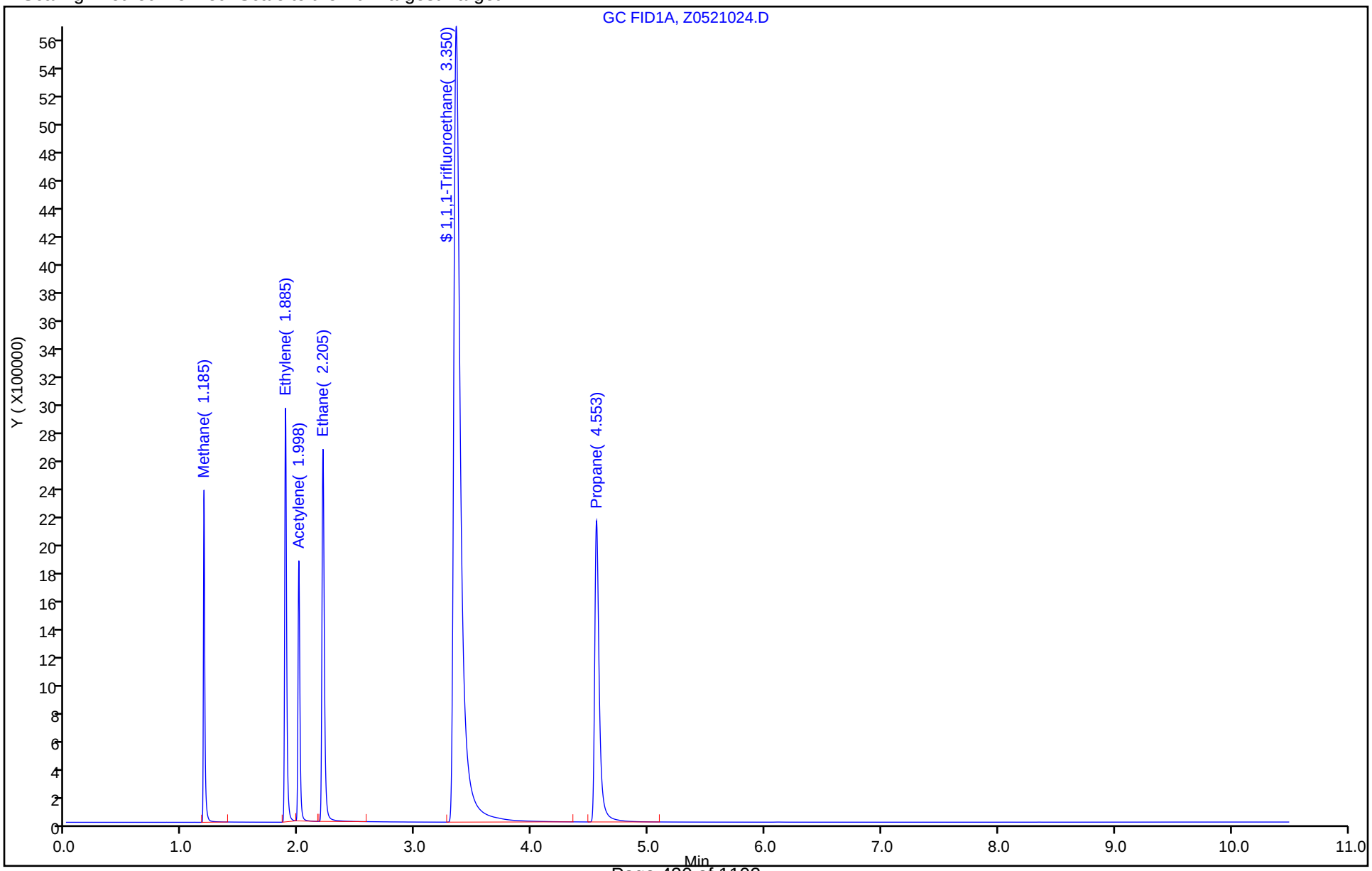
Report Date: 22-May-2019 07:26:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521024.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 20:44:57 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 24 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 24 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-381892/4

Matrix: Water  Lab File ID: Z0517004.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 15:00

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 0.11 | U | 1.0 | 0.11 |
| 74-84-0 | Ethane | 0.10 | U | 1.0 | 0.10 |
| 74-82-8 | Methane | 0.17 | U | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 86 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-May-2019 15:00:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|
| 1 Methane | | | | | | |
| 1.183 | | | | | ND | |
| 2 Ethylene | | | | | | |
| 1.883 | | | | | ND | |
| 3 Acetylene | | | | | | |
| 1.997 | | | | | ND | |
| 4 Ethane | | | | | | |
| 2.205 | | | | | ND | |
| $ 5 1,1,1-Trifluoroethane | | | | | | |
| 3.348 | 3.348 | 0.000 | 26296198 | 9730.4 | 8404.0 | |
| 6 Propane | | | | | | |
| 4.552 | | | | | ND | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

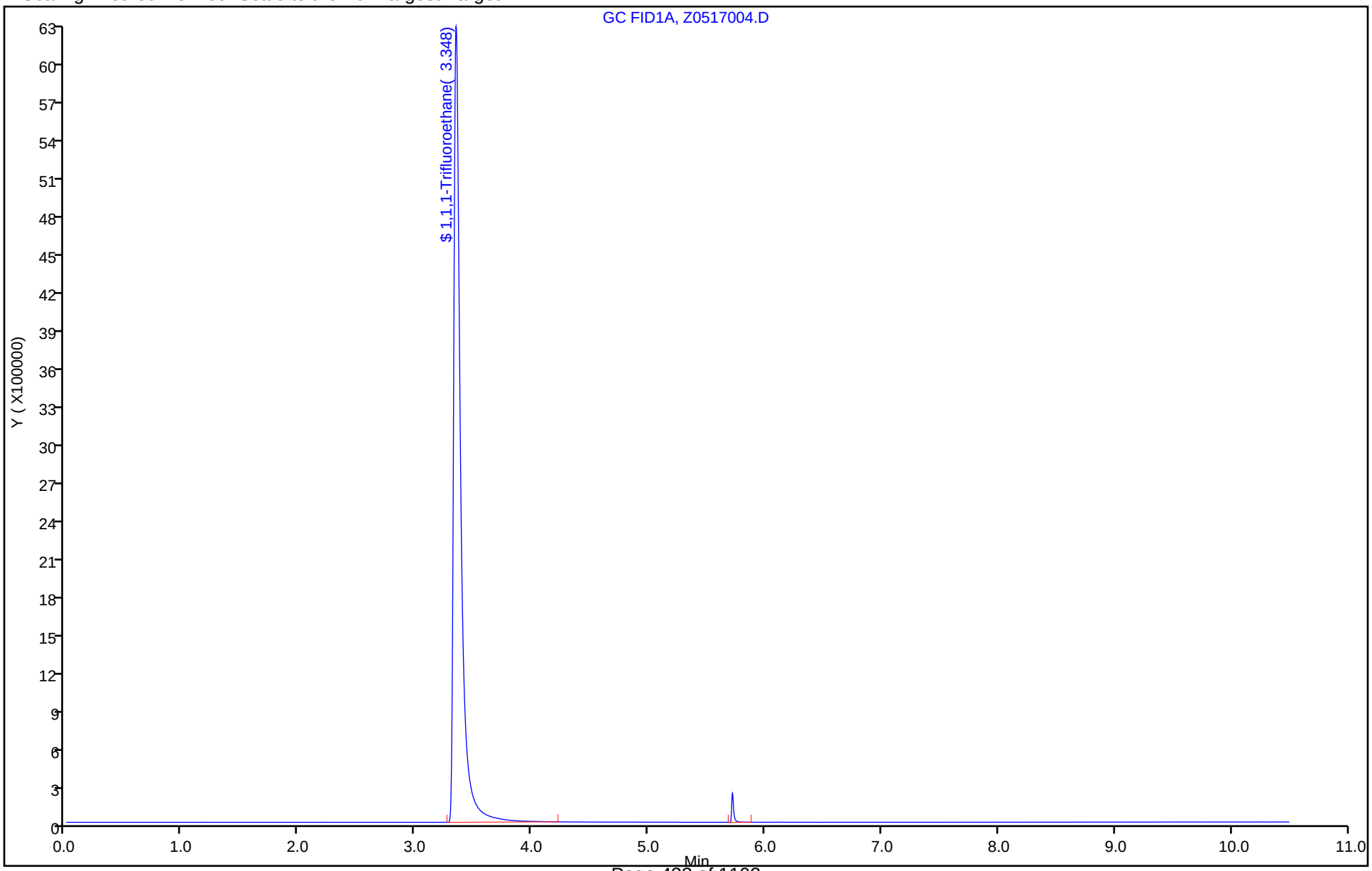
Report Date: 20-May-2019 10:18:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 15:00:30 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-May-2019 15:00:30 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8404.0 | 86.37 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-382383/4

Matrix: Water  Lab File ID: Z0521004.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/21/2019 15:02

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 382383  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 0.11 | U | 1.0 | 0.11 |
| 74-84-0 | Ethane | 0.10 | U | 1.0 | 0.10 |
| 74-82-8 | Methane | 0.17 | U | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 82 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-May-2019 15:02:29 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.186 | | | | | ND | |
| 2 | Ethylene | | | | | | |
| | 1.886 | | | | | ND | |
| 3 | Acetylene | | | | | | |
| | 1.999 | | | | | ND | |
| 4 | Ethane | | | | | | |
| | 2.207 | | | | | ND | |
| $ 5 | 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.351 | -0.002 | 25039780 | 9730.4 | 8002.5 | |
| 6 | Propane | | | | | | |
| | 4.552 | | | | | ND | |

## Reagents:

SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

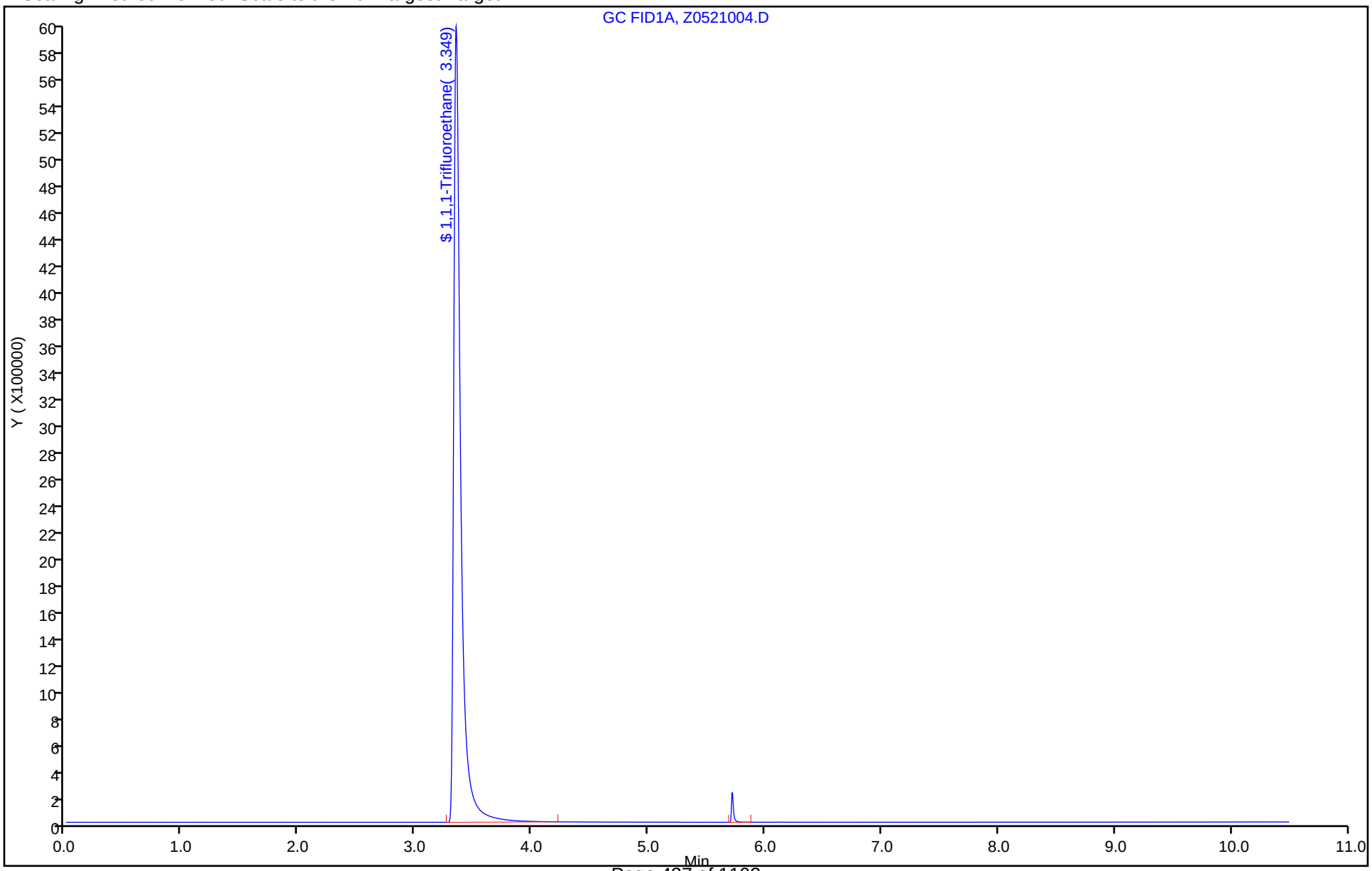
Report Date: 22-May-2019 07:26:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521004.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 15:02:29 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 4 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521004.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 21-May-2019 15:02:29 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-004
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8002.5 | 82.24 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-381892/5

Matrix: Water  Lab File ID: Z0517005.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 15:17

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 338 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 387 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 399 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2019 15:17:50 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 2564217 | 480.0 | 399.4 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 2151892 | 387.0 | 338.4 | |
| 4 | Ethane | | | | | | |
| | 2.205 | 2.205 | 0.000 | 2581780 | 475.3 | 386.5 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.348 | 0.000 | 26529121 | 9730.4 | 8478.4 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 2680820 | 460.5 | 370.6 | |

## Reagents:

MEEP LCS_00026 Amount Added: 23.00 Units: mL
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

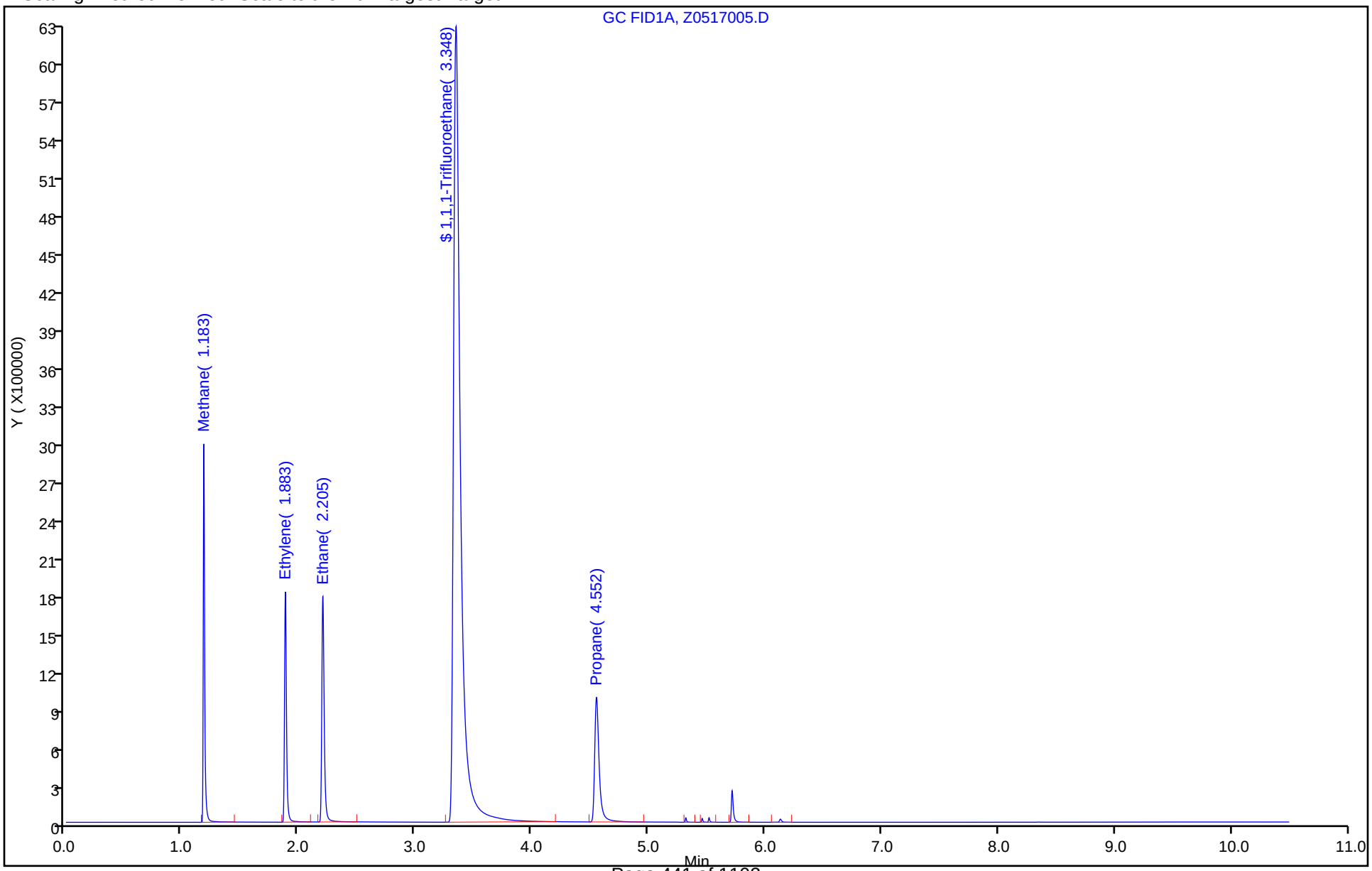
Report Date: 20-May-2019 10:18:05 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 15:17:50 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-May-2019 15:17:50 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087233-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8478.4 | 87.13 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-382383/5

Matrix: Water  Lab File ID: Z0521005.D

Analysis Method: RSK-175  Date Collected:

Sample wt/vol: 23(mL)  Date Analyzed: 05/21/2019 15:19

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 382383  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 336 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 385 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 384 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 82 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521005.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-May-2019 15:19:34 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-005
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:12 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.185 | 1.186 | -0.001 | 2463031 | 480.0 | 383.6 | |
| 2 | Ethylene | | | | | | |
| | 1.885 | 1.886 | -0.001 | 2135398 | 387.0 | 335.8 | |
| 4 | Ethane | | | | | | |
| | 2.206 | 2.207 | -0.001 | 2569993 | 475.3 | 384.7 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.351 | -0.003 | 25118132 | 9730.4 | 8027.5 | |
| 6 | Propane | | | | | | |
| | 4.555 | 4.552 | 0.003 | 2688095 | 460.5 | 371.6 | |

## Reagents:

MEEP LCS_00026 Amount Added: 23.00 Units: mL
SARSKSURR_00012 Amount Added: 20.00 Units: mL Run Reagent

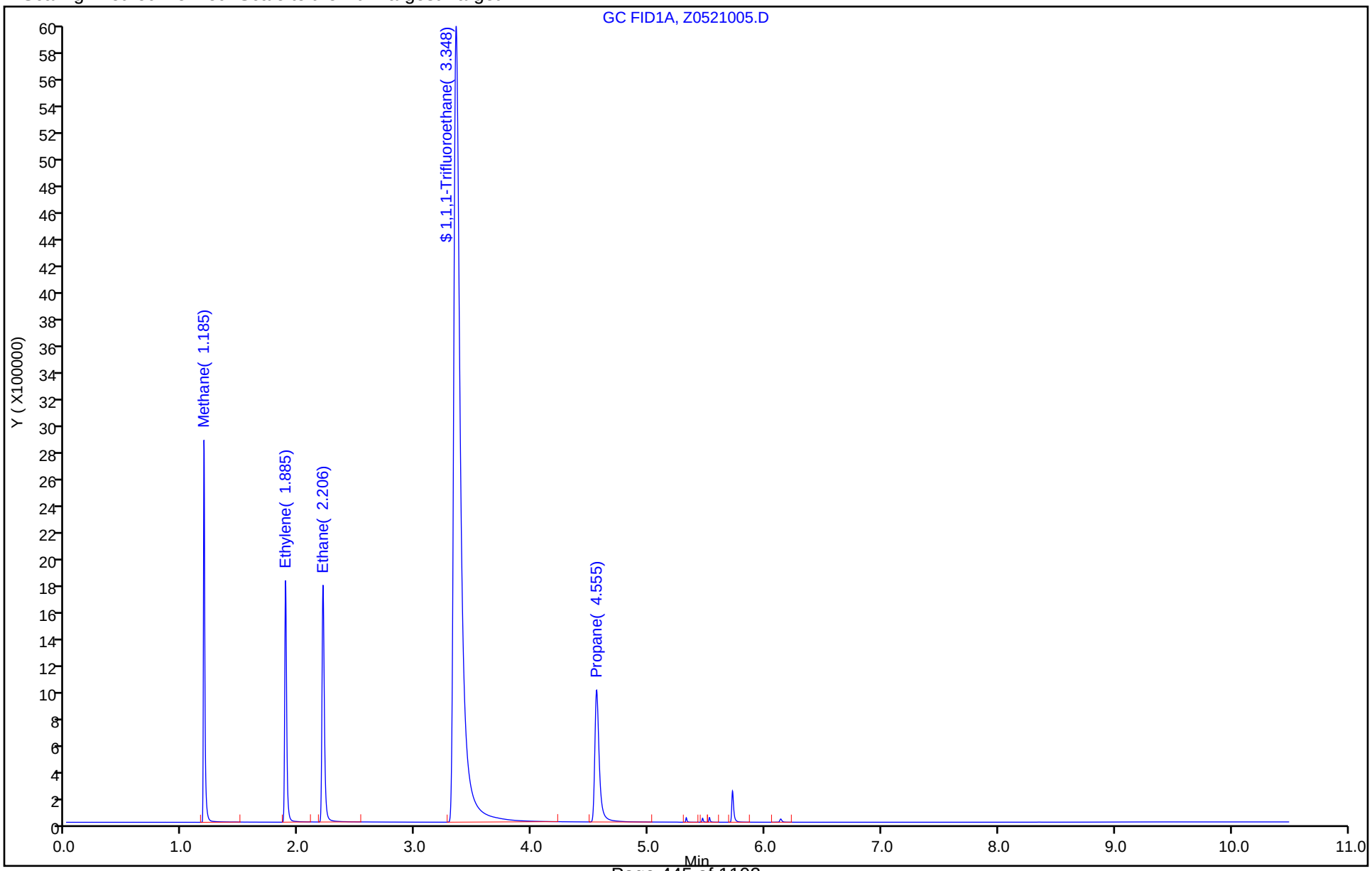
Report Date: 22-May-2019 07:26:13 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521005.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 15:19:34 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 5 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521005.D | | | | |
| Lims ID: | LCS | | | | |
| Client ID: | | | | | |
| Sample Type: | LCS | | | | |
| Inject. Date: | 21-May-2019 15:19:34 | ALS Bottle#: | 5 | Worklist Smp#: | 5 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087330-005 | | | | |
| Operator ID: | | Instrument ID: | ZPID | | |
| Method: | \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m | | | | |
| Limit Group: | GCV RSK 175 ICAL | | | | |
| Last Update: | 22-May-2019 07:26:12 | Calib Date: | 25-Mar-2019 17:40:28 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D | | | | |
| Column 1 : | | | Det: GC FID1A | | |
| Process Host: | CTX0335 | | | | |

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9730.4 | 8027.5 | 82.50 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-112111-D-5 MS

Matrix: Water  Lab File ID: Z0517011.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 17:02

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4870 | | 10 | 1.1 |
| 74-84-0 | Ethane | 5140 | | 10 | 1.0 |
| 74-82-8 | Methane | 12600 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 86 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D
Lims ID: 240-112111-D-5 MS
Client ID:
Sample Type: MS
Inject. Date: 17-May-2019 17:02:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.184 | 1.183 | 0.001 | 8068768 | 285.1 | 1256.7 | |
| | 2 Ethylene | | | | | | |
| | 1.882 | 1.883 | -0.001 | 3099473 | 500.8 | 487.4 | |
| | 3 Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1881243 | 463.3 | 567.5 | |
| | 4 Ethane | | | | | | |
| | 2.204 | 2.205 | -0.001 | 3432320 | 536.4 | 513.8 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.348 | -0.001 | 24895941 | 9243.9 | 7956.5 | |
| | 6 Propane | | | | | | |
| | 4.551 | 4.552 | -0.001 | 5102009 | 786.0 | 705.2 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

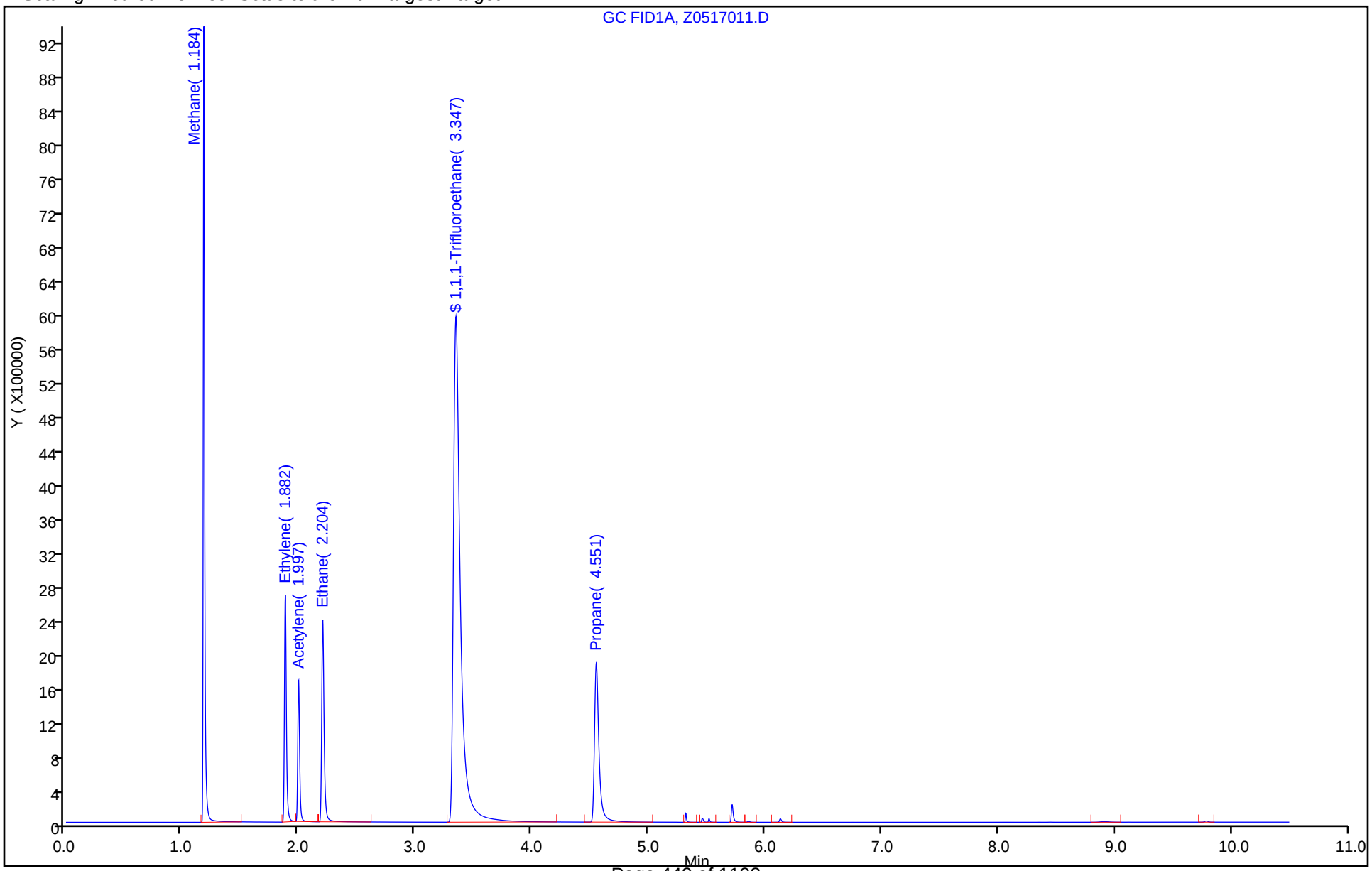
Report Date: 20-May-2019 10:18:15 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 17:02:30 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-5 MS | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 11 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517011.D
Lims ID: 240-112111-D-5 MS
Client ID:
Sample Type: MS
Inject. Date: 17-May-2019 17:02:30 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-011
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7956.5 | 86.07 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-112371-P-3 MS

Matrix: Water  Lab File ID: Z0521020.D

Analysis Method: RSK-175  Date Collected: 05/09/2019 11:40

Sample wt/vol: 23(mL)  Date Analyzed: 05/21/2019 19:36

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 382383  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 526 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 565 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 1190 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 79 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521020.D
Lims ID: 240-112371-P-3 MS
Client ID: GW-3298-050919-JY-056
Sample Type: MS
Inject. Date: 21-May-2019 19:36:40 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-020
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:20 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| | 1 Methane | | | | | | |
| | 1.186 | 1.186 | 0.000 | 7652518 | 285.1 | 1191.9 | |
| | 2 Ethylene | | | | | | |
| | 1.884 | 1.886 | -0.002 | 3344040 | 500.8 | 525.9 | |
| | 3 Acetylene | | | | | | |
| | 1.999 | 1.999 | 0.000 | 2008981 | 463.3 | 606.0 | |
| | 4 Ethane | | | | | | |
| | 2.206 | 2.207 | -0.001 | 3772801 | 536.4 | 564.8 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.349 | 3.351 | -0.002 | 22981408 | 9243.9 | 7344.6 | |
| | 6 Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5725708 | 786.0 | 791.4 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

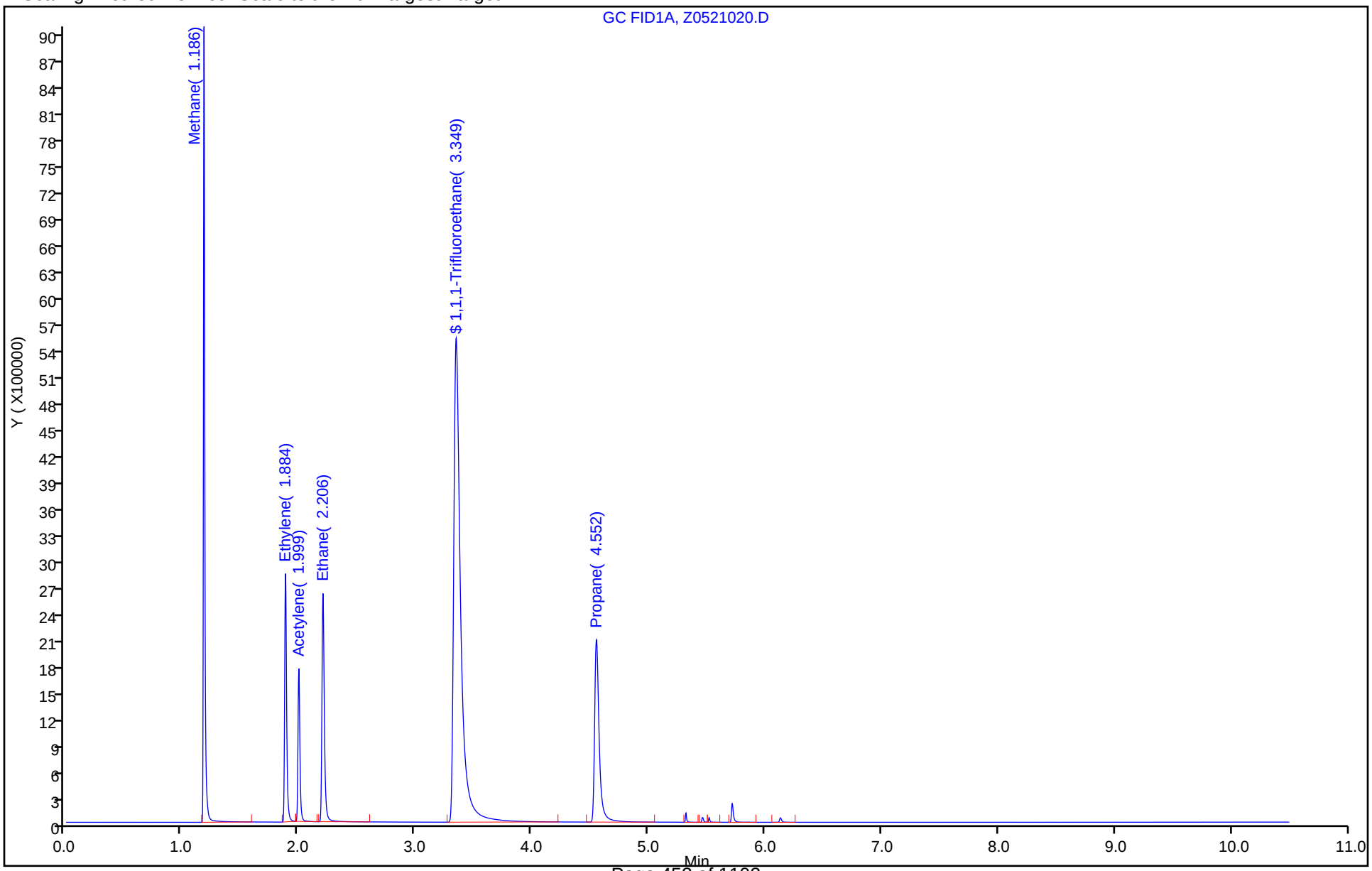
Report Date: 22-May-2019 07:26:21 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521020.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 19:36:40 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112371-P-3 MS | | | Worklist Smp#: | 20 |
| Client ID: | GW-3298-050919-JY-056 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 20 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521020.D
Lims ID: 240-112371-P-3 MS
Client ID: GW-3298-050919-JY-056
Sample Type: MS
Inject. Date: 21-May-2019 19:36:40 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-020
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:20 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7344.6 | 79.45 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-112111-D-5 MSD

Matrix: Water  Lab File ID: Z0517012.D

Analysis Method: RSK-175  Date Collected: 05/06/2019 14:57

Sample wt/vol: 23(mL)  Date Analyzed: 05/17/2019 17:20

Soil Aliquot Vol:  Dilution Factor: 10

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 381892  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 4920 | | 10 | 1.1 |
| 74-84-0 | Ethane | 5190 | | 10 | 1.0 |
| 74-82-8 | Methane | 12500 | | 10 | 1.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 87 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D
Lims ID: 240-112111-D-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-May-2019 17:20:00 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-012
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.183 | 1.183 | 0.000 | 8018072 | 285.1 | 1248.8 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.883 | 0.000 | 3128981 | 500.8 | 492.1 | |
| 3 | Acetylene | | | | | | |
| | 1.997 | 1.997 | 0.000 | 1920366 | 463.3 | 579.3 | |
| 4 | Ethane | | | | | | |
| | 2.203 | 2.205 | -0.002 | 3463552 | 536.4 | 518.5 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.347 | 3.348 | -0.001 | 25167296 | 9243.9 | 8043.2 | |
| 6 | Propane | | | | | | |
| | 4.552 | 4.552 | 0.000 | 5158786 | 786.0 | 713.1 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

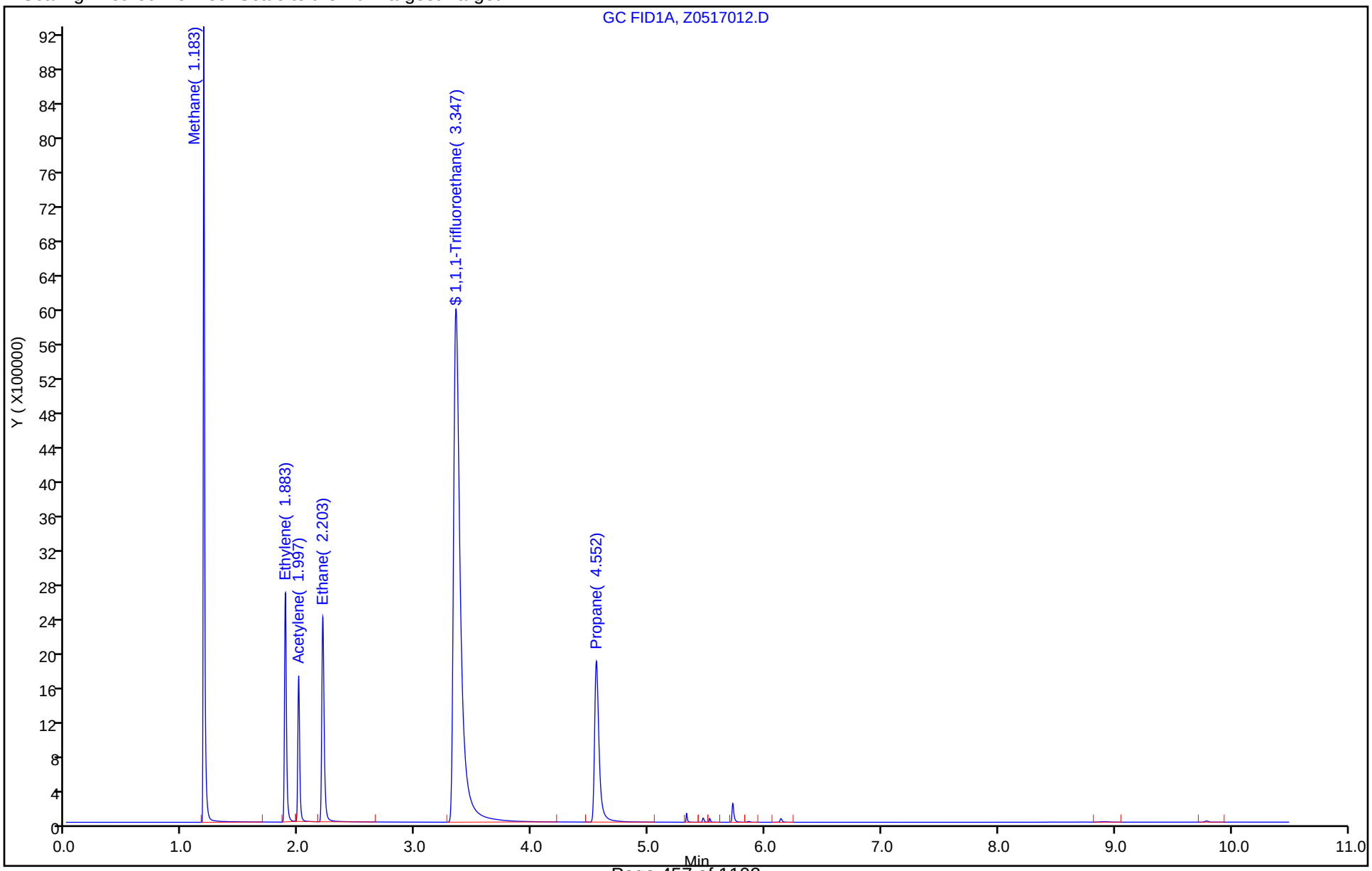
Report Date: 20-May-2019 10:18:17 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 17-May-2019 17:20:00 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112111-D-5 MSD | | | Worklist Smp#: | 12 |
| Client ID: | | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 10.0000 | ALS Bottle#: | 12 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\Z0517012.D
Lims ID: 240-112111-D-5 MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-May-2019 17:20:00 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 1.000 mL Dil. Factor: 10.0000
Sample Info: 240-0087233-012
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190517-87233.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 20-May-2019 10:17:59 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0309

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 8043.2 | 87.01 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Client Sample ID:  Lab Sample ID: 240-112371-T-3 MSD

Matrix: Water  Lab File ID: Z0521021.D

Analysis Method: RSK-175  Date Collected: 05/09/2019 11:40

Sample wt/vol: 23(mL)  Date Analyzed: 05/21/2019 19:53

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: HP-PLOT/Q  ID: 0.53(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 382383  Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-85-1 | Ethene | 533 | | 1.0 | 0.11 |
| 74-84-0 | Ethane | 574 | | 1.0 | 0.10 |
| 74-82-8 | Methane | 1050 | | 1.0 | 0.17 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 420-46-2 | 1,1,1-Trifluoroethane | 78 | | 60-140 |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521021.D
Lims ID: 240-112371-T-3 MSD
Client ID: GW-3298-050919-JY-056
Sample Type: MSD
Inject. Date: 21-May-2019 19:53:47 ALS Bottle#: 21 Worklist Smp#: 21
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info: 240-0087330-021
Operator ID: Instrument ID: ZPID

Method: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m
Limit Group: GCV RSK 175 ICAL
Last Update: 22-May-2019 07:26:20 Calib Date: 25-Mar-2019 17:40:28
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D

Column 1 : Det: GC FID1A
Process Host: CTX0335

| | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/l | OnCol Amt ug/l | Flags |
|---|---|---|---|---|---|---|---|
| 1 | Methane | | | | | | |
| | 1.184 | 1.186 | -0.002 | 6728025 | 285.1 | 1047.9 | |
| 2 | Ethylene | | | | | | |
| | 1.883 | 1.886 | -0.003 | 3389005 | 500.8 | 533.0 | |
| 3 | Acetylene | | | | | | |
| | 1.998 | 1.999 | -0.001 | 2013905 | 463.3 | 607.5 | |
| 4 | Ethane | | | | | | |
| | 2.204 | 2.207 | -0.003 | 3836881 | 536.4 | 574.4 | |
| $ | 5 1,1,1-Trifluoroethane | | | | | | |
| | 3.348 | 3.351 | -0.003 | 22553027 | 9243.9 | 7207.7 | |
| 6 | Propane | | | | | | |
| | 4.551 | 4.552 | -0.001 | 5872667 | 786.0 | 811.8 | |

## Reagents:

SARSKSURR_00012 Amount Added: 19.00 Units: mL
SARSKHighCal_00006 Amount Added: 1.00 Units: mL

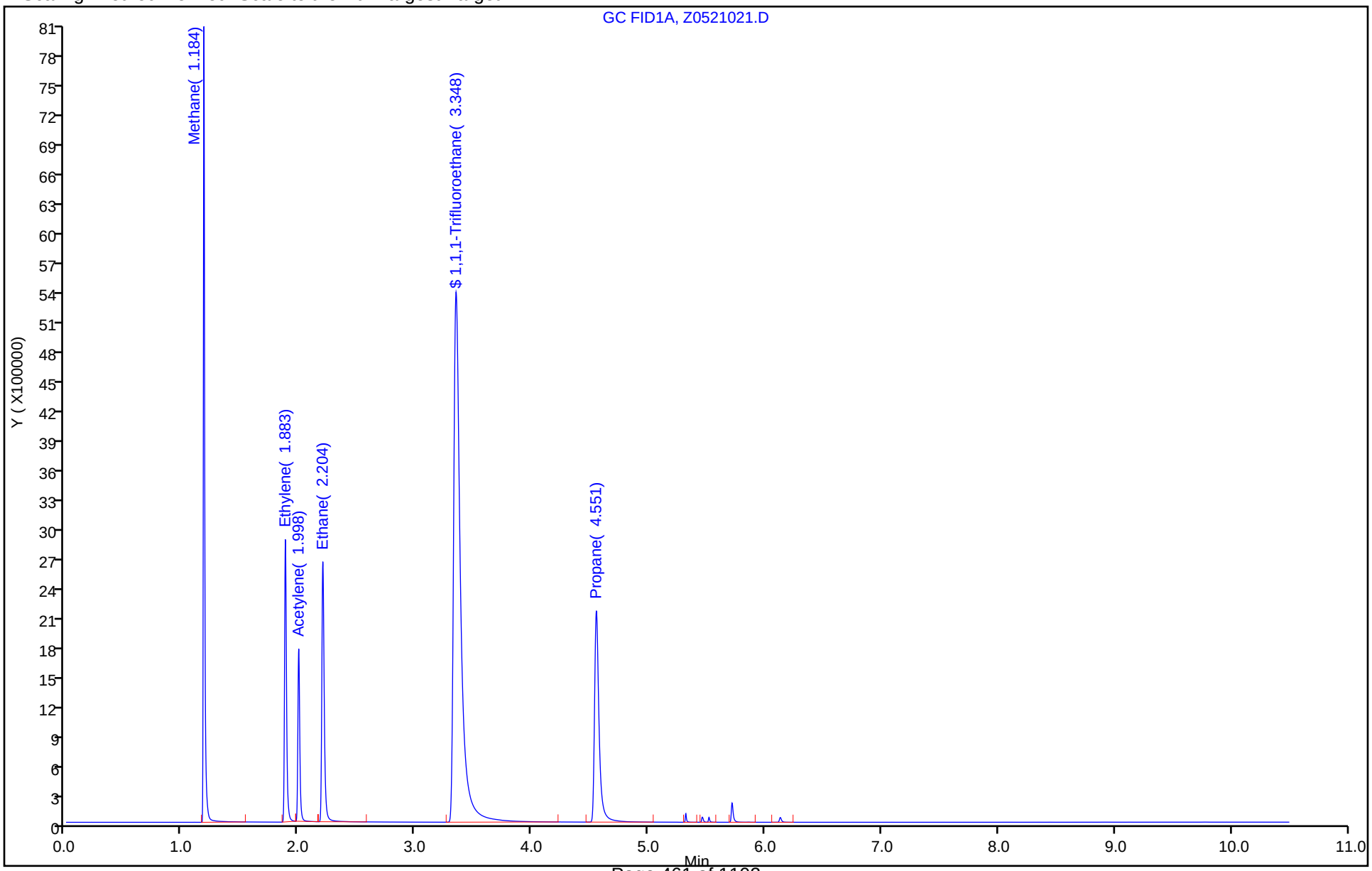
Report Date: 22-May-2019 07:26:21 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521021.D

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 19:53:47 | Instrument ID: | ZPID | Operator ID: | |
| Lims ID: | 240-112371-T-3 MSD | | | Worklist Smp#: | 21 |
| Client ID: | GW-3298-050919-JY-056 | | | | |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | ALS Bottle#: | 21 |
| Method: | RSK175 | Limit Group: | GCV RSK 175 ICAL | | |

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Canton
Recovery Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\ZPID\20190521-87330.b\Z0521021.D | | | | |
| Lims ID: | 240-112371-T-3 MSD | | | | |
| Client ID: | GW-3298-050919-JY-056 | | | | |
| Sample Type: | MSD | | | | |
| Inject. Date: | 21-May-2019 19:53:47 | ALS Bottle#: | 21 | Worklist Smp#: | 21 |
| Purge Vol: | 1.000 mL | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087330-021 | | | | |
| Operator ID: | | Instrument ID: | ZPID | | |
| Method: | \\chromna\Canton\ChromData\ZPID\20190521-87330.b\RSK175.m | | | | |
| Limit Group: | GCV RSK 175 ICAL | | | | |
| Last Update: | 22-May-2019 07:26:20 | Calib Date: | 25-Mar-2019 17:40:28 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\ZPID\20190325-85484.b\Z0325014.D | | | | |
| Column 1 : | | | Det: GC FID1A | | |
| Process Host: | CTX0335 | | | | |

| Compound | Amount Added | Amount Recovered | % Rec. |
|---|---|---|---|
| $ 5 1,1,1-Trifluoroethane | 9243.9 | 7207.7 | 77.97 |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID  Start Date: 03/25/2019 14:32

Analysis Batch Number: 373146  End Date: 03/25/2019 17:57

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD 240-373146/3 IC | | 03/25/2019 14:32 | 1 | Z0325003.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/4 IC | | 03/25/2019 14:49 | 1 | Z0325004.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/5 IC | | 03/25/2019 15:06 | 1 | Z0325005.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/6 IC | | 03/25/2019 15:23 | 1 | Z0325006.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/7 IC | | 03/25/2019 15:40 | 1 | Z0325007.D | HP-PLOT/Q 0.53(mm) |
| STD 240-373146/8 IC | | 03/25/2019 15:57 | 1 | Z0325008.D | HP-PLOT/Q 0.53(mm) |
| STD1 240-373146/9 IC | | 03/25/2019 16:14 | 1 | Z0325009.D | HP-PLOT/Q 0.53(mm) |
| STD2 240-373146/10 IC | | 03/25/2019 16:32 | 1 | Z0325010.D | HP-PLOT/Q 0.53(mm) |
| STD3 240-373146/11 IC | | 03/25/2019 16:49 | 1 | Z0325011.D | HP-PLOT/Q 0.53(mm) |
| STD4 240-373146/12 IC | | 03/25/2019 17:06 | 1 | Z0325012.D | HP-PLOT/Q 0.53(mm) |
| STD5 240-373146/13 IC | | 03/25/2019 17:23 | 1 | Z0325013.D | HP-PLOT/Q 0.53(mm) |
| STD6 240-373146/14 IC | | 03/25/2019 17:40 | 1 | Z0325014.D | HP-PLOT/Q 0.53(mm) |
| ICV 240-373146/15 | | 03/25/2019 17:57 | 1 | Z0325015.D | HP-PLOT/Q 0.53(mm) |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID Start Date: 05/17/2019 14:43

Analysis Batch Number: 381892 End Date: 05/17/2019 21:23

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVRT 240-381892/3 | | 05/17/2019 14:43 | 1 | Z0517003.D | HP-PLOT/Q 0.53(mm) |
| MB 240-381892/4 | | 05/17/2019 15:00 | 1 | Z0517004.D | HP-PLOT/Q 0.53(mm) |
| LCS 240-381892/5 | | 05/17/2019 15:17 | 1 | Z0517005.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 15:35 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 15:52 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 16:10 | 5 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 16:27 | 10 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 16:45 | 10 | | HP-PLOT/Q 0.53(mm) |
| 240-112111-D-5 MS | | 05/17/2019 17:02 | 10 | Z0517011.D | HP-PLOT/Q 0.53(mm) |
| 240-112111-D-5 MSD | | 05/17/2019 17:20 | 10 | Z0517012.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 17:37 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 17:55 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:12 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:30 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 18:47 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:05 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-381892/19 | | 05/17/2019 19:22 | 1 | Z0517019.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:39 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 19:56 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:14 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:31 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/17/2019 20:48 | 1 | | HP-PLOT/Q 0.53(mm) |
| 240-112234-2 | | 05/17/2019 21:05 | 1 | Z0517025.D | HP-PLOT/Q 0.53(mm) |
| CCV 240-381892/26 | | 05/17/2019 21:23 | 1 | Z0517026.D | HP-PLOT/Q 0.53(mm) |

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: ZPID  Start Date: 05/21/2019 14:45

Analysis Batch Number: 382383  End Date: 05/21/2019 20:44

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVRT 240-382383/3 | | 05/21/2019 14:45 | 1 | Z0521003.D | HP-PLOT/Q 0.53(mm) |
| MB 240-382383/4 | | 05/21/2019 15:02 | 1 | Z0521004.D | HP-PLOT/Q 0.53(mm) |
| LCS 240-382383/5 | | 05/21/2019 15:19 | 1 | Z0521005.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 15:36 | 1 | | HP-PLOT/Q 0.53(mm) |
| 240-112234-2 | | 05/21/2019 15:53 | 10 | Z0521007.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 16:11 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 16:28 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 16:45 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 17:02 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 17:19 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 17:36 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 17:53 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 18:10 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 18:27 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 18:45 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 19:02 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-382383/19 | | 05/21/2019 19:19 | 1 | Z0521019.D | HP-PLOT/Q 0.53(mm) |
| 240-112371-P-3 MS | | 05/21/2019 19:36 | 1 | Z0521020.D | HP-PLOT/Q 0.53(mm) |
| 240-112371-T-3 MSD | | 05/21/2019 19:53 | 1 | Z0521021.D | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 20:10 | 1 | | HP-PLOT/Q 0.53(mm) |
| ZZZZZ | | 05/21/2019 20:27 | 1 | | HP-PLOT/Q 0.53(mm) |
| CCV 240-382383/24 | | 05/21/2019 20:44 | 1 | Z0521024.D | HP-PLOT/Q 0.53(mm) |

# GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 381892  Batch Start Date: 05/17/19 14:43  Batch Analyst: Matthews, Brandon

Batch Method: RSK-175  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | MEEP LCS 00026 | SARSKHighCal 00006 | SARSKSURR 00012 |
|---|---|---|---|---|---|---|---|---|---|
| CCVRT 240-381892/3 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| MB 240-381892/4 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | | 20 mL |
| LCS 240-381892/5 | | RSK-175 | | 23 mL | 23 mL | 7 SU | 23 mL | | 20 mL |
| 240-112111-D-5 MS | | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| 240-112111-D-5 MSD | | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| CCV 240-381892/19 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| 240-112234-D-2 | MRC-NMW-2S-050719 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| CCV 240-381892/26 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |

| Batch Notes | |
|---|---|
| pH Paper ID | 4042520 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 382383  Batch Start Date: 05/21/19 14:45  Batch Analyst: Matthews, Brandon

Batch Method: RSK-175  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | Initial pH | MEEP LCS 00026 | SARSKHighCal 00006 | SARSKSURR 00012 |
|---|---|---|---|---|---|---|---|---|---|
| CCVRT 240-382383/3 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| MB 240-382383/4 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | | 20 mL |
| LCS 240-382383/5 | | RSK-175 | | 23 mL | 23 mL | 7 SU | 23 mL | | 20 mL |
| 240-112234-E-2 | MRC-NMW-2S-050719 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | | 20 mL |
| CCV 240-382383/19 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |
| 240-112371-P-3 MS | GW-3298-050919-JY-056 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| 240-112371-T-3 MSD | GW-3298-050919-JY-056 | RSK-175 | T | 23 mL | 23 mL | <2 SU | | 1 mL | 19 mL |
| CCV 240-382383/24 | | RSK-175 | | 23 mL | 23 mL | 7 SU | | 1 mL | 19 mL |

| Batch Notes | |
|---|---|
| pH Paper ID | 4042519 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
| --- | --- |
| MRC-NMW-2S-050719 | 240-112234-2 |

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MRC-NMW-2S-050719 Lab Sample ID: 240-112234-2

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG ID.:

Matrix: Water Date Sampled: 05/07/2019 12:00

Reporting Basis: WET Date Received: 05/08/2019 09:20

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron | 51000 | 200 | 26 | ug/L | | | 1 | 6010C |
| 7439-96-5 | Manganese | 3700 | 15 | 2.1 | ug/L | | B | 1 | 6010C |

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

ICV Source: MT6500ICV_00053  Concentration Units: ug/L

CCV Source: MTICPCCV_00153

| Analyte | ICV 240-380720/4 05/10/2019 12:03 | | | | CCV 240-380720/88 05/10/2019 18:15 | | | | CCV 240-380720/100 05/10/2019 19:05 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 12900 | | 12500 | 103 | 25200 | | 25000 | 101 | 25000 | | 25000 | 100 |
| **Manganese** | 1540 | | 1500 | 102 | 2000 | | 2000 | 100 | 2010 | | 2000 | 100 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

ICV Source: MT6500ICV_00053  Concentration Units: ug/L

CCV Source: MTICPCCV_00153

| Analyte | CCV 240-380720/112 05/10/2019 19:55 | | | | CCV 240-380720/124 05/10/2019 20:46 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 24900 | | 25000 | 99 | 25100 | | 25000 | 100 | | | | |
| **Manganese** | 2010 | | 2000 | 101 | 2040 | | 2000 | 102 | | | | |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

ICV Source: MTTRCRIC_00069  Concentration Units: ug/L

CCV Source: MTTRCRIC_00069

| Analyte | ICVL 240-380720/20 05/10/2019 13:11 | | | | CCVL 240-380720/138 05/10/2019 21:46 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Iron** | 209 | | 200 | 104 | 204 | | 200 | 102 | | | | |
| **Manganese** | 15.6 | | 15.0 | 104 | 17.5 | | 15.0 | 116 | | | | |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | ICB 240-380720/5 05/10/2019 12:07 | | CCB 240-380720/89 05/10/2019 18:19 | | CCB 240-380720/101 05/10/2019 19:09 | | CCB 240-380720/113 05/10/2019 19:59 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Iron** | 200 | 26 | U | 26 | U | 26 | U | 26 | U |
| **Manganese** | 15 | 2.1 | U | 2.1 | U | 2.1 | U | 2.1 | U |

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | CCB 240-380720/125 05/10/2019 20:50 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Iron** | 200 | 26 | U | | | | | | |
| **Manganese** | 15 | 2.1 | U | | | | | | |

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Concentration Units: ug/L  Lab Sample ID: MB 240-380430/1-A

Instrument Code: I9  Batch No.: 380720

| CAS No. | Analyte | Concentration | C | Q | Method |
|---|---|---|---|---|---|
| 7439-89-6 | Iron | 26 | U | | 6010C |
| 7439-96-5 | Manganese | 10.4 | J | | 6010C |

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICSA 240-380720/8  Instrument ID: I9

Lab File ID: I9051019B.asc  ICS Source: MTTRICSAW_00045

Concentration Units: ug/L

| Analyte | True Solution A | Found Solution A | Percent Recovery |
|---|---|---|---|
| **Iron** | **200000** | **192860** | **96** |
| **Manganese** | | **1.23** | |
| *Aluminum* | *500000* | *508840* | *102* |
| *Antimony* | | *1.55* | |
| *Arsenic* | | *-1.19* | |
| *Barium* | | *0.0664* | |
| *Beryllium* | | *0.515* | |
| *Boron* | | *-3.73* | |
| *Cadmium* | | *0.671* | |
| *Calcium* | *500000* | *483340* | *97* |
| *Chromium* | | *4.55* | |
| *Cobalt* | | *-0.364* | |
| *Copper* | | *4.72* | |
| *Lead* | | *2.84* | |
| *Lithium* | | *15.6* | |
| *Magnesium* | *500000* | *503580* | *101* |
| *Molybdenum* | | *0.628* | |
| *Nickel* | | *5.13* | |
| *Potassium* | | *77.4* | |
| *Selenium* | | *1.80* | |
| *Silicon* | | *7.79* | |
| *Silver* | | *-0.213* | |
| *Sodium* | | *136* | |
| *Strontium* | | *4.02* | |
| *Thallium* | | *1.12* | |
| *Tin* | | *4.11* | |
| *Titanium* | | *-0.281* | |
| *Vanadium* | | *-5.16* | |
| *Zinc* | | *0.145* | |

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Lab Sample ID: ICSAB 240-380720/9  Instrument ID: I9

Lab File ID: I9051019B.asc  ICS Source: MTICPICSABW_00021

Concentration Units: ug/L

| Analyte | True Solution AB | Found Solution AB | Found Percent Recovery |
|---|---|---|---|
| **Iron** | **200000** | **192810** | **96** |
| **Manganese** | **500** | **506** | **101** |
| *Aluminum* | *500000* | *502880* | *101* |
| *Antimony* | *1000* | *1041* | *104* |
| *Arsenic* | *1000* | *1047* | *105* |
| *Barium* | *500* | *505* | *101* |
| *Beryllium* | *500* | *500* | *100* |
| *Boron* | *500* | *519* | *104* |
| *Cadmium* | *1000* | *1047* | *105* |
| *Calcium* | *500000* | *477620* | *96* |
| *Chromium* | *500* | *499* | *100* |
| *Cobalt* | *500* | *511* | *102* |
| *Copper* | *500* | *529* | *106* |
| *Lead* | *1000* | *930* | *93* |
| *Lithium* | *500* | *543* | *109* |
| *Magnesium* | *500000* | *500450* | *100* |
| *Molybdenum* | *1000* | *992* | *99* |
| *Nickel* | *1000* | *1011* | *101* |
| *Potassium* | *10000* | *10621* | *106* |
| *Selenium* | *1000* | *1026* | *103* |
| *Silicon* | *10000* | *10081* | *101* |
| *Silver* | *1000* | *1093* | *109* |
| *Sodium* | *10000* | *10691* | *107* |
| *Strontium* | *1500* | *1481* | *99* |
| *Thallium* | *1000* | *980* | *98* |
| *Tin* | *500* | *521* | *104* |
| *Titanium* | *500* | *515* | *103* |
| *Vanadium* | *500* | *492* | *98* |
| *Zinc* | *1000* | *1026* | *103* |

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-112175-A-1-B MS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

| Analyte | SSR | C | Sample Result (SR) | C | Spike Added (SA) | %R | Control Limit %R | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 1080 | | 39 | J | 1000 | 104 | 75-125 | | 6010C |
| Manganese | 546 | | 29 | | 500 | 103 | 75-125 | | 6010C |

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-112175-A-1-C MSD

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

| Analyte | (SDR) C | | Spike Added (SA) | %R | Control Limit %R | RPD | RPD Limit | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Iron | 1090 | | 1000 | 106 | 75-125 | 1 | 20 | | 6010C |
| Manganese | 552 | | 500 | 105 | 75-125 | 1 | 20 | | 6010C |

SDR = Sample Duplicate Result

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

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-380430/2-A

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

Sample Matrix: Water  LCS Source: MTICP1_00084

| Analyte | Water(ug/L) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | True | Found | C | %R | Limits | | Q | Method |
| Iron | 1000 | 1040 | | 104 | 80 | 120 | | 6010C |
| Manganese | 500 | 511 | | 102 | 80 | 120 | | 6010C |

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-112175-A-1-A SD ^5

SDG No:

Lab Name: Eurofins TestAmerica, Canton  Job No: 240-112234-1

Matrix: Water  Concentration Units: ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | Method |
|---|---|---|---|---|---|---|---|
| Iron | 39 | J | 130 | U | NC | | 6010C |
| Manganese | 29 | | 31.6 | J | NC | | 6010C |

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: I9

Method: 6010C  MDL Date: 12/15/2017 12:49

Prep Method: 3005A

| Analyte | Wavelength/ Mass | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Iron | 271.441 | 200 | 25.958 |
| Manganese | 257.610 | 15 | 2.119 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: I9

Method: 6010C  XMDL Date: 12/15/2017 12:49

| Analyte | Wavelength/ Mass | XRL (ug/L) | XMDL (ug/L) |
|---|---|---|---|
| Iron | 271.441 | 200 | 25.958 |
| Manganese | 257.610 | 15 | 2.119 |

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Canton Job Number: 240-112234-1

SDG No.:

ICP-AES Instrument ID: I9 Date: 01/25/2019

| Analyte | Wave Length | Al | As | Ca | Co | Cr | Cu | Fe | Mn | Mo | Ni | Si | Ti | Tl | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | | | | | | | | | 0.01401160 | | | | | 0.026101 |
| Antimony | | -0.000056 | | | -0.000451 | | | -0.000015 | | | | | | | 0.002940 |
| Arsenic | | 0.000005 | | | -0.000198 | 0.00022072 | | | -0.000355 | 0.00045569 | | | | | |
| Barium | | | | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | | | | 0.000086 |
| Boron | | | | | | | | | | | | | | | |
| Cadmium | | | 0.008775 | | | | | -0.00001 | | | | | | | |
| Calcium | | | | | | | | | | | | | | | |
| Chromium | | | | | | | | | | | | | | | |
| Cobalt | | | | | | | | | | | | | 0.001923 | | |
| Copper | | | | 0.000018 | 0.000453 | | | -0.000018 | | | | | -0.000463 | | |
| Iron | | | | | | | | | | | | | | | |
| Lead | | -0.000129 | | | | | 0.00001699 | 0.000043 | | | 0.000260 | 0.000066831 | | | |
| Lithium | | | | | | | | | | | | | | | |
| Magnesium | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | | | | |
| Nickel | | | | | 0.000799 | | | 0.000054 | | | | | | | |
| Potassium | | | | | | | | | | | | | | | |
| Selenium | | -0.000049 | | | | | | | 0.000231 | | | | | | |
| Silver | | | | | | | | | | | | | | | |
| Sodium | | | | | | | | | | | | | | | |
| Strontium | | | | | | | | | | | | | | | |
| Thallium | | -0.000010 | | | 0.003994 | | | 0.000007 | 0.00168520 | | | | -0.000498 | | -0.000210 |
| Tin | | | | | | | | | | | | | | | |
| Titanium | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | 0.000027 | | | | | | | |
| Zinc | | | | | | -0.000286 | | | | | | | | | |

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Canton Job No: 240-112234-1

SDG No.:

Instrument ID: I9 Date: 01/28/2019 12:15

| Analyte | Integ. Time (Sec.) | Concentration (ug/L) | Method |
|---|---|---|---|
| Iron | | 500000 | 6010C |
| Manganese | | 10000 | 6010C |

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Prep Method: 3005A

| Lab Sample ID | Preparation Date | Prep Batch | Initial Weight | Initial Volume (mL) | Final Volume (mL) |
|---|---|---|---|---|---|
| MB 240-380430/1-A | 05/09/2019 14:00 | 380430 | | 50 | 50 |
| LCS 240-380430/2-A | 05/09/2019 14:00 | 380430 | | 50 | 50 |
| 240-112175-A-1-B MS | 05/09/2019 14:00 | 380430 | | 50 | 50 |
| 240-112175-A-1-C MSD | 05/09/2019 14:00 | 380430 | | 50 | 50 |
| 240-112234-2 | 05/09/2019 14:00 | 380430 | | 50 | 50 |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ICIS 240-380720/1 | 1 | | 11:50 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-380720/2 IC | | | 11:54 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-380720/3 IC | | | 11:59 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ICV 240-380720/4 | 1 | | 12:03 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ICB 240-380720/5 | 1 | | 12:07 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICSA 240-380720/8 | 1 | | 12:20 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ICSAB 240-380720/9 | 1 | | 12:24 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/10 | | | 12:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/11 | | | 12:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/18 | | | 13:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/19 | | | 13:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICVL 240-380720/20 | 1 | | 13:11 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/28 | | | 13:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/29 | | | 13:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/40 | | | 14:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/41 | | | 14:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:55 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:05 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/52 | | | 15:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/53 | | | 15:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/64 | | | 16:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/65 | | | 16:33 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/76 | | | 17:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/77 | | | 17:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380720/78 | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:57 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:02 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:06 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:11 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/88 | 1 | | 18:15 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/89 | 1 | | 18:19 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:23 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:32 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:36 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:40 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:44 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-380430/1-A | 1 | R | 18:48 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-380430/2-A | 1 | R | 18:53 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:57 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112175-A-1-A SD ^5 | 5 | R | 19:01 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/100 | 1 | | 19:05 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/101 | 1 | | 19:09 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:14 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112175-A-1-B MS | 1 | R | 19:18 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112175-A-1-C MSD | 1 | R | 19:22 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:26 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:30 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:34 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:43 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:47 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:51 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/112 | 1 | | 19:55 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/113 | 1 | | 19:59 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112234-2 | 1 | R | 20:04 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:08 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:12 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:17 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:21 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:25 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:29 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:33 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:38 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:42 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/124 | 1 | | 20:46 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/125 | 1 | | 20:50 | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:55 | | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/136 | | | 21:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/137 | | | 21:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380720/138 | 1 | | 21:46 | X | X | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:50 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/148 | | | 22:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/149 | | | 22:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/160 | | | 23:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/161 | | | 23:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:53 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/172 | | | 00:10 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/173 | | | 00:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:48 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/184 | | | 01:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/185 | | | 01:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCVL 240-380720/186 | | | 01:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/196 | | | 01:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/197 | | | 01:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:16 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:24 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:33 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/208 | | | 02:41 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/209 | | | 02:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:49 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: I9  Analysis Method: 6010C

Start Date: 05/10/2019 11:50  End Date: 05/11/2019 05:25

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Fe | Mn | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:02 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:06 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/220 | | | 03:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/221 | | | 03:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:40 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:44 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:05 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/232 | | | 04:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/233 | | | 04:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:43 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/244 | | | 05:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/245 | | | 05:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-380720/246 | | | 05:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-380720/247 | | | 05:25 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
R = Total Recoverable

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

ICP Instrument ID: I9 Start Date: 05/10/2019 End Date: 05/10/2019

| Lab Sample ID | Time | Internal Standards %RI For: | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Element In 230.606 | Q | Element Y 224.306 | Q | Element Y 360.073 | Q | Element Y 371.030 | Q | Element | Q |
| | | | | | | | | | | | |
| ICIS 240-380720/1 | 11:50 | | | | | | | | | | |
| ICV 240-380720/4 | 12:03 | 92 | | 98 | | 97 | | 99 | | | |
| ICB 240-380720/5 | 12:07 | 100 | | 100 | | 100 | | 101 | | | |
| ICSA 240-380720/8 | 12:20 | 79 | | 88 | | 86 | | 95 | | | |
| ICSAB 240-380720/9 | 12:24 | 78 | | 88 | | 85 | | 96 | | | |
| ICVL 240-380720/20 | 13:11 | 97 | | 98 | | 99 | | 98 | | | |
| CCV 240-380720/88 | 18:15 | 88 | | 95 | | 94 | | 95 | | | |
| CCB 240-380720/89 | 18:19 | 100 | | 100 | | 100 | | 96 | | | |
| MB 240-380430/1-A | 18:48 | 100 | | 101 | | 101 | | 97 | | | |
| LCS 240-380430/2-A | 18:53 | 90 | | 96 | | 95 | | 96 | | | |
| 240-112175-A-1-A SD ^5 | 19:01 | 99 | | 99 | | 99 | | 96 | | | |
| CCV 240-380720/100 | 19:05 | 87 | | 94 | | 93 | | 93 | | | |
| CCB 240-380720/101 | 19:09 | 99 | | 98 | | 99 | | 95 | | | |
| 240-112175-A-1-B MS | 19:18 | 88 | | 95 | | 94 | | 95 | | | |
| 240-112175-A-1-C MSD | 19:22 | 88 | | 95 | | 93 | | 95 | | | |
| CCV 240-380720/112 | 19:55 | 89 | | 96 | | 95 | | 96 | | | |
| CCB 240-380720/113 | 19:59 | 100 | | 100 | | 100 | | 97 | | | |
| 240-112234-2 | 20:04 | 94 | | 98 | | 97 | | 98 | | | |
| CCV 240-380720/124 | 20:46 | 87 | | 94 | | 93 | | 93 | | | |
| CCB 240-380720/125 | 20:50 | 99 | | 99 | | 99 | | 95 | | | |
| CCVL 240-380720/138 | 21:46 | 99 | | 101 | | 100 | | 96 | | | |

# METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 380430  Batch Start Date: 05/09/19 14:00  Batch Analyst: Dillon, Samuel

Batch Method: 3005A  Batch End Date: 05/09/19 22:00

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | MTAGSPIKEW 00091 | MTICP1 00084 | MTICP2A 00092 | MTTMHCL 00246 |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-380430/1 | | 3005A, 6010C | | 50 mL | 50 mL | | | | 2.5 mL |
| LCS 240-380430/2 | | 3005A, 6010C | | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112175-A-1 MS | | 3005A, 6010C | R | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112175-A-1 MSD | | 3005A, 6010C | R | 50 mL | 50 mL | 1 mL | 1 mL | 1 mL | 2.5 mL |
| 240-112234-K-2 | MRC-NMW-2S-050719 | 3005A, 6010C | R | 50 mL | 50 mL | | | | 2.5 mL |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | MTTMHNO3 00189 |
|---|---|---|---|---|
| MB 240-380430/1 | | 3005A, 6010C | | 1 mL |
| LCS 240-380430/2 | | 3005A, 6010C | | 1 mL |
| 240-112175-A-1 MS | | 3005A, 6010C | R | 1 mL |
| 240-112175-A-1 MSD | | 3005A, 6010C | R | 1 mL |
| 240-112234-K-2 | MRC-NMW-2S-050719 | 3005A, 6010C | R | 1 mL |

| Batch Notes | |
|---|---|
| Batch Comment | filter paper: 81029102 |
| Temperature - Corrected - End | temp log Degrees C |
| Temperature - Corrected - Start | temp log Degrees C |
| Digestion Unit ID | hb1 |
| Pipette/Syringe/Dispenser ID | mp1 |
| Thermometer ID | temp log |
| Digestion Tube/Cup ID | 1812114 |
| Temperature - Uncorrected - End | temp log Degrees C |
| Temperature - Uncorrected - Start | temp log Degrees C |

| Basis | Basis Description |
|---|---|
| R | Total Recoverable |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

MT6500BLKH20 319

# Test America Canton ICP Data Review Checklist

**Analysis Date:** 5-10-19 **Analyst:** WKD **Instrument:** I9

**Review Items**

| |
|---|
| **A. Calibration/Instrument Run QC** |
| **1. Instrument calibrated per method.** |
| **2. ICV/CCV analyzed at appropriate frequency and within acceptance criteria.** ***(ICV (2nd source):*****200.7=95 – 105%, 6010B 90-110%)** ***(CCV: 90 – 110%)*** |
| **3. ICB/CCB analyzed at appropriate frequency and within acceptance criteria.** |
| **4. CRI analyzed at SOP or project-specific frequency and within acceptance criteria. (project specific limits may vary)** |
| **5. ICSA/ICSAB analyzed at required frequency and within acceptance criteria.** |
| **B. Sample Results** |
| **1. Samples with concentrations > the linear range for any parameter diluted and reanalyzed.** |
| **2. Internal standard(s) within acceptance criteria.** |
| **3. Sample analyses done within holding time.** |
| **C. Preparation/Matrix QC** |
| **1. LCS performed per prep batch and within acceptance criteria.** |
| **2. Method blank performed per prep batch and within acceptance criteria.** |
| **3. MS performed at required frequency and evaluated.** |
| **4. MSD or DU performed at required frequency and evaluated.** |
| **5. Serial dilution performed per prep batch.** |
| **6. Post digest spike performed at required frequency and evaluated.** |
| **D. Other** |
| **1. Are all nonconformances documented appropriately in lims system.** |
| **2. Calculations checked for error.** |
| **3. All client/project specific requirements met.** |
| **4. Date/time of analysis verified as correct.** |

**Level I Analyst:** [signature] **Date:** 5-10-19 **Time:** 11:50-13:49

**Level I Analyst:** [signature] **Date:** 5-13-19 **Time:** 11:50 – 5:25

**Level I Analyst:** _____ **Date:** _____ **Time:** _____

**Level II Reviewer:** Karen L Hunt **Date:** 5-10-19 **Time:** 11:50-13:49

**Level II Reviewer:** Karen L Hunt **Date:** 5-13-19 **Time:** jobs 112177, 112097, 11215

**Level II Reviewer:** Nudjarin Narinkhen **Date:** 5-14-19 **Time:** 11:50 - 05:25

**Comments:** _____

L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions

WI-NC-0167

Sample Name: Blank Acquired: 5/10/2019 11:50:30 Type: Cal
Method: ICP I9 6010 200.7 Methods(v692) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00158 | .00105 | .00104 | .00121 | .03154 | .00206 | .00482 |
| Stddev | .00021 | .00095 | .00005 | .00020 | .00145 | .00071 | .00104 |
| %RSD | 13.341 | 90.753 | 4.9793 | 16.142 | 4.6104 | 34.339 | 21.652 |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .0002 | .00104 | .00070 | .00031 | .00017 | .01644 | -.00241 |
| Stddev | .0005 | .00016 | .00026 | .00012 | .00012 | .00296 | .00250 |
| %RSD | 288.5 | 15.146 | 36.820 | 39.861 | 68.635 | 17.978 | 103.58 |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .00003 | .00152 | .00138 | .02680 | .00093 | -.00048 | -.0002 |
| Stddev | .00041 | .00001 | .00034 | .00380 | .00025 | .00056 | .0004 |
| %RSD | 1392.6 | .91702 | 24.435 | 14.165 | 27.073 | 117.07 | 200.9 |

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00027 | .00081 | .00260 | -.00058 | -.00098 | .00136 | .00211 |
| Stddev | .00031 | .00001 | .00003 | .00017 | .00058 | .00015 | .00009 |
| %RSD | 113.05 | 1.2613 | 1.0245 | 28.447 | 59.516 | 10.956 | 4.4603 |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | Cts/S |
| Avg | -.00172 |
| Stddev | .00151 |
| %RSD | 87.770 |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6297.5 | 4147.9 | 45509. | 3386.8 |
| Stddev | 12.0 | 6.7 | 98. | 1.9 |
| %RSD | .19067 | .16138 | .21479 | .05551 |

Sample Name: SCAL1-4032031 Acquired: 5/10/2019 11:54:52 Type: Cal
Method: ICP I9 6010 200.7 Methods(v692) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | As1890 | B_1826 | Ba4554 | Be3130 | Cd2288 | Co2286 | Cr2677 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .67222 | .11544 | 4.8202 | 32.863 | 14.835 | 2.587 | 3.7386 | 1.1868 |
| Stddev | .00260 | .00071 | .0162 | .089 | .057 | .011 | .0193 | .0045 |
| %RSD | .38701 | .61653 | .33655 | .27132 | .38153 | .4253 | .51576 | .37746 |

| Elem | Cu3273 | Li6707 | Mn2576 | Mo2020 | Ni2316 | Pb2203 | Sb2175 | Se1960 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_3600) | (Y_2243) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .83733 | 13.968 | 7.9933 | 4.4037 | 1.9937 | .37706 | .1632 | .11372 |
| Stddev | .00154 | .022 | .0660 | .0249 | .0098 | .00092 | .0008 | .00069 |
| %RSD | .18341 | .15714 | .82585 | .56468 | .49397 | .24385 | .5095 | .60492 |

| Elem | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Sr3464 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.9491 | 8.9635 | .28699 | .47858 | 5.1018 | 1.6755 |
| Stddev | .0192 | .0117 | .00190 | .00301 | .0298 | .0064 |
| %RSD | .65036 | .13039 | .66317 | .62927 | .58398 | .37991 |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5874.1 | 4041.8 | 44096. | 3332.8 |
| Stddev | 15.2 | 5.4 | 80. | 10.7 |
| %RSD | .25819 | .13467 | .18151 | .32023 |

Sample Name: SCAL2-4050066 Acquired: 5/10/2019 11:59:11 Type: Cal
Method: ICP I9 6010 200.7 Methods(v692) Mode: IR Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Al3082 | Ca3179 | Fe2599 | K_7664 | Mg2790 | Na5895 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .96474 | 16.253 | 6.8901 | 6.0693 | 1.7256 | 25.645 | .45672 |
| Stddev | .00176 | .036 | .0242 | .0272 | .0053 | .082 | .00126 |
| %RSD | .18205 | .21890 | .35136 | .44859 | .30640 | .31972 | .27497 |

| Int. Std. | Y_3710 |
|---|---|
| Units | Cts/S |
| Avg | 3263.3 |
| Stddev | 12.2 |
| %RSD | .37394 |

Sample Name: ICV-4050189 Acquired: 5/10/2019 12:03:24 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 762.37 | 12686. | 394.95 | 1567.9 | 1507.6 | 1504.3 | 25499. | 387.2 |
| Stddev | 4.22 | 42. | 1.90 | 5.5 | 3.7 | 5.3 | 55. | 1.3 |
| %RSD | .55322 | .33402 | .48085 | .35177 | .24541 | .35023 | .21728 | .3361 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1508.9 | 1495.0 | 1498.9 | 12887. | 25198. | 1046.2 | 25957. | 1535.9 |
| Stddev | 7.5 | 7.0 | 8.7 | 15. | 88. | 1.7 | 71. | 3.0 |
| %RSD | .49427 | .46996 | .58342 | .11393 | .35030 | .16439 | .27368 | .19511 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1518.9 | 25509. | 1510.3 | 381.84 | 391.4 | 392.23 | 1531.6 | 1528.7 |
| Stddev | 9.5 | 55. | 6.1 | 4.55 | 2.8 | 3.48 | 7.8 | 1.9 |
| %RSD | .62867 | .21515 | .40308 | 1.1913 | .7243 | .88715 | .50858 | .12259 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: ICV-4050189 Acquired: 5/10/2019 12:03:24 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 773.45 | 1505.1 | 1535.3 | 4997.5 | 4609.3 |
| Stddev | 6.21 | 4.6 | 7.2 | 6.5 | 18.1 |
| %RSD | .80280 | .30320 | .46990 | .12911 | .39293 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5803.4 | 4044.8 | 43920. | 3359.3 |
| Stddev | 9.4 | 8.4 | 129. | 5.3 |
| %RSD | .16157 | .20864 | .29297 | .15851 |

Sample Name: ICB Acquired: 5/10/2019 12:07:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15593 | -26.344 | 2.6841 | 6.4552 | .09424 | -.04007 | -.85273 | -.0329 |
| Stddev | .42008 | 58.171 | 1.0280 | .2590 | .27226 | .22699 | 4.7501 | .0608 |
| %RSD | 269.40 | 220.81 | 38.300 | 4.0128 | 288.89 | 566.52 | 557.05 | 184.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15075 | .12262 | .54032 | 1.4147 | -10.985 | 3.2096 | 15.968 | .00947 |
| Stddev | .45319 | .15714 | .40250 | 3.5109 | 19.545 | 3.8250 | 27.438 | .01507 |
| %RSD | 300.63 | 128.15 | 74.492 | 248.18 | 177.93 | 119.17 | 171.83 | 159.06 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.3817 | -9.0832 | .75889 | 1.7953 | -.2307 | .37219 | .23633 | .46963 |
| Stddev | .5945 | 4.1619 | .30398 | 1.1676 | 1.201 | .21475 | .25709 | .19630 |
| %RSD | 11.046 | 45.820 | 40.056 | 65.039 | 520.7 | 57.699 | 108.78 | 41.799 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: ICB Acquired: 5/10/2019 12:07:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .42351 | 1.6746 | .11726 | -16.133 | .54341 |
| Stddev | .88495 | 2.6789 | .08438 | 10.348 | 3.4672 |
| %RSD | 208.96 | 159.98 | 71.959 | 64.143 | 638.05 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6306.0 | 4149.2 | 45547. | 3424.9 |
| Stddev | 5.6 | 9.3 | 134. | 4.9 |
| %RSD | .08842 | .22481 | .29498 | .14362 |

Sample Name: DNUICVL-4100714 Acquired: 5/10/2019 12:11:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.365 | W 147.26 | W 18.378 | 106.79 | 199.61 | 5.0757 | 5169.4 |
| Stddev | .328 | 21.92 | .904 | .60 | .82 | .2807 | 26.0 |
| %RSD | 3.1682 | 14.887 | 4.9172 | .55826 | .41135 | 5.5307 | .50361 |
| Check ? | Chk Pass | Chk Warn | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | 200.00 | 15.000 | | | | |
| Range | | -20.500% | 20.500% | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.165 | 9.9372 | 9.9472 | 25.768 | 204.77 | 5002.5 | 52.750 |
| Stddev | .197 | .0867 | .2123 | .647 | .53 | 21.7 | 2.828 |
| %RSD | 3.805 | .87299 | 2.1342 | 2.5103 | .25948 | .43314 | 5.3604 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5245.5 | 15.690 | 41.511 | 5079.3 | 39.975 | 10.101 | 21.94 |
| Stddev | 62.8 | .077 | .296 | 19.6 | .511 | .453 | 1.46 |
| %RSD | 1.1965 | .49134 | .71420 | .38499 | 1.2788 | 4.4886 | 6.650 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: DNUICVL-4100714 Acquired: 5/10/2019 12:11:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20.069 | 99.711 | 50.357 | 20.143 | 53.997 | 51.477 | 487.50 |
| Stddev | .793 | .807 | .339 | .769 | 11.954 | .175 | 22.48 |
| %RSD | 3.9508 | .80911 | .67269 | 3.8182 | 22.138 | .33971 | 4.6113 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 47.510 |
| Stddev | 6.062 |
| %RSD | 12.760 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6165.7 | 4105.6 | 44990. | 3358.2 |
| Stddev | 4.9 | 8.0 | 53. | 17.4 |
| %RSD | .07904 | .19443 | .11850 | .51944 |

Sample Name: CRILL-4054130 Acquired: 5/10/2019 12:16:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0040 | 179.83 | 13.120 | 215.26 | 207.52 | 5.6044 | 5345.4 |
| Stddev | .2473 | 51.13 | 2.748 | .77 | 1.09 | .0856 | 32.1 |
| %RSD | 4.9419 | 28.433 | 20.949 | .35777 | .52726 | 1.5277 | .60127 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.203 | 7.4771 | 5.6562 | 25.878 | 112.78 | 5126.0 | 55.235 |
| Stddev | .193 | .5535 | .3157 | .552 | .24 | 64.5 | 2.652 |
| %RSD | 8.773 | 7.4028 | 5.5808 | 2.1336 | .21089 | 1.2582 | 4.8011 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5488.6 | 15.986 | 11.243 | 5306.8 | 42.371 | 2.8219 | 10.91 |
| Stddev | 33.4 | .073 | .312 | 14.4 | .601 | 1.0425 | 1.92 |
| %RSD | .60817 | .45449 | 2.7792 | .27167 | 1.4185 | 36.942 | 17.58 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: CRILL-4054130 Acquired: 5/10/2019 12:16:02 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.7389 | 103.96 | 52.044 | 10.518 | F 10.865 | 20.673 | 513.71 |
| Stddev | .8172 | 1.17 | .630 | .501 | .649 | .089 | 3.17 |
| %RSD | 17.245 | 1.1260 | 1.2101 | 4.7626 | 5.9748 | .43211 | .61622 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | | | 7.0000 | | |
| Range | | | | | 50.500% | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 55.911 |
| Stddev | .238 |
| %RSD | .42638 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6157.1 | 4105.2 | 44980. | 3361.1 |
| Stddev | 5.4 | 3.9 | 34. | 22.9 |
| %RSD | .08847 | .09387 | .07524 | .68137 |

Sample Name: ICSA-4032305 Acquired: 5/10/2019 12:20:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.21286 | 508840. | -1.1895 | -3.7342 | .06641 | .51530 | 483340. |
| Stddev | .17261 | 219. | 1.7376 | .2495 | .19739 | .11208 | 3915. |
| %RSD | 81.093 | .04294 | 146.07 | 6.6804 | 297.24 | 21.750 | .80998 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .6711 | -.36382 | 4.5540 | 4.7163 | 192860. | 77.402 | 15.573 |
| Stddev | .1700 | .17994 | .2652 | 1.1139 | 219. | 21.758 | 3.272 |
| %RSD | 25.34 | 49.457 | 5.8224 | 23.617 | .11331 | 28.110 | 21.009 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 503580. | 1.2292 | .62780 | 136.19 | 5.1302 | 2.8397 | 1.545 |
| Stddev | 693. | .0210 | .54173 | 6.01 | .2435 | .9428 | 8.080 |
| %RSD | .13766 | 1.7118 | 86.290 | 4.4152 | 4.7457 | 33.203 | 522.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: ICSA-4032305 Acquired: 5/10/2019 12:20:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.8049 | 4.1149 | -.28061 | 1.1211 | -5.1595 | .14516 | 7.7913 |
| Stddev | 2.1116 | .5304 | .24584 | 1.0255 | 3.4630 | .30507 | 2.8824 |
| %RSD | 116.99 | 12.890 | 87.607 | 91.476 | 67.119 | 210.16 | 36.995 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 4.0190 |
| Stddev | 6.3716 |
| %RSD | 158.54 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4955.2 | 3661.7 | 38989. | 3233.0 |
| Stddev | 11.3 | 5.4 | 114. | 23.2 |
| %RSD | .22819 | .14822 | .29174 | .71911 |

Sample Name: ICSAB-4100708 Acquired: 5/10/2019 12:24:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1093.1 | 502880. | 1046.7 | 519.05 | 504.94 | 499.63 | 477620. |
| Stddev | 3.2 | 1430. | 8.2 | 1.88 | 2.09 | 3.56 | 3223. |
| %RSD | .29698 | .28439 | .78277 | .36262 | .41336 | .71285 | .67471 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1047. | 511.17 | 498.63 | 528.50 | 192810. | 10621. | 543.26 |
| Stddev | 7. | 2.92 | 1.56 | 2.21 | 516. | 48. | 1.99 |
| %RSD | .6253 | .57209 | .31217 | .41906 | .26750 | .45307 | .36650 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 500450. | 505.96 | 991.73 | 10691. | 1011.0 | 929.84 | 1041. |
| Stddev | 2440. | .62 | 8.50 | 46. | 7.8 | 4.01 | 10. |
| %RSD | .48746 | .12292 | .85676 | .42872 | .77253 | .43166 | .9759 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: ICSAB-4100708 Acquired: 5/10/2019 12:24:34 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1025.9 | 521.07 | 514.63 | 979.98 | 491.82 | 1026.2 | 10081. |
| Stddev | 5.2 | 4.69 | .63 | 8.92 | 2.32 | 6.5 | 67. |
| %RSD | .50480 | .89972 | .12305 | .91005 | .47197 | .63427 | .66906 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1481.3 |
| Stddev | 27.6 |
| %RSD | 1.8644 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4901.5 | 3650.3 | 38905. | 3260.7 |
| Stddev | 8.8 | 3.9 | 99. | 18.4 |
| %RSD | .17965 | .10783 | .25536 | .56571 |

Sample Name: CCV-4140446 Acquired: 5/10/2019 12:28:42 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1005.2 | 25286. | 523.14 | 5210.9 | 2020.1 | 2043.2 | 50819. | 516.5 |
| Stddev | .3 | 26. | 2.32 | 4.8 | 4.1 | 13.4 | 96. | 1.3 |
| %RSD | .03151 | .10455 | .44343 | .09263 | .20329 | .65555 | .18837 | .2577 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2067.7 | 2011.4 | 2001.4 | 25635. | 50625. | 5077.0 | 51208. | 2038.1 |
| Stddev | 2.4 | 3.7 | 1.3 | 27. | 285. | 15.3 | 314. | 1.9 |
| %RSD | .11398 | .18583 | .06343 | .10596 | .56212 | .30124 | .61379 | .09413 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2064.8 | 51104. | 2066.2 | 498.54 | 512.5 | 522.45 | 5204.3 | 5120.3 |
| Stddev | 4.8 | 271. | 4.6 | 1.47 | 5.7 | 2.41 | 9.8 | 3.7 |
| %RSD | .23092 | .52979 | .22213 | .29558 | 1.109 | .46206 | .18864 | .07280 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 12:28:42 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1026.3 | 2025.2 | 2097.6 | 4997.5 | 5056.9 |
| Stddev | 2.4 | 8.6 | 3.9 | 33.6 | 20.9 |
| %RSD | .23145 | .42311 | .18451 | .67289 | .41347 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5537.9 | 3948.0 | 42871. | 3322.7 |
| Stddev | 9.7 | 6.1 | 118. | 28.7 |
| %RSD | .17435 | .15567 | .27588 | .86359 |

Sample Name: CCB Acquired: 5/10/2019 12:32:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.51699 | -7.8132 | 3.5167 | 7.4824 | .24157 | .28154 | 23.508 | .0329 |
| Stddev | .07230 | 43.880 | 1.7172 | .8519 | .15564 | .32825 | 4.629 | .1782 |
| %RSD | 13.985 | 561.61 | 48.829 | 11.385 | 64.429 | 116.59 | 19.690 | 542.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15978 | -.02960 | -.00367 | 8.6093 | 42.417 | 4.8100 | -7.6672 | .43088 |
| Stddev | .10737 | .26645 | .24283 | 1.6475 | 37.782 | 2.0621 | 33.760 | .00157 |
| %RSD | 67.202 | 900.20 | 6612.7 | 19.136 | 89.074 | 42.872 | 440.31 | .36520 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.9592 | -8.8774 | .22929 | -.07634 | 2.158 | -.85437 | .95217 | 1.2241 |
| Stddev | .4508 | 11.287 | .37712 | .92289 | 1.828 | 2.2071 | .26534 | .0985 |
| %RSD | 7.5655 | 127.14 | 164.47 | 1208.9 | 84.72 | 258.33 | 27.867 | 8.0465 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 12:32:41 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .82406 | -.07630 | 1.2821 | -8.6276 | -1.5274 |
| Stddev | .76711 | 5.5539 | .0755 | 13.912 | 6.4180 |
| %RSD | 93.089 | 7278.9 | 5.8907 | 161.25 | 420.18 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6259.8 | 4135.8 | 45362. | 3388.0 |
| Stddev | 10.9 | 10.3 | 29. | 21.0 |
| %RSD | .17351 | .24901 | .06467 | .61973 |

Sample Name: IEC Check As  Acquired: 5/10/2019 12:37:04  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.13244 | -29.803 | 5204.6 | 4.1481 | .04570 | .18819 | 2.6498 | -1.582 |
| Stddev | .29280 | 42.835 | 10.1 | .1786 | .69287 | .09312 | 2.3556 | .217 |
| %RSD | 221.07 | 143.73 | .19376 | 4.3065 | 1516.1 | 49.481 | 88.900 | 13.75 |
| Check ? | None | None | None | None | None | None | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19281 | -.34941 | .27784 | 7.0358 | -27.996 | -1.9146 | -7.4331 | -.02254 |
| Stddev | .18184 | .27674 | .87326 | 4.9780 | 28.822 | .8914 | 6.6854 | .02348 |
| %RSD | 94.308 | 79.203 | 314.30 | 70.752 | 102.95 | 46.562 | 89.941 | 104.16 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.5676 | -40.210 | -.05539 | .32247 | 1.769 | -.66915 | -.55828 | .01807 |
| Stddev | .2797 | 5.829 | .37682 | .32417 | 3.084 | 1.9188 | .43356 | .18502 |
| %RSD | 17.843 | 14.498 | 680.30 | 100.53 | 174.3 | 286.76 | 77.660 | 1024.2 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check As  Acquired: 5/10/2019 12:37:04  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.0869 | 2.0547 | .02045 | -10.632 | -4.0188 |
| Stddev | .6636 | 9.6232 | .10288 | 8.126 | 5.1462 |
| %RSD | 31.798 | 468.34 | 503.02 | 76.430 | 128.05 |
| Check ? | None | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6552.8 | 4256.1 | 46460. | 3484.9 |
| Stddev | 11.9 | 12.9 | 136. | 8.5 |
| %RSD | .18172 | .30376 | .29289 | .24264 |

Sample Name: IEC Check Ti  Acquired: 5/10/2019 12:41:23  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.53524 | 4.2179 | 10.434 | 39.329 | .22152 | -.19715 | 6.3629 | .2357 |
| Stddev | .34499 | 28.792 | 2.615 | 8.880 | .23924 | .09797 | 3.6097 | .0333 |
| %RSD | 64.456 | 682.63 | 25.058 | 22.578 | 108.00 | 49.693 | 56.730 | 14.15 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.04161 | .67220 | 2.4861 | 5.4497 | -74.031 | -1.2923 | -34.678 | .01791 |
| Stddev | .46501 | .21155 | .4819 | 4.5690 | 28.960 | 1.6504 | 34.296 | .06146 |
| %RSD | 1117.5 | 31.472 | 19.383 | 83.840 | 39.119 | 127.71 | 98.901 | 343.18 |
| Check ? | Chk Pass | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.3235 | -42.866 | -.94982 | -.26839 | 4.298 | 2.4411 | 2.8481 | 29693. |
| Stddev | .1129 | 2.575 | .56063 | 1.6939 | 1.830 | .4078 | .4736 | 25. |
| %RSD | 1.5418 | 6.0072 | 59.025 | 631.12 | 42.57 | 16.707 | 16.629 | .08501 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check Ti  Acquired: 5/10/2019 12:41:23  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.9014 | -.78787 | -.11516 | 17209. | -.46397 |
| Stddev | .6860 | 6.8748 | .07816 | 774. | 3.1811 |
| %RSD | 17.582 | 872.58 | 67.876 | 4.4951 | 685.63 |
| Check ? | Chk Pass | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6412.0 | 4225.9 | 46187. | 3479.7 |
| Stddev | 7.9 | 6.1 | 62. | 10.8 |
| %RSD | .12365 | .14514 | .13405 | .31108 |

Sample Name: IEC Check Co  Acquired: 5/10/2019 12:45:52  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .00547 | -12.136 | -.01129 | 29.153 | .04713 | .24315 | .17825 | .3076 |
| Stddev | .31166 | 13.475 | 2.0205 | 2.700 | .13113 | .01865 | 3.9179 | .1616 |
| %RSD | 5697.8 | 111.03 | 17898. | 9.2619 | 278.20 | 7.6709 | 2198.0 | 52.54 |
| Check ? | None | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10108. | -.17289 | -1.2128 | 1.9008 | -54.702 | -4.2842 | 5.6779 | -.10572 |
| Stddev | 5. | .21589 | .2689 | 4.6694 | 19.274 | 1.2061 | 37.644 | .02874 |
| %RSD | .05074 | 124.87 | 22.169 | 245.66 | 35.235 | 28.153 | 662.99 | 27.183 |
| Check ? | None | None | Chk Pass | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.39226 | -75.461 | -2.2687 | .80764 | 1.614 | -.16406 | -.32128 | 1.1565 |
| Stddev | .17743 | 25.218 | .3030 | .97213 | 1.690 | 2.5633 | .37085 | .1687 |
| %RSD | 45.233 | 33.419 | 13.356 | 120.37 | 104.7 | 1562.4 | 115.43 | 14.586 |
| Check ? | None | None | Chk Pass | None | Chk Pass | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check Co  Acquired: 5/10/2019 12:45:52  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2257 | 4.1201 | -.08487 | 807.45 | -7.6536 |
| Stddev | 1.1241 | 1.7128 | .13245 | 161.54 | 3.1687 |
| %RSD | 26.603 | 41.573 | 156.07 | 20.006 | 41.401 |
| Check ? | Chk Pass | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6441.7 | 4225.3 | 46337. | 3453.5 |
| Stddev | 21.0 | 6.6 | 58. | 3.6 |
| %RSD | .32549 | .15736 | .12525 | .10361 |

Sample Name: IEC Check Al  Acquired: 5/10/2019 12:50:12  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.42297 | 509420. | 3.5685 | 10.849 | .54111 | .00041 | 16.122 |
| Stddev | .25105 | 1034. | 1.9430 | 1.076 | .50217 | .25527 | 1.079 |
| %RSD | 59.353 | .20292 | 54.449 | 9.9166 | 92.804 | 61701. | 6.6946 |
| Check ? | None | None | Chk Pass | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0487 | .19089 | 4.2345 | .37143 | 49.114 | -36.684 | -.57695 |
| Stddev | .1161 | .15613 | .4421 | .31534 | 1.490 | 23.751 | 1.7795 |
| %RSD | 238.3 | 81.788 | 10.440 | 84.898 | 3.0334 | 64.745 | 308.43 |
| Check ? | None | None | None | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -16.128 | 1.3872 | -.17229 | 120.82 | .97000 | -.00766 | -.8498 |
| Stddev | 45.879 | .0458 | .36703 | 4.86 | .63226 | 1.6000 | 2.971 |
| %RSD | 284.46 | 3.2996 | 213.03 | 4.0253 | 65.181 | 20876. | 349.6 |
| Check ? | None | None | None | None | None | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: IEC Check Al  Acquired: 5/10/2019 12:50:12  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1412 | 3.1941 | 1.7452 | .01897 | 3.3028 | -.51370 | 77.948 |
| Stddev | 2.8157 | .2268 | .1346 | .99610 | 2.7388 | .11702 | 7.911 |
| %RSD | 246.73 | 7.1007 | 7.7102 | 5251.4 | 82.922 | 22.780 | 10.148 |
| Check ? | Chk Pass | None | None | Chk Pass | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -1.8000 |
| Stddev | 1.9684 |
| %RSD | 109.35 |
| Check ? | None |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5809.3 | 4098.0 | 42247. | 3479.9 |
| Stddev | 3.7 | 5.7 | 197. | 33.3 |
| %RSD | .06410 | .13841 | .46661 | .95610 |

Sample Name: IEC Check Fe  Acquired: 5/10/2019 12:54:26  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .02839 | -22.267 | 1.6740 | 7.0665 | 1.6139 | .37446 | 11.405 |
| Stddev | .56968 | 33.039 | 2.7050 | .1454 | .3447 | .15298 | 6.905 |
| %RSD | 2006.3 | 148.38 | 161.59 | 2.0573 | 21.361 | 40.853 | 60.541 |
| Check ? | None | None | None | None | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3522 | -.41520 | 1.4883 | .86751 | 503700. | -200.30 | -1.4453 |
| Stddev | .1858 | .34444 | .7139 | .80096 | 723. | 64.78 | 2.5826 |
| %RSD | 52.75 | 82.957 | 47.966 | 92.329 | .14358 | 32.340 | 178.69 |
| Check ? | Chk Pass | None | None | Chk Pass | None | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -96.741 | .91153 | -1.2584 | -78.326 | .72527 | -.00346 | 2.880 |
| Stddev | 28.239 | .02648 | .1131 | 13.890 | .64390 | .53417 | 1.978 |
| %RSD | 29.191 | 2.9053 | 8.9866 | 17.733 | 88.780 | 15417. | 68.67 |
| Check ? | None | None | None | None | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: IEC Check Fe  Acquired: 5/10/2019 12:54:26  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .42891 | 2.4609 | 1.2298 | 2.1082 | .00000 | 1.2275 | -.71744 |
| Stddev | 1.4869 | .1546 | .3466 | .5305 | 5.3639 | .0924 | 7.6732 |
| %RSD | 346.66 | 6.2834 | 28.187 | 25.164 | .00000 | 7.5262 | 1069.5 |
| Check ? | None | None | None | Chk Pass | Chk Pass | None | None |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 12.145 |
| Stddev | 5.756 |
| %RSD | 47.393 |
| Check ? | None |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6129.2 | 4049.1 | 43998. | 3386.2 |
| Stddev | 12.2 | 7.5 | 121. | 3.1 |
| %RSD | .19956 | .18492 | .27465 | .09059 |

Sample Name: IEC Check V  Acquired: 5/10/2019 12:58:48  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38775 | -21.365 | 1.4691 | 5.8828 | .15964 | .66421 | 1.8871 | .3803 |
| Stddev | .26405 | 31.870 | 1.4566 | .3732 | .12028 | .25824 | 2.5104 | .1815 |
| %RSD | 68.098 | 149.17 | 99.146 | 6.3435 | 75.346 | 38.879 | 133.03 | 47.73 |
| Check ? | None | Chk Pass | None | None | None | Chk Pass | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34290 | -.41697 | -1.8368 | 23.024 | -99.135 | -3.4410 | -1.2537 | .00028 |
| Stddev | .32890 | .24211 | .1436 | 7.319 | 11.392 | 3.9946 | 18.397 | .00739 |
| %RSD | 95.919 | 58.064 | 7.8160 | 31.787 | 11.491 | 116.09 | 1467.3 | 2665.1 |
| Check ? | None | None | None | None | None | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.4963 | -88.047 | .03957 | .95924 | -.2067 | 1.5972 | -.54949 | -.33166 |
| Stddev | .4115 | 5.469 | .15970 | 1.7446 | 2.405 | 2.4455 | .80660 | .07954 |
| %RSD | 16.486 | 6.2115 | 403.54 | 181.87 | 1163. | 153.11 | 146.79 | 23.982 |
| Check ? | None | None | None | None | Chk Pass | None | None | None |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: IEC Check V  Acquired: 5/10/2019 12:58:48  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.04592 | 5134.7 | -.11206 | 1.7055 | -2.4224 |
| Stddev | .95897 | 17.6 | .05285 | 2.8946 | 3.5254 |
| %RSD | 2088.6 | .34351 | 47.166 | 169.73 | 145.54 |
| Check ? | Chk Pass | None | None | None | None |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6428.6 | 4220.5 | 46036. | 3452.6 |
| Stddev | 8.1 | 5.8 | 54. | 4.7 |
| %RSD | .12629 | .13716 | .11684 | .13609 |

Sample Name: CCV-4140446 Acquired: 5/10/2019 13:03:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1017.4 | 25394. | 521.76 | 5240.9 | 2030.3 | 2052.4 | 51054. | 517.3 |
| Stddev | 1.8 | 113. | 2.27 | 6.2 | 6.7 | 13.6 | 142. | .4 |
| %RSD | .17395 | .44573 | .43448 | .11814 | .33108 | .66179 | .27825 | .0691 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2070.1 | 2019.4 | 2022.0 | 25698. | 50770. | 5071.6 | 51374. | 2054.7 |
| Stddev | 2.8 | 2.8 | 3.1 | 77. | 249. | 23.9 | 180. | 3.0 |
| %RSD | .13603 | .13626 | .15130 | .29776 | .49124 | .47167 | .35116 | .14482 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2053.1 | 51423. | 2065.6 | 498.21 | 516.9 | 523.05 | 5207.9 | 5127.6 |
| Stddev | 3.5 | 280. | 3.8 | 2.06 | .7 | 3.03 | 7.4 | 2.4 |
| %RSD | .17254 | .54394 | .18287 | .41383 | .1407 | .57858 | .14247 | .04739 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 13:03:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1024.5 | 2039.5 | 2101.3 | 5048.2 | 5068.7 |
| Stddev | 4.8 | 15.1 | 2.6 | 11.6 | 27.7 |
| %RSD | .46758 | .74251 | .12524 | .23011 | .54674 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5507.3 | 3927.4 | 42634. | 3328.6 |
| Stddev | 10.2 | 9.6 | 106. | 3.2 |
| %RSD | .18527 | .24370 | .24766 | .09532 |

Sample Name: CCB Acquired: 5/10/2019 13:07:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12118 | -59.311 | 3.4147 | 11.980 | .01450 | .08856 | 12.242 | -.2766 |
| Stddev | .30595 | 42.490 | 1.6486 | .757 | .31250 | .16376 | 3.976 | .1216 |
| %RSD | 252.47 | 71.640 | 48.280 | 6.3185 | 2154.4 | 184.91 | 32.473 | 43.96 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12231 | .06061 | -.12596 | 6.0944 | -27.164 | 5.3957 | -20.239 | .41454 |
| Stddev | .24730 | .45711 | .33106 | 1.3248 | 22.316 | 2.8729 | 13.934 | .07455 |
| %RSD | 202.20 | 754.19 | 262.82 | 21.737 | 82.150 | 53.243 | 68.849 | 17.984 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7365 | -55.561 | .31587 | .72448 | .3456 | 1.6184 | .52519 | 1.2315 |
| Stddev | .3509 | 7.441 | .56706 | .97697 | 2.224 | 1.4459 | .89353 | .1541 |
| %RSD | 6.1179 | 13.392 | 179.52 | 134.85 | 643.5 | 89.339 | 170.14 | 12.513 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 13:07:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.27149 | -4.7658 | 1.3150 | -10.800 | -3.1916 |
| Stddev | 1.4708 | 8.3192 | .0973 | 13.687 | 4.0506 |
| %RSD | 541.74 | 174.56 | 7.3959 | 126.73 | 126.91 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6197.7 | 4088.1 | 44758. | 3366.0 |
| Stddev | 7.4 | 6.5 | 112. | 16.1 |
| %RSD | .11917 | .15825 | .24933 | .47952 |

Sample Name: ICVL-4100714 Acquired: 5/10/2019 13:11:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.6755 | 187.06 | W 18.165 | 109.73 | 199.44 | 5.2270 | 5153.9 |
| Stddev | .1441 | 17.09 | 3.194 | .67 | .36 | .3057 | 38.9 |
| %RSD | 1.4896 | 9.1364 | 17.583 | .60828 | .18242 | 5.8480 | .75536 |
| Check ? | Chk Pass | Chk Pass | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | 15.000 | | | | |
| Range | | | 20.500% | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.942 | 9.7931 | 9.8282 | 25.357 | 208.83 | 5055.7 | 54.252 |
| Stddev | .041 | .2471 | .1529 | .460 | 5.05 | 58.8 | 1.702 |
| %RSD | .8198 | 2.5233 | 1.5558 | 1.8149 | 2.4185 | 1.1623 | 3.1372 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5291.8 | 15.631 | 41.055 | 5111.0 | 40.312 | 10.125 | 21.42 |
| Stddev | 3.8 | .058 | .310 | 9.7 | .377 | .932 | 1.03 |
| %RSD | .07233 | .37385 | .75418 | .18983 | .93528 | 9.2049 | 4.803 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

Sample Name: ICVL-4100714 Acquired: 5/10/2019 13:11:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18.645 | 99.863 | 50.678 | 19.350 | 49.078 | 51.677 | 496.07 |
| Stddev | 1.220 | 1.491 | .252 | .528 | 1.794 | .392 | 20.00 |
| %RSD | 6.5450 | 1.4933 | .49802 | 2.7309 | 3.6555 | .75927 | 4.0327 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | |
| Range | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 53.109 |
| Stddev | 6.639 |
| %RSD | 12.501 |
| Check ? | Chk Pass |
| Value | |
| Range | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6125.9 | 4084.8 | 44880. | 3326.4 |
| Stddev | 12.4 | 6.9 | 134. | 6.9 |
| %RSD | .20228 | .16901 | .29875 | .20597 |

Sample Name: 240-112128-a1d msd@5 Acquired: 5/10/2019 13:15:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 197.05 | 418.31 | 1067.6 | 229.69 | 3513.2 | 10.428 | 559030. |
| Stddev | .90 | 39.23 | 5.4 | .53 | 3.4 | .380 | 3620. |
| %RSD | .45747 | 9.3784 | .50613 | .23004 | .09586 | 3.6461 | .64762 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 206.5 | 102.34 | 1121.7 | 54.584 | 208.09 | 112320. | 280.60 |
| Stddev | .7 | .46 | 1.0 | .744 | 5.24 | 187. | 4.23 |
| %RSD | .3215 | .44976 | .09036 | 1.3622 | 2.5187 | .16651 | 1.5059 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10005. | 99.835 | 256.53 | 133140. | 105.04 | 1079.7 | 104.9 |
| Stddev | 94. | .218 | 2.10 | 174. | .64 | 3.9 | 3.9 |
| %RSD | .94115 | .21862 | .81807 | .13036 | .61257 | .36108 | 3.705 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112128-a1d msd@5 Acquired: 5/10/2019 13:15:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 225.40 | 411.87 | 198.70 | 392.91 | 92.119 | 435.73 | 240.58 |
| Stddev | 3.01 | .62 | .06 | 2.29 | 2.249 | .82 | 8.97 |
| %RSD | 1.3351 | .14950 | .02992 | .58376 | 2.4412 | .18865 | 3.7296 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1737.8 |
| Stddev | 13.3 |
| %RSD | .76603 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5216.8 | 3763.9 | 41057. | 3261.8 |
| Stddev | 15.7 | 9.6 | 55. | 11.9 |
| %RSD | .30106 | .25502 | .13344 | .36408 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.840% | 90.743% | 90.216% | 96.309% |
| Range | | | | |

Sample Name: mb 240-380416/1-a Acquired: 5/10/2019 13:19:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.16562 | -68.814 | 3.9322 | 5.7530 | .37883 | .21970 | 95.371 | .1117 |
| Stddev | .14255 | 17.827 | .9156 | .2111 | .23014 | .11107 | 7.586 | .0708 |
| %RSD | 86.068 | 25.906 | 23.286 | 3.6693 | 60.749 | 50.558 | 7.9546 | 63.35 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .00079 | .33559 | -.69530 | 17.948 | 168.01 | .32126 | 2.2596 | 1.1690 |
| Stddev | .40667 | .30287 | .35419 | 1.243 | 41.70 | 3.4842 | 15.820 | .0379 |
| %RSD | 51370. | 90.248 | 50.941 | 6.9248 | 24.818 | 1084.5 | 700.13 | 3.2436 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6652 | -1.2348 | .88147 | .16577 | .5053 | .05709 | 42.393 | .40368 |
| Stddev | .1230 | 12.584 | .43602 | .91513 | 2.170 | 1.6890 | .252 | .09818 |
| %RSD | 7.3875 | 1019.1 | 49.465 | 552.04 | 429.4 | 2958.5 | .59530 | 24.320 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380416/1-a Acquired: 5/10/2019 13:19:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .17945 | .53884 | 3.0477 | -6.5219 | .32346 |
| Stddev | 1.0310 | 4.9438 | .0587 | 13.617 | 7.3536 |
| %RSD | 574.53 | 917.49 | 1.9252 | 208.80 | 2273.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6201.8 | 4134.9 | 45681. | 3402.5 |
| Stddev | 6.6 | 10.9 | 114. | 7.9 |
| %RSD | .10716 | .26282 | .24856 | .23333 |

Sample Name: lcs 240-380416/2-a Acquired: 5/10/2019 13:24:18 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48.878 | 1983.2 | 2011.6 | 988.51 | 1919.7 | 49.060 | 48335. | 49.39 |
| Stddev | .128 | 7.1 | 3.7 | .89 | 2.9 | .519 | 83. | .17 |
| %RSD | .26102 | .35904 | .18262 | .09044 | .15134 | 1.0577 | .17200 | .3469 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 497.03 | 197.92 | 245.36 | 1025.4 | 48292. | 984.56 | 49465. | 502.89 |
| Stddev | 1.23 | .57 | 1.84 | 12.5 | 141. | 3.66 | 294. | .89 |
| %RSD | .24774 | .28989 | .74863 | 1.2197 | .29294 | .37129 | .59342 | .17658 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 980.53 | 49025. | 500.68 | 486.30 | 491.6 | 2003.9 | 2023.4 | 984.72 |
| Stddev | 1.81 | 123. | 1.14 | .71 | 2.7 | 5.3 | 6.2 | .77 |
| %RSD | .18432 | .25142 | .22814 | .14677 | .5512 | .26444 | .30565 | .07863 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380416/2-a Acquired: 5/10/2019 13:24:18 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1958.8 | 494.97 | 514.94 | 991.16 | 980.80 |
| Stddev | 8.5 | 9.71 | 1.55 | 4.49 | 4.95 |
| %RSD | .43523 | 1.9621 | .30134 | .45256 | .50508 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5607.7 | 3940.8 | 42735. | 3339.3 |
| Stddev | 18.3 | 6.9 | 23. | 12.3 |
| %RSD | .32708 | .17418 | .05372 | .36929 |

Sample Name: 240-112138-a-3-b Acquired: 5/10/2019 13:28:20 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.31974 | 18084. | 11.562 | 29.927 | 171.73 | .62099 | 327080. |
| Stddev | .35829 | 70. | 2.740 | .186 | .26 | .07181 | 2574. |
| %RSD | 112.06 | .38482 | 23.702 | .62204 | .15337 | 11.563 | .78705 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.506 | 11.628 | 28.731 | 31.558 | 20296. | 2074.1 | 29.501 |
| Stddev | .106 | .116 | .521 | .775 | 28. | 46.4 | 2.571 |
| %RSD | 4.219 | .99938 | 1.8143 | 2.4545 | .14021 | 2.2377 | 8.7156 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 78620. | 435.47 | 5.7603 | 1034.1 | 30.640 | 343.36 | 1.502 |
| Stddev | 364. | .95 | .4467 | 3.7 | .594 | 1.43 | 1.113 |
| %RSD | .46293 | .21734 | 7.7545 | .35387 | 1.9384 | .41689 | 74.12 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112138-a-3-b  Acquired: 5/10/2019 13:28:20  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.4418 | 34.214 | 770.04 | -.50012 | 46.756 | 784.44 | 5697.6 |
| Stddev | 2.3523 | .454 | .10 | .32807 | 3.290 | 2.50 | 138.7 |
| %RSD | 96.333 | 1.3259 | .01318 | 65.599 | 7.0364 | .31888 | 2.4335 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 281.32 |
| Stddev | 10.41 |
| %RSD | 3.6999 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5452.1 | 3958.0 | 42968. | 3397.1 |
| Stddev | 11.3 | 11.5 | 40. | 15.2 |
| %RSD | .20806 | .29076 | .09201 | .44735 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.576% | 95.423% | 94.417% | 100.30% |
| Range | | | | |

Sample Name: SD 240-112138-a-3b@5 Acquired: 5/10/2019 13:32:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.56912 | 3531.8 | 2.7516 | 7.0138 | 34.280 | .42894 | 65794. | .6921 |
| Stddev | .58308 | 54.3 | 2.7015 | .4874 | .445 | .15836 | 62. | .2985 |
| %RSD | 102.45 | 1.5367 | 98.182 | 6.9490 | 1.2977 | 36.919 | .09408 | 43.13 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.5314 | 6.5286 | 6.3641 | 4159.6 | 392.52 | 5.7597 | 16340. | 87.752 |
| Stddev | .2798 | .2578 | .3806 | 6.3 | 36.92 | 2.0165 | 33. | .035 |
| %RSD | 11.052 | 3.9491 | 5.9806 | .15126 | 9.4060 | 35.011 | .20418 | .03993 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .87573 | 148.86 | 6.6480 | 70.343 | 1.865 | 2.4501 | 6.6433 | 150.93 |
| Stddev | .14223 | 9.63 | .2555 | 2.832 | 1.370 | .5571 | .3749 | .42 |
| %RSD | 16.241 | 6.4702 | 3.8438 | 4.0256 | 73.44 | 22.737 | 5.6435 | .27761 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112138-a-3b@5 Acquired: 5/10/2019 13:32:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .40666 | 11.828 | 153.84 | 1117.8 | 60.205 |
| Stddev | .73789 | 6.456 | 1.96 | 20.6 | 2.055 |
| %RSD | 181.45 | 54.582 | 1.2719 | 1.8420 | 3.4137 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5914.8 | 4024.7 | 43995. | 3322.8 |
| Stddev | 7.1 | 4.4 | 17. | 14.4 |
| %RSD | .12035 | .10967 | .03802 | .43260 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.923% | 97.031% | 96.672% | 98.109% |
| Range | | | | |

Sample Name: 240-112138-a-3-c ms  Acquired: 5/10/2019 13:36:56  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.012 | 20979. | 2007.0 | 1031.1 | 2025.4 | 48.412 | 384030. |
| Stddev | .537 | 14. | 5.8 | 2.3 | 3.2 | .115 | 1303. |
| %RSD | 1.1416 | .06714 | .29029 | .22196 | .15995 | .23744 | .33924 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.09 | 511.17 | 212.39 | 261.88 | 23013. | 51631. | 1034.9 |
| Stddev | .08 | 1.67 | 1.09 | .47 | 50. | 208. | 3.5 |
| %RSD | .1656 | .32640 | .51553 | .18124 | .21775 | .40211 | .34042 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 143600. | 937.83 | 949.07 | 50727. | 534.58 | 509.76 | 437.6 |
| Stddev | 437. | .18 | 2.83 | 144. | 2.39 | 3.02 | 4.4 |
| %RSD | .30408 | .01881 | .29854 | .28430 | .44670 | .59294 | 1.006 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112138-a-3-c ms  Acquired: 5/10/2019 13:36:56  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1980.5 | 1992.4 | 1947.2 | 1940.2 | 522.08 | 1133.3 | 5947.8 |
| Stddev | 6.7 | 10.7 | 1.7 | 10.5 | 4.68 | 2.4 | 32.1 |
| %RSD | .33823 | .53826 | .08651 | .54201 | .89675 | .21557 | .53940 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1243.2 |
| Stddev | 4.5 |
| %RSD | .36130 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5136.3 | 3825.7 | 42012. | 3289.9 |
| Stddev | 4.0 | 4.7 | 93. | 33.8 |
| %RSD | .07883 | .12312 | .22139 | 1.0262 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.561% | 92.233% | 92.316% | 97.139% |
| Range | | | | |

Sample Name: 240-112138-a-3-d msd  Acquired: 5/10/2019 13:41:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.352 | 20277. | 1992.9 | 1011.2 | 2007.1 | 48.419 | 335480. |
| Stddev | .484 | 132. | 9.7 | 3.0 | 7.3 | .648 | 4808. |
| %RSD | 1.0215 | .64924 | .48656 | .29470 | .36446 | 1.3391 | 1.4332 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.17 | 507.90 | 215.33 | 261.49 | 20026. | 50745. | 1012.9 |
| Stddev | .43 | 2.47 | 1.30 | 1.56 | 79. | 122. | 4.7 |
| %RSD | .8529 | .48577 | .60381 | .59654 | .39283 | .24004 | .46469 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 116070. | 974.44 | 944.11 | 50109. | 530.35 | 508.00 | 431.3 |
| Stddev | 352. | 2.73 | 5.31 | 203. | 2.67 | 1.61 | 3.9 |
| %RSD | .30314 | .28057 | .56289 | .40510 | .50292 | .31790 | .9016 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112138-a-3-d msd  Acquired: 5/10/2019 13:41:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1968.0 | 1965.1 | 1749.5 | 1927.7 | 511.84 | 1126.6 | 5921.8 |
| Stddev | 12.2 | 11.1 | 2.0 | 11.1 | 4.35 | 5.3 | 57.0 |
| %RSD | .62074 | .56402 | .11568 | .57389 | .85037 | .47172 | .96305 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1216.2 |
| Stddev | 3.5 |
| %RSD | .28746 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5206.8 | 3863.3 | 42233. | 3331.4 |
| Stddev | 5.9 | 5.1 | 89. | 14.4 |
| %RSD | .11366 | .13253 | .21166 | .43367 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.680% | 93.139% | 92.802% | 98.365% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 13:45:09 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1001.7 | 25292. | 522.38 | 5209.1 | 2029.0 | 2043.7 | 50970. | 515.9 |
| Stddev | 3.4 | 68. | 3.79 | 11.7 | 7.1 | 10.6 | 135. | 2.3 |
| %RSD | .33473 | .26786 | .72622 | .22373 | .35157 | .51679 | .26550 | .4412 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2071.8 | 2007.4 | 1993.0 | 25831. | 51238. | 5116.8 | 51842. | 2034.8 |
| Stddev | 11.3 | 4.1 | 2.7 | 84. | 241. | 25.5 | 299. | 2.7 |
| %RSD | .54376 | .20354 | .13449 | .32545 | .47029 | .49814 | .57700 | .13234 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2066.2 | 51769. | 2072.2 | 498.06 | 514.0 | 522.99 | 5228.0 | 5123.3 |
| Stddev | 9.6 | 235. | 12.8 | 3.42 | 1.4 | 2.17 | 32.0 | 2.5 |
| %RSD | .46390 | .45396 | .61775 | .68619 | .2663 | .41541 | .61227 | .04868 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 13:45:09 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1027.8 | 2032.2 | 2106.9 | 5006.9 | 5119.2 |
| Stddev | 7.8 | 5.1 | 11.3 | 23.3 | 30.9 |
| %RSD | .75898 | .25273 | .53455 | .46545 | .60428 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5490.2 | 3922.2 | 42484. | 3286.8 |
| Stddev | 2.6 | 4.3 | 89. | 14.9 |
| %RSD | .04716 | .11023 | .20857 | .45327 |

Sample Name: CCB Acquired: 5/10/2019 13:49:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15198 | -54.884 | 3.6235 | 8.9478 | .30407 | .10899 | 26.631 | -.0310 |
| Stddev | .36409 | 13.276 | 1.7603 | .6395 | .15661 | .15270 | 6.964 | .2395 |
| %RSD | 239.57 | 24.190 | 48.581 | 7.1471 | 51.505 | 140.11 | 26.151 | 773.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .02549 | -.18756 | -.67847 | 4.0958 | 60.381 | 4.3430 | -2.1715 | .51247 |
| Stddev | .06438 | .38800 | .57029 | 2.1352 | 8.337 | 1.5996 | 30.319 | .01352 |
| %RSD | 252.55 | 206.87 | 84.056 | 52.130 | 13.807 | 36.831 | 1396.2 | 2.6378 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.8360 | -61.522 | .50811 | .43468 | .2266 | 2.3113 | 1.1549 | 1.1973 |
| Stddev | .3704 | 2.700 | .20217 | .92237 | .8105 | 2.2201 | .4673 | .0993 |
| %RSD | 6.3461 | 4.3879 | 39.788 | 212.20 | 357.8 | 96.053 | 40.458 | 8.2909 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 13:49:07 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.26782 | -2.1959 | 1.5455 | -13.030 | -3.6758 |
| Stddev | .39494 | 3.0743 | .0219 | 3.868 | 4.4295 |
| %RSD | 147.47 | 140.00 | 1.4168 | 29.682 | 120.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6225.4 | 4100.9 | 45307. | 3338.9 |
| Stddev | 10.4 | 5.8 | 175. | 7.8 |
| %RSD | .16698 | .14120 | .38585 | .23390 |

Sample Name: PDS 240-112138-a-3-b Acquired: 5/10/2019 14:04:11 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.050 | 19484. | 2146.9 | 1090.5 | 2213.0 | 51.725 | 367700. |
| Stddev | .492 | 25. | .7 | 1.1 | 3.7 | .269 | 2328. |
| %RSD | .94606 | .12872 | .03466 | .10221 | .16559 | .51978 | .63300 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55.59 | 546.94 | 227.79 | 283.60 | 20956. | 55178. | 1102.9 |
| Stddev | .22 | .98 | .20 | 1.70 | 13. | 253. | 3.5 |
| %RSD | .4015 | .17878 | .08687 | .60116 | .06032 | .45790 | .32184 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 128910. | 919.43 | 1076.6 | 54523. | 567.79 | 828.54 | 532.8 |
| Stddev | 323. | 2.67 | 1.2 | 172. | .36 | 1.37 | 3.8 |
| %RSD | .25022 | .29000 | .11528 | .31540 | .06291 | .16537 | .7169 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: PDS 240-112138-a-3-b  Acquired: 5/10/2019 14:04:11  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2148.6 | 2273.9 | 1818.6 | 2119.1 | 563.24 | 1332.7 | 6709.1 |
| Stddev | 3.9 | 2.4 | 2.4 | 4.7 | 3.16 | 1.4 | 109.8 |
| %RSD | .18121 | .10735 | .13243 | .22190 | .56026 | .10168 | 1.6365 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1306.7 |
| Stddev | 8.3 |
| %RSD | .63349 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5191.8 | 3857.1 | 41966. | 3304.4 |
| Stddev | 7.1 | 8.0 | 76. | 9.5 |
| %RSD | .13650 | .20822 | .18060 | .28635 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.443% | 92.989% | 92.214% | 97.566% |
| Range | | | | |

Sample Name: lb 240-380297/1-b Acquired: 5/10/2019 14:08:19 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.38731 | -18.207 | F 11.407 | F 654.48 | 3.8165 | .25903 |
| Stddev | .32751 | 68.457 | 2.113 | 2.72 | .3119 | .42636 |
| %RSD | 84.561 | 375.99 | 18.523 | .41563 | 8.1722 | 164.60 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | 100.00 | | |
| Low Limit | | | -1000.0 | -1000.0 | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3067.0 | -.1544 | .11396 | 4.5051 | .41506 | 12.840 |
| Stddev | 18.7 | .2719 | .29683 | .7168 | .53899 | 1.004 |
| %RSD | .61014 | 176.1 | 260.46 | 15.911 | 129.86 | 7.8187 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1635.3 | 21.967 | 652.74 | 1.2241 | 4.3933 | 1235600. |
| Stddev | 113.6 | 4.144 | 20.70 | .0164 | .3043 | 34540. |
| %RSD | 6.9469 | 18.867 | 3.1715 | 1.3410 | 6.9268 | 2.7955 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: lb 240-380297/1-b  Acquired: 5/10/2019 14:08:19  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.8062 | -.71449 | 4.349 | F 6.3688 | 2.7964 | 1.1324 |
| Stddev | .8703 | 1.4561 | .279 | 1.8401 | .5988 | .1457 |
| %RSD | 22.865 | 203.80 | 6.421 | 28.893 | 21.414 | 12.863 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 5.0000 | | |
| Low Limit | | | | -1000.0 | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.0516 | -2.0189 | 11.314 | 369.24 | -.60934 |
| Stddev | .7576 | 1.6456 | .075 | 30.46 | 9.9677 |
| %RSD | 18.698 | 81.509 | .66731 | 8.2503 | 1635.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4968.6 | 3700.3 | 38673. | 3239.1 |
| Stddev | 5.3 | 5.6 | 10. | 8.7 |
| %RSD | .10726 | .15160 | .02678 | .26921 |

Sample Name: mb 240-380455/2-a Acquired: 5/10/2019 14:12:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .17384 | -31.829 | 2.0020 | 5.0059 | .02413 | -.10758 | 14.807 | .0892 |
| Stddev | .26683 | 5.875 | 2.3362 | .3944 | .25359 | .14310 | 3.098 | .1391 |
| %RSD | 153.49 | 18.459 | 116.69 | 7.8790 | 1050.9 | 133.02 | 20.920 | 156.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .21552 | .02644 | -.13767 | .79269 | 154.29 | 15.973 | -7.2537 | -.04133 |
| Stddev | .15533 | .10347 | .68449 | 3.4217 | 22.23 | 1.986 | 41.537 | .03914 |
| %RSD | 72.074 | 391.35 | 497.21 | 431.66 | 14.408 | 12.432 | 572.63 | 94.708 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .55029 | 439.37 | .50833 | .83491 | 1.400 | -.81188 | .11334 | -.09661 |
| Stddev | .45570 | 51.94 | .45163 | .36493 | 1.017 | .40580 | .27206 | .18846 |
| %RSD | 82.811 | 11.821 | 88.847 | 43.709 | 72.61 | 49.983 | 240.03 | 195.08 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380455/2-a Acquired: 5/10/2019 14:12:45 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.29756 | -.23879 | 1.3600 | 2.9747 | -2.0907 |
| Stddev | .69517 | 3.6054 | .0924 | 15.534 | 6.0605 |
| %RSD | 233.62 | 1509.9 | 6.7955 | 522.21 | 289.87 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6242.5 | 4150.7 | 46061. | 3361.5 |
| Stddev | 6.2 | 1.5 | 103. | 10.2 |
| %RSD | .09936 | .03687 | .22390 | .30458 |

Sample Name: lcs 240-380455/3-a Acquired: 5/10/2019 14:17:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.030 | 2086.5 | 2271.1 | F 1709.8 | 2027.8 | 52.371 |
| Stddev | .540 | 36.7 | 5.6 | 4.9 | 2.7 | .241 |
| %RSD | 1.0185 | 1.7611 | .24807 | .28804 | .13468 | .46053 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | | 1000.0 | | |
| Range | | | | 20.500% | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53388. | 53.35 | 550.01 | 211.67 | 258.13 | 1070.7 |
| Stddev | 122. | .20 | 3.14 | 1.34 | 2.16 | 4.9 |
| %RSD | .22809 | .3701 | .57024 | .63076 | .83525 | .45397 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55703. | 1112.1 | 52765. | 529.94 | 1043.3 | 1225100. |
| Stddev | 301. | 4.4 | 345. | 1.52 | 4.4 | 8380. |
| %RSD | .54024 | .39417 | .65440 | .28772 | .42505 | .68405 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| Value | | | | | | |
| Range | | | | | | |

Sample Name: lcs 240-380455/3-a Acquired: 5/10/2019 14:17:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 558.37 | 496.43 | 533.9 | 2304.5 | 2208.1 | 1048.0 |
| Stddev | .73 | 3.75 | 3.0 | 5.9 | 6.4 | 1.1 |
| %RSD | .13043 | .75468 | .5630 | .25510 | .29066 | .10164 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2034.3 | 525.52 | 598.25 | F 1505.9 | 1050.1 |
| Stddev | 10.1 | 3.60 | 1.18 | 28.3 | 9.7 |
| %RSD | .49778 | .68503 | .19750 | 1.8772 | .92040 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| Value | | | | 1000.0 | |
| Range | | | | 20.500% | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4823.1 | 3642.2 | 38409. | 3244.9 |
| Stddev | 19.5 | 12.9 | 95. | 28.5 |
| %RSD | .40476 | .35333 | .24666 | .87732 |

Sample Name: 240-112177-a-1-b  Acquired: 5/10/2019 14:21:13  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.81141 | 54.771 | 12.855 | 900.57 | 220.78 | .33127 |
| Stddev | .48011 | 11.692 | 1.311 | 8.17 | .66 | .27117 |
| %RSD | 59.169 | 21.348 | 10.197 | .90719 | .29737 | 81.857 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 36132. | .1850 | 10.316 | 3.3437 | .49395 | 35.337 |
| Stddev | 60. | .2036 | .333 | .3073 | .71553 | 4.791 |
| %RSD | .16715 | 110.1 | 3.2286 | 9.1914 | 144.86 | 13.558 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3537.0 | 100.61 | 8838.0 | F 4157.4 | 3.4811 | F 1220900. |
| Stddev | 79.0 | 2.55 | 41.6 | 24.6 | .0728 | 21213. |
| %RSD | 2.2334 | 2.5340 | .47098 | .59124 | 2.0903 | 1.7374 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 100000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112177-a-1-b Acquired: 5/10/2019 14:21:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.8768 | 3.0640 | 1.705 | 6.2844 | 2.2778 | 1.5087 |
| Stddev | .1569 | 1.4466 | 2.108 | 2.7400 | .8301 | .0805 |
| %RSD | 2.2815 | 47.211 | 123.7 | 43.600 | 36.443 | 5.3360 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.2254 | .04087 | 17.277 | 2424.0 | 179.54 |
| Stddev | 1.5695 | 7.0617 | .240 | 20.9 | 3.50 |
| %RSD | 48.661 | 17279. | 1.3872 | .86188 | 1.9503 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4945.7 | 3712.2 | 38681. | 3217.7 |
| Stddev | 19.5 | 6.0 | 131. | 6.4 |
| %RSD | .39489 | .16066 | .33795 | .19765 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.535% | 89.496% | 84.996% | 95.007% |
| Range | | | | |

Sample Name: SD 240-112177-a-1b@5 Acquired: 5/10/2019 14:25:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.26349 | -19.182 | 4.4465 | 183.08 | 45.717 | .20802 |
| Stddev | .38221 | 64.916 | .5346 | 1.09 | .248 | .20926 |
| %RSD | 145.06 | 338.43 | 12.024 | .59596 | .54166 | 100.60 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7404.9 | -.0185 | 2.3732 | .53252 | .00621 | 9.6344 |
| Stddev | 19.9 | .1036 | .2580 | .26789 | .95083 | 2.9060 |
| %RSD | .26819 | 559.7 | 10.872 | 50.305 | 15300. | 30.162 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 766.01 | 31.530 | 1787.6 | 845.17 | .43011 | F 321790. |
| Stddev | 40.81 | 1.078 | 35.3 | 2.25 | .32939 | 4303. |
| %RSD | 5.3273 | 3.4196 | 1.9771 | .26587 | 76.582 | 1.3373 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: SD 240-112177-a-1b@5 Acquired: 5/10/2019 14:25:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.3514 | 2.4020 | -.3372 | 5.3967 | .63177 | .34117 |
| Stddev | .3950 | 1.7901 | 3.148 | 2.0662 | .35854 | .24739 |
| %RSD | 16.800 | 74.525 | 933.7 | 38.286 | 56.751 | 72.511 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.46338 | 4.3517 | 5.9339 | 480.09 | 30.394 |
| Stddev | 1.5473 | 7.2625 | .0640 | 15.58 | 2.251 |
| %RSD | 333.92 | 166.89 | 1.0781 | 3.2459 | 7.4062 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5438.4 | 3888.8 | 41802. | 3260.3 |
| Stddev | 23.0 | 12.4 | 94. | 13.5 |
| %RSD | .42306 | .31803 | .22580 | .41442 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.358% | 93.753% | 91.853% | 96.266% |
| Range | | | | |

Sample Name: PDS 240-112177-a-1-b  Acquired: 5/10/2019 14:30:14  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.316 | 2071.1 | 2201.9 | 1913.9 | 2239.5 | 52.537 |
| Stddev | .687 | 44.4 | 24.2 | 18.9 | 3.5 | .572 |
| %RSD | 1.2893 | 2.1417 | 1.0995 | .98957 | .15573 | 1.0886 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 85673. | 53.07 | 546.04 | 206.34 | 249.61 | 1062.7 |
| Stddev | 59. | .42 | 6.51 | .70 | .16 | 6.7 |
| %RSD | .06941 | .7969 | 1.1923 | .34140 | .06584 | .63130 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 57518. | 1155.8 | 60528. | F 4538.2 | 1038.3 | F 1205900. |
| Stddev | 107. | 7.6 | 385. | 54.5 | 15.4 | 9854. |
| %RSD | .18515 | .65959 | .63604 | 1.2014 | 1.4842 | .81715 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 100000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: PDS 240-112177-a-1-b  Acquired: 5/10/2019 14:30:14  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 547.56 | 482.56 | 522.4 | F 2261.0 | 2200.5 | 1052.2 |
| Stddev | 6.33 | 4.30 | 10.2 | 22.8 | 29.2 | 3.4 |
| %RSD | 1.1562 | .89115 | 1.942 | 1.0072 | 1.3249 | .32020 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 1000.0 | | |
| Low Limit | | | | -500000. | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | F 2012.2 | 516.75 | 591.07 | 3426.1 | 1189.3 |
| Stddev | 14.0 | 2.70 | 7.55 | 3.4 | 5.8 |
| %RSD | .69742 | .52254 | 1.2774 | .10013 | .48770 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 2000.0 | | | | |
| Low Limit | -500000. | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4871.1 | 3692.2 | 38727. | 3263.9 |
| Stddev | 9.7 | 9.8 | 140. | 14.8 |
| %RSD | .19970 | .26610 | .36249 | .45267 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.349% | 89.015% | 85.097% | 96.370% |
| Range | | | | |

Sample Name: 240-112177-a-1c ms@5 Acquired: 5/10/2019 14:34:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 184.13 | 347.57 | 974.18 | 364.07 | F 9187.6 | 9.7704 |
| Stddev | 1.57 | 22.10 | 2.63 | 2.76 | 30.6 | .3837 |
| %RSD | .85197 | 6.3571 | .27041 | .75674 | .33303 | 3.9271 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | 4000.0 | |
| Low Limit | | | | | -500000. | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16079. | 190.5 | 98.881 | 897.83 | 45.024 | 197.14 |
| Stddev | 52. | 1.1 | .718 | 2.84 | .844 | 5.09 |
| %RSD | .32641 | .5945 | .72601 | .31666 | 1.8756 | 2.5806 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10479. | 217.42 | 11323. | 869.76 | 189.49 | F 305420. |
| Stddev | 71. | 3.16 | 11. | .68 | 1.10 | 3700. |
| %RSD | .67790 | 1.4532 | .10142 | .07818 | .58004 | 1.2113 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112177-a-1c ms@5 Acquired: 5/10/2019 14:34:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 96.678 | 910.71 | 97.55 | 200.35 | 388.40 | 188.15 |
| Stddev | .366 | 5.34 | 2.20 | 1.54 | 2.31 | .20 |
| %RSD | .37897 | .58635 | 2.253 | .77049 | .59554 | .10623 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 371.94 | 87.318 | 106.74 | 683.28 | 226.11 |
| Stddev | 3.30 | 2.841 | .41 | 12.44 | 6.88 |
| %RSD | .88736 | 3.2542 | .38522 | 1.8202 | 3.0412 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5436.2 | 3892.6 | 42234. | 3281.6 |
| Stddev | 2.1 | 6.6 | 76. | 16.5 |
| %RSD | .03830 | .16830 | .18066 | .50134 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.323% | 93.844% | 92.804% | 96.892% |
| Range | | | | |

Sample Name: 240-112177-a1d msd@5 Acquired: 5/10/2019 14:38:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 201.83 | 411.63 | 1080.9 | 398.04 | F 10200. | 10.749 |
| Stddev | .66 | 87.48 | 13.1 | 2.62 | 30. | .140 |
| %RSD | .32714 | 21.251 | 1.2150 | .65772 | .29519 | 1.3007 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | 4000.0 | |
| Low Limit | | | | | -500000. | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17776. | 210.9 | 109.64 | 997.86 | 49.568 | 220.64 |
| Stddev | 68. | 1.9 | 1.21 | 2.37 | .831 | 2.71 |
| %RSD | .38003 | .9069 | 1.0996 | .23730 | 1.6755 | 1.2282 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11523. | 230.01 | 12565. | 958.19 | 206.96 | F 340580. |
| Stddev | 64. | 1.04 | 36. | .97 | 1.31 | 7427. |
| %RSD | .55475 | .45360 | .28609 | .10131 | .63111 | 2.1808 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 100000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112177-a1d msd@5 Acquired: 5/10/2019 14:38:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 108.08 | 1006.1 | 105.6 | 220.92 | 431.69 | 208.38 |
| Stddev | 1.09 | 6.7 | 5.0 | .24 | 2.77 | .52 |
| %RSD | 1.0093 | .67087 | 4.750 | .11028 | .64114 | .24981 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 408.56 | 105.22 | 118.32 | 734.57 | 253.92 |
| Stddev | 4.44 | 4.27 | .96 | 7.97 | 1.32 |
| %RSD | 1.0868 | 4.0582 | .81289 | 1.0850 | .52102 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5402.7 | 3882.4 | 41664. | 3183.9 |
| Stddev | 14.4 | 10.5 | 35. | 33.1 |
| %RSD | .26669 | .27018 | .08512 | 1.0397 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.791% | 93.600% | 91.551% | 94.008% |
| Range | | | | |

Sample Name: 240-112139-a-1-b  Acquired: 5/10/2019 14:42:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.25372 | 23.756 | 7.7461 | 529.24 | 44.281 | .15609 |
| Stddev | .22524 | 80.313 | 2.0704 | 8.57 | .161 | .20932 |
| %RSD | 88.776 | 338.07 | 26.728 | 1.6201 | .36308 | 134.10 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 502840. | -.1366 | 223.44 | 11.844 | 4.2034 | 3.9168 |
| Stddev | 2604. | .1289 | 4.20 | .080 | .9611 | 2.3947 |
| %RSD | .51794 | 94.34 | 1.8778 | .67406 | 22.865 | 61.140 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2624.5 | 62.903 | 38894. | 3512.8 | 14.412 | F 1266900. |
| Stddev | 73.8 | 5.117 | 315. | 15.8 | .326 | 31869. |
| %RSD | 2.8106 | 8.1346 | .81005 | .44897 | 2.2612 | 2.5156 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112139-a-1-b  Acquired: 5/10/2019 14:42:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16358. | 3.4159 | 5.178 | 5.0678 | 1.9184 | .10411 |
| Stddev | 340. | 2.0396 | 2.051 | .5679 | .4770 | .21521 |
| %RSD | 2.0796 | 59.708 | 39.61 | 11.207 | 24.865 | 206.71 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.5096 | -.69377 | 1.2062 | 1962.8 | 653.83 |
| Stddev | .7229 | 6.5730 | .1367 | 41.0 | 2.30 |
| %RSD | 20.596 | 947.43 | 11.331 | 2.0894 | .35183 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4669.6 | 3543.1 | 37488. | 3117.7 |
| Stddev | 24.9 | 16.7 | 86. | 13.1 |
| %RSD | .53345 | .47015 | .22921 | .42177 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.150% | 85.421% | 82.374% | 92.053% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 14:47:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 982.19 | 24882. | 511.26 | 5105.2 | 1985.3 | 2014.3 | 49941. | 507.7 |
| Stddev | 2.23 | 158. | 5.92 | 6.0 | 4.7 | 8.7 | 147. | .5 |
| %RSD | .22702 | .63310 | 1.1582 | .11831 | .23575 | .43174 | .29493 | .0969 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2023.8 | 1968.4 | 1950.9 | 25204. | 50297. | 5037.3 | 50982. | 2004.0 |
| Stddev | 7.8 | 1.6 | 1.8 | 24. | 246. | 13.7 | 108. | 3.5 |
| %RSD | .38583 | .08193 | .09233 | .09473 | .48967 | .27166 | .21258 | .17356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2023.5 | 49888. | 2024.0 | 491.95 | 504.4 | 513.83 | 5105.9 | 5025.2 |
| Stddev | 7.1 | 195. | 9.0 | 3.71 | 4.5 | 5.65 | 22.7 | 2.1 |
| %RSD | .35316 | .39097 | .44377 | .75516 | .8837 | 1.0997 | .44532 | .04135 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 14:47:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.2 | 1979.2 | 2065.3 | 4902.9 | 5012.9 |
| Stddev | 13.8 | 6.1 | 7.7 | 52.7 | 8.4 |
| %RSD | 1.3718 | .30824 | .37304 | 1.0754 | .16775 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5482.4 | 3896.0 | 42276. | 3260.5 |
| Stddev | 4.6 | 4.0 | 33. | 8.4 |
| %RSD | .08478 | .10275 | .07773 | .25650 |

Sample Name: CCB Acquired: 5/10/2019 14:51:37 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .03636 | -27.484 | 2.2558 | 7.1233 | .60625 | .28832 | 49.555 | .1142 |
| Stddev | .34217 | 28.877 | 1.2543 | .5078 | .26249 | .11089 | 3.938 | .1266 |
| %RSD | 941.13 | 105.07 | 55.603 | 7.1282 | 43.297 | 38.461 | 7.9461 | 110.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39246 | -.03252 | -.66101 | 6.3979 | 118.34 | 10.652 | -14.079 | .93333 |
| Stddev | .19440 | .22370 | .45616 | 3.5192 | 12.49 | 2.617 | 18.522 | .05617 |
| %RSD | 49.533 | 687.80 | 69.010 | 55.006 | 10.555 | 24.573 | 131.55 | 6.0184 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.8681 | 302.69 | .99778 | -.43938 | 4.011 | -.38019 | 1.4283 | 1.5194 |
| Stddev | .4135 | 6.31 | .06172 | 1.3917 | 2.401 | 1.1362 | .4325 | .2631 |
| %RSD | 7.0465 | 2.0842 | 6.1853 | 316.74 | 59.86 | 298.86 | 30.281 | 17.314 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 14:51:37 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .46851 | 1.6013 | 3.0959 | -12.296 | -5.6179 |
| Stddev | .48528 | 6.6163 | .0355 | 7.077 | 1.2363 |
| %RSD | 103.58 | 413.18 | 1.1481 | 57.556 | 22.007 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6175.5 | 4061.9 | 44731. | 3281.1 |
| Stddev | 14.9 | 7.6 | 185. | 13.5 |
| %RSD | .24206 | .18637 | .41359 | .41282 |

Sample Name: 240-112177-a-2-b Acquired: 5/10/2019 14:55:58 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16788 | 106.29 | 7.3694 | 1494.8 | 501.23 | .34852 |
| Stddev | .71831 | 31.70 | .4635 | 7.4 | .44 | .30803 |
| %RSD | 427.86 | 29.824 | 6.2899 | .49561 | .08695 | 88.381 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 41535. | .9135 | 31.801 | 5.7146 | 16.092 | 387.53 |
| Stddev | 102. | .0727 | .412 | .1829 | .639 | 7.45 |
| %RSD | .24534 | 7.956 | 1.2968 | 3.2001 | 3.9696 | 1.9233 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3480.3 | 64.037 | 11209. | F 6642.9 | 1.2540 | F 1154500. |
| Stddev | 22.8 | 3.938 | 111. | 17.4 | .0909 | 20873. |
| %RSD | .65596 | 6.1491 | .99443 | .26244 | 7.2444 | 1.8079 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 100000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112177-a-2-b  Acquired: 5/10/2019 14:55:58  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 21.382 | 24.508 | 2.037 | 6.4058 | 1.8349 | 1.2127 |
| Stddev | .926 | .570 | 2.165 | 3.2432 | 1.2871 | .2560 |
| %RSD | 4.3303 | 2.3267 | 106.3 | 50.628 | 70.145 | 21.110 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.8614 | 12.328 | 729.79 | 3371.9 | 266.25 |
| Stddev | 1.5976 | 3.166 | 9.42 | 48.9 | 9.37 |
| %RSD | 32.863 | 25.684 | 1.2905 | 1.4487 | 3.5198 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5018.5 | 3752.5 | 38930. | 3256.0 |
| Stddev | 32.8 | 24.0 | 73. | 18.2 |
| %RSD | .65442 | .63874 | .18751 | .55894 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 79.691% | 90.468% | 85.542% | 96.137% |
| Range | | | | |

Sample Name: 240-112177-a-3-b  Acquired: 5/10/2019 15:00:27  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28168 | 101.33 | 11.454 | 1520.7 | 303.38 | .14137 |
| Stddev | .45528 | 65.42 | 1.748 | 11.5 | .58 | .12554 |
| %RSD | 161.63 | 64.561 | 15.264 | .75554 | .19195 | 88.806 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 58429. | .1526 | 12.650 | 5.5318 | .99292 | 224.57 |
| Stddev | 114. | .0257 | .474 | .2993 | 1.0810 | 4.40 |
| %RSD | .19555 | 16.82 | 3.7436 | 5.4104 | 108.87 | 1.9592 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3428.2 | 59.547 | 12198. | F 5347.0 | .51327 | F 1176700. |
| Stddev | 50.5 | 2.877 | 40. | 18.0 | .24668 | 18765. |
| %RSD | 1.4737 | 4.8313 | .32748 | .33631 | 48.061 | 1.5946 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 100000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112177-a-3-b Acquired: 5/10/2019 15:00:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.6746 | 2.3441 | -1.205 | 5.3662 | 1.8296 | .99928 |
| Stddev | .1505 | .5606 | 3.592 | 2.7918 | .2028 | .15697 |
| %RSD | 1.9614 | 23.914 | 298.1 | 52.025 | 11.083 | 15.708 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.7586 | 9.1730 | 44.824 | 2392.2 | 221.46 |
| Stddev | 2.0272 | 7.5278 | .295 | 7.6 | 5.29 |
| %RSD | 35.203 | 82.064 | .65918 | .31837 | 2.3895 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4987.4 | 3755.4 | 39451. | 3321.4 |
| Stddev | 27.2 | 28.4 | 85. | 6.4 |
| %RSD | .54527 | .75553 | .21480 | .19370 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 79.197% | 90.539% | 86.688% | 98.068% |
| Range | | | | |

Sample Name: 240-112177-a-4-b  Acquired: 5/10/2019 15:05:00  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .02290 | 46.451 | 9.5957 | 1573.6 | 378.76 | .47552 |
| Stddev | .52566 | 37.980 | 1.8635 | 7.9 | .67 | .07334 |
| %RSD | 2295.0 | 81.763 | 19.420 | .50024 | .17563 | 15.422 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 54431. | .2498 | 39.833 | 6.3450 | 2.2066 | 107.69 |
| Stddev | 147. | .1201 | .585 | .4078 | .7822 | 1.58 |
| %RSD | .27071 | 48.06 | 1.4682 | 6.4265 | 35.448 | 1.4648 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3961.4 | 60.082 | 14494. | F 10431. | -.07789 | F 1160900. |
| Stddev | 57.9 | 1.963 | 65. | 114. | .49035 | 3958. |
| %RSD | 1.4614 | 3.2679 | .44891 | 1.0974 | 629.57 | .34097 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 4000.0 | | 100000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112177-a-4-b  Acquired: 5/10/2019 15:05:00  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20.366 | 2.1202 | -.6514 | 6.8426 | 2.1395 | .90679 |
| Stddev | .372 | .2852 | 5.230 | 1.9585 | .1166 | .37672 |
| %RSD | 1.8266 | 13.453 | 802.9 | 28.623 | 5.4512 | 41.544 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.2412 | -2.4661 | 21.658 | 3380.0 | 256.54 |
| Stddev | .8476 | 2.9388 | .139 | 10.9 | 11.69 |
| %RSD | 13.580 | 119.17 | .64364 | .32354 | 4.5569 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4929.8 | 3711.5 | 38858. | 3223.7 |
| Stddev | 18.5 | 11.5 | 254. | 17.5 |
| %RSD | .37531 | .30946 | .65431 | .54194 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.282% | 89.479% | 85.386% | 95.183% |
| Range | | | | |

Sample Name: 240-112213-b-6-a Acquired: 5/10/2019 15:09:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5012 | 84181. | 442.96 | 382.93 | 694.54 | 12.457 |
| Stddev | .5604 | 112. | 1.91 | .90 | 1.24 | .234 |
| %RSD | 37.330 | .13322 | .43098 | .23483 | .17807 | 1.8777 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1692.8 | 2.620 | 84.523 | 2712.0 | 10.154 | F 888900. |
| Stddev | 3.8 | .117 | .480 | 6.3 | .525 | 4101. |
| %RSD | .22259 | 4.447 | .56781 | .23263 | 5.1703 | .46135 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 41784. | 46.814 | 20367. | 2002.3 | 5.3405 | 910.58 |
| Stddev | 112. | 1.674 | 115. | 1.5 | .2820 | 21.16 |
| %RSD | .26719 | 3.5763 | .56276 | .07500 | 5.2806 | 2.3240 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112213-b-6-a Acquired: 5/10/2019 15:09:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 259.73 | 113.09 | 12.38 | 6.3906 | 44.422 | 1950.5 |
| Stddev | 3.26 | 2.43 | 1.67 | .7632 | .932 | 1.1 |
| %RSD | 1.2553 | 2.1494 | 13.47 | 11.942 | 2.0982 | .05584 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.6747 | 1490.8 | 1309.9 | 2453.2 | 105.99 |
| Stddev | 2.3973 | 9.7 | 9.9 | 14.5 | 4.74 |
| %RSD | 42.245 | .64951 | .75308 | .59098 | 4.4762 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5740.3 | 5017.3 | 54905. | 4291.4 |
| Stddev | 12.4 | 16.4 | 61. | 24.8 |
| %RSD | .21569 | .32649 | .11077 | .57693 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.152% | 120.96% | 120.65% | 126.71% |
| Range | | | | |

Sample Name: 240-112213-b-7-a Acquired: 5/10/2019 15:13:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15103 | 64016. | 92.868 | 367.77 | 190.72 | 7.9825 | 14449. |
| Stddev | .27144 | 239. | .437 | 2.51 | .12 | .1707 | 27. |
| %RSD | 179.73 | .37268 | .47028 | .68252 | .06376 | 2.1383 | .19012 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .6142 | 15.229 | 887.55 | 190.76 | 216480. | 41358. | 61.758 |
| Stddev | .0593 | .477 | 2.37 | .78 | 259. | 148. | 3.041 |
| %RSD | 9.660 | 3.1333 | .26680 | .40744 | .11974 | .35882 | 4.9234 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17472. | 283.25 | 9.0872 | 1049.0 | 62.570 | 126.27 | 4.029 |
| Stddev | 73. | .32 | .0186 | 23.6 | 1.271 | .82 | 1.886 |
| %RSD | .41902 | .11303 | .20477 | 2.2484 | 2.0314 | .64649 | 46.81 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-b-7-a  Acquired: 5/10/2019 15:13:46  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.2726 | 42.672 | 1029.0 | -1.7476 | 372.90 | 312.48 | 4472.1 |
| Stddev | 1.8794 | .749 | 1.2 | .5208 | 2.33 | 1.70 | 70.7 |
| %RSD | 25.843 | 1.7554 | .11436 | 29.798 | .62454 | .54474 | 1.5804 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 138.34 |
| Stddev | 1.24 |
| %RSD | .89971 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5821.2 | 4358.0 | 47794. | 3587.9 |
| Stddev | 16.5 | 17.1 | 99. | 6.0 |
| %RSD | .28303 | .39150 | .20671 | .16752 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.437% | 105.07% | 105.02% | 105.94% |
| Range | | | | |

Sample Name: 240-112213-b-5-a Acquired: 5/10/2019 15:17:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0283 | 94433. | 216.96 | 897.54 | 410.57 | 16.197 | 9100.9 |
| Stddev | .1287 | 310. | 4.53 | 2.24 | .96 | .069 | 25.8 |
| %RSD | 12.518 | .32774 | 2.0872 | .24971 | .23371 | .42788 | .28314 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .5815 | 20.519 | 1977.4 | 34.947 | 397010. | 98352. | 86.209 |
| Stddev | .2206 | .342 | 6.2 | 1.809 | 444. | 191. | .789 |
| %RSD | 37.94 | 1.6674 | .31532 | 5.1779 | .11176 | .19388 | .91515 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 39954. | 406.52 | 12.491 | 662.66 | 67.774 | 67.256 | 4.615 |
| Stddev | 532. | .63 | .033 | 14.08 | .422 | 2.121 | 1.316 |
| %RSD | 1.3318 | .15494 | .26642 | 2.1253 | .62336 | 3.1540 | 28.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-b-5-a  Acquired: 5/10/2019 15:17:55  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.2967 | 43.417 | 886.95 | -2.9869 | 549.23 | 500.53 | 2601.0 |
| Stddev | 3.1433 | .528 | .72 | .9049 | 7.56 | 1.08 | 11.2 |
| %RSD | 37.886 | 1.2159 | .08131 | 30.297 | 1.3758 | .21603 | .43183 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 189.52 |
| Stddev | 6.42 |
| %RSD | 3.3855 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5582.1 | 4555.3 | 49353. | 3840.8 |
| Stddev | 8.9 | 4.4 | 351. | 2.6 |
| %RSD | .15860 | .09591 | .71189 | .06892 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.641% | 109.82% | 108.45% | 113.40% |
| Range | | | | |

Sample Name: 240-112213-b-8-a Acquired: 5/10/2019 15:22:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.53358 | 92447. | 114.37 | 178.12 | 233.00 | 6.7937 | 5603.7 |
| Stddev | .31421 | 266. | 2.17 | .52 | .71 | .3120 | 21.4 |
| %RSD | 58.887 | .28731 | 1.8968 | .29043 | .30583 | 4.5931 | .38178 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4355 | 28.754 | 847.50 | 594.06 | 226440. | 22055. | 46.292 |
| Stddev | .0940 | .083 | .82 | 1.75 | 360. | 16. | .866 |
| %RSD | 21.59 | .28765 | .09687 | .29400 | .15894 | .07124 | 1.8714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 15160. | 699.58 | 15.203 | 443.33 | 83.447 | 329.61 | 6.709 |
| Stddev | 98. | .85 | .238 | 4.02 | .273 | 2.18 | 2.525 |
| %RSD | .64438 | .12207 | 1.5659 | .90671 | .32686 | .66080 | 37.63 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-b-8-a  Acquired: 5/10/2019 15:22:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.5188 | 46.148 | 1479.7 | -1.2467 | 439.50 | 445.18 | 2202.1 |
| Stddev | 1.6609 | .406 | .6 | .5121 | 16.48 | 2.25 | 9.6 |
| %RSD | 25.479 | .87971 | .03806 | 41.075 | 3.7505 | .50590 | .43499 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 77.708 |
| Stddev | 3.318 |
| %RSD | 4.2703 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5770.0 | 4370.1 | 46951. | 3611.4 |
| Stddev | 12.1 | 10.1 | 108. | 5.4 |
| %RSD | .20905 | .23167 | .22937 | .15014 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.623% | 105.36% | 103.17% | 106.63% |
| Range | | | | |

Sample Name: 240-112213-b-9-a Acquired: 5/10/2019 15:26:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20212 | 69027. | 258.65 | 507.70 | 99.489 | 9.2374 |
| Stddev | .69025 | 374. | 2.57 | 2.86 | .145 | .0930 |
| %RSD | 341.50 | .54152 | .99515 | .56389 | .14624 | 1.0071 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 618.03 | .7817 | 21.540 | 2095.4 | 14.214 | F 572620. |
| Stddev | 3.81 | .0679 | .324 | 1.4 | .582 | 1641. |
| %RSD | .61638 | 8.690 | 1.5047 | .06752 | 4.0939 | .28651 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 66453. | 37.634 | 23416. | 149.60 | 2.9165 | 1626.4 |
| Stddev | 218. | 2.258 | 132. | .25 | .0662 | 17.7 |
| %RSD | .32868 | 6.0000 | .56168 | .16633 | 2.2700 | 1.0903 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112213-b-9-a Acquired: 5/10/2019 15:26:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 109.79 | 101.49 | 8.363 | 3.0805 | 40.425 | 1433.3 |
| Stddev | 1.13 | .88 | 4.096 | 1.9438 | .620 | .6 |
| %RSD | 1.0285 | .86815 | 48.97 | 63.100 | 1.5335 | .04501 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.1753 | 959.11 | 630.65 | 2503.0 | 25.502 |
| Stddev | .9954 | .85 | 2.42 | 26.4 | 6.191 |
| %RSD | 45.762 | .08877 | .38403 | 1.0530 | 24.275 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5649.6 | 4212.6 | 45097. | 3518.5 |
| Stddev | 8.1 | 7.1 | 69. | 20.8 |
| %RSD | .14370 | .16797 | .15254 | .58992 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.712% | 101.56% | 99.094% | 103.89% |
| Range | | | | |

Sample Name: 240-112213-b-10-a Acquired: 5/10/2019 15:30:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.1977 | 66824. | 287.80 | 352.29 | 881.56 | 9.4969 |
| Stddev | .3571 | 160. | 3.06 | 3.58 | 2.62 | .2943 |
| %RSD | 11.168 | .23950 | 1.0644 | 1.0155 | .29729 | 3.0993 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5503.8 | 1.302 | 33.388 | 2680.8 | 11.427 | F 659160. |
| Stddev | 21.7 | .275 | .588 | 2.6 | .565 | 1441. |
| %RSD | .39351 | 21.09 | 1.7597 | .09632 | 4.9467 | .21855 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 43622. | 25.247 | 19688. | 369.60 | 2.2574 | 535.56 |
| Stddev | 108. | 1.172 | 86. | .18 | .2062 | 1.02 |
| %RSD | .24734 | 4.6412 | .43617 | .04992 | 9.1327 | .19016 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112213-b-10-a Acquired: 5/10/2019 15:30:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 186.97 | 138.87 | 13.37 | 4.2254 | 38.733 | 2068.9 |
| Stddev | 3.18 | 2.63 | 3.49 | 1.8970 | .773 | .7 |
| %RSD | 1.7010 | 1.8956 | 26.14 | 44.895 | 1.9964 | .03418 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.6166 | 1306.7 | 855.71 | 2415.9 | 197.52 |
| Stddev | 1.7955 | 12.1 | 5.54 | 17.2 | 2.37 |
| %RSD | 27.137 | .92807 | .64766 | .71259 | 1.2011 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5700.2 | 4138.0 | 44331. | 3446.4 |
| Stddev | 7.5 | 7.3 | 58. | 11.8 |
| %RSD | .13198 | .17541 | .13119 | .34242 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.515% | 99.761% | 97.410% | 101.76% |
| Range | | | | |

Sample Name: 240-112213-b-11-a Acquired: 5/10/2019 15:34:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.59742 | 36052. | 31.008 | 88.350 | 57.027 | 2.5999 | 1990.6 | .1949 |
| Stddev | .12111 | 25. | .442 | .646 | .421 | .0875 | 18.5 | .1172 |
| %RSD | 20.272 | .06982 | 1.4265 | .73107 | .73895 | 3.3663 | .92930 | 60.13 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.059 | 209.44 | 18.523 | 83240. | 10505. | 20.446 | 4741.7 | 471.63 |
| Stddev | .152 | 1.35 | .294 | 154. | 121. | .623 | 55.6 | 1.44 |
| %RSD | 1.2574 | .64583 | 1.5850 | .18480 | 1.1517 | 3.0460 | 1.1733 | .30454 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.9969 | 191.13 | 21.964 | 29.673 | 1.135 | 1.1821 | 34.555 | 1291.0 |
| Stddev | .2753 | 5.27 | .676 | 1.152 | 5.002 | 2.7862 | .501 | 1.2 |
| %RSD | 9.1856 | 2.7592 | 3.0796 | 3.8807 | 440.6 | 235.70 | 1.4492 | .09184 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112213-b-11-a Acquired: 5/10/2019 15:34:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4416 | 132.93 | 74.376 | 1985.6 | 16.786 |
| Stddev | 1.1624 | 7.42 | .293 | 16.0 | 5.489 |
| %RSD | 80.633 | 5.5824 | .39396 | .80326 | 32.702 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5936.1 | 4212.1 | 45847. | 3416.1 |
| Stddev | 7.6 | 6.8 | 142. | 10.7 |
| %RSD | .12766 | .16137 | .31014 | .31451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.261% | 101.55% | 100.74% | 100.86% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 15:39:01 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1012.9 | 25102. | 509.62 | 5109.8 | 1993.2 | 2001.8 | 50423. | 506.5 |
| Stddev | 1.6 | 63. | 2.13 | 9.0 | 3.2 | 2.4 | 47. | 1.7 |
| %RSD | .15804 | .25265 | .41700 | .17578 | .15960 | .12023 | .09336 | .3373 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2035.8 | 2025.4 | 1995.9 | 25114. | 49750. | 4954.3 | 50322. | 2035.5 |
| Stddev | 7.0 | 1.5 | 1.5 | 43. | 11. | 10.1 | 59. | 1.2 |
| %RSD | .34147 | .07466 | .07512 | .17004 | .02236 | .20342 | .11702 | .05713 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2020.5 | 50113. | 2028.4 | 491.25 | 501.6 | 506.33 | 5120.9 | 5065.4 |
| Stddev | 10.4 | 63. | 7.2 | 1.64 | 3.1 | 1.60 | 18.6 | 2.2 |
| %RSD | .51337 | .12562 | .35704 | .33387 | .6095 | .31523 | .36348 | .04367 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 15:39:01 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.6 | 2006.2 | 2078.0 | 4954.2 | 4944.2 |
| Stddev | 5.5 | 14.3 | 8.3 | 21.9 | 7.1 |
| %RSD | .54773 | .71227 | .39930 | .44161 | .14432 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5439.8 | 3876.2 | 41652. | 3214.8 |
| Stddev | 25.2 | 20.8 | 56. | 10.1 |
| %RSD | .46351 | .53748 | .13367 | .31409 |

Sample Name: CCB Acquired: 5/10/2019 15:42:59 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20009 | -25.357 | F 5.0247 | 7.1246 | .67564 | .39787 | 34.968 |
| Stddev | .14835 | 3.490 | .3428 | .3960 | .24896 | .27826 | 5.853 |
| %RSD | 74.142 | 13.762 | 6.8232 | 5.5575 | 36.848 | 69.938 | 16.737 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | | | | |
| Low Limit | | | -5.0000 | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0265 | .15161 | .11844 | -.25091 | 14.389 | 150.92 | 5.8756 |
| Stddev | .0912 | .12770 | .46316 | .48189 | .887 | 9.40 | 2.0247 |
| %RSD | 344.3 | 84.227 | 391.05 | 192.06 | 6.1625 | 6.2306 | 34.459 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.4924 | .75425 | 4.7374 | 94.248 | .54653 | .60035 | 1.738 |
| Stddev | 7.0099 | .06666 | .2043 | 7.195 | .18571 | .49482 | 1.460 |
| %RSD | 107.97 | 8.8383 | 4.3121 | 7.6342 | 33.980 | 82.422 | 83.99 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB  Acquired: 5/10/2019 15:42:59  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7309 | .49471 | 1.3629 | .36664 | .98737 | 2.8798 | -13.125 |
| Stddev | .6882 | .71625 | .1078 | .85362 | 4.1418 | .0723 | 2.468 |
| %RSD | 39.762 | 144.78 | 7.9078 | 232.82 | 419.47 | 2.5115 | 18.802 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -4.5882 |
| Stddev | 2.0550 |
| %RSD | 44.788 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6176.6 | 4068.4 | 44332. | 3257.1 |
| Stddev | 23.4 | 12.2 | 54. | 10.7 |
| %RSD | .37843 | .30078 | .12092 | .32951 |

Sample Name: 240-112213-a-12-a Acquired: 5/10/2019 15:47:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.34955 | 34658. | 69.491 | 139.28 | 223.03 | 3.8543 | 4560.4 |
| Stddev | .52627 | 86. | .718 | .29 | .55 | .1426 | 34.3 |
| %RSD | 150.56 | .24950 | 1.0338 | .21146 | .24495 | 3.6993 | .75262 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .7250 | 24.692 | 587.07 | 336.35 | 145690. | 18508. | 26.457 |
| Stddev | .1762 | .274 | 1.89 | 1.31 | 340. | 145. | .969 |
| %RSD | 24.30 | 1.1103 | .32249 | .39084 | .23329 | .78121 | 3.6641 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 17456. | 1480.4 | 5.3442 | 457.94 | 99.841 | 55.381 | .7082 |
| Stddev | 139. | 5.6 | .0314 | 5.52 | .295 | .973 | 2.192 |
| %RSD | .79555 | .38031 | .58777 | 1.2061 | .29518 | 1.7564 | 309.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-a-12-a  Acquired: 5/10/2019 15:47:19  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.5988 | 40.426 | 1050.7 | -2.3182 | 260.24 | 295.87 | 1779.0 |
| Stddev | 1.4043 | .196 | 1.3 | .8199 | 2.62 | .45 | 15.5 |
| %RSD | 87.835 | .48372 | .12494 | 35.371 | 1.0051 | .15245 | .87272 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 47.449 |
| Stddev | .781 |
| %RSD | 1.6463 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5873.4 | 4217.5 | 45769. | 3427.9 |
| Stddev | 5.4 | 8.2 | 115. | 9.4 |
| %RSD | .09143 | .19345 | .25137 | .27393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.265% | 101.68% | 100.57% | 101.21% |
| Range | | | | |

Sample Name: 240-112213-a-13-a Acquired: 5/10/2019 15:51:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.98562 | 58433. | 111.29 | 380.77 | 297.55 | 8.2576 | 3849.6 |
| Stddev | .55722 | 183. | .70 | .79 | .41 | .0336 | 7.9 |
| %RSD | 56.535 | .31334 | .62469 | .20693 | .13799 | .40698 | .20397 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .6995 | 20.410 | 1239.5 | 737.36 | 226720. | 45826. | 44.277 |
| Stddev | .0365 | .536 | 4.6 | 1.92 | 347. | 206. | 2.730 |
| %RSD | 5.219 | 2.6256 | .37487 | .26028 | .15289 | .44892 | 6.1652 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 21884. | 396.13 | 5.8542 | 245.63 | 59.058 | 68.380 | 4.074 |
| Stddev | 9. | .94 | .2068 | 6.98 | .223 | .957 | 1.922 |
| %RSD | .04035 | .23751 | 3.5319 | 2.8411 | .37757 | 1.4002 | 47.18 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-a-13-a  Acquired: 5/10/2019 15:51:30  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0364 | 42.224 | 1069.5 | -3.3630 | 416.12 | 426.62 | 2582.3 |
| Stddev | .6966 | .723 | 1.2 | 1.1992 | 7.60 | 2.05 | 25.6 |
| %RSD | 13.831 | 1.7119 | .11674 | 35.660 | 1.8272 | .48052 | .98994 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 103.13 |
| Stddev | .98 |
| %RSD | .94997 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5710.8 | 4569.3 | 49515. | 3720.8 |
| Stddev | 18.3 | 15.2 | 27. | 15.5 |
| %RSD | .31984 | .33170 | .05416 | .41524 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.683% | 110.16% | 108.80% | 109.86% |
| Range | | | | |

Sample Name: 240-112213-a-14-a Acquired: 5/10/2019 15:55:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.70854 | 57395. | 141.66 | 382.05 | 223.80 | 7.9630 | 2329.9 |
| Stddev | .06317 | 234. | .38 | 2.05 | .61 | .1451 | 16.6 |
| %RSD | 8.9160 | .40718 | .26749 | .53585 | .27217 | 1.8217 | .71356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4568 | 18.501 | 1145.9 | 514.97 | 224820. | 45218. | 33.953 |
| Stddev | .1930 | .243 | 3.6 | 3.01 | 489. | 98. | .359 |
| %RSD | 42.24 | 1.3123 | .31014 | .58493 | .21765 | .21630 | 1.0564 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18131. | 212.09 | 8.7923 | 204.77 | 49.370 | 129.68 | 5.624 |
| Stddev | 88. | .81 | .1766 | 7.20 | .367 | 1.81 | .241 |
| %RSD | .48649 | .38079 | 2.0084 | 3.5162 | .74339 | 1.3951 | 4.288 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-a-14-a  Acquired: 5/10/2019 15:55:40  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.8298 | 47.072 | 922.43 | -3.4747 | 500.13 | 406.05 | 2105.2 |
| Stddev | 1.8267 | .251 | 1.02 | 1.7974 | 5.58 | 1.48 | 27.9 |
| %RSD | 47.698 | .53423 | .11031 | 51.727 | 1.1154 | .36426 | 1.3270 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 93.724 |
| Stddev | 5.265 |
| %RSD | 5.6181 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5735.8 | 4524.2 | 49123. | 3672.8 |
| Stddev | 7.5 | 7.8 | 226. | 14.7 |
| %RSD | .13042 | .17161 | .46047 | .40094 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.080% | 109.07% | 107.94% | 108.44% |
| Range | | | | |

Sample Name: 240-112213-a-15-a  Acquired: 5/10/2019 15:59:50  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.98342 | 64555. | 186.32 | 439.31 | 312.90 | 9.4909 | 2954.8 |
| Stddev | .46051 | 333. | .79 | 1.71 | 1.39 | .0675 | 12.9 |
| %RSD | 46.827 | .51655 | .42154 | .38972 | .44349 | .71125 | .43698 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4701 | 17.685 | 1450.8 | 363.57 | 261000. | 52153. | 53.235 |
| Stddev | .1281 | .171 | 5.0 | 1.66 | 990. | 265. | 1.507 |
| %RSD | 27.24 | .96669 | .34529 | .45698 | .37929 | .50765 | 2.8309 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 23418. | 178.75 | 12.997 | 272.95 | 59.444 | 59.995 | 1.582 |
| Stddev | 199. | .36 | .299 | 7.95 | .331 | 1.744 | .190 |
| %RSD | .84791 | .19943 | 2.3011 | 2.9119 | .55693 | 2.9072 | 12.01 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-a-15-a  Acquired: 5/10/2019 15:59:50  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.219 | 44.959 | 741.91 | -3.5656 | 460.26 | 395.56 | 2366.7 |
| Stddev | 2.152 | .941 | .61 | 1.6936 | 5.49 | 2.07 | 29.5 |
| %RSD | 21.059 | 2.0920 | .08250 | 47.497 | 1.1922 | .52207 | 1.2460 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 116.24 |
| Stddev | 3.45 |
| %RSD | 2.9673 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5665.1 | 4591.1 | 49796. | 3736.3 |
| Stddev | 5.6 | 7.3 | 176. | 21.6 |
| %RSD | .09801 | .15982 | .35397 | .57946 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.959% | 110.68% | 109.42% | 110.32% |
| Range | | | | |

Sample Name: 240-112213-a-16-a  Acquired: 5/10/2019 16:03:59  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14376 | 34049. | 51.718 | 103.86 | 141.22 | 3.8660 | 2494.5 |
| Stddev | .31725 | 120. | 1.081 | .22 | .72 | .0765 | 18.2 |
| %RSD | 220.68 | .35148 | 2.0911 | .20734 | .50739 | 1.9797 | .73044 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3500 | 14.054 | 388.05 | 196.69 | 106940. | 13036. | 25.425 |
| Stddev | .1629 | .638 | 1.02 | 1.49 | 203. | 30. | 3.903 |
| %RSD | 46.53 | 4.5366 | .26263 | .75654 | .18984 | .22935 | 15.351 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 14782. | 399.87 | 2.4949 | 2957.2 | 45.143 | 39.761 | 3.485 |
| Stddev | 87. | 1.14 | .2281 | 17.6 | .820 | 1.512 | 3.709 |
| %RSD | .59079 | .28449 | 9.1447 | .59498 | 1.8170 | 3.8020 | 106.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112213-a-16-a  Acquired: 5/10/2019 16:03:59  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7527 | 39.914 | 650.15 | -1.8268 | 163.16 | 202.06 | 2095.2 |
| Stddev | 2.3187 | .319 | .77 | .6663 | 3.63 | .68 | 25.2 |
| %RSD | 84.234 | .79990 | .11794 | 36.470 | 2.2227 | .33673 | 1.2017 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 28.408 |
| Stddev | .747 |
| %RSD | 2.6309 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5858.5 | 4296.3 | 47045. | 3439.7 |
| Stddev | 12.6 | 3.9 | 78. | 13.1 |
| %RSD | .21490 | .09150 | .16616 | .38149 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.029% | 103.58% | 103.37% | 101.56% |
| Range | | | | |

Sample Name: lb 240-380296/1-b Acquired: 5/10/2019 16:08:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.31817 | -51.370 | F 6.0620 | 12.880 | 3.1554 | .33494 |
| Stddev | .77516 | 35.760 | 3.8155 | .448 | .0916 | .13541 |
| %RSD | 243.63 | 69.613 | 62.941 | 3.4789 | 2.9044 | 40.426 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | | | |
| Low Limit | | | -1000.0 | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.365 | -.0269 | .08648 | 1.2913 | 2.4730 | 17.363 |
| Stddev | 3.898 | .2823 | .23623 | .7876 | .7015 | 4.073 |
| %RSD | 8.2294 | 1051. | 273.17 | 60.988 | 28.366 | 23.457 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1629.8 | 19.714 | 3.0038 | .64089 | -.33916 | 1208700. |
| Stddev | 111.4 | 3.900 | 40.782 | .04050 | .17589 | 30264. |
| %RSD | 6.8372 | 19.781 | 1357.7 | 6.3198 | 51.861 | 2.5039 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: lb 240-380296/1-b Acquired: 5/10/2019 16:08:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.6888 | -.58235 | 1.056 | 2.9097 | 2.0118 | .99205 |
| Stddev | .3173 | 1.5956 | 1.197 | .3173 | .7342 | .09448 |
| %RSD | 8.6012 | 273.99 | 113.3 | 10.905 | 36.496 | 9.5233 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.2561 | -4.8560 | 4.2907 | 72.464 | -2.3144 |
| Stddev | 1.0797 | 7.2611 | .0867 | 8.122 | 9.2205 |
| %RSD | 25.368 | 149.53 | 2.0196 | 11.208 | 398.40 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5020.9 | 3730.4 | 38875. | 3157.4 |
| Stddev | 13.3 | 12.2 | 104. | 18.5 |
| %RSD | .26554 | .32673 | .26660 | .58726 |

Sample Name: mb 240-380449/2-a  Acquired: 5/10/2019 16:12:38  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14122 | -27.187 | 1.2159 | 1.3978 | .07951 | .15119 | 71.763 | .0158 |
| Stddev | .23686 | 28.282 | .7675 | .4485 | .17433 | .37715 | 3.794 | .1728 |
| %RSD | 167.72 | 104.03 | 63.123 | 32.084 | 219.26 | 249.46 | 5.2865 | 1097. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.13029 | -.02441 | .45986 | 12.622 | 238.46 | 13.243 | 2.3991 | .03814 |
| Stddev | .14187 | .45202 | .82225 | 3.560 | 7.86 | .841 | 18.861 | .03899 |
| %RSD | 108.89 | 1851.7 | 178.80 | 28.207 | 3.2948 | 6.3493 | 786.15 | 102.21 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.42470 | 661.92 | .18904 | 1.0980 | .4552 | .94819 | .09406 | .15232 |
| Stddev | .16230 | 71.35 | .45512 | 1.0158 | 2.959 | 1.9505 | .15374 | .17398 |
| %RSD | 38.215 | 10.779 | 240.75 | 92.511 | 650.0 | 205.71 | 163.45 | 114.22 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380449/2-a Acquired: 5/10/2019 16:12:38 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .15870 | .60492 | 1.2863 | -2.9573 | 5.1285 |
| Stddev | .96828 | 1.2986 | .0831 | 3.7068 | 11.959 |
| %RSD | 610.11 | 214.67 | 6.4608 | 125.34 | 233.18 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6237.8 | 4146.4 | 45730. | 3325.4 |
| Stddev | 10.0 | 4.0 | 173. | 2.1 |
| %RSD | .16075 | .09746 | .37766 | .06291 |

Sample Name: lcs 240-380449/3-a Acquired: 5/10/2019 16:17:00 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.717 | 2046.9 | 2226.7 | 1056.0 | 2008.7 | 52.227 |
| Stddev | .746 | 31.8 | 12.0 | 3.6 | 7.0 | .080 |
| %RSD | 1.4150 | 1.5514 | .53894 | .34421 | .34972 | .15224 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50349. | 52.64 | 543.48 | 209.88 | 257.61 | 1066.0 |
| Stddev | 116. | .37 | 3.97 | .69 | .74 | 12.5 |
| %RSD | .23087 | .6949 | .73007 | .33023 | .28557 | 1.1714 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55019. | 1089.1 | 51627. | 529.31 | 1017.5 | 1207100. |
| Stddev | 285. | 10.1 | 454. | .74 | 8.0 | 23296. |
| %RSD | .51766 | .92995 | .87873 | .13967 | .78144 | 1.9299 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| Value | | | | | | |
| Range | | | | | | |

Sample Name: lcs 240-380449/3-a Acquired: 5/10/2019 16:17:00 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 552.64 | 490.56 | 523.7 | 2244.4 | 2177.6 | 1041.1 |
| Stddev | 2.38 | 4.17 | 2.7 | 11.3 | 12.3 | 1.7 |
| %RSD | .42988 | .84977 | .5192 | .50237 | .56604 | .16482 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2004.0 | 527.01 | F 609.69 | 1162.4 | 1023.8 |
| Stddev | 18.7 | 6.02 | 3.07 | 38.4 | 13.4 |
| %RSD | .93426 | 1.1432 | .50431 | 3.3011 | 1.3096 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | 500.00 | | |
| Range | | | 20.500% | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4867.9 | 3682.1 | 38184. | 3193.5 |
| Stddev | 9.4 | 13.8 | 138. | 24.8 |
| %RSD | .19333 | .37374 | .36117 | .77777 |

Sample Name: 240-112097-d-4-c Acquired: 5/10/2019 16:21:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.02862 | 15805. | 18.506 | 167.15 | 655.07 | 3.3459 |
| Stddev | .74216 | 133. | 1.664 | .91 | .24 | .1016 |
| %RSD | 2593.4 | .83848 | 8.9943 | .54281 | .03635 | 3.0364 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 281410. | 2.358 | 22.094 | 3.8500 | 7.4517 | 1265.4 |
| Stddev | 275. | .037 | .080 | .2760 | 1.0273 | 12.3 |
| %RSD | .09766 | 1.552 | .36161 | 7.1689 | 13.786 | .97523 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 11907. | 95.948 | 15129. | 6054.1 | 5.5475 | F 1165900. |
| Stddev | 72. | 4.440 | 74. | 44.8 | .2765 | 18004. |
| %RSD | .60427 | 4.6278 | .49022 | .74010 | 4.9845 | 1.5442 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112097-d-4-c Acquired: 5/10/2019 16:21:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 26.175 | 11.690 | .0817 | 5.1843 | 2.3976 | 4.1277 |
| Stddev | .286 | .225 | 1.776 | 2.0869 | .3219 | .1042 |
| %RSD | 1.0933 | 1.9238 | 2174. | 40.254 | 13.424 | 2.5250 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.8839 | 3.0398 | 108.55 | 25807. | 583.40 |
| Stddev | .6854 | 2.5921 | 1.05 | 236. | 8.91 |
| %RSD | 23.766 | 85.272 | .96798 | .91304 | 1.5270 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4862.8 | 3738.6 | 38967. | 3233.1 |
| Stddev | 24.9 | 12.2 | 102. | 11.6 |
| %RSD | .51207 | .32759 | .26104 | .35770 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.218% | 90.132% | 85.625% | 95.462% |
| Range | | | | |

Sample Name: SD 240-112097-d-4c@5 Acquired: 5/10/2019 16:25:36 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.21000 | 3193.3 | 6.1726 | 33.210 | 133.30 | .94403 | 57766. |
| Stddev | .27398 | 32.0 | 2.7878 | .485 | .63 | .21570 | 157. |
| %RSD | 130.47 | 1.0020 | 45.164 | 1.4594 | .47162 | 22.849 | .27100 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3235 | 4.3847 | .97886 | 1.0636 | 262.42 | 2451.5 | 32.670 |
| Stddev | .2540 | .3880 | .63709 | .1606 | 2.34 | 18.0 | 1.805 |
| %RSD | 78.51 | 8.8480 | 65.085 | 15.103 | .89266 | .73424 | 5.5264 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3154.8 | 1251.3 | .45904 | 293440. | 6.0838 | 3.9332 | .0975 |
| Stddev | 30.5 | 2.9 | .20001 | 2240. | .4289 | 2.3578 | 4.244 |
| %RSD | .96767 | .22954 | 43.570 | .76319 | 7.0501 | 59.946 | 4352. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: SD 240-112097-d-4c@5 Acquired: 5/10/2019 16:25:36 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.5528 | .39904 | 1.1254 | -.17559 | -.96023 | 23.924 | 5165.5 |
| Stddev | 1.8667 | .25202 | .1942 | 1.3330 | 9.6730 | .182 | 47.6 |
| %RSD | 120.21 | 63.156 | 17.258 | 759.14 | 1007.4 | .75980 | .92191 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 124.02 |
| Stddev | 2.62 |
| %RSD | 2.1111 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5473.0 | 3948.8 | 42244. | 3292.2 |
| Stddev | 11.9 | 5.7 | 165. | 8.1 |
| %RSD | .21654 | .14489 | .39017 | .24610 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.907% | 95.201% | 92.826% | 97.208% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 16:29:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1009.2 | 25092. | 510.41 | 5131.4 | 1998.2 | 2001.2 | 50348. | 508.3 |
| Stddev | 1.7 | 100. | 3.58 | 6.3 | 3.7 | 4.8 | 86. | 1.1 |
| %RSD | .16805 | .40013 | .70152 | .12366 | .18435 | .24211 | .17120 | .2098 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2044.9 | 2022.1 | 1992.9 | 25153. | 50112. | 5007.4 | 50667. | 2036.9 |
| Stddev | 9.0 | 3.3 | 5.4 | 149. | 208. | 10.5 | 190. | 5.2 |
| %RSD | .44207 | .16138 | .27146 | .59360 | .41547 | .20905 | .37447 | .25451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2030.9 | 49848. | 2038.8 | 491.22 | 507.8 | 515.79 | 5150.6 | 5069.0 |
| Stddev | 6.7 | 87. | 9.1 | 1.36 | 2.3 | .58 | 23.4 | 5.8 |
| %RSD | .33025 | .17461 | .44513 | .27691 | .4498 | .11193 | .45483 | .11405 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 16:29:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1009.0 | 2001.6 | 2092.3 | 4923.8 | 4991.1 |
| Stddev | 5.3 | 13.7 | 9.4 | 21.1 | 13.7 |
| %RSD | .52103 | .68197 | .44754 | .42880 | .27435 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5473.8 | 3906.7 | 42089. | 3233.7 |
| Stddev | 11.6 | 3.0 | 41. | 10.4 |
| %RSD | .21267 | .07675 | .09771 | .32291 |

Sample Name: CCB Acquired: 5/10/2019 16:33:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.00989 | -9.4320 | 2.8476 | 5.5133 | .42465 | .33678 | 34.288 | .0031 |
| Stddev | .64233 | 39.517 | 2.4193 | .8165 | .29190 | .06525 | 2.115 | .0943 |
| %RSD | 6494.4 | 418.97 | 84.961 | 14.810 | 68.740 | 19.373 | 6.1682 | 3070. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40386 | -.08928 | -.44503 | 5.7747 | 193.47 | 8.1468 | 12.256 | .79222 |
| Stddev | .10395 | .41547 | 1.2169 | 5.2819 | 28.78 | .7506 | 29.819 | .05388 |
| %RSD | 25.738 | 465.38 | 273.44 | 91.466 | 14.874 | 9.2137 | 243.29 | 6.8008 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.2485 | 305.63 | .71135 | 1.5956 | -.0431 | .43091 | .73802 | 1.1972 |
| Stddev | .2009 | 16.20 | .10751 | 2.0160 | 1.091 | 1.8949 | .09874 | .2736 |
| %RSD | 3.8268 | 5.2992 | 15.114 | 126.34 | 2533. | 439.74 | 13.379 | 22.854 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 16:33:54 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.00478 | 4.5072 | 2.8069 | -13.907 | -2.4722 |
| Stddev | .47999 | 6.2836 | .0242 | 7.769 | 8.4913 |
| %RSD | 10036. | 139.41 | .86364 | 55.862 | 343.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6166.3 | 4063.1 | 43977. | 3243.7 |
| Stddev | 13.5 | 11.6 | 116. | 18.5 |
| %RSD | .21849 | .28535 | .26277 | .57180 |

Sample Name: PDS 240-112097-d-4-c  Acquired: 5/10/2019 16:38:13  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.429 | 17608. | 2190.0 | 1210.4 | 2673.0 | 54.362 |
| Stddev | .546 | 53. | 18.7 | 8.0 | 12.5 | .843 |
| %RSD | 1.0226 | .30241 | .85208 | .66117 | .46942 | 1.5503 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 323950. | 54.85 | 561.47 | 207.67 | 260.26 | 2238.2 |
| Stddev | 1777. | .52 | 5.55 | .60 | .81 | 7.2 |
| %RSD | .54840 | .9481 | .98838 | .28903 | .31033 | .32378 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 64970. | 1127.8 | 64746. | 6391.0 | 1028.0 | F 1209500. |
| Stddev | 359. | 9.4 | 464. | 24.5 | 11.4 | 41678. |
| %RSD | .55240 | .83529 | .71647 | .38377 | 1.1124 | 3.4459 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: PDS 240-112097-d-4-c Acquired: 5/10/2019 16:38:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 566.44 | 488.21 | 517.6 | 2206.3 | 2201.8 | 1048.6 |
| Stddev | 4.48 | 4.87 | 10.0 | 19.0 | 23.8 | .5 |
| %RSD | .79054 | .99802 | 1.926 | .86149 | 1.0815 | .04711 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2018.9 | 517.77 | 678.81 | 25846. | 1569.4 |
| Stddev | 7.5 | 3.65 | 6.46 | 367. | 13.4 |
| %RSD | .36965 | .70418 | .95139 | 1.4204 | .85376 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4685.6 | 3611.2 | 38095. | 3219.0 |
| Stddev | 3.9 | 12.7 | 257. | 26.9 |
| %RSD | .08310 | .35140 | .67364 | .83640 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.404% | 87.060% | 83.707% | 95.044% |
| Range | | | | |

Sample Name: 240-112097-d-4d ms@5 Acquired: 5/10/2019 16:42:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 207.46 | 3617.9 | 1079.0 | 250.34 | 10292. | 11.334 | 67726. |
| Stddev | 1.30 | 11.3 | 6.0 | 1.02 | 15. | .057 | 157. |
| %RSD | .62829 | .31110 | .55203 | .40583 | .14463 | .50714 | .23155 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 210.8 | 113.00 | 1028.8 | 52.781 | 476.46 | 12986. | 234.62 |
| Stddev | .7 | .68 | 2.3 | .844 | 5.10 | 40. | 3.12 |
| %RSD | .3355 | .59944 | .22340 | 1.5991 | 1.0699 | .31009 | 1.3286 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13694. | 1348.3 | 210.87 | 301900. | 112.41 | 1009.7 | 107.8 |
| Stddev | 78. | 1.0 | .98 | 2376. | .77 | 3.8 | 2.2 |
| %RSD | .57155 | .07430 | .46372 | .78699 | .68157 | .37193 | 2.022 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112097-d-4d ms@5 Acquired: 5/10/2019 16:42:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 220.64 | 434.69 | 210.52 | 414.03 | 103.09 | 138.02 | 6299.3 |
| Stddev | .90 | 1.92 | .39 | 3.89 | 7.41 | .71 | 58.0 |
| %RSD | .41013 | .44143 | .18400 | .93880 | 7.1911 | .51477 | .92076 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 330.97 |
| Stddev | 9.89 |
| %RSD | 2.9882 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5361.6 | 3866.5 | 41228. | 3200.5 |
| Stddev | 13.1 | 9.3 | 139. | 14.4 |
| %RSD | .24403 | .24153 | .33767 | .45123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.139% | 93.215% | 90.593% | 94.498% |
| Range | | | | |

Sample Name: 240-112097-d4e msd@5 Acquired: 5/10/2019 16:46:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 209.00 | 3630.7 | 1089.3 | 250.53 | 10398. | 11.444 | 68433. |
| Stddev | .96 | 27.9 | 7.5 | .73 | 13. | .139 | 119. |
| %RSD | .46095 | .76971 | .68806 | .29206 | .12291 | 1.2134 | .17452 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 212.6 | 113.97 | 1033.9 | 51.923 | 487.86 | 13148. | 228.46 |
| Stddev | 1.3 | .81 | 2.4 | .606 | 2.89 | 23. | 5.63 |
| %RSD | .5995 | .71286 | .23133 | 1.1675 | .59205 | .17704 | 2.4624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13829. | 1361.3 | 209.27 | 307980. | 113.41 | 1019.7 | 104.1 |
| Stddev | 8. | 1.9 | 1.40 | 401. | .20 | 4.0 | 2.9 |
| %RSD | .05665 | .13940 | .66895 | .13023 | .17377 | .39626 | 2.782 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112097-d4e msd@5 Acquired: 5/10/2019 16:46:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 221.80 | 437.47 | 212.16 | 415.12 | 100.49 | 138.08 | 5709.8 |
| Stddev | 3.87 | 3.20 | .11 | 3.10 | 3.58 | .64 | 22.2 |
| %RSD | 1.7429 | .73048 | .04983 | .74659 | 3.5646 | .46081 | .38867 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 324.37 |
| Stddev | 7.11 |
| %RSD | 2.1926 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5367.2 | 3883.2 | 41436. | 3203.2 |
| Stddev | 6.7 | 6.6 | 106. | 39.7 |
| %RSD | .12413 | .16924 | .25621 | 1.2387 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.227% | 93.620% | 91.049% | 94.578% |
| Range | | | | |

Sample Name: 240-112097-e-3-c  Acquired: 5/10/2019 16:50:53  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.07023 | 164.96 | 27.730 | 604.67 | 471.62 | .52868 |
| Stddev | .11317 | 28.76 | .891 | 2.22 | 2.05 | .09159 |
| %RSD | 161.13 | 17.434 | 3.2145 | .36665 | .43534 | 17.324 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 190490. | 2.268 | 19.170 | 4.1922 | 3.4643 | 176.82 |
| Stddev | 936. | .162 | .241 | .2131 | 1.0632 | 2.56 |
| %RSD | .49135 | 7.136 | 1.2551 | 5.0828 | 30.692 | 1.4455 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4401.4 | 41.994 | 29985. | 4540.2 | 3.4099 | F 1110000. |
| Stddev | 48.5 | 1.851 | 160. | 43.5 | .1946 | 14702. |
| %RSD | 1.1009 | 4.4072 | .53401 | .95734 | 5.7080 | 1.3245 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112097-e-3-c  Acquired: 5/10/2019 16:50:53  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16.978 | 11.573 | 1.554 | 2.5365 | 2.4067 | 1.0383 |
| Stddev | .681 | 1.499 | .598 | 2.0552 | .1604 | .2163 |
| %RSD | 4.0125 | 12.950 | 38.48 | 81.022 | 6.6645 | 20.829 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.6854 | -.80485 | 280.71 | 1120.0 | 635.86 |
| Stddev | 1.7397 | 6.7502 | 5.27 | 10.0 | 7.32 |
| %RSD | 37.131 | 838.68 | 1.8770 | .89426 | 1.1510 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4795.1 | 3620.5 | 38046. | 3171.3 |
| Stddev | 7.8 | 12.2 | 188. | 24.3 |
| %RSD | .16203 | .33797 | .49528 | .76531 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.144% | 87.286% | 83.600% | 93.637% |
| Range | | | | |

Sample Name: 240-112119-b-1-d  Acquired: 5/10/2019 16:55:21  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .27785 | -36.244 | 13.064 | 563.99 | 906.60 | .42038 |
| Stddev | .45398 | 14.151 | 2.059 | 5.69 | 2.56 | .28421 |
| %RSD | 163.39 | 39.045 | 15.757 | 1.0083 | .28228 | 67.608 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 542290. | .0824 | 34.825 | 3.6823 | 6.2845 | 44.995 |
| Stddev | 2118. | .0241 | .369 | .2028 | 1.5829 | 2.168 |
| %RSD | .39052 | 29.26 | 1.0600 | 5.5083 | 25.188 | 4.8173 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3440.2 | 61.621 | 26123. | F 11270. | 118.69 | F 1068700. |
| Stddev | 24.9 | 3.392 | 117. | 97. | 1.82 | 10518. |
| %RSD | .72501 | 5.5048 | .44962 | .86209 | 1.5328 | .98415 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 10000. | | 500000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112119-b-1-d  Acquired: 5/10/2019 16:55:21  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 184.01 | 4.7283 | .9407 | 5.8113 | 2.0028 | .19450 |
| Stddev | 2.83 | 1.6942 | 1.360 | 2.0322 | .3286 | .08888 |
| %RSD | 1.5372 | 35.832 | 144.6 | 34.970 | 16.405 | 45.695 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.4299 | 49.625 | 64.636 | 2876.9 | 884.98 |
| Stddev | .6976 | 6.622 | .741 | 7.9 | 9.54 |
| %RSD | 20.338 | 13.344 | 1.1468 | .27469 | 1.0783 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4689.2 | 3566.6 | 37588. | 3071.4 |
| Stddev | 20.0 | 18.8 | 94. | 18.8 |
| %RSD | .42756 | .52573 | .24963 | .61181 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.461% | 85.986% | 82.594% | 90.686% |
| Range | | | | |

Sample Name: 240-112119-b-2-d  Acquired: 5/10/2019 16:59:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.05148 | 24.211 | 19.878 | 738.83 | 1110.7 | .55067 |
| Stddev | .76524 | 26.472 | 4.600 | 5.76 | 3.7 | .21145 |
| %RSD | 1486.3 | 109.34 | 23.143 | .77965 | .33391 | 38.399 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 655470. | .4165 | 6.6855 | 2.2758 | 5.1426 | 58.518 |
| Stddev | 4675. | .0617 | .3078 | .1256 | 1.2279 | 2.525 |
| %RSD | .71316 | 14.82 | 4.6044 | 5.5201 | 23.877 | 4.3155 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5854.2 | 74.324 | 29492. | 4492.2 | 2123.7 | F 1105500. |
| Stddev | 14.3 | 2.549 | 320. | 33.2 | 21.6 | 14674. |
| %RSD | .24384 | 3.4289 | 1.0843 | .73809 | 1.0179 | 1.3274 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112119-b-2-d  Acquired: 5/10/2019 16:59:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 724.91 | 3.5793 | -1.119 | 3.9609 | 1.1566 | .03030 |
| Stddev | 2.76 | 1.3712 | 4.858 | 2.9484 | .7528 | .07431 |
| %RSD | .38070 | 38.309 | 434.3 | 74.438 | 65.081 | 245.24 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.9562 | 3434.3 | 56.765 | 3762.7 | 1340.9 |
| Stddev | 2.2890 | 25.1 | .449 | 38.8 | 18.2 |
| %RSD | 77.432 | .73227 | .79171 | 1.0301 | 1.3603 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4689.4 | 3572.3 | 37823. | 3187.9 |
| Stddev | 15.6 | 15.9 | 187. | 17.6 |
| %RSD | .33359 | .44539 | .49484 | .55290 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.465% | 86.123% | 83.110% | 94.126% |
| Range | | | | |

Sample Name: 240-112119-b-3-d  Acquired: 5/10/2019 17:04:31  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2270 | 257.22 | 29.751 | 446.03 | 765.24 | .42522 |
| Stddev | 1.1988 | 92.11 | .718 | 1.93 | 2.31 | .20291 |
| %RSD | 53.828 | 35.809 | 2.4130 | .43158 | .30205 | 47.720 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 288220. | 3.910 | 33.217 | 4.3704 | 5.7417 | 59.837 |
| Stddev | 706. | .240 | .646 | .4457 | .5240 | 2.317 |
| %RSD | .24509 | 6.148 | 1.9454 | 10.199 | 9.1266 | 3.8731 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5550.2 | 66.968 | 59712. | F 12240. | 529.59 | F 1062100. |
| Stddev | 83.5 | 3.595 | 896. | 1524. | 3.38 | 18363. |
| %RSD | 1.5039 | 5.3674 | 1.5002 | 12.449 | .63775 | 1.7290 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Fail |
| High Limit | | | | 10000. | | 500000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 240-112119-b-3-d  Acquired: 5/10/2019 17:04:31  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 407.64 | 14.329 | -6.051 | 6.1795 | 1.8654 | .43673 |
| Stddev | 2.38 | .578 | .673 | 3.1866 | .4202 | .10390 |
| %RSD | .58317 | 4.0360 | 11.13 | 51.567 | 22.525 | 23.791 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.8504 | 1162.2 | 796.69 | 2310.6 | 729.66 |
| Stddev | 2.4082 | 13.4 | 5.90 | 25.9 | 14.06 |
| %RSD | 84.487 | 1.1543 | .74073 | 1.1219 | 1.9267 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4787.5 | 3645.5 | 38165. | 3200.4 |
| Stddev | 24.3 | 15.0 | 615. | 45.5 |
| %RSD | .50861 | .41204 | 1.6115 | 1.4204 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.022% | 87.888% | 83.861% | 94.495% |
| Range | | | | |

Sample Name: 240-111895-i-2-f Acquired: 5/10/2019 17:08:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.52750 | 204.78 | 9.8342 | 645.33 | 58.285 | .20872 | 23218. |
| Stddev | .36690 | 38.08 | 1.7318 | 3.45 | .533 | .20432 | 31. |
| %RSD | 69.554 | 18.597 | 17.610 | .53465 | .91384 | 97.892 | .13232 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .5412 | 3.3030 | 68.379 | 63.279 | 613.62 | 240890. | 147.20 |
| Stddev | .1939 | .0765 | .783 | .849 | 5.16 | 628. | 3.21 |
| %RSD | 35.83 | 2.3157 | 1.1447 | 1.3417 | .84105 | .26071 | 2.1777 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1446.1 | 36.417 | 138.60 | 192290. | 23.826 | 8.4234 | 13.88 |
| Stddev | 24.2 | .106 | .60 | 439. | .550 | .1840 | 1.30 |
| %RSD | 1.6713 | .29189 | .43202 | .22832 | 2.3089 | 2.1847 | 9.380 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111895-i-2-f  Acquired: 5/10/2019 17:08:54  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7904 | 5.4227 | 5.5944 | -2.8314 | 27.369 | 516.17 | 5438.6 |
| Stddev | 2.3389 | .2916 | .2813 | .8786 | 4.675 | 3.31 | 30.8 |
| %RSD | 130.64 | 5.3772 | 5.0283 | 31.032 | 17.080 | .64061 | .56629 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 248.65 |
| Stddev | 4.39 |
| %RSD | 1.7667 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5356.5 | 3867.1 | 41089. | 3233.6 |
| Stddev | 13.3 | 11.2 | 157. | 10.2 |
| %RSD | .24883 | .28879 | .38119 | .31657 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.058% | 93.231% | 90.288% | 95.477% |
| Range | | | | |

Sample Name: 240-111927-b-1-d Acquired: 5/10/2019 17:13:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .42316 | -9.4433 | 4.0704 | 31.163 | 11.654 | .23219 |
| Stddev | .42450 | 15.403 | 1.1395 | .619 | .594 | .27353 |
| %RSD | 100.32 | 163.11 | 27.994 | 1.9868 | 5.0995 | 117.80 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 683.84 | 4.244 | .27104 | 1.0950 | .76014 | 214.33 |
| Stddev | 5.02 | .085 | .17906 | .3983 | .50734 | 2.71 |
| %RSD | .73341 | 1.991 | 66.062 | 36.371 | 66.742 | 1.2656 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2221.2 | 38.488 | 1915.9 | 4.3169 | 8.6557 | F 1088900. |
| Stddev | 86.0 | 3.215 | 38.4 | .0614 | .2815 | 30095. |
| %RSD | 3.8725 | 8.3534 | 2.0022 | 1.4219 | 3.2519 | 2.7637 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111927-b-1-d  Acquired: 5/10/2019 17:13:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2352 | 8.8519 | -2.270 | 2.7508 | 1.8785 | .51816 |
| Stddev | .3810 | .9242 | 1.837 | 1.1440 | .2844 | .04550 |
| %RSD | 30.842 | 10.441 | 80.93 | 41.590 | 15.139 | 8.7814 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.3579 | 7.9167 | 8099.2 | 110.17 | 7.2125 |
| Stddev | 1.2852 | 7.3567 | 109.7 | 6.51 | 5.9004 |
| %RSD | 54.506 | 92.926 | 1.3540 | 5.9100 | 81.808 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5110.4 | 3785.4 | 39423. | 3258.3 |
| Stddev | 7.6 | 4.7 | 157. | 26.2 |
| %RSD | .14777 | .12407 | .39703 | .80541 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.150% | 91.260% | 86.626% | 96.205% |
| Range | | | | |

Sample Name: 240-112101-b-1-d Acquired: 5/10/2019 17:17:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59088 | -8.8855 | 8.8843 | 607.50 | 1650.5 | .42605 |
| Stddev | 1.1207 | 56.516 | 1.3792 | 7.39 | 5.7 | .18151 |
| %RSD | 189.66 | 636.05 | 15.523 | 1.2170 | .34755 | 42.604 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 550780. | 8.783 | 15.941 | 10.267 | 45.497 | 4.6430 |
| Stddev | 6697. | .218 | .508 | .306 | .786 | .3986 |
| %RSD | 1.2159 | 2.485 | 3.1845 | 2.9815 | 1.7272 | 8.5839 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12159. | 75.788 | 32792. | 7934.3 | 11.807 | F 1106200. |
| Stddev | 108. | 1.887 | 328. | 31.6 | .209 | 13444. |
| %RSD | .89107 | 2.4900 | .99941 | .39827 | 1.7737 | 1.2153 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-1-d  Acquired: 5/10/2019 17:17:28  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 561.93 | 21.660 | 2.672 | 5.4604 | 2.2646 | -.34373 |
| Stddev | 11.91 | 1.266 | 1.110 | 3.4607 | .6018 | .09633 |
| %RSD | 2.1191 | 5.8463 | 41.52 | 63.377 | 26.576 | 28.026 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.8399 | 2.5435 | 645.16 | 17125. | 1630.2 |
| Stddev | 1.3221 | 4.1207 | 7.80 | 304. | 17.0 |
| %RSD | 27.316 | 162.01 | 1.2093 | 1.7741 | 1.0433 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4816.1 | 3650.6 | 38461. | 3256.4 |
| Stddev | 3.3 | 1.4 | 47. | 14.3 |
| %RSD | .06830 | .03941 | .12194 | .43885 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.476% | 88.011% | 84.511% | 96.150% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 17:22:05 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 997.91 | 24695. | 511.60 | 5109.2 | 1990.4 | 1945.2 | 49999. | 506.3 |
| Stddev | 2.14 | 82. | 2.49 | 8.1 | 2.2 | 3.5 | 115. | 1.9 |
| %RSD | .21403 | .33029 | .48609 | .15900 | .11046 | .17869 | .22953 | .3765 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2045.1 | 2015.8 | 1976.9 | 25181. | 49776. | 5029.8 | 50058. | 2005.4 |
| Stddev | 5.3 | 8.3 | 1.8 | 36. | 123. | 5.6 | 178. | 2.5 |
| %RSD | .25978 | .41265 | .08955 | .14168 | .24759 | .11187 | .35612 | .12313 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2041.2 | 48764. | 2036.9 | 495.06 | 501.3 | 514.69 | 5147.9 | 5050.5 |
| Stddev | 9.9 | 99. | 6.8 | .75 | 2.6 | 3.78 | 15.6 | 11.3 |
| %RSD | .48294 | .20378 | .33539 | .15074 | .5222 | .73493 | .30236 | .22408 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 17:22:05 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1015.4 | 2011.8 | 2086.6 | 4855.7 | 4956.3 |
| Stddev | 3.5 | 5.8 | 6.0 | 53.2 | 19.6 |
| %RSD | .33985 | .28836 | .28944 | 1.0960 | .39555 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5599.1 | 3999.4 | 43135. | 3336.4 |
| Stddev | 10.4 | 10.8 | 126. | 9.8 |
| %RSD | .18578 | .26893 | .29133 | .29310 |

Sample Name: CCB Acquired: 5/10/2019 17:26:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12217 | -60.742 | 3.9057 | 5.6404 | .00572 | .15733 | 39.126 | -.0453 |
| Stddev | .34861 | 36.870 | 2.0855 | .2642 | .34835 | .07789 | 4.201 | .0506 |
| %RSD | 285.35 | 60.699 | 53.398 | 4.6834 | 6093.2 | 49.511 | 10.737 | 111.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .32909 | -.10269 | -.01721 | 3.0058 | 264.14 | 9.6567 | 6.9587 | .75876 |
| Stddev | .23918 | .47648 | .34116 | 1.5682 | 10.04 | 2.4233 | 13.764 | .02115 |
| %RSD | 72.680 | 464.00 | 1982.5 | 52.172 | 3.7991 | 25.094 | 197.79 | 2.7876 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.4332 | 626.80 | .29333 | .99185 | -.6917 | .02246 | .68373 | 1.1040 |
| Stddev | .3639 | 21.90 | .25134 | .38547 | 1.327 | .36856 | 1.0382 | .2292 |
| %RSD | 6.6969 | 3.4936 | 85.687 | 38.864 | 191.9 | 1641.0 | 151.85 | 20.757 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 17:26:08 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .90498 | 2.9783 | 2.9589 | -5.3526 | -2.1563 |
| Stddev | .74361 | 8.3748 | .0478 | 11.465 | 2.7828 |
| %RSD | 82.169 | 281.19 | 1.6148 | 214.20 | 129.06 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6332.1 | 4180.1 | 45719. | 3364.0 |
| Stddev | 12.9 | 12.4 | 54. | 25.3 |
| %RSD | .20355 | .29545 | .11874 | .75090 |

Sample Name: CCVL-4100714 Acquired: 5/10/2019 17:30:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.330 | 147.84 | 18.726 | 104.56 | 199.29 | 5.0413 | 5155.5 | 5.235 |
| Stddev | .145 | 10.87 | 1.468 | .91 | .30 | .1715 | 27.2 | .307 |
| %RSD | 1.4077 | 7.3488 | 7.8392 | .87362 | .15162 | 3.4021 | .52831 | 5.863 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.268 | 10.370 | 25.145 | 211.22 | 5133.9 | 60.785 | 5251.1 | 17.323 |
| Stddev | .303 | .100 | .703 | 3.69 | 23.4 | 1.287 | 39.0 | .071 |
| %RSD | 2.9473 | .96629 | 2.7961 | 1.7450 | .45613 | 2.1180 | .74337 | .41230 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 41.828 | 5462.8 | 40.664 | 10.414 | 20.28 | 19.618 | 100.60 | 50.669 |
| Stddev | .359 | 18.8 | .362 | .719 | 1.89 | 1.943 | 1.35 | .151 |
| %RSD | .85833 | .34427 | .89125 | 6.9027 | 9.328 | 9.9035 | 1.3434 | .29759 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/10/2019 17:30:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 19.386 | 51.442 | 53.014 | 484.83 | 50.382 |
| Stddev | .602 | 2.544 | .674 | 5.68 | 5.604 |
| %RSD | 3.1044 | 4.9447 | 1.2710 | 1.1717 | 11.123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6153.7 | 4109.3 | 44620. | 3321.0 |
| Stddev | 5.8 | 2.0 | 93. | 6.2 |
| %RSD | .09477 | .04912 | .20812 | .18796 |

Sample Name: 240-112101-b-2-d  Acquired: 5/10/2019 17:34:41  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03082 | 14.644 | 9.6895 | 547.24 | 1252.3 | .18423 |
| Stddev | .58678 | 18.884 | 1.0039 | 6.05 | 4.7 | .08457 |
| %RSD | 1904.2 | 128.95 | 10.360 | 1.1055 | .37907 | 45.906 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 597350. | 1.698 | 7.4913 | 14.529 | 22.379 | 3.9116 |
| Stddev | 13184. | .226 | .1329 | .349 | 1.766 | 2.9083 |
| %RSD | 2.2070 | 13.32 | 1.7745 | 2.4046 | 7.8897 | 74.350 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10141. | 48.698 | 29169. | 5650.5 | 5.6524 | F 1144500. |
| Stddev | 132. | 5.351 | 277. | 23.0 | .1236 | 20407. |
| %RSD | 1.3055 | 10.987 | .94973 | .40623 | 2.1871 | 1.7831 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-2-d  Acquired: 5/10/2019 17:34:41  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 170.35 | 4.6957 | -2.597 | 2.9557 | 1.9142 | -.14622 |
| Stddev | 2.24 | .6967 | 1.306 | 3.0943 | .4505 | .22633 |
| %RSD | 1.3157 | 14.838 | 50.30 | 104.69 | 23.536 | 154.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.5694 | 5.6508 | 119.51 | 8228.8 | 1217.1 |
| Stddev | 1.6870 | 2.0772 | 1.48 | 69.7 | 14.8 |
| %RSD | 47.263 | 36.760 | 1.2413 | .84680 | 1.2127 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4745.7 | 3596.3 | 38342. | 3225.0 |
| Stddev | 21.3 | 15.6 | 51. | 39.4 |
| %RSD | .44917 | .43253 | .13272 | 1.2203 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.359% | 86.702% | 84.252% | 95.221% |
| Range | | | | |

Sample Name: 240-112101-b-3-d  Acquired: 5/10/2019 17:39:17  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.10664 | 400.04 | 8.0259 | 755.90 | 1631.9 | .28600 |
| Stddev | .31612 | 28.61 | .6997 | 1.57 | 3.1 | .07633 |
| %RSD | 296.43 | 7.1524 | 8.7188 | .20777 | .18721 | 26.688 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 169700. | 2.905 | 7.2742 | 9.3674 | 237.89 | 6.0526 |
| Stddev | 285. | .062 | .5276 | .1906 | 1.12 | 4.7583 |
| %RSD | .16789 | 2.121 | 7.2537 | 2.0352 | .46992 | 78.617 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18252. | 58.897 | 33875. | 3429.9 | 2.1291 | F 1127400. |
| Stddev | 40. | 4.682 | 197. | 12.2 | .1194 | 7077. |
| %RSD | .21981 | 7.9501 | .58263 | .35486 | 5.6100 | .62772 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-3-d  Acquired: 5/10/2019 17:39:17  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 608.15 | 221.75 | 2.092 | 4.4125 | 2.1983 | .78253 |
| Stddev | 2.93 | 1.03 | .307 | 1.8704 | .2416 | .06767 |
| %RSD | .48171 | .46540 | 14.66 | 42.389 | 10.989 | 8.6482 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.8121 | 9.4406 | 1248.4 | 7088.8 | 375.53 |
| Stddev | .4880 | 1.8917 | 7.7 | 78.6 | 4.26 |
| %RSD | 12.802 | 20.038 | .62053 | 1.1084 | 1.1354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4896.6 | 3706.4 | 39138. | 3259.5 |
| Stddev | 32.1 | 21.6 | 98. | 15.7 |
| %RSD | .65501 | .58377 | .25108 | .48105 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.755% | 89.358% | 86.000% | 96.239% |
| Range | | | | |

Sample Name: 240-112101-b-4-d  Acquired: 5/10/2019 17:43:46  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.05577 | 9.7292 | 8.3659 | 586.93 | 1866.6 | .33821 |
| Stddev | .64812 | 50.677 | 1.4946 | 5.09 | 2.6 | .15442 |
| %RSD | 1162.1 | 520.87 | 17.865 | .86708 | .14124 | 45.659 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 592620. | 9.675 | 40.912 | 4.8745 | 176.51 | 2.1223 |
| Stddev | 6642. | .100 | .348 | .2553 | 1.54 | 3.0644 |
| %RSD | 1.1207 | 1.037 | .84993 | 5.2382 | .87058 | 144.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6267.2 | 73.923 | 46951. | 5186.2 | 17.648 | F 1074000. |
| Stddev | 120.5 | 4.206 | 538. | 28.7 | .387 | 12576. |
| %RSD | 1.9221 | 5.6895 | 1.1469 | .55328 | 2.1929 | 1.1710 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-4-d  Acquired: 5/10/2019 17:43:46  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1700.4 | 173.40 | 13.48 | 2.3635 | 2.2754 | -.10654 |
| Stddev | 15.0 | 3.28 | 3.25 | 2.4629 | .2172 | .17660 |
| %RSD | .88341 | 1.8919 | 24.14 | 104.21 | 9.5440 | 165.75 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.5374 | 2.6544 | 2629.2 | 10021. | 1445.0 |
| Stddev | 1.3020 | 2.8311 | 19.2 | 82. | 12.2 |
| %RSD | 36.808 | 106.65 | .72978 | .81949 | .84703 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4759.2 | 3603.8 | 38218. | 3213.8 |
| Stddev | 20.3 | 16.4 | 83. | 28.0 |
| %RSD | .42749 | .45628 | .21639 | .87236 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.572% | 86.884% | 83.979% | 94.890% |
| Range | | | | |

Sample Name: 240-112101-b-5-d  Acquired: 5/10/2019 17:48:22  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.05859 | 3.8465 | 8.0305 | 493.75 | 1538.2 | .37732 |
| Stddev | .30822 | 19.883 | 1.6673 | 4.02 | 3.1 | .08383 |
| %RSD | 526.05 | 516.92 | 20.763 | .81410 | .20160 | 22.216 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 657840. | 5.082 | 14.315 | 8.6513 | 52.466 | 4.4696 |
| Stddev | 4884. | .111 | .209 | .5278 | 1.442 | 1.0204 |
| %RSD | .74246 | 2.185 | 1.4566 | 6.1004 | 2.7488 | 22.829 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4637.5 | 74.428 | 52206. | 3364.0 | 30.496 | F 1081800. |
| Stddev | 67.5 | 3.894 | 134. | 10.1 | .336 | 4844. |
| %RSD | 1.4553 | 5.2320 | .25617 | .30054 | 1.1015 | .44774 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-5-d  Acquired: 5/10/2019 17:48:22  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 656.00 | 25.783 | 12.31 | 3.0866 | 1.6094 | -.36386 |
| Stddev | 10.17 | 1.383 | 1.32 | 1.8487 | .4739 | .26652 |
| %RSD | 1.5500 | 5.3655 | 10.74 | 59.894 | 29.448 | 73.247 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.2213 | 5.9091 | 413.02 | 12418. | 1338.4 |
| Stddev | 1.5253 | 4.2266 | 3.46 | 49. | 6.8 |
| %RSD | 36.134 | 71.528 | .83866 | .39688 | .50723 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4758.3 | 3597.9 | 38298. | 3171.2 |
| Stddev | 3.1 | 1.6 | 208. | 6.6 |
| %RSD | .06498 | .04521 | .54405 | .20775 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.558% | 86.742% | 84.155% | 93.633% |
| Range | | | | |

Sample Name: 240-112101-b-6-d  Acquired: 5/10/2019 17:52:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34236 | 201.14 | 7.6636 | 535.63 | 1742.6 | .50772 |
| Stddev | .53510 | 20.58 | 1.1639 | 4.40 | 2.8 | .22818 |
| %RSD | 156.30 | 10.232 | 15.187 | .82161 | .15818 | 44.942 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 621330. | 7.758 | 27.303 | 5.3133 | 122.41 | .91283 |
| Stddev | 6167. | .079 | .320 | .3768 | .44 | 8.4265 |
| %RSD | .99255 | 1.020 | 1.1735 | 7.0918 | .35709 | 923.12 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4952.2 | 71.627 | 47785. | 5040.6 | 26.076 | F 1085600. |
| Stddev | 28.4 | 5.268 | 653. | 19.1 | .208 | 9883. |
| %RSD | .57326 | 7.3541 | 1.3670 | .37985 | .79945 | .91032 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-6-d  Acquired: 5/10/2019 17:52:57  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1030.1 | 98.847 | 9.725 | 3.3165 | 1.6777 | -.26956 |
| Stddev | 10.4 | 2.322 | 3.524 | 2.8723 | .3394 | .10258 |
| %RSD | 1.0090 | 2.3491 | 36.24 | 86.609 | 20.228 | 38.055 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.5320 | -2.6186 | 1337.4 | 14540. | 1201.2 |
| Stddev | 1.2982 | 3.3426 | 14.8 | 350. | 15.8 |
| %RSD | 36.755 | 127.65 | 1.1095 | 2.4044 | 1.3193 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4750.4 | 3601.8 | 38059. | 3145.1 |
| Stddev | 1.8 | 5.2 | 194. | 25.1 |
| %RSD | .03844 | .14362 | .51102 | .79804 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.434% | 86.834% | 83.630% | 92.862% |
| Range | | | | |

Sample Name: 240-112101-b-7-d  Acquired: 5/10/2019 17:57:32  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05024 | 282.60 | 8.4055 | 569.20 | 899.32 | .66459 |
| Stddev | .85314 | 30.44 | .3806 | 5.84 | .84 | .04513 |
| %RSD | 1698.0 | 10.773 | 4.5283 | 1.0254 | .09354 | 6.7911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 503140. | 2.561 | 11.295 | 5.6887 | 8.2702 | 5.3080 |
| Stddev | 6305. | .189 | .569 | .2171 | .7756 | 2.4224 |
| %RSD | 1.2531 | 7.378 | 5.0375 | 3.8160 | 9.3780 | 45.637 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4485.3 | 67.208 | 36187. | 6132.1 | 6.8402 | F 1119400. |
| Stddev | 60.2 | 3.825 | 125. | 14.1 | .4661 | 26198. |
| %RSD | 1.3421 | 5.6910 | .34450 | .22982 | 6.8141 | 2.3404 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112101-b-7-d Acquired: 5/10/2019 17:57:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 142.59 | 5.4785 | 1.960 | 4.7852 | 1.1215 | .01579 |
| Stddev | 2.69 | 1.6573 | 2.797 | 1.7980 | .7212 | .18391 |
| %RSD | 1.8855 | 30.250 | 142.7 | 37.574 | 64.308 | 1164.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.8256 | 4.9521 | 67.806 | 7869.5 | 678.86 |
| Stddev | .9842 | 6.3659 | 1.417 | 71.1 | 1.73 |
| %RSD | 16.895 | 128.55 | 2.0894 | .90300 | .25530 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4711.4 | 3580.4 | 38028. | 3156.7 |
| Stddev | 11.0 | 11.2 | 61. | 9.3 |
| %RSD | .23325 | .31296 | .16007 | .29322 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.815% | 86.320% | 83.560% | 93.206% |
| Range | | | | |

Sample Name: 490-172895-a-26-c  Acquired: 5/10/2019 18:02:09  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .80805 | 269.73 | 14.454 | 535.55 | 404.64 | .29344 |
| Stddev | .55039 | 7.24 | .392 | 3.83 | 1.25 | .25567 |
| %RSD | 68.113 | 2.6830 | 2.7121 | .71452 | .30772 | 87.130 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 605140. | .4908 | 8.8279 | 16.565 | 7.7807 | 62.571 |
| Stddev | 7170. | .1656 | .1061 | .514 | .9711 | 2.071 |
| %RSD | 1.1848 | 33.75 | 1.2023 | 3.1044 | 12.481 | 3.3097 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3572.6 | 68.577 | 74954. | W 9111.3 | 25.221 | F 1106700. |
| Stddev | 24.0 | 4.533 | 670. | 69.9 | .191 | 6033. |
| %RSD | .67284 | 6.6101 | .89433 | .76718 | .75597 | .54512 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Warn | Chk Pass | Chk Fail |
| High Limit | | | | 9000.0 | | 500000. |
| Low Limit | | | | -500000. | | -500000. |

Sample Name: 490-172895-a-26-c Acquired: 5/10/2019 18:02:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33.407 | 1.4138 | -.8099 | 8.1105 | 2.5683 | 12.549 |
| Stddev | .439 | .9277 | 1.322 | 4.7561 | .1250 | .268 |
| %RSD | 1.3131 | 65.617 | 163.2 | 58.641 | 4.8675 | 2.1332 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.9130 | 11.024 | 3.3678 | 76668. | 468.32 |
| Stddev | 2.1101 | 5.924 | .1336 | 1970. | 8.13 |
| %RSD | 42.948 | 53.740 | 3.9678 | 2.5690 | 1.7361 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4716.7 | 3589.8 | 38015. | 3137.1 |
| Stddev | 16.9 | 11.8 | 107. | 10.1 |
| %RSD | .35871 | .32883 | .28194 | .32263 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 74.897% | 86.545% | 83.531% | 92.628% |
| Range | | | | |

Sample Name: 490-172895-e-27-c Acquired: 5/10/2019 18:06:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .51337 | -15.842 | 1.8051 | 245.50 | 45.736 | .17875 | 60333. | .0013 |
| Stddev | .37571 | 43.217 | 1.0052 | 1.20 | .095 | .23580 | 163. | .1662 |
| %RSD | 73.185 | 272.80 | 55.684 | .49004 | .20695 | 131.92 | .27017 | 12470. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.8532 | 2.0360 | 1.1754 | 1.5519 | 2762.4 | 24.245 | 19509. | 1415.0 |
| Stddev | .1308 | .2491 | .4019 | 4.4571 | 39.1 | 2.295 | 157. | 2.2 |
| %RSD | 1.9085 | 12.233 | 34.195 | 287.20 | 1.4146 | 9.4676 | .80382 | .15567 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7657 | 41386. | 9.8859 | 1.3368 | -1.484 | .89716 | .53947 | .12544 |
| Stddev | .3965 | 108. | .3855 | .8120 | 1.548 | 1.9584 | .82915 | .16532 |
| %RSD | 14.337 | .26055 | 3.8990 | 60.741 | 104.3 | 218.28 | 153.70 | 131.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 490-172895-e-27-c Acquired: 5/10/2019 18:06:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.69303 | -.11253 | 1.9358 | 2986.3 | 127.38 |
| Stddev | .86781 | 3.8684 | .1185 | 11.0 | 3.76 |
| %RSD | 125.22 | 3437.8 | 6.1230 | .36709 | 2.9544 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5885.4 | 4036.8 | 44247. | 3314.6 |
| Stddev | 7.8 | 5.1 | 74. | 4.6 |
| %RSD | .13337 | .12622 | .16718 | .13981 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.456% | 97.323% | 97.226% | 97.866% |
| Range | | | | |

Sample Name: lb 240-380299/1-b Acquired: 5/10/2019 18:11:01 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .10149 | -26.768 | 1.8823 | 1.3322 | F 5.6079 | .05515 | 73.811 |
| Stddev | .40542 | 27.959 | .8448 | .1867 | .1749 | .05552 | 3.860 |
| %RSD | 399.48 | 104.45 | 44.879 | 14.016 | 3.1190 | 100.67 | 5.2291 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | None |
| High Limit | | | | | 5.0000 | | |
| Low Limit | | | | | -1000.0 | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2591 | .06769 | .56635 | -.89700 | 17.071 | 182.82 | 11.533 |
| Stddev | .0377 | .38132 | .28862 | .52237 | 5.399 | 44.17 | 4.710 |
| %RSD | 14.54 | 563.35 | 50.961 | 58.236 | 31.628 | 24.161 | 40.835 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.9735 | .70760 | -.34095 | 16050. | 1.3349 | 1.2201 | 1.691 |
| Stddev | 9.1718 | .05573 | .26325 | 36. | .7584 | 1.1007 | 1.893 |
| %RSD | 308.45 | 7.8753 | 77.212 | .22593 | 56.810 | 90.215 | 112.0 |
| Check ? | None | Chk Pass | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: lb 240-380299/1-b  Acquired: 5/10/2019 18:11:01  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.09195 | 33.398 | .14071 | -.34189 | -2.6194 | 3.3704 | 50.908 |
| Stddev | 2.4075 | .293 | .14799 | 1.5333 | 6.1603 | .0153 | 15.831 |
| %RSD | 2618.1 | .87710 | 105.17 | 448.49 | 235.18 | .45440 | 31.098 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -2.6124 |
| Stddev | 3.6079 |
| %RSD | 138.10 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6170.7 | 4116.7 | 45218. | 3312.8 |
| Stddev | 23.8 | 16.5 | 42. | 8.2 |
| %RSD | .38609 | .40135 | .09277 | .24622 |

Sample Name: CCV-4140446 Acquired: 5/10/2019 18:15:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 981.03 | 24793. | 513.64 | 5107.8 | 2002.3 | 2002.8 | 50052. | 509.6 |
| Stddev | 6.77 | 101. | .50 | 6.0 | 1.5 | 4.8 | 46. | .5 |
| %RSD | .68976 | .40690 | .09715 | .11807 | .07393 | .23877 | .09157 | .1031 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2037.4 | 1975.4 | 1948.9 | 25199. | 51197. | 5118.0 | 51087. | 1997.3 |
| Stddev | 3.3 | 10.6 | 10.6 | 48. | 38. | 3.9 | 95. | 7.4 |
| %RSD | .16269 | .53493 | .54365 | .18924 | .07426 | .07593 | .18652 | .36972 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2039.7 | 50633. | 2037.0 | 493.26 | 503.5 | 510.44 | 5149.5 | 5035.3 |
| Stddev | 3.8 | 104. | 6.9 | 1.99 | 3.0 | 4.29 | 11.7 | 10.9 |
| %RSD | .18770 | .20592 | .33984 | .40344 | .6028 | .84038 | .22809 | .21618 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 18:15:21 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1012.3 | 1999.1 | 2086.0 | 4934.9 | 5071.8 |
| Stddev | 3.7 | 16.8 | 4.3 | 37.6 | 14.3 |
| %RSD | .36996 | .84248 | .20693 | .76126 | .28198 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5550.6 | 3953.2 | 42737. | 3215.4 |
| Stddev | 7.3 | 4.2 | 149. | 13.2 |
| %RSD | .13078 | .10627 | .34975 | .41008 |

Sample Name: CCB Acquired: 5/10/2019 18:19:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.27992 | -43.816 | 2.0407 | 4.0596 | .31153 | .21664 | 39.295 | .1020 |
| Stddev | .44729 | 45.957 | .6354 | .1409 | .07902 | .17179 | .641 | .1739 |
| %RSD | 159.79 | 104.89 | 31.135 | 3.4696 | 25.364 | 79.299 | 1.6320 | 170.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03673 | -.31387 | -1.2551 | 4.6791 | 192.65 | 5.2650 | -12.245 | .77763 |
| Stddev | .18363 | .33295 | .2758 | 1.2709 | 16.03 | 2.2888 | 24.410 | .05580 |
| %RSD | 499.99 | 106.08 | 21.970 | 27.161 | 8.3185 | 43.472 | 199.34 | 7.1759 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.5760 | 529.52 | .80158 | -1.0144 | .5276 | 3.6364 | .85957 | 1.3274 |
| Stddev | .4805 | 8.19 | .27414 | 1.0483 | 4.797 | 2.1016 | .31900 | .3206 |
| %RSD | 8.6170 | 1.5462 | 34.199 | 103.34 | 909.2 | 57.793 | 37.112 | 24.148 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 18:19:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0212 | 2.3446 | 3.0200 | 20.097 | -3.8196 |
| Stddev | .7743 | 6.7346 | .0190 | 4.377 | 3.5909 |
| %RSD | 75.827 | 287.24 | .62945 | 21.781 | 94.011 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6315.5 | 4141.7 | 45522. | 3267.5 |
| Stddev | 14.8 | 3.8 | 91. | 7.9 |
| %RSD | .23424 | .09093 | .20091 | .24182 |

Sample Name: mb 240-380412/2-a Acquired: 5/10/2019 18:23:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .03960 | -44.191 | 2.2081 | 1.6952 | .60438 | .38589 | 68.773 | .1728 |
| Stddev | .24323 | 23.679 | 1.0432 | .5123 | .01656 | .09382 | 4.679 | .1227 |
| %RSD | 614.19 | 53.584 | 47.244 | 30.219 | 2.7396 | 24.312 | 6.8029 | 71.02 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .08393 | .23395 | -.07944 | 12.346 | 213.97 | 7.8008 | 4.2085 | .38156 |
| Stddev | .11835 | .13778 | 1.1543 | 3.789 | 50.22 | 1.2981 | 33.580 | .08261 |
| %RSD | 141.01 | 58.891 | 1453.0 | 30.690 | 23.469 | 16.641 | 797.89 | 21.651 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1822 | 532.72 | 1.1957 | -.06194 | .5614 | -.72423 | 34.322 | .65451 |
| Stddev | .4276 | 14.81 | .1342 | .63206 | 3.515 | 1.2348 | .639 | .14586 |
| %RSD | 36.170 | 2.7796 | 11.225 | 1020.4 | 626.2 | 170.50 | 1.8613 | 22.285 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380412/2-a Acquired: 5/10/2019 18:23:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.19412 | 1.5413 | 1.4439 | .25331 | .15540 |
| Stddev | .70598 | .4567 | .0699 | 3.7339 | 3.1698 |
| %RSD | 363.68 | 29.631 | 4.8426 | 1474.1 | 2039.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6224.8 | 4130.2 | 45655. | 3314.1 |
| Stddev | 10.7 | 11.2 | 211. | 9.9 |
| %RSD | .17166 | .27113 | .46324 | .29736 |

Sample Name: lcs 240-380412/3-a Acquired: 5/10/2019 18:28:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.397 | 1973.3 | 1943.9 | 956.05 | 1940.4 | 48.657 | 63.851 | 48.90 |
| Stddev | .302 | 33.0 | 3.7 | 3.65 | 8.6 | .279 | 4.545 | .17 |
| %RSD | .63761 | 1.6731 | .18919 | .38194 | .44148 | .57428 | 7.1183 | .3574 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 485.88 | 193.44 | 244.40 | 1035.2 | 163.73 | 1007.3 | -4.0561 | 501.18 |
| Stddev | 1.29 | .97 | 1.30 | 13.5 | 25.93 | 4.1 | 36.399 | .82 |
| %RSD | .26508 | .50294 | .53155 | 1.3022 | 15.836 | .40527 | 897.38 | .16332 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | None | Chk Pass | None | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 964.22 | 16030. | 492.45 | 498.66 | 480.2 | 1928.4 | 1923.4 | 960.36 |
| Stddev | 4.98 | 62. | 1.76 | 1.96 | 5.0 | 11.1 | 7.3 | 1.16 |
| %RSD | .51608 | .38783 | .35697 | .39269 | 1.038 | .57552 | .38038 | .12130 |
| Check ? | Chk Pass | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380412/3-a Acquired: 5/10/2019 18:28:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1923.9 | 489.23 | 493.71 | 946.40 | 1022.0 |
| Stddev | 10.4 | 7.03 | 1.17 | 15.35 | 9.1 |
| %RSD | .54119 | 1.4378 | .23689 | 1.6217 | .89310 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6058.0 | 4083.1 | 44819. | 3285.2 |
| Stddev | 6.7 | 8.4 | 106. | 20.0 |
| %RSD | .11069 | .20548 | .23590 | .60976 |

Sample Name: 240-112157-b-1-c Acquired: 5/10/2019 18:32:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .52315 | 16.240 | 4.6789 | 1.2256 | .23916 | .10086 | 78.898 | .1489 |
| Stddev | .27938 | 38.221 | 2.8883 | .3007 | .17848 | .06904 | 2.507 | .1582 |
| %RSD | 53.403 | 235.35 | 61.729 | 24.536 | 74.629 | 68.454 | 3.1774 | 106.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05535 | .07491 | .38807 | 7.9502 | 157.32 | 6.3931 | 6.3202 | .67057 |
| Stddev | .20222 | .33079 | 1.0713 | 2.4540 | 74.62 | 1.9825 | 16.317 | .07855 |
| %RSD | 365.34 | 441.58 | 276.06 | 30.867 | 47.432 | 31.010 | 258.17 | 11.714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.8474 | 440.08 | 1.0485 | 1.0223 | 1.340 | 4.3381 | 33.713 | 4.0924 |
| Stddev | .2844 | 6.95 | .2882 | .9804 | 3.177 | 3.2981 | .892 | .4567 |
| %RSD | 9.9871 | 1.5791 | 27.486 | 95.909 | 237.1 | 76.026 | 2.6444 | 11.160 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112157-b-1-c Acquired: 5/10/2019 18:32:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3211 | 3.4808 | 1.8457 | 19.483 | 1.4851 |
| Stddev | .5672 | 2.8574 | .0636 | 5.351 | 5.9820 |
| %RSD | 42.931 | 82.090 | 3.4436 | 27.463 | 402.80 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6362.6 | 4172.3 | 46260. | 3352.6 |
| Stddev | 2.9 | 4.8 | 117. | 9.3 |
| %RSD | .04627 | .11408 | .25196 | .27714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.03% | 100.59% | 101.65% | 98.988% |
| Range | | | | |

Sample Name: SD 240-112157-b-1c@5 Acquired: 5/10/2019 18:36:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28919 | -19.139 | 2.8811 | -.07762 | .35111 | .03689 | 78.426 | -.1047 |
| Stddev | .32432 | 25.238 | 1.5615 | .06464 | .15912 | .15018 | 1.651 | .0330 |
| %RSD | 112.15 | 131.87 | 54.198 | 83.280 | 45.318 | 407.13 | 2.1052 | 31.54 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12427 | .02892 | -.06223 | 2.6212 | 26.611 | 1.8438 | -22.926 | 1.0976 |
| Stddev | .23666 | .07565 | 1.1266 | .8653 | 56.867 | .6615 | 2.909 | .0533 |
| %RSD | 190.45 | 261.59 | 1810.4 | 33.010 | 213.70 | 35.878 | 12.689 | 4.8583 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34414 | 334.97 | .44966 | .69345 | -.2790 | .89846 | 6.7434 | .86507 |
| Stddev | .19946 | 18.63 | .37822 | 1.1006 | 2.104 | 1.7407 | .5645 | .38887 |
| %RSD | 57.958 | 5.5613 | 84.111 | 158.72 | 754.1 | 193.74 | 8.3708 | 44.953 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112157-b-1c@5 Acquired: 5/10/2019 18:36:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3315 | 1.4920 | 3.1058 | -5.2562 | 3.7542 |
| Stddev | 1.4300 | 5.9216 | .0814 | 3.3132 | 3.9877 |
| %RSD | 107.39 | 396.89 | 2.6199 | 63.034 | 106.22 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6412.3 | 4198.3 | 46272. | 3342.6 |
| Stddev | 12.1 | 10.1 | 108. | 21.8 |
| %RSD | .18928 | .23954 | .23257 | .65284 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 101.82% | 101.22% | 101.68% | 98.694% |
| Range | | | | |

Sample Name: 240-112157-b-1d ms@5 Acquired: 5/10/2019 18:40:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 196.53 | 347.16 | 980.72 | 196.13 | 9906.9 | 9.9581 | 42.763 |
| Stddev | 1.15 | 19.15 | 2.48 | .72 | 44.9 | .2587 | 5.159 |
| %RSD | .58340 | 5.5166 | .25300 | .36720 | .45340 | 2.5977 | 12.064 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 201.6 | 98.298 | 973.66 | 50.557 | 209.94 | 69.379 | 202.92 |
| Stddev | .9 | .243 | 1.37 | 1.666 | 2.36 | 33.079 | 1.90 |
| %RSD | .4660 | .24771 | .14069 | 3.2956 | 1.1228 | 47.678 | .93399 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.7862 | 101.46 | 192.32 | 319.17 | 97.460 | 1025.6 | 96.51 |
| Stddev | 29.585 | .35 | 1.13 | 8.84 | .615 | 4.2 | 1.61 |
| %RSD | 435.95 | .34635 | .58772 | 2.7711 | .63084 | .41224 | 1.668 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112157-b-1d ms@5 Acquired: 5/10/2019 18:40:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 199.51 | 388.09 | 194.24 | 394.14 | 94.360 | 100.53 | 189.75 |
| Stddev | .58 | .91 | .27 | 3.07 | 2.712 | .08 | 7.08 |
| %RSD | .29170 | .23558 | .13651 | .77891 | 2.8737 | .08348 | 3.7328 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 199.15 |
| Stddev | 8.70 |
| %RSD | 4.3692 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6326.3 | 4160.2 | 45958. | 3312.3 |
| Stddev | 7.5 | 10.5 | 156. | 14.2 |
| %RSD | .11859 | .25135 | .33860 | .42891 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.46% | 100.30% | 100.99% | 97.800% |
| Range | | | | |

Sample Name: 240-112157-b1e msd@5 Acquired: 5/10/2019 18:44:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 196.70 | 343.31 | 989.68 | 197.23 | 9993.5 | 10.228 | 36.381 |
| Stddev | .55 | 17.47 | 5.36 | 1.66 | 17.3 | .129 | 2.114 |
| %RSD | .28022 | 5.0878 | .54168 | .84116 | .17272 | 1.2598 | 5.8095 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | | |
| Low Limit | -500000. | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 203.6 | 99.268 | 977.54 | 49.967 | 211.18 | 31.597 | 204.90 |
| Stddev | .8 | .384 | 1.46 | .892 | 3.17 | 40.065 | 3.39 |
| %RSD | .4056 | .38684 | .14984 | 1.7857 | 1.5014 | 126.80 | 1.6546 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -20.924 | 101.68 | 194.98 | 286.21 | 98.423 | 1034.8 | 97.88 |
| Stddev | 24.900 | .19 | .89 | 9.29 | .420 | 2.4 | .66 |
| %RSD | 119.00 | .18914 | .45850 | 3.2465 | .42680 | .22772 | .6724 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112157-b1e msd@5 Acquired: 5/10/2019 18:44:51 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 199.78 | 392.01 | 195.06 | 396.96 | 98.419 | 100.79 | 185.78 |
| Stddev | 1.09 | 1.30 | .08 | 2.34 | 5.805 | .18 | 2.63 |
| %RSD | .54662 | .33256 | .04356 | .58936 | 5.8987 | .18300 | 1.4138 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 204.33 |
| Stddev | 16.30 |
| %RSD | 7.9774 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6325.0 | 4165.0 | 45940. | 3325.1 |
| Stddev | 2.3 | 4.0 | 162. | 19.5 |
| %RSD | .03691 | .09549 | .35158 | .58529 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.44% | 100.41% | 100.95% | 98.178% |
| Range | | | | |

Sample Name: mb 240-380430/1-a Acquired: 5/10/2019 18:48:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .26012 | -25.027 | 3.4670 | 1.1760 | .96183 | .14694 | 81.761 |
| Stddev | .64875 | 90.653 | 1.2367 | .2332 | .28290 | .29153 | 6.526 |
| %RSD | 249.40 | 362.22 | 35.671 | 19.827 | 29.413 | 198.39 | 7.9824 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0212 | .28918 | -.12510 | .77944 | 7.9746 | 57.622 | 3.7235 |
| Stddev | .1843 | .25273 | .50535 | .92558 | 1.0691 | 33.996 | 3.6579 |
| %RSD | 870.7 | 87.394 | 403.96 | 118.75 | 13.406 | 58.998 | 98.239 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.9547 | F 10.407 | .57258 | 336.98 | .52267 | .51666 | 1.121 |
| Stddev | 24.301 | .007 | .17503 | 3.46 | .45543 | 1.0383 | 1.205 |
| %RSD | 349.42 | .06840 | 30.568 | 1.0283 | 87.136 | 200.97 | 107.5 |
| Check ? | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 10.000 | | | | | |
| Low Limit | | -1000.0 | | | | | |

Sample Name: mb 240-380430/1-a  Acquired: 5/10/2019 18:48:57  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .77549 | -.09377 | .09772 | .72676 | 3.4439 | 2.7930 | -9.3162 |
| Stddev | 1.4897 | .33059 | .08375 | .64827 | 5.1507 | .1609 | 17.648 |
| %RSD | 192.10 | 352.56 | 85.704 | 89.200 | 149.56 | 5.7621 | 189.43 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -2.6202 |
| Stddev | 5.6104 |
| %RSD | 214.13 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6326.5 | 4178.4 | 45799. | 3293.6 |
| Stddev | 10.8 | 11.2 | 143. | 21.0 |
| %RSD | .17048 | .26790 | .31114 | .63803 |

Sample Name: lcs 240-380430/2-a Acquired: 5/10/2019 18:53:15 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.811 | 2016.8 | 2090.1 | 1042.9 | 1967.3 | 51.079 | 49231. | 51.50 |
| Stddev | .326 | 9.6 | 4.3 | .5 | 1.5 | .586 | 42. | .22 |
| %RSD | .65460 | .47839 | .20395 | .04908 | .07565 | 1.1478 | .08461 | .4246 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 508.16 | 198.14 | 248.22 | 1044.5 | 51190. | 1027.4 | 51940. | 511.01 |
| Stddev | .75 | 1.10 | 1.60 | 7.2 | 128. | 3.7 | 111. | .62 |
| %RSD | .14792 | .55512 | .64631 | .69314 | .25019 | .36110 | .21342 | .12105 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 989.63 | 51024. | 514.64 | 499.94 | 517.4 | 2134.8 | 2019.8 | 996.53 |
| Stddev | 3.13 | 58. | 2.14 | 3.13 | 2.5 | .8 | 5.7 | 1.13 |
| %RSD | .31634 | .11374 | .41525 | .62702 | .4807 | .03773 | .28304 | .11362 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380430/2-a Acquired: 5/10/2019 18:53:15 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2008.4 | 508.34 | 530.88 | 1060.1 | 1049.6 |
| Stddev | 13.1 | 6.12 | 1.15 | 24.3 | 7.7 |
| %RSD | .65404 | 1.2044 | .21737 | 2.2908 | .73016 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5689.6 | 3989.6 | 43315. | 3236.7 |
| Stddev | 2.3 | 9.1 | 193. | 1.7 |
| %RSD | .04062 | .22841 | .44545 | .05123 |

Sample Name: 240-112175-a-1-a Acquired: 5/10/2019 18:57:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11657 | -17.434 | 6.0571 | 21.731 | 17.881 | .13665 | 29078. | -.1327 |
| Stddev | .83853 | 26.773 | 1.0560 | .694 | .322 | .01544 | 58. | .1166 |
| %RSD | 719.34 | 153.57 | 17.434 | 3.1921 | 1.8011 | 11.303 | .20110 | 87.83 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38374 | .97988 | 3.7726 | 38.717 | 3216.1 | 5.1114 | 8922.3 | 28.940 |
| Stddev | .11097 | .50556 | .6922 | 3.275 | 46.6 | .5203 | 121.8 | .041 |
| %RSD | 28.919 | 51.594 | 18.347 | 8.4589 | 1.4485 | 10.180 | 1.3648 | .14257 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.5262 | 14499. | 30.378 | -.03763 | 2.844 | 1.8106 | 1.1047 | .64332 |
| Stddev | .3514 | 12. | .327 | 1.3665 | 1.055 | 2.6635 | .2476 | .11994 |
| %RSD | 3.6892 | .08054 | 1.0751 | 3631.7 | 37.10 | 147.11 | 22.415 | 18.644 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112175-a-1-a Acquired: 5/10/2019 18:57:16 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.4919 | -1.4780 | 30.212 | 1143.8 | 113.94 |
| Stddev | .3173 | 5.2329 | .228 | 6.1 | 8.21 |
| %RSD | 21.269 | 354.06 | .75552 | .53102 | 7.2050 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6106.3 | 4100.3 | 44842. | 3305.5 |
| Stddev | 19.4 | 6.8 | 110. | 6.8 |
| %RSD | .31735 | .16558 | .24633 | .20451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.965% | 98.853% | 98.533% | 97.598% |
| Range | | | | |

Sample Name: SD 240-112175-a-1a@5 Acquired: 5/10/2019 19:01:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .29827 | -26.783 | 4.0946 | 2.7486 | 3.7495 | .22220 | 5936.5 | -.0166 |
| Stddev | .07174 | 14.098 | 2.0872 | .1680 | .1184 | .27958 | 103.1 | .2733 |
| %RSD | 24.051 | 52.639 | 50.973 | 6.1126 | 3.1569 | 125.83 | 1.7367 | 1649. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .26062 | .07048 | .37500 | 10.332 | 641.22 | .75697 | 1763.7 | 6.3250 |
| Stddev | .20595 | .58868 | 1.0637 | 3.118 | 12.04 | 3.1021 | 16.0 | .0802 |
| %RSD | 79.023 | 835.23 | 283.65 | 30.183 | 1.8773 | 409.81 | .90721 | 1.2685 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.8728 | 3118.8 | 6.3036 | .14009 | 2.973 | 1.0436 | .36693 | .07675 |
| Stddev | .2049 | 17.1 | .5173 | 1.7714 | 1.129 | 3.3541 | .19505 | .21911 |
| %RSD | 10.941 | .54923 | 8.2058 | 1264.5 | 37.97 | 321.41 | 53.157 | 285.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112175-a-1a@5 Acquired: 5/10/2019 19:01:30 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .06842 | 2.0173 | 8.4031 | 224.18 | 21.535 |
| Stddev | 1.1322 | 4.2635 | .0967 | 8.64 | 9.313 |
| %RSD | 1654.7 | 211.34 | 1.1503 | 3.8545 | 43.245 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6233.5 | 4101.0 | 44928. | 3254.5 |
| Stddev | 3.7 | 5.7 | 67. | 4.5 |
| %RSD | .05919 | .13799 | .14893 | .13729 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.984% | 98.871% | 98.723% | 96.094% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 19:05:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 982.82 | 24841. | 507.71 | 5106.0 | 1997.6 | 2013.1 | 50038. | 510.2 |
| Stddev | 1.66 | 50. | 3.33 | 6.8 | 5.1 | 8.0 | 161. | 1.2 |
| %RSD | .16915 | .19945 | .65668 | .13294 | .25532 | .39907 | .32153 | .2296 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2025.6 | 1970.0 | 1956.6 | 25041. | 51161. | 5087.5 | 51106. | 2008.1 |
| Stddev | 7.7 | 5.4 | 3.8 | 45. | 62. | 6.0 | 182. | 1.6 |
| %RSD | .37918 | .27505 | .19550 | .18158 | .12079 | .11797 | .35581 | .07907 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2030.6 | 51257. | 2027.3 | 490.76 | 504.3 | 511.55 | 5126.4 | 5016.6 |
| Stddev | 8.4 | 107. | 6.5 | 2.46 | 3.7 | 2.40 | 27.4 | 26.1 |
| %RSD | .41241 | .20908 | .32297 | .50092 | .7367 | .46870 | .53398 | .51933 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 19:05:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1005.1 | 1974.0 | 2078.4 | 4891.8 | 5070.5 |
| Stddev | 6.4 | 19.3 | 7.7 | 26.4 | 20.5 |
| %RSD | .63223 | .97791 | .37036 | .53882 | .40360 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5498.2 | 3906.1 | 42185. | 3165.4 |
| Stddev | 6.3 | 2.9 | 80. | 5.7 |
| %RSD | .11546 | .07448 | .18911 | .17951 |

Sample Name: CCB Acquired: 5/10/2019 19:09:47 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06857 | -49.943 | 2.0768 | 3.7045 | .16715 | -.06031 | 33.629 | .0706 |
| Stddev | .72177 | 11.589 | 1.7398 | .9554 | .22595 | .17602 | 2.763 | .0375 |
| %RSD | 1052.6 | 23.204 | 83.774 | 25.791 | 135.18 | 291.86 | 8.2155 | 53.05 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12829 | .03912 | .03388 | 2.0535 | 72.773 | 1.5015 | 8.9022 | .71500 |
| Stddev | .29869 | .28577 | .63661 | .6656 | 32.480 | 2.3617 | 10.932 | .05503 |
| %RSD | 232.83 | 730.42 | 1879.3 | 32.411 | 44.632 | 157.29 | 122.80 | 7.6963 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7055 | 218.91 | .55566 | .94437 | 2.052 | .94637 | 1.4265 | 1.5238 |
| Stddev | .2808 | 20.01 | .40152 | 1.1407 | 2.972 | 2.3865 | .2053 | .1774 |
| %RSD | 4.9220 | 9.1408 | 72.260 | 120.79 | 144.8 | 252.18 | 14.389 | 11.640 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 19:09:47 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .76418 | 6.3284 | 2.8684 | -7.0322 | -6.1593 |
| Stddev | .31311 | 4.0757 | .0494 | 14.597 | 6.6686 |
| %RSD | 40.973 | 64.403 | 1.7222 | 207.57 | 108.27 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6234.9 | 4083.4 | 44972. | 3212.0 |
| Stddev | 6.7 | 3.1 | 106. | 23.7 |
| %RSD | .10736 | .07658 | .23647 | .73765 |

Sample Name: PDS 240-112175-a-1-a Acquired: 5/10/2019 19:14:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.761 | 2033.0 | 2133.5 | 1096.3 | 2064.7 | 52.970 | 79348. | 53.11 |
| Stddev | .928 | 15.0 | 8.3 | 1.8 | 10.5 | .375 | 334. | .21 |
| %RSD | 1.8276 | .74009 | .38845 | .16480 | .51079 | .70702 | .42113 | .3867 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 519.87 | 202.89 | 256.93 | 1096.1 | 56005. | 1054.6 | 62474. | 543.52 |
| Stddev | 1.62 | .57 | .96 | 8.4 | 358. | 8.0 | 318. | .97 |
| %RSD | .31107 | .28060 | .37264 | .76668 | .63941 | .75900 | .50876 | .17868 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1043.9 | 66528. | 554.30 | 508.55 | 510.8 | 2184.3 | 2129.7 | 1042.6 |
| Stddev | 4.9 | 323. | 1.79 | 1.14 | 4.6 | 6.3 | 5.4 | 2.3 |
| %RSD | .46497 | .48624 | .32265 | .22439 | .9048 | .28900 | .25320 | .21819 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: PDS 240-112175-a-1-a Acquired: 5/10/2019 19:14:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2088.0 | 525.08 | 571.68 | 2173.2 | 1161.8 |
| Stddev | 1.0 | 5.30 | 2.13 | 30.2 | 16.2 |
| %RSD | .04942 | 1.0096 | .37251 | 1.3905 | 1.3962 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5583.6 | 3942.2 | 42838. | 3236.2 |
| Stddev | 10.6 | 9.9 | 94. | 10.8 |
| %RSD | .19057 | .25075 | .21896 | .33455 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.665% | 95.042% | 94.130% | 95.553% |
| Range | | | | |

Sample Name: 240-112175-a-1-b ms  Acquired: 5/10/2019 19:18:05  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.070 | 2098.8 | 2147.4 | 1089.3 | 2015.1 | 52.422 | 77872. | 52.65 |
| Stddev | .398 | 38.5 | 5.9 | 3.2 | 1.2 | .201 | 50. | .18 |
| %RSD | .79524 | 1.8334 | .27437 | .29654 | .05708 | .38375 | .06462 | .3485 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 517.51 | 199.69 | 254.21 | 1082.0 | 55141. | 1051.7 | 60965. | 546.11 |
| Stddev | 1.11 | .88 | .82 | 4.2 | 140. | 4.2 | 297. | .45 |
| %RSD | .21484 | .44182 | .32143 | .39080 | .25332 | .39640 | .48683 | .08312 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1028.9 | 65581. | 552.07 | 509.43 | 533.6 | 2178.6 | 2075.7 | 1012.4 |
| Stddev | 5.0 | 101. | 1.01 | 1.53 | 4.5 | 9.7 | 5.5 | 1.0 |
| %RSD | .48753 | .15384 | .18208 | .29985 | .8430 | .44590 | .26604 | .09653 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112175-a-1-b ms  Acquired: 5/10/2019 19:18:05  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2046.1 | 510.66 | 567.64 | 2197.5 | 1152.9 |
| Stddev | 8.0 | 9.55 | .56 | 14.9 | 10.4 |
| %RSD | .39199 | 1.8698 | .09902 | .68004 | .90370 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5563.7 | 3926.2 | 42839. | 3220.2 |
| Stddev | 10.7 | 2.2 | 251. | 20.2 |
| %RSD | .19315 | .05561 | .58668 | .62768 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.348% | 94.656% | 94.132% | 95.082% |
| Range | | | | |

Sample Name: 240-112175-a-1-c msd Acquired: 5/10/2019 19:22:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.702 | 2065.1 | 2155.0 | 1096.5 | 2032.4 | 52.797 | 78782. | 52.66 |
| Stddev | .220 | 50.1 | 7.2 | 1.2 | 2.6 | .256 | 194. | .12 |
| %RSD | .43469 | 2.4239 | .33593 | .10579 | .12945 | .48456 | .24676 | .2258 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 519.14 | 202.17 | 257.58 | 1094.9 | 55579. | 1050.0 | 61598. | 551.98 |
| Stddev | 1.53 | .55 | 2.05 | 1.9 | 90. | 4.0 | 97. | .53 |
| %RSD | .29441 | .27045 | .79512 | .17547 | .16211 | .38516 | .15752 | .09645 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1028.9 | 66198. | 554.82 | 506.50 | 533.7 | 2178.6 | 2076.4 | 1019.8 |
| Stddev | 5.5 | 161. | 1.56 | 1.81 | 4.4 | 11.1 | 8.7 | .4 |
| %RSD | .52976 | .24247 | .28172 | .35729 | .8266 | .51120 | .42085 | .04015 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112175-a-1-c msd Acquired: 5/10/2019 19:22:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2043.9 | 513.71 | 572.37 | 2232.8 | 1163.2 |
| Stddev | 14.6 | 5.50 | 2.18 | 9.0 | 6.3 |
| %RSD | .71397 | 1.0710 | .38106 | .40175 | .53923 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5548.2 | 3921.1 | 42459. | 3209.3 |
| Stddev | 4.4 | 4.9 | 181. | 15.4 |
| %RSD | .07997 | .12467 | .42534 | .47944 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.102% | 94.533% | 93.298% | 94.760% |
| Range | | | | |

Sample Name: 190-19608-a-2-a Acquired: 5/10/2019 19:26:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.27471 | 360.25 | 7.2369 | 726.38 | 48.345 | .22981 | 37541. |
| Stddev | .23423 | 32.98 | 1.4104 | 2.31 | .507 | .31369 | 175. |
| %RSD | 85.265 | 9.1552 | 19.490 | .31865 | 1.0496 | 136.50 | .46577 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.1601 | .27254 | 3.3735 | 21.116 | 91.338 | 1897.7 | 7.0734 |
| Stddev | .1657 | .13798 | .4448 | 1.118 | 5.397 | 85.9 | 1.5984 |
| %RSD | 103.5 | 50.625 | 13.185 | 5.2940 | 5.9085 | 4.5259 | 22.598 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5183.0 | 4.8382 | 8.3395 | 260930. | 2.1147 | 1.9495 | 5.255 |
| Stddev | 26.8 | .0812 | .5668 | 408. | .6602 | 1.6026 | 1.917 |
| %RSD | .51708 | 1.6773 | 6.7966 | .15622 | 31.219 | 82.205 | 36.48 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 190-19608-a-2-a Acquired: 5/10/2019 19:26:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.8758 | 3.7179 | 4.2806 | 2.3055 | 4.6866 | 372.03 | 4755.1 |
| Stddev | 2.2847 | .7609 | .2512 | 1.2522 | 4.0076 | 1.66 | 51.7 |
| %RSD | 46.858 | 20.466 | 5.8681 | 54.312 | 85.512 | .44619 | 1.0881 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 93.750 |
| Stddev | 11.362 |
| %RSD | 12.119 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5441.2 | 3898.8 | 41914. | 3203.4 |
| Stddev | 13.5 | 15.8 | 158. | 16.8 |
| %RSD | .24896 | .40541 | .37598 | .52356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.402% | 93.996% | 92.100% | 94.584% |
| Range | | | | |

Sample Name: 190-19608-a-3-a Acquired: 5/10/2019 19:30:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.60167 | 266.90 | 5.7067 | 713.36 | 43.171 | .01097 | 38243. |
| Stddev | .55495 | 36.39 | 1.5653 | 4.80 | .339 | .14899 | 13. |
| %RSD | 92.235 | 13.634 | 27.429 | .67220 | .78601 | 1358.5 | .03288 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0105 | .56115 | 2.7809 | 12.869 | 66.159 | 1873.7 | 6.8424 |
| Stddev | .1596 | .13705 | .1130 | 1.009 | 1.405 | 20.8 | 4.6289 |
| %RSD | 1518. | 24.423 | 4.0622 | 7.8405 | 2.1243 | 1.1095 | 67.650 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5105.8 | 3.3058 | 3.7583 | 282620. | 2.0450 | .04097 | 4.229 |
| Stddev | 53.6 | .1066 | .0995 | 1181. | .2811 | 1.3100 | 1.411 |
| %RSD | 1.0495 | 3.2257 | 2.6478 | .41799 | 13.747 | 3197.3 | 33.37 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 190-19608-a-3-a  Acquired: 5/10/2019 19:30:17  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1149 | 2.3890 | 3.3058 | -.48720 | 8.6897 | 339.00 | 4685.5 |
| Stddev | 1.1364 | .9178 | .3823 | 1.1472 | 5.7405 | 3.49 | 28.0 |
| %RSD | 101.94 | 38.417 | 11.565 | 235.46 | 66.061 | 1.0304 | .59698 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 104.29 |
| Stddev | 10.17 |
| %RSD | 9.7474 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5429.7 | 3897.9 | 41772. | 3178.7 |
| Stddev | 23.2 | 14.7 | 48. | 8.4 |
| %RSD | .42710 | .37822 | .11566 | .26433 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.220% | 93.973% | 91.789% | 93.856% |
| Range | | | | |

Sample Name: 190-19608-a-8-a Acquired: 5/10/2019 19:34:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38062 | 113.19 | 4.5339 | 274.94 | 53.401 | .13832 | 35270. |
| Stddev | .13511 | 24.25 | .6454 | .63 | .221 | .22627 | 114. |
| %RSD | 35.496 | 21.422 | 14.236 | .22936 | .41335 | 163.58 | .32354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0421 | .55360 | 4.0615 | 44.384 | 48.735 | 1786.6 | 7.9154 |
| Stddev | .0843 | .38921 | .4849 | .566 | 1.656 | 29.5 | 2.7060 |
| %RSD | 200.1 | 70.305 | 11.940 | 1.2746 | 3.3983 | 1.6535 | 34.186 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5798.8 | 3.5008 | 2.0462 | 267900. | 3.8854 | 1.2859 | 1.179 |
| Stddev | 35.2 | .0300 | .0324 | 633. | .5138 | 1.4443 | 1.665 |
| %RSD | .60785 | .85553 | 1.5848 | .23637 | 13.224 | 112.33 | 141.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 190-19608-a-8-a Acquired: 5/10/2019 19:34:32 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.68750 | 2.5121 | 3.7484 | .77950 | -.22332 | 759.27 | 4110.3 |
| Stddev | 2.7257 | .6390 | .4332 | 1.4009 | 4.0851 | 4.62 | 23.4 |
| %RSD | 396.47 | 25.437 | 11.557 | 179.72 | 1829.2 | .60868 | .56873 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 97.562 |
| Stddev | 9.919 |
| %RSD | 10.167 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5455.4 | 3903.9 | 42030. | 3194.7 |
| Stddev | 9.6 | 9.7 | 99. | 6.8 |
| %RSD | .17529 | .24842 | .23505 | .21200 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.627% | 94.119% | 92.355% | 94.328% |
| Range | | | | |

Sample Name: 240-112147-b-1-a  Acquired: 5/10/2019 19:38:45  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.1041 | 205.17 | 77.122 | 6555.8 | 41.800 | .23412 |
| Stddev | 1.1777 | 68.11 | 3.760 | 87.1 | .451 | .27195 |
| %RSD | 55.971 | 33.197 | 4.8749 | 1.3281 | 1.0793 | 116.16 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 36651. | .0679 | 2.9890 | 9.9177 | 15.303 | 2759.5 |
| Stddev | 82. | .1386 | .0880 | .8067 | .480 | 7.3 |
| %RSD | .22503 | 204.1 | 2.9450 | 8.1341 | 3.1396 | .26386 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 142430. | 1751.7 | 12062. | 73.159 | 5.1256 | F 2129100. |
| Stddev | 651. | 117.2 | 74. | .368 | .0414 | 49698. |
| %RSD | .45686 | 6.6901 | .61701 | .50262 | .80828 | 2.3342 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112147-b-1-a Acquired: 5/10/2019 19:38:45 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18.387 | .76703 | 3.615 | 10.922 | 61.498 | 13.912 |
| Stddev | 1.155 | 2.5999 | 3.833 | 2.847 | 2.321 | .318 |
| %RSD | 6.2818 | 338.96 | 106.1 | 26.070 | 3.7749 | 2.2879 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -8.0382 | 3.9877 | 206.49 | 4834.5 | 284.76 |
| Stddev | 1.0547 | 6.6359 | 5.90 | 12.4 | 13.39 |
| %RSD | 13.121 | 166.41 | 2.8590 | .25575 | 4.7010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 3458.2 | 2766.7 | 27525. | 2829.9 |
| Stddev | 21.9 | 13.9 | 49. | 12.4 |
| %RSD | .63309 | .50197 | .17751 | .43654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 54.914% | 66.702% | 60.481% | 83.557% |
| Range | | | | |

Sample Name: 190-19607-d-1-a Acquired: 5/10/2019 19:43:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.86050 | 11.168 | 10.914 | 124.84 | 151.96 | .09452 |
| Stddev | .14106 | 72.702 | 1.131 | .85 | .17 | .16861 |
| %RSD | 16.392 | 651.00 | 10.358 | .68088 | .11464 | 178.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 168910. | .1070 | .94524 | 1.5153 | 10.094 | 322.45 |
| Stddev | 739. | .1748 | .76574 | .1016 | .599 | 1.32 |
| %RSD | .43740 | 163.4 | 81.010 | 6.7032 | 5.9298 | .40850 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 26540. | 115.47 | 28255. | 16.140 | 8.3591 | F 1031800. |
| Stddev | 87. | 3.75 | 172. | .034 | .1495 | 27827. |
| %RSD | .32714 | 3.2465 | .60811 | .20926 | 1.7883 | 2.6970 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19607-d-1-a Acquired: 5/10/2019 19:43:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2036 | 1.2177 | -2.091 | -.30023 | 1.3281 | 1.1270 |
| Stddev | .7459 | 1.3654 | 3.379 | 3.9401 | 1.3197 | .2256 |
| %RSD | 17.744 | 112.14 | 161.6 | 1312.4 | 99.368 | 20.019 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .82449 | 2.9864 | 30.694 | 6590.9 | 1488.4 |
| Stddev | 1.6292 | 8.6889 | .197 | 44.7 | 13.4 |
| %RSD | 197.60 | 290.95 | .64098 | .67828 | .90218 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4819.9 | 3648.9 | 38347. | 3198.1 |
| Stddev | 12.8 | 9.3 | 82. | 27.6 |
| %RSD | .26570 | .25471 | .21299 | .86290 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.537% | 87.970% | 84.262% | 94.428% |
| Range | | | | |

Sample Name: 240-112192-b-1-a Acquired: 5/10/2019 19:47:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .37223 | 36.758 | 3.1418 | 137.60 | 92.131 | .33687 | 166330. |
| Stddev | .36161 | 34.558 | 1.0447 | .87 | .498 | .01142 | 419. |
| %RSD | 97.148 | 94.016 | 33.251 | .63489 | .54052 | 3.3901 | .25178 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0131 | .67652 | 14.707 | 12.407 | 610.97 | 10503. | 63.898 |
| Stddev | .0596 | .14976 | .046 | 1.181 | 6.91 | 138. | 3.862 |
| %RSD | 454.4 | 22.137 | .31415 | 9.5167 | 1.1307 | 1.3163 | 6.0437 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 36318. | 25.382 | 138.64 | 144720. | 2.4698 | 2.9266 | .0727 |
| Stddev | 299. | .064 | 1.46 | 482. | .2760 | .4815 | .7358 |
| %RSD | .82402 | .25177 | 1.0560 | .33286 | 11.173 | 16.453 | 1012. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112192-b-1-a Acquired: 5/10/2019 19:47:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.5082 | .53437 | .57751 | 2.1116 | 2.5308 | 13.329 | 8662.3 |
| Stddev | 1.2673 | .63998 | .04283 | .9585 | 6.3953 | .193 | 61.9 |
| %RSD | 50.528 | 119.76 | 7.4165 | 45.394 | 252.70 | 1.4452 | .71431 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 410.13 |
| Stddev | 8.56 |
| %RSD | 2.0869 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5569.6 | 3937.5 | 42654. | 3278.3 |
| Stddev | 3.2 | 6.3 | 35. | 4.8 |
| %RSD | .05702 | .16110 | .08212 | .14638 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.442% | 94.928% | 93.726% | 96.795% |
| Range | | | | |

Sample Name: 240-112193-b-4-a Acquired: 5/10/2019 19:51:39 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.28163 | -.54700 | 3.2150 | 120.94 | 65.589 | .30187 | 128400. |
| Stddev | .48211 | 20.998 | 1.0228 | .69 | .445 | .26305 | 179. |
| %RSD | 171.19 | 3838.8 | 31.813 | .57167 | .67848 | 87.140 | .13920 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0881 | .54354 | .73153 | 2.8284 | 54.000 | 8086.3 | 40.178 |
| Stddev | .1801 | .23166 | .30581 | .7108 | 4.739 | 78.1 | 3.808 |
| %RSD | 204.5 | 42.620 | 41.805 | 25.130 | 8.7767 | .96644 | 9.4785 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 34046. | 43.262 | 54.054 | 76861. | 37.134 | 47.111 | 2.118 |
| Stddev | 230. | .111 | .409 | 210. | .732 | 2.441 | .551 |
| %RSD | .67541 | .25617 | .75733 | .27306 | 1.9722 | 5.1815 | 26.00 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112193-b-4-a  Acquired: 5/10/2019 19:51:39  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 44.757 | -.14786 | .33725 | .80153 | .56218 | 28.093 | 6786.0 |
| Stddev | 1.950 | .24604 | .23823 | 1.4786 | 5.8841 | .137 | 26.6 |
| %RSD | 4.3566 | 166.41 | 70.640 | 184.47 | 1046.7 | .48837 | .39241 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 272.02 |
| Stddev | 6.62 |
| %RSD | 2.4318 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5739.9 | 3998.0 | 43499. | 3277.6 |
| Stddev | 2.4 | 3.5 | 95. | 13.1 |
| %RSD | .04139 | .08878 | .21815 | .39890 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.146% | 96.387% | 95.583% | 96.775% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 19:55:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 985.74 | 24833. | 506.63 | 5102.2 | 1996.3 | 2026.7 | 49934. | 509.4 |
| Stddev | 2.33 | 107. | 3.37 | 10.5 | 4.9 | 6.8 | 131. | 1.8 |
| %RSD | .23672 | .43070 | .66428 | .20557 | .24455 | .33552 | .26292 | .3579 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2021.5 | 1958.4 | 1960.2 | 24856. | 51305. | 5088.2 | 50785. | 2011.8 |
| Stddev | 8.2 | 4.6 | 3.6 | 109. | 108. | 15.9 | 185. | 1.2 |
| %RSD | .40336 | .23317 | .18112 | .43662 | .21124 | .31338 | .36385 | .06022 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2020.1 | 49783. | 2019.8 | 486.84 | 504.0 | 506.96 | 5103.5 | 5016.7 |
| Stddev | 9.2 | 148. | 9.0 | 1.52 | 4.0 | .89 | 26.6 | 1.2 |
| %RSD | .45463 | .29808 | .44447 | .31169 | .7839 | .17474 | .52185 | .02354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 19:55:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 996.40 | 1965.0 | 2069.8 | 4853.2 | 5069.5 |
| Stddev | 8.02 | 6.9 | 8.4 | 26.4 | 12.3 |
| %RSD | .80518 | .35256 | .40497 | .54454 | .24358 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5579.7 | 3967.8 | 43139. | 3247.8 |
| Stddev | 21.1 | 7.4 | 45. | 7.3 |
| %RSD | .37844 | .18713 | .10500 | .22530 |

Sample Name: CCB Acquired: 5/10/2019 19:59:49 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03562 | -52.791 | 3.1556 | 4.8348 | .58176 | .11458 | 33.656 |
| Stddev | .19310 | 16.624 | 1.2087 | .7174 | .14105 | .24710 | 7.089 |
| %RSD | 542.15 | 31.491 | 38.303 | 14.839 | 24.246 | 215.65 | 21.063 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1312 | .01159 | .08030 | -1.3663 | 3.3649 | 323.42 | 6.9305 |
| Stddev | .1351 | .15490 | .32382 | .4209 | 1.4651 | 12.76 | 4.1760 |
| %RSD | 103.0 | 1336.0 | 403.28 | 30.806 | 43.540 | 3.9447 | 60.256 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -28.871 | .69550 | 5.5453 | F 1588.2 | .97184 | -.27272 | 1.508 |
| Stddev | 40.069 | .05795 | .6157 | 27.5 | .26583 | .48453 | .493 |
| %RSD | 138.79 | 8.3323 | 11.102 | 1.7287 | 27.353 | 177.66 | 32.70 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 1000.0 | | | |
| Low Limit | | | | -1000.0 | | | |

Sample Name: CCB  Acquired: 5/10/2019 19:59:49  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .55497 | 1.0458 | 1.4399 | .08342 | -.65099 | 2.8176 | -15.146 |
| Stddev | 2.2527 | .3958 | .1737 | 1.4472 | 9.3072 | .0880 | 5.234 |
| %RSD | 405.92 | 37.849 | 12.060 | 1734.9 | 1429.7 | 3.1246 | 34.556 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -5.5600 |
| Stddev | 8.1443 |
| %RSD | 146.48 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6314.5 | 4142.3 | 45540. | 3280.4 |
| Stddev | 11.2 | 12.7 | 102. | 6.5 |
| %RSD | .17665 | .30698 | .22379 | .19959 |

Sample Name: 240-112234-k-2-a Acquired: 5/10/2019 20:04:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .45312 | 265.99 | 8.4660 | 13.800 | 103.25 | .52338 | 9075.1 | .2023 |
| Stddev | .71067 | 39.62 | .6934 | .267 | .64 | .06463 | 16.0 | .1372 |
| %RSD | 156.84 | 14.896 | 8.1907 | 1.9357 | .62306 | 12.349 | .17597 | 67.83 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32.460 | .70705 | .72290 | 51346. | 1471.2 | 11.694 | 11444. | 3664.6 |
| Stddev | .356 | .09562 | .31817 | 181. | 40.9 | 1.569 | 45. | 12.4 |
| %RSD | 1.0979 | 13.524 | 44.013 | .35161 | 2.7803 | 13.418 | .39225 | .33846 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .78733 | 63869. | 11.993 | .38407 | 2.312 | 1.6620 | .26177 | 7.5527 |
| Stddev | .28060 | 112. | .063 | .17228 | 1.412 | 2.0819 | .63506 | .5451 |
| %RSD | 35.639 | .17582 | .52388 | 44.858 | 61.08 | 125.27 | 242.60 | 7.2170 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112234-k-2-a Acquired: 5/10/2019 20:04:07 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .01800 | 3.6674 | 32.689 | 4938.3 | 64.209 |
| Stddev | .52624 | 6.4709 | .109 | 14.1 | 7.348 |
| %RSD | 2923.0 | 176.44 | .33260 | .28462 | 11.445 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5943.1 | 4073.8 | 44224. | 3323.7 |
| Stddev | 17.9 | 3.6 | 113. | 14.2 |
| %RSD | .30195 | .08856 | .25522 | .42848 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.373% | 98.213% | 97.176% | 98.138% |
| Range | | | | |

Sample Name: 240-112236-g-1-a Acquired: 5/10/2019 20:08:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.17447 | -29.971 | 6.0580 | 1000.3 | 3213.5 | .36085 |
| Stddev | .52648 | 38.795 | .6685 | 5.7 | 9.6 | .13767 |
| %RSD | 301.76 | 129.44 | 11.036 | .56845 | .29733 | 38.151 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 427280. | .0326 | 1.9765 | 1.1850 | 1.0416 | 205.57 |
| Stddev | 3307. | .0471 | .3883 | .1575 | 1.1596 | 4.63 |
| %RSD | .77391 | 144.5 | 19.645 | 13.291 | 111.33 | 2.2530 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 22323. | 2130.6 | 35578. | 124.03 | 3.6038 | F 943940. |
| Stddev | 58. | 3.2 | 369. | .23 | .3127 | 22266. |
| %RSD | .26100 | .15203 | 1.0360 | .18160 | 8.6759 | 2.3589 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112236-g-1-a  Acquired: 5/10/2019 20:08:28  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.1775 | -1.1173 | 3.456 | -.73224 | .53899 | -2.7248 |
| Stddev | .3572 | .3741 | 2.051 | 2.7330 | .09183 | .3589 |
| %RSD | 8.5501 | 33.485 | 59.33 | 373.24 | 17.038 | 13.170 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.27648 | -4.2249 | 2.6230 | 98.126 | W 49298. |
| Stddev | 1.0482 | 10.088 | .0363 | 10.079 | 135. |
| %RSD | 379.13 | 238.78 | 1.3853 | 10.271 | .27436 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Warn |
| High Limit | | | | | 45000. |
| Low Limit | | | | | -500000. |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4806.6 | 3624.8 | 38371. | 3123.4 |
| Stddev | 15.2 | 11.0 | 75. | 11.9 |
| %RSD | .31622 | .30412 | .19426 | .38182 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.326% | 87.389% | 84.314% | 92.222% |
| Range | | | | |

Sample Name: 240-112239-a-2-a Acquired: 5/10/2019 20:12:58 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.00728 | 130.62 | 4.1462 | 556.17 | 17.924 | .06681 | 33977. |
| Stddev | .50712 | 34.87 | .4712 | 3.07 | .172 | .11309 | 37. |
| %RSD | 6962.0 | 26.695 | 11.365 | .55179 | .95904 | 169.27 | .10844 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0396 | 4.1615 | 2.5328 | 21.368 | 879.37 | 76951. | 14.965 |
| Stddev | .0570 | .1999 | .2005 | .331 | 2.84 | 97. | 1.773 |
| %RSD | 143.9 | 4.8027 | 7.9157 | 1.5489 | .32350 | .12550 | 11.847 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7080.8 | 37.139 | 99.613 | 148800. | 5.1572 | 1.4873 | 2.096 |
| Stddev | 44.2 | .123 | 1.115 | 451. | .6119 | .6186 | 1.517 |
| %RSD | .62438 | .33084 | 1.1195 | .30335 | 11.865 | 41.595 | 72.39 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112239-a-2-a  Acquired: 5/10/2019 20:12:58  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .72401 | 330.66 | .36700 | 1.1071 | 3.0536 | 59.199 | 3185.2 |
| Stddev | 1.6793 | 3.28 | .14333 | .3790 | 2.8317 | .470 | 2.6 |
| %RSD | 231.94 | .99214 | 39.055 | 34.236 | 92.733 | .79396 | .08245 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 95.270 |
| Stddev | 2.623 |
| %RSD | 2.7533 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5700.3 | 4018.4 | 43243. | 3316.2 |
| Stddev | 11.8 | 9.7 | 126. | 14.7 |
| %RSD | .20644 | .24126 | .29207 | .44426 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.516% | 96.877% | 95.019% | 97.916% |
| Range | | | | |

Sample Name: 240-112244-r-1-a Acquired: 5/10/2019 20:17:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15608 | -4.3888 | 2.0903 | 13.647 | 122.52 | .35534 | 99933. | .0454 |
| Stddev | .30045 | 17.181 | 2.4293 | 1.068 | .50 | .07943 | 373. | .0725 |
| %RSD | 192.50 | 391.48 | 116.22 | 7.8278 | .40638 | 22.352 | .37291 | 159.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16022 | .32288 | 1.0670 | 8.5137 | 1056.8 | 14.014 | 30041. | .33391 |
| Stddev | .04551 | .32489 | .5466 | 3.1966 | 9.9 | 1.564 | 86. | .07561 |
| %RSD | 28.407 | 100.62 | 51.222 | 37.547 | .93408 | 11.159 | .28669 | 22.644 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .70555 | 3293.4 | 1.7704 | -.47665 | -1.101 | .76709 | .10699 | .15448 |
| Stddev | .02581 | 22.6 | .0634 | 1.8029 | 1.679 | 1.1011 | .26305 | .22189 |
| %RSD | 3.6576 | .68665 | 3.5806 | 378.24 | 152.6 | 143.54 | 245.85 | 143.64 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112244-r-1-a Acquired: 5/10/2019 20:17:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2875 | -.07675 | 3.3882 | 4039.1 | 584.33 |
| Stddev | .3606 | 4.4171 | .2925 | 5.5 | 7.07 |
| %RSD | 28.007 | 5755.1 | 8.6316 | .13702 | 1.2096 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5957.5 | 4061.7 | 44513. | 3315.0 |
| Stddev | 7.5 | 6.1 | 175. | 14.6 |
| %RSD | .12582 | .14928 | .39362 | .44077 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.602% | 97.924% | 97.811% | 97.881% |
| Range | | | | |

Sample Name: 240-112244-r-1-b ms  Acquired: 5/10/2019 20:21:25  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.675 | 2109.9 | 2168.6 | 1101.3 | 2164.6 | 54.650 | 148730. |
| Stddev | .665 | 25.2 | 7.6 | 2.1 | 5.5 | .188 | 146. |
| %RSD | 1.2875 | 1.1952 | .35142 | .18946 | .25345 | .34328 | .09817 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.62 | 528.27 | 201.81 | 262.78 | 1054.5 | 55231. | 1086.0 |
| Stddev | .30 | 1.86 | .27 | 1.35 | 4.1 | 412. | 5.7 |
| %RSD | .5570 | .35138 | .13302 | .51241 | .38896 | .74626 | .52684 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 81431. | 532.47 | 1021.2 | 55841. | 532.93 | 510.89 | 537.4 |
| Stddev | 398. | .60 | 6.4 | 390. | 3.01 | 1.72 | 2.0 |
| %RSD | .48819 | .11179 | .62790 | .69848 | .56391 | .33689 | .3721 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112244-r-1-b ms  Acquired: 5/10/2019 20:21:25  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2200.5 | 2101.9 | 1026.8 | 2063.8 | 513.98 | 552.02 | 5064.0 |
| Stddev | 3.0 | 8.1 | .8 | 20.3 | 4.53 | 2.16 | 45.6 |
| %RSD | .13736 | .38632 | .07541 | .98119 | .88217 | .39127 | .90022 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1631.8 |
| Stddev | 2.9 |
| %RSD | .17805 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5542.3 | 3951.0 | 43197. | 3267.9 |
| Stddev | 6.2 | 10.1 | 116. | 19.9 |
| %RSD | .11113 | .25678 | .26854 | .61034 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 88.009% | 95.254% | 94.920% | 96.489% |
| Range | | | | |

Sample Name: 240-112244-r-1-c msd  Acquired: 5/10/2019 20:25:26  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.044 | 2124.3 | 2198.7 | 1111.7 | 2187.8 | 55.385 | 151110. |
| Stddev | .136 | 47.9 | 6.1 | 1.3 | 2.1 | .265 | 321. |
| %RSD | .25702 | 2.2551 | .27685 | .11387 | .09412 | .47784 | .21243 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 54.32 | 533.18 | 204.17 | 263.54 | 1060.6 | 55354. | 1095.3 |
| Stddev | .17 | 1.01 | .98 | .25 | 7.4 | 185. | 2.5 |
| %RSD | .3210 | .18913 | .48083 | .09367 | .69921 | .33380 | .22694 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 82324. | 537.44 | 1041.0 | 56131. | 539.13 | 518.01 | 546.8 |
| Stddev | 412. | 1.18 | 3.8 | 113. | 1.26 | 2.99 | 1.1 |
| %RSD | .50027 | .21954 | .36285 | .20137 | .23294 | .57731 | .1954 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112244-r-1-c msd  Acquired: 5/10/2019 20:25:26  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2234.3 | 2129.5 | 1036.3 | 2089.5 | 515.12 | 559.30 | 5174.3 |
| Stddev | 2.0 | 4.8 | 1.4 | 13.1 | 1.54 | 1.27 | 32.2 |
| %RSD | .09129 | .22741 | .13866 | .62538 | .29971 | .22712 | .62158 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1651.8 |
| Stddev | 5.6 |
| %RSD | .33973 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5523.4 | 3937.3 | 42877. | 3236.7 |
| Stddev | 4.0 | 3.5 | 42. | 19.7 |
| %RSD | .07231 | .08887 | .09912 | .61004 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.708% | 94.922% | 94.217% | 95.568% |
| Range | | | | |

Sample Name: 240-112244-q-1-a Acquired: 5/10/2019 20:29:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19437 | -29.829 | 6.9555 | 13.968 | 123.43 | .01574 | 99622. | .1407 |
| Stddev | .17015 | 6.441 | 2.6475 | .249 | .70 | .08639 | 294. | .2049 |
| %RSD | 87.537 | 21.592 | 38.064 | 1.7821 | .56907 | 548.80 | .29481 | 145.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .22111 | .24841 | 1.2764 | 14.063 | 938.42 | 8.6982 | 30031. | .39272 |
| Stddev | .15737 | .19891 | 1.3442 | 2.713 | 16.34 | 2.2924 | 92. | .05691 |
| %RSD | 71.172 | 80.071 | 105.31 | 19.294 | 1.7409 | 26.355 | .30519 | 14.492 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.0699 | 2930.0 | 1.1187 | .38220 | -1.174 | 2.5518 | 1.4003 | .83887 |
| Stddev | .6506 | 23.8 | .2396 | .60998 | 2.294 | 3.4347 | .1113 | .24198 |
| %RSD | 10.719 | .81134 | 21.421 | 159.60 | 195.4 | 134.60 | 7.9473 | 28.846 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112244-q-1-a Acquired: 5/10/2019 20:29:26 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.3428 | 5.4988 | 2.4962 | 4039.3 | 578.42 |
| Stddev | .9449 | 9.3110 | .1359 | 8.3 | 12.37 |
| %RSD | 40.333 | 169.33 | 5.4462 | .20441 | 2.1383 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5936.6 | 4042.5 | 44405. | 3272.3 |
| Stddev | 15.5 | 12.0 | 148. | 8.4 |
| %RSD | .26043 | .29652 | .33406 | .25672 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.269% | 97.461% | 97.573% | 96.619% |
| Range | | | | |

Sample Name: 190-19623-c-1-a Acquired: 5/10/2019 20:33:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .13206 | -8.5823 | 5.2251 | 173.41 | 36.759 | .30630 | 12403. |
| Stddev | .79398 | 48.879 | .3842 | 1.84 | .181 | .10948 | 20. |
| %RSD | 601.24 | 569.53 | 7.3525 | 1.0600 | .49168 | 35.741 | .15772 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0018 | .36563 | 5.3752 | 31.235 | 705.18 | 3398.8 | 5.8542 |
| Stddev | .1921 | .16769 | .4318 | .342 | 3.72 | 35.8 | 2.9681 |
| %RSD | 10820. | 45.862 | 8.0339 | 1.0948 | .52713 | 1.0521 | 50.700 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5515.1 | 8.6038 | 6.8891 | 144010. | 2.0673 | -.15265 | 1.845 |
| Stddev | 45.5 | .0430 | .2620 | 315. | .3419 | 2.0962 | 4.107 |
| %RSD | .82501 | .49923 | 3.8031 | .21896 | 16.541 | 1373.1 | 222.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 190-19623-c-1-a  Acquired: 5/10/2019 20:33:43  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1551 | .80173 | .91339 | .11648 | 2.7458 | 18.138 | 3441.8 |
| Stddev | .3518 | .33437 | .08727 | .37035 | 4.0293 | .087 | 44.2 |
| %RSD | 30.458 | 41.706 | 9.5551 | 317.96 | 146.74 | .47834 | 1.2850 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 56.323 |
| Stddev | 4.226 |
| %RSD | 7.5028 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5839.7 | 4048.3 | 43906. | 3291.3 |
| Stddev | 19.2 | 12.2 | 105. | 13.5 |
| %RSD | .32814 | .30085 | .23844 | .41101 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.731% | 97.600% | 96.477% | 97.181% |
| Range | | | | |

Sample Name: 190-19624-a-1-a Acquired: 5/10/2019 20:38:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.17983 | 357.41 | 4.0655 | 104.73 | 6.9683 | .01105 |
| Stddev | .91268 | 21.46 | 2.2908 | .44 | .1467 | .15081 |
| %RSD | 507.52 | 6.0033 | 56.349 | .42045 | 2.1046 | 1364.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 26795. | .3175 | 10.253 | 40.157 | .70664 | 472.18 |
| Stddev | 87. | .1588 | .229 | .275 | .86218 | 2.13 |
| %RSD | .32284 | 50.02 | 2.2317 | .68463 | 122.01 | .45051 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 255600. | 20.218 | 4664.3 | 12.041 | 16.793 | F 591880. |
| Stddev | 1843. | 2.275 | 58.6 | .036 | .252 | 5145. |
| %RSD | .72098 | 11.253 | 1.2570 | .30061 | 1.4987 | .86918 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19624-a-1-a Acquired: 5/10/2019 20:38:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.2240 | .20382 | 2.497 | -.32200 | 1.1966 | .69388 |
| Stddev | .6355 | 1.5422 | 1.227 | 4.0996 | .5277 | .22672 |
| %RSD | 19.712 | 756.69 | 49.12 | 1273.2 | 44.101 | 32.675 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .06570 | -2.3328 | 432.24 | 56.258 | 216.40 |
| Stddev | .85234 | 10.495 | 2.48 | 16.536 | 3.15 |
| %RSD | 1297.4 | 449.90 | .57270 | 29.394 | 1.4579 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5320.1 | 3889.5 | 40910. | 3222.3 |
| Stddev | 24.3 | 16.1 | 59. | 35.2 |
| %RSD | .45757 | .41453 | .14348 | 1.0909 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.479% | 93.771% | 89.895% | 95.143% |
| Range | | | | |

Sample Name: 190-19626-c-1-a Acquired: 5/10/2019 20:42:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.1309 | 117.97 | 7.2407 | 7458.0 | 34.457 | .33809 |
| Stddev | .6302 | 26.01 | 2.7762 | 42.1 | .147 | .24759 |
| %RSD | 55.728 | 22.048 | 38.341 | .56471 | .42562 | 73.232 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 30098. | -.2105 | 1.1005 | 38.257 | 5.9648 | 8.8968 |
| Stddev | 89. | .2028 | .1584 | .390 | 1.0360 | 2.6527 |
| %RSD | .29699 | 96.35 | 14.391 | 1.0184 | 17.368 | 29.816 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5694.0 | 62.637 | 10474. | 217.53 | 4.1250 | F 1289000. |
| Stddev | 109.4 | 3.975 | 121. | .45 | .1469 | 6751. |
| %RSD | 1.9215 | 6.3464 | 1.1541 | .20787 | 3.5606 | .52377 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19626-c-1-a Acquired: 5/10/2019 20:42:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20.776 | .04898 | 11.18 | .58000 | 1.0937 | .55347 |
| Stddev | .557 | 1.5396 | 1.69 | 2.0855 | .4056 | .16118 |
| %RSD | 2.6808 | 3143.3 | 15.12 | 359.57 | 37.082 | 29.123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .45931 | 3.7744 | 40.937 | 2609.2 | 628.33 |
| Stddev | .69441 | 2.4523 | .193 | 17.9 | 1.50 |
| %RSD | 151.19 | 64.971 | .47094 | .68585 | .23828 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4940.8 | 3731.1 | 39177. | 3178.9 |
| Stddev | 6.1 | 3.1 | 63. | 8.3 |
| %RSD | .12344 | .08194 | .16058 | .26087 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.457% | 89.953% | 86.085% | 93.860% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 20:46:44 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 991.15 | 25341. | 512.79 | 5177.7 | 2035.3 | 2096.5 | 50900. | 518.4 |
| Stddev | 2.04 | 109. | 2.49 | .5 | 2.7 | 5.9 | 87. | 1.4 |
| %RSD | .20579 | .42882 | .48467 | .00907 | .13148 | .28088 | .17112 | .2752 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2046.2 | 1972.5 | 1975.0 | 25124. | 52718. | 5178.6 | 52188. | 2040.6 |
| Stddev | 10.0 | 2.9 | 4.2 | 98. | 237. | 20.5 | 204. | 3.3 |
| %RSD | .48855 | .14839 | .21196 | .38857 | .45021 | .39585 | .39108 | .16383 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2046.4 | 51824. | 2047.1 | 493.93 | 512.6 | 511.76 | 5170.0 | 5086.3 |
| Stddev | 7.9 | 294. | 11.2 | .88 | 2.0 | 1.59 | 37.3 | 85.7 |
| %RSD | .38816 | .56746 | .54927 | .17876 | .3815 | .31155 | .72079 | 1.6849 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 20:46:44 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.8 | 1987.9 | 2100.8 | 4933.7 | 5168.3 |
| Stddev | 8.7 | 8.2 | 12.2 | 5.0 | 6.4 |
| %RSD | .86028 | .41180 | .57951 | .10100 | .12363 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5500.0 | 3902.0 | 42501. | 3155.5 |
| Stddev | 6.9 | 10.2 | 24. | 35.5 |
| %RSD | .12492 | .26107 | .05692 | 1.1241 |

Sample Name: CCB Acquired: 5/10/2019 20:50:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14129 | -46.461 | 3.4370 | 8.2043 | .32106 | .51664 | 29.309 | -.0549 |
| Stddev | .38087 | 47.816 | .9985 | .7089 | .29476 | .17064 | 3.339 | .0616 |
| %RSD | 269.56 | 102.92 | 29.050 | 8.6404 | 91.808 | 33.029 | 11.392 | 112.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .21931 | -.68979 | -.23774 | 6.2020 | 314.83 | 3.5759 | -22.836 | .61644 |
| Stddev | .16959 | .72104 | .12206 | 2.6858 | 49.65 | .7724 | 20.442 | .06945 |
| %RSD | 77.326 | 104.53 | 51.343 | 43.305 | 15.770 | 21.601 | 89.514 | 11.266 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.5378 | 831.42 | .17894 | -.81881 | .8756 | .73253 | .97661 | 1.1709 |
| Stddev | .3786 | 16.38 | .37483 | .44131 | 2.621 | .98926 | .50416 | .2620 |
| %RSD | 6.8375 | 1.9696 | 209.47 | 53.897 | 299.3 | 135.05 | 51.624 | 22.373 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 20:50:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.37468 | -3.6845 | 2.5310 | -11.360 | 3.5406 |
| Stddev | 1.3594 | 5.9206 | .1719 | 6.606 | 2.3619 |
| %RSD | 362.81 | 160.69 | 6.7930 | 58.154 | 66.709 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6252.5 | 4091.8 | 45248. | 3217.8 |
| Stddev | 11.8 | 10.0 | 97. | 19.5 |
| %RSD | .18861 | .24548 | .21467 | .60581 |

Sample Name: 240-112249-b-1-a Acquired: 5/10/2019 20:55:06 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .06763 | 7576.8 | 3.3148 | 48.113 | 24.365 | .25104 | 14015. |
| Stddev | .64923 | 62.8 | 1.3487 | .772 | .127 | .05146 | 64. |
| %RSD | 959.93 | .82882 | 40.689 | 1.6036 | .52156 | 20.500 | .45896 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1410 | 1.4003 | 30.402 | 76.293 | 4300.4 | 5324.4 | 6.8957 |
| Stddev | .0460 | .3442 | .259 | .294 | 16.5 | 83.0 | 4.5120 |
| %RSD | 32.65 | 24.581 | .85248 | .38518 | .38360 | 1.5586 | 65.432 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20301. | 76.377 | 6.2986 | 161750. | 72.227 | 3.3631 | -.4841 |
| Stddev | 206. | .153 | .4493 | 882. | .704 | 2.1602 | 1.020 |
| %RSD | 1.0127 | .20007 | 7.1339 | .54523 | .97441 | 64.234 | 210.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112249-b-1-a  Acquired: 5/10/2019 20:55:06  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.9103 | 3.7747 | 5.3891 | .91437 | 1.8979 | 65.631 | 3775.0 |
| Stddev | 2.0726 | .8424 | .2044 | .82817 | 4.6303 | .463 | 10.4 |
| %RSD | 53.002 | 22.316 | 3.7919 | 90.573 | 243.97 | .70571 | .27559 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 310.16 |
| Stddev | 9.86 |
| %RSD | 3.1802 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5713.0 | 4014.2 | 43400. | 3223.1 |
| Stddev | 3.6 | 1.3 | 85. | 31.9 |
| %RSD | .06371 | .03225 | .19633 | .99053 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.719% | 96.778% | 95.365% | 95.167% |
| Range | | | | |

Sample Name: 190-19615-a-1-a Acquired: 5/10/2019 20:59:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.34266 | 47.209 | 8.0387 | 102.14 | 24.992 | .18282 |
| Stddev | .21363 | 10.789 | 1.1148 | .48 | .377 | .36052 |
| %RSD | 62.343 | 22.855 | 13.867 | .46683 | 1.5093 | 197.20 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 30219. | -.0255 | 4.2794 | 4224.3 | 163.32 | 607.38 |
| Stddev | 88. | .1308 | .0511 | 6.7 | 1.26 | 8.76 |
| %RSD | .29183 | 512.5 | 1.1936 | .15810 | .77166 | 1.4426 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 77728. | 13.117 | 11052. | 32.638 | 1.3193 | F 907890. |
| Stddev | 236. | 3.873 | 85. | .078 | .2994 | 16342. |
| %RSD | .30345 | 29.527 | .77004 | .23921 | 22.698 | 1.8000 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19615-a-1-a Acquired: 5/10/2019 20:59:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.3321 | 1.8243 | 2.056 | 2.5848 | 2.2916 | 2.3632 |
| Stddev | .5452 | .2680 | 1.140 | 3.0123 | .4828 | .0975 |
| %RSD | 7.4363 | 14.691 | 55.46 | 116.54 | 21.069 | 4.1276 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0415 | 6.3184 | 97.817 | 2521.7 | 110.16 |
| Stddev | .9829 | 7.9747 | .398 | 9.4 | 2.98 |
| %RSD | 94.375 | 126.21 | .40661 | .37374 | 2.7088 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5071.7 | 3785.2 | 39647. | 3144.1 |
| Stddev | 14.5 | 9.0 | 45. | 2.9 |
| %RSD | .28496 | .23763 | .11442 | .09281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 80.535% | 91.256% | 87.119% | 92.833% |
| Range | | | | |

Sample Name: 190-19616-a-2-a Acquired: 5/10/2019 21:03:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0725 | -16.860 | 6.0521 | F 34383. | 7.1645 | .48920 |
| Stddev | .1328 | 25.307 | 1.0568 | 35. | .2422 | .13699 |
| %RSD | 12.381 | 150.10 | 17.461 | .10049 | 3.3808 | 28.003 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 20000. | | |
| Low Limit | | | | -500000. | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18907. | -.3588 | .55730 | 152.66 | -1.1678 | 8.3095 |
| Stddev | 51. | .1174 | .25263 | .73 | 1.3600 | 4.8434 |
| %RSD | .27018 | 32.71 | 45.332 | .47623 | 116.46 | 58.287 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 87908. | 34.295 | 3591.6 | .29743 | 1.5873 | F 1505500. |
| Stddev | 393. | 4.893 | 24.1 | .04944 | .2599 | 26676. |
| %RSD | .44730 | 14.267 | .67207 | 16.621 | 16.374 | 1.7719 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19616-a-2-a Acquired: 5/10/2019 21:03:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 774.50 | -1.9105 | 12.16 | -1.3595 | 1.2184 | .58317 |
| Stddev | 2.55 | 1.3770 | 2.93 | 1.0684 | .4091 | .32540 |
| %RSD | .32927 | 72.077 | 24.12 | 78.589 | 33.580 | 55.798 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9631 | -2.2743 | 7.8546 | 4979.6 | 83.745 |
| Stddev | .2853 | 4.3456 | .1444 | 41.7 | 2.551 |
| %RSD | 14.534 | 191.07 | 1.8388 | .83832 | 3.0461 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4847.7 | 3667.6 | 38166. | 3163.7 |
| Stddev | 8.5 | 7.9 | 111. | 29.9 |
| %RSD | .17547 | .21659 | .29186 | .94576 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 76.978% | 88.421% | 83.864% | 93.412% |
| Range | | | | |

Sample Name: 190-19616-a-4-a Acquired: 5/10/2019 21:08:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.72914 | -35.007 | 6.4304 | F 28483. | 5.3619 | .04105 |
| Stddev | .78398 | 34.428 | 1.5880 | 187. | .1954 | .30450 |
| %RSD | 107.52 | 98.345 | 24.695 | .65706 | 3.6442 | 741.80 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 20000. | | |
| Low Limit | | | | -500000. | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 16379. | -.2992 | .76025 | 1267.9 | .35030 | 59.505 |
| Stddev | 74. | .2658 | .17825 | 1.7 | .97465 | 4.413 |
| %RSD | .45116 | 88.83 | 23.446 | .13508 | 278.23 | 7.4159 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 99881. | 37.431 | 3458.4 | .92943 | 1.5448 | F 1352800. |
| Stddev | 615. | 1.615 | 80.2 | .05251 | .2897 | 19396. |
| %RSD | .61618 | 4.3152 | 2.3197 | 5.6500 | 18.753 | 1.4338 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 190-19616-a-4-a Acquired: 5/10/2019 21:08:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1198.9 | .35743 | 12.80 | -.21993 | 2.0599 | .78446 |
| Stddev | 9.4 | .29980 | 1.25 | 1.3003 | .4332 | .38144 |
| %RSD | .78327 | 83.876 | 9.723 | 591.25 | 21.029 | 48.624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.78603 | -4.0630 | 27.806 | 5301.2 | 75.249 |
| Stddev | .91450 | 2.5826 | .357 | 78.6 | 10.774 |
| %RSD | 116.34 | 63.562 | 1.2855 | 1.4820 | 14.318 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4877.2 | 3682.0 | 38150. | 3164.2 |
| Stddev | 31.5 | 26.7 | 94. | 3.3 |
| %RSD | .64634 | .72638 | .24591 | .10539 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.447% | 88.769% | 83.829% | 93.427% |
| Range | | | | |

Sample Name: lb 240-380088/1-b Acquired: 5/10/2019 21:12:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.72051 | 2.8644 | F 5.2195 | F 686.93 | 3.9399 | .20039 |
| Stddev | .18382 | 32.584 | 2.4862 | 9.22 | .6930 | .05864 |
| %RSD | 25.513 | 1137.6 | 47.634 | 1.3426 | 17.588 | 29.263 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | 100.00 | | |
| Low Limit | | | -1000.0 | -1000.0 | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2875.3 | -.0264 | .63868 | 3.4910 | -.94543 | 7.2829 |
| Stddev | 7.9 | .1924 | .26206 | .0936 | .67917 | 3.3015 |
| %RSD | .27512 | 729.2 | 41.031 | 2.6825 | 71.837 | 45.332 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2149.3 | 26.884 | 707.61 | .64841 | -.01044 | 1043900. |
| Stddev | 30.2 | .346 | 16.25 | .06519 | .06823 | 14221. |
| %RSD | 1.4053 | 1.2881 | 2.2968 | 10.054 | 653.29 | 1.3623 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: lb 240-380088/1-b Acquired: 5/10/2019 21:12:26 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0428 | -1.0678 | -2.046 | 2.7083 | 1.1035 | .64351 |
| Stddev | .3990 | .2158 | 1.736 | 1.9368 | .5505 | .15927 |
| %RSD | 9.8694 | 20.207 | 84.83 | 71.515 | 49.885 | 24.750 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.3219 | 2.3450 | 6.0346 | 441.08 | .09019 |
| Stddev | .8303 | 2.2838 | .1810 | 10.98 | 7.0475 |
| %RSD | 35.759 | 97.391 | 2.9987 | 2.4906 | 7814.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5085.6 | 3760.5 | 39392. | 3152.8 |
| Stddev | 10.5 | 4.0 | 41. | 9.4 |
| %RSD | .20704 | .10714 | .10448 | .29733 |

Sample Name: mb 240-380266/2-a Acquired: 5/10/2019 21:16:51 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49216 | -51.894 | 2.5185 | 31.174 | .68453 | .21775 | 59.457 |
| Stddev | .56306 | 16.116 | .7796 | 1.411 | .03604 | .17541 | 4.384 |
| %RSD | 114.40 | 31.055 | 30.955 | 4.5273 | 5.2648 | 80.554 | 7.3728 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0007 | .07891 | -.09956 | .51710 | 9.1009 | 361.01 | 8.5798 |
| Stddev | .1226 | .15836 | .25324 | .42749 | 2.7236 | 34.87 | 1.9051 |
| %RSD | 17990. | 200.68 | 254.35 | 82.670 | 29.927 | 9.6590 | 22.204 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 26.379 | .10019 | -.43614 | F 1620.8 | .52682 | 1.9753 | -1.393 |
| Stddev | 7.584 | .00513 | .13245 | 72.6 | .49661 | .5196 | 2.950 |
| %RSD | 28.752 | 5.1167 | 30.369 | 4.4789 | 94.266 | 26.306 | 211.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 1000.0 | | | |
| Low Limit | | | | -1000.0 | | | |

Sample Name: mb 240-380266/2-a  Acquired: 5/10/2019 21:16:51  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28046 | -.23032 | .06016 | -1.0304 | 3.3273 | 8.7005 | 12.955 |
| Stddev | 3.1461 | .09360 | .29754 | .5921 | 2.6492 | .2382 | 10.314 |
| %RSD | 1121.8 | 40.641 | 494.61 | 57.468 | 79.621 | 2.7372 | 79.614 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -4.4950 |
| Stddev | 7.6411 |
| %RSD | 169.99 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6297.1 | 4155.6 | 46213. | 3274.2 |
| Stddev | 5.3 | 3.0 | 124. | 4.9 |
| %RSD | .08489 | .07249 | .26760 | .15095 |

Sample Name: lcs 240-380266/3-a Acquired: 5/10/2019 21:21:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48.251 | 2073.8 | 2234.7 | F 1802.7 | 2040.7 | 54.326 |
| Stddev | .998 | 49.0 | 16.7 | 6.7 | 6.3 | .407 |
| %RSD | 2.0688 | 2.3631 | .74889 | .37373 | .30973 | .74924 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| Value | | | | 1000.0 | | |
| Range | | | | 20.500% | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53803. | 52.80 | 545.03 | 208.51 | 254.56 | 1044.5 |
| Stddev | 132. | .41 | 3.75 | .55 | 1.71 | 4.9 |
| %RSD | .24573 | .7734 | .68817 | .26164 | .67079 | .47264 |
| Check ? | None | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 57925. | 1091.2 | 53716. | 539.62 | 1024.3 | 1253700. |
| Stddev | 220. | 5.1 | 181. | .80 | 7.9 | 14848. |
| %RSD | .37912 | .46858 | .33723 | .14808 | .77537 | 1.1844 |
| Check ? | None | Chk Pass | None | Chk Pass | Chk Pass | None |
| Value | | | | | | |
| Range | | | | | | |

Sample Name: lcs 240-380266/3-a Acquired: 5/10/2019 21:21:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 554.59 | 488.36 | 534.6 | 2246.3 | 2185.8 | 1049.6 |
| Stddev | 2.43 | 2.49 | 4.0 | 9.7 | 17.3 | .4 |
| %RSD | .43883 | .51018 | .7451 | .43250 | .79202 | .03881 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | |
| Range | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1984.8 | 519.14 | 600.67 | F 1704.2 | 1073.1 |
| Stddev | 13.8 | 7.93 | 3.69 | 26.1 | 5.3 |
| %RSD | .69406 | 1.5268 | .61373 | 1.5317 | .49744 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| Value | | | | 1000.0 | |
| Range | | | | 20.500% | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4883.4 | 3683.3 | 38650. | 3157.5 |
| Stddev | 8.1 | 12.5 | 72. | 3.5 |
| %RSD | .16571 | .33960 | .18595 | .10953 |

Sample Name: 240-111934-d-1-i Acquired: 5/10/2019 21:25:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .04272 | 13.598 | 9.1877 | 977.66 | 313.54 | .06593 |
| Stddev | .76312 | 55.337 | 1.9360 | 12.75 | .36 | .08155 |
| %RSD | 1786.2 | 406.96 | 21.072 | 1.3046 | .11539 | 123.69 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 768400. | 2.423 | 11.060 | 5.6134 | 46.222 | 47.404 |
| Stddev | 9912. | .124 | .200 | .4059 | .366 | 1.321 |
| %RSD | 1.2900 | 5.109 | 1.8055 | 7.2317 | .79187 | 2.7862 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 720000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5776.8 | 45.389 | 17841. | 6142.3 | 18.550 | F 1182100. |
| Stddev | 70.2 | .332 | 121. | 40.8 | .363 | 40933. |
| %RSD | 1.2154 | .73162 | .67882 | .66352 | 1.9568 | 3.4626 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-111934-d-1-i Acquired: 5/10/2019 21:25:19 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 72.104 | 5.2664 | 13.01 | 7.6094 | 2.0052 | .59424 |
| Stddev | 1.652 | 1.2832 | 5.54 | 2.0491 | .5143 | .21782 |
| %RSD | 2.2906 | 24.366 | 42.58 | 26.928 | 25.650 | 36.655 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.7439 | 4.3920 | 123.93 | 12242. | 886.83 |
| Stddev | 1.3143 | 6.5553 | 1.93 | 85. | 3.69 |
| %RSD | 27.704 | 149.26 | 1.5608 | .69519 | .41654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4770.3 | 3617.6 | 38607. | 3166.4 |
| Stddev | 7.4 | 7.7 | 79. | 20.6 |
| %RSD | .15422 | .21343 | .20485 | .65112 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 75.749% | 87.217% | 84.832% | 93.493% |
| Range | | | | |

Sample Name: mb 240-379991/1-a Acquired: 5/10/2019 21:29:55 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12531 | 3.1551 | 2.3399 | 18.278 | .26679 | .44034 | 195.78 |
| Stddev | .39982 | 34.539 | 1.9069 | .354 | .35407 | .09918 | 9.06 |
| %RSD | 319.08 | 1094.7 | 81.492 | 1.9366 | 132.71 | 22.524 | 4.6281 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0535 | .14377 | F 5.8176 | .75639 | 30.804 | 311.32 | 5.0913 |
| Stddev | .1364 | .27548 | .0811 | .86660 | 1.172 | 30.03 | 2.2000 |
| %RSD | 254.9 | 191.61 | 1.3940 | 114.57 | 3.8061 | 9.6472 | 43.210 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | | | | |
| Low Limit | | | -1000.0 | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.5911 | 3.5370 | .14146 | F 1601.5 | 4.3727 | 1.0820 | -.5192 |
| Stddev | 28.269 | .0821 | .21454 | 54.5 | .6804 | .9551 | 1.950 |
| %RSD | 787.21 | 2.3214 | 151.67 | 3.4060 | 15.561 | 88.272 | 375.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 1000.0 | | | |
| Low Limit | | | | -1000.0 | | | |

Sample Name: mb 240-379991/1-a  Acquired: 5/10/2019 21:29:55  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .12483 | 1.6453 | .02434 | 1.3849 | 1.2789 | F 21.489 | 1.2321 |
| Stddev | .51377 | .6343 | .23507 | .4162 | 1.9545 | .032 | 5.3142 |
| %RSD | 411.56 | 38.551 | 965.72 | 30.050 | 152.82 | .15083 | 431.30 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass |
| High Limit | | | | | | 20.000 | |
| Low Limit | | | | | | -1000.0 | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 3.9970 |
| Stddev | 2.1196 |
| %RSD | 53.029 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6443.5 | 4251.8 | 46773. | 3367.0 |
| Stddev | 14.9 | 8.2 | 189. | 9.6 |
| %RSD | .23114 | .19325 | .40354 | .28499 |

Sample Name: lcs 240-379991/2-a Acquired: 5/10/2019 21:34:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.537 | 2053.7 | 2125.3 | 1076.8 | 1997.8 | 54.185 | 49715. | 52.27 |
| Stddev | .276 | 28.3 | 5.0 | 2.3 | 5.5 | .322 | 211. | .17 |
| %RSD | .54599 | 1.3777 | .23464 | .21708 | .27365 | .59408 | .42480 | .3264 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 517.57 | 197.45 | 251.58 | 1035.0 | 52537. | 1038.5 | 52867. | 525.26 |
| Stddev | 2.31 | .71 | 1.37 | 7.7 | 95. | .9 | 197. | .31 |
| %RSD | .44572 | .35983 | .54632 | .73973 | .18082 | .08960 | .37235 | .05967 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 991.82 | 51628. | 526.46 | 506.77 | 527.8 | 2169.6 | 2047.6 | 1006.2 |
| Stddev | 7.17 | 96. | 1.96 | 3.94 | 3.2 | 5.5 | 10.3 | .5 |
| %RSD | .72313 | .18658 | .37228 | .77807 | .6155 | .25237 | .50444 | .04624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-379991/2-a Acquired: 5/10/2019 21:34:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2016.4 | 495.64 | 543.69 | 1067.2 | 1059.2 |
| Stddev | 17.0 | 2.84 | 2.21 | 8.3 | 11.9 |
| %RSD | .84104 | .57305 | .40666 | .77590 | 1.1273 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5775.7 | 4060.0 | 44249. | 3279.8 |
| Stddev | 11.4 | 9.3 | 55. | 20.5 |
| %RSD | .19708 | .22936 | .12462 | .62568 |

Sample Name: CCV-4140446 Acquired: 5/10/2019 21:38:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 983.38 | 25396. | 526.25 | 5224.0 | 2039.1 | 2121.5 | 50900. | 519.3 |
| Stddev | 1.23 | 73. | 3.09 | 5.2 | 7.9 | 6.7 | 224. | .4 |
| %RSD | .12459 | .28774 | .58622 | .10024 | .38613 | .31480 | .44000 | .0719 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2068.5 | 1960.3 | 1958.6 | 25046. | 53051. | 5155.7 | 52371. | 2051.4 |
| Stddev | 3.8 | 4.3 | .7 | 151. | 264. | 28.6 | 280. | 2.3 |
| %RSD | .18312 | .22110 | .03434 | .60313 | .49742 | .55566 | .53400 | .11074 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2054.8 | 52287. | 2082.7 | 495.65 | 514.8 | 527.98 | 5249.1 | 5113.2 |
| Stddev | 5.2 | 161. | 4.4 | .50 | 3.8 | 1.61 | 15.9 | 9.1 |
| %RSD | .25441 | .30841 | .21250 | .10113 | .7325 | .30585 | .30318 | .17737 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 21:38:11 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1017.3 | 1975.6 | 2133.8 | 4941.1 | 5191.8 |
| Stddev | 1.4 | 3.1 | 3.3 | 39.5 | 15.0 |
| %RSD | .13754 | .15665 | .15239 | .80000 | .28970 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5607.3 | 4004.0 | 43304. | 3194.6 |
| Stddev | 6.7 | 2.8 | 72. | 27.4 |
| %RSD | .11904 | .07052 | .16712 | .85637 |

Sample Name: CCB Acquired: 5/10/2019 21:42:13 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.21719 | -59.808 | 3.2885 | 19.065 | .57667 | .37784 | 26.048 | .1786 |
| Stddev | .20780 | 7.478 | 1.8993 | .621 | .20332 | .36539 | 4.991 | .1502 |
| %RSD | 95.672 | 12.503 | 57.757 | 3.2574 | 35.257 | 96.705 | 19.160 | 84.10 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16752 | -.34700 | -.83215 | .57961 | 214.76 | 1.6213 | 5.2423 | .58478 |
| Stddev | .23507 | .28802 | .75325 | 2.7936 | 42.83 | 3.3642 | 28.837 | .02852 |
| %RSD | 140.33 | 83.004 | 90.519 | 481.97 | 19.941 | 207.50 | 550.08 | 4.8777 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.6339 | 762.51 | .22349 | .18474 | .5660 | 1.5821 | 1.2788 | 1.3873 |
| Stddev | .2079 | 5.33 | .62259 | 1.0437 | .2948 | 1.2997 | .3614 | .2779 |
| %RSD | 3.1346 | .69947 | 278.57 | 564.97 | 52.09 | 82.150 | 28.259 | 20.034 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 21:42:13 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .08230 | 4.9819 | 2.6368 | -6.2829 | -7.1320 |
| Stddev | .78864 | 6.2593 | .0480 | 6.0583 | 1.7204 |
| %RSD | 958.22 | 125.64 | 1.8197 | 96.425 | 24.122 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6346.6 | 4197.3 | 46111. | 3267.3 |
| Stddev | 21.0 | 8.7 | 109. | 6.4 |
| %RSD | .33073 | .20662 | .23590 | .19710 |

Sample Name: CCVL-4100714 Acquired: 5/10/2019 21:46:31 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.028 | 195.11 | 18.371 | 118.53 | 200.19 | 5.4462 | 5193.9 | 5.232 |
| Stddev | .212 | 48.28 | 1.868 | 1.26 | .76 | .1180 | 21.5 | .045 |
| %RSD | 2.1120 | 24.747 | 10.167 | 1.0607 | .38095 | 2.1658 | .41421 | .8570 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.282 | 9.5851 | 24.750 | 203.69 | 5330.8 | 52.314 | 5388.9 | 17.465 |
| Stddev | .031 | .4280 | 1.132 | 2.62 | 57.8 | 3.295 | 31.4 | .079 |
| %RSD | .30243 | 4.4650 | 4.5754 | 1.2848 | 1.0837 | 6.2980 | .58193 | .45307 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42.045 | 5815.6 | 41.131 | 10.126 | 20.50 | 22.374 | 102.22 | 50.729 |
| Stddev | .245 | 36.7 | .294 | 1.017 | 1.37 | 1.164 | .73 | .187 |
| %RSD | .58354 | .63083 | .71375 | 10.045 | 6.669 | 5.2009 | .71798 | .36923 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/10/2019 21:46:31 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 19.389 | 45.043 | 53.809 | 483.58 | 51.248 |
| Stddev | 1.625 | 4.928 | .119 | 13.42 | 9.739 |
| %RSD | 8.3804 | 10.940 | .22086 | 2.7749 | 19.003 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6238.2 | 4176.4 | 45408. | 3257.5 |
| Stddev | 6.3 | 4.6 | 122. | 14.6 |
| %RSD | .10148 | .10905 | .26889 | .44716 |

Sample Name: 240-112064-b-2-a Acquired: 5/10/2019 21:50:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.67125 | 1052.6 | 8.6384 | 9072.2 | 58.617 | .34950 | 75130. | .3654 |
| Stddev | .25135 | 46.0 | 1.9038 | 8.9 | .366 | .14758 | 110. | .0338 |
| %RSD | 37.445 | 4.3731 | 22.038 | .09858 | .62409 | 42.227 | .14595 | 9.248 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2817 | 4.0788 | 8.2071 | 1672.6 | 3095.5 | 31.654 | 80778. | 139.12 |
| Stddev | .1929 | .2873 | .8112 | 1.3 | 21.4 | 3.388 | 136. | .36 |
| %RSD | 15.048 | 7.0435 | 9.8844 | .07687 | .69287 | 10.704 | .16835 | .25962 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.2343 | 30116. | 6.6846 | 1.1771 | -1.687 | 16.029 | .65172 | 46.442 |
| Stddev | .3024 | 90. | .2744 | 2.2437 | 3.638 | 2.584 | .34553 | .145 |
| %RSD | 5.7782 | .29730 | 4.1046 | 190.62 | 215.7 | 16.118 | 53.019 | .31129 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-b-2-a Acquired: 5/10/2019 21:50:43 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7878 | 8.4379 | 24.259 | 5179.2 | 276.81 |
| Stddev | .6149 | 5.9133 | .237 | 13.8 | 5.86 |
| %RSD | 34.392 | 70.081 | .97867 | .26616 | 2.1184 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5839.6 | 4098.6 | 44428. | 3309.9 |
| Stddev | 6.9 | 2.1 | 9. | 6.5 |
| %RSD | .11737 | .05082 | .01970 | .19705 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.728% | 98.811% | 97.624% | 97.730% |
| Range | | | | |

Sample Name: 240-112064-b-5-a@2 Acquired: 5/10/2019 21:54:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.50704 | 18.788 | 4.0728 | F 113340. | 34.918 | .15823 |
| Stddev | .30580 | 16.675 | 1.8799 | 1010. | .268 | .18962 |
| %RSD | 60.312 | 88.752 | 46.157 | .89074 | .76803 | 119.84 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | 20000. | | |
| Low Limit | | | | -500000. | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 451400. | -.3042 | .88102 | 10.548 | 3.3663 | 30.140 |
| Stddev | 1601. | .2771 | .24462 | .451 | .9340 | 2.291 |
| %RSD | .35473 | 91.07 | 27.765 | 4.2766 | 27.746 | 7.6005 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12019. | 143.42 | F 978200. | 1573.4 | 22.132 | 110550. |
| Stddev | 64. | 1.54 | 1123. | 2.4 | .517 | 100. |
| %RSD | .53267 | 1.0767 | .11479 | .15455 | 2.3340 | .09075 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 500000. | | | |
| Low Limit | | | -500000. | | | |

Sample Name: 240-112064-b-5-a@2 Acquired: 5/10/2019 21:54:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.2983 | 2.1302 | .6479 | 212.18 | 1.5606 | -.74784 |
| Stddev | .2882 | .8793 | 3.561 | 1.86 | .9589 | .05083 |
| %RSD | 4.5758 | 41.276 | 549.5 | .87533 | 61.445 | 6.7971 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .70385 | 3.0481 | 2.8981 | 4606.3 | 999.26 |
| Stddev | .74844 | 2.0190 | .0913 | 30.5 | 11.88 |
| %RSD | 106.33 | 66.239 | 3.1493 | .66143 | 1.1884 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4902.0 | 3628.4 | 39219. | 3110.7 |
| Stddev | 9.8 | 6.9 | 76. | 7.8 |
| %RSD | .19938 | .19027 | .19351 | .24928 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 77.841% | 87.476% | 86.179% | 91.849% |
| Range | | | | |

Sample Name: 240-112064-b-5-a@20 Acquired: 5/10/2019 21:59:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.21318 | -9.5686 | 2.0313 | 12055. | 4.1016 | .20469 | 47584. | -.0723 |
| Stddev | .42053 | 47.025 | 1.6275 | 46. | .3613 | .13587 | 104. | .1530 |
| %RSD | 197.26 | 491.45 | 80.122 | .37905 | 8.8097 | 66.380 | .21878 | 211.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .48465 | 1.2222 | .38400 | 5.5706 | 1281.6 | 13.386 | 99753. | 163.40 |
| Stddev | .32462 | .5463 | .66275 | 1.4064 | 14.9 | 1.866 | 296. | .29 |
| %RSD | 66.979 | 44.697 | 172.59 | 25.246 | 1.1665 | 13.940 | .29717 | .17798 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.1849 | 11892. | 1.2446 | -.15192 | .5989 | 19.347 | .10733 | .29739 |
| Stddev | .0553 | 41. | .3453 | .40647 | 2.531 | 1.983 | .30103 | .27793 |
| %RSD | 2.5300 | .34076 | 27.740 | 267.56 | 422.7 | 10.248 | 280.48 | 93.458 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-b-5-a@20 Acquired: 5/10/2019 21:59:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15335 | -1.4580 | 3.5188 | 453.43 | 109.73 |
| Stddev | .71659 | 4.8889 | .1422 | 7.37 | 7.07 |
| %RSD | 467.28 | 335.32 | 4.0409 | 1.6255 | 6.4391 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5771.0 | 3994.4 | 43123. | 3201.8 |
| Stddev | 13.8 | 13.6 | 24. | 8.8 |
| %RSD | .23976 | .33959 | .05485 | .27402 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.640% | 96.300% | 94.756% | 94.537% |
| Range | | | | |

Sample Name: 240-112064-a-6-a Acquired: 5/10/2019 22:03:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.61161 | 602.05 | 4.6792 | 140.51 | 39.885 | -.01493 | 24434. | .0899 |
| Stddev | .05470 | 47.98 | 2.5623 | 5.45 | .262 | .14462 | 73. | .1049 |
| %RSD | 8.9432 | 7.9688 | 54.758 | 3.8785 | .65810 | 968.45 | .30007 | 116.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .77010 | 1.8210 | 5.9477 | 1012.3 | 1776.3 | 6.5555 | 6599.8 | 96.705 |
| Stddev | .49289 | .2802 | .5948 | 7.7 | 50.5 | .6199 | 27.6 | .223 |
| %RSD | 64.003 | 15.384 | 10.001 | .75930 | 2.8438 | 9.4562 | .41884 | .23025 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .38049 | 15253. | 3.8285 | 1.4518 | 1.215 | -1.5434 | .67353 | 7.5160 |
| Stddev | .31456 | 73. | .7857 | .9936 | 2.668 | .6060 | .38026 | .3805 |
| %RSD | 82.673 | .47618 | 20.522 | 68.442 | 219.6 | 39.262 | 56.458 | 5.0629 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112064-a-6-a Acquired: 5/10/2019 22:03:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .89213 | 2.5697 | 11.742 | 3138.5 | 108.41 |
| Stddev | .93866 | 7.0246 | .150 | 27.4 | 7.25 |
| %RSD | 105.22 | 273.36 | 1.2756 | .87223 | 6.6880 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6133.5 | 4129.5 | 44424. | 3304.2 |
| Stddev | 14.6 | 7.6 | 215. | 15.6 |
| %RSD | .23829 | .18517 | .48451 | .47225 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.396% | 99.557% | 97.616% | 97.561% |
| Range | | | | |

Sample Name: 240-112073-b-1-c Acquired: 5/10/2019 22:07:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.35525 | -9.7323 | 10.473 | 1578.0 | 37.040 | -.00781 | 243080. |
| Stddev | .70264 | 31.352 | 1.822 | 8.9 | .315 | .17816 | 532. |
| %RSD | 197.79 | 322.14 | 17.400 | .56591 | .85103 | 2281.4 | .21897 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1378 | 1.0409 | .95559 | 2.1011 | 1490.3 | 4216.1 | 1.9843 |
| Stddev | .0618 | .3050 | .37855 | .2833 | 16.3 | 29.2 | 3.3878 |
| %RSD | 44.86 | 29.296 | 39.614 | 13.486 | 1.0933 | .69333 | 170.73 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33696. | 391.97 | 27.325 | 45636. | 2.9277 | 3.0839 | -.1997 |
| Stddev | 403. | 1.15 | .364 | 66. | .8814 | .7272 | 1.844 |
| %RSD | 1.1965 | .29217 | 1.3334 | .14420 | 30.105 | 23.579 | 923.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112073-b-1-c Acquired: 5/10/2019 22:07:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.3906 | .69645 | .23603 | .78732 | 3.7494 | 1.0535 | 5863.1 |
| Stddev | 2.8855 | .30697 | .19111 | 1.9564 | 5.7318 | .0604 | 68.7 |
| %RSD | 85.103 | 44.077 | 80.967 | 248.49 | 152.87 | 5.7318 | 1.1714 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 655.19 |
| Stddev | 3.44 |
| %RSD | .52494 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5704.9 | 3981.9 | 42373. | 3273.3 |
| Stddev | 30.4 | 26.2 | 157. | 8.5 |
| %RSD | .53274 | .65675 | .36967 | .26063 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.591% | 95.999% | 93.108% | 96.649% |
| Range | | | | |

Sample Name: 240-112073-b-2-c Acquired: 5/10/2019 22:11:55 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.97697 | -25.304 | 3.5769 | 13618. | 27.138 | .05973 | 391400. |
| Stddev | .50790 | 21.187 | 1.2249 | 66. | .092 | .20343 | 1361. |
| %RSD | 51.987 | 83.731 | 34.244 | .48476 | .34038 | 340.57 | .34776 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2177 | .22345 | 1.2744 | 3.7823 | 5928.9 | 5844.7 | 12.469 |
| Stddev | .0393 | .27506 | .1392 | 1.2703 | 49.0 | 59.7 | 1.274 |
| %RSD | 18.07 | 123.10 | 10.920 | 33.584 | .82699 | 1.0208 | 10.215 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48850. | 532.56 | 56.661 | 252230. | 2.8722 | 2.1058 | -1.888 |
| Stddev | 328. | .89 | .403 | 582. | .1343 | .7153 | 2.155 |
| %RSD | .67088 | .16696 | .71078 | .23071 | 4.6739 | 33.968 | 114.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112073-b-2-c  Acquired: 5/10/2019 22:11:55  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.4915 | .22058 | -.01848 | 1.6760 | 1.2751 | 1.2589 | 8817.2 |
| Stddev | 1.2533 | .53121 | .13382 | .9228 | 4.7773 | .1102 | 121.7 |
| %RSD | 35.896 | 240.83 | 724.09 | 55.059 | 374.67 | 8.7557 | 1.3801 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 851.93 |
| Stddev | 17.86 |
| %RSD | 2.0960 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5300.4 | 3823.8 | 40943. | 3228.1 |
| Stddev | 18.1 | 15.0 | 122. | 3.2 |
| %RSD | .34169 | .39339 | .29873 | .10011 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.166% | 92.188% | 89.967% | 95.315% |
| Range | | | | |

Sample Name: mb 240-379754/1-a Acquired: 5/10/2019 22:16:13 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.11641 | -32.673 | 2.5379 | 63.453 | .68511 | .21074 | 120.28 |
| Stddev | .73417 | 67.567 | .5380 | 1.759 | .14617 | .20648 | 2.68 |
| %RSD | 630.69 | 206.79 | 21.200 | 2.7724 | 21.335 | 97.981 | 2.2307 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0017 | -.02939 | -.07777 | -1.0143 | 7.4840 | 37.455 | -1.8316 |
| Stddev | .1059 | .20329 | .83938 | .8204 | 1.8043 | 41.666 | 2.0014 |
| %RSD | 6407. | 691.75 | 1079.3 | 80.885 | 24.109 | 111.24 | 109.27 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 19.905 | .37984 | -.22157 | 564.38 | .43123 | .63556 | .5007 |
| Stddev | 22.120 | .03055 | .22070 | 7.55 | .74595 | 2.7434 | .3513 |
| %RSD | 111.13 | 8.0420 | 99.610 | 1.3375 | 172.98 | 431.64 | 70.16 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: mb 240-379754/1-a  Acquired: 5/10/2019 22:16:13  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1882 | .36898 | -.08034 | -.41831 | F 6.7817 | .75451 | .02400 |
| Stddev | 2.4463 | .29192 | .13476 | .77957 | 1.5314 | .10906 | 5.4260 |
| %RSD | 205.88 | 79.115 | 167.73 | 186.36 | 22.581 | 14.455 | 22610. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | | 4.0000 | | |
| Low Limit | | | | | -1000.0 | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -.00269 |
| Stddev | 6.3052 |
| %RSD | 234590. |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6330.1 | 4173.8 | 45227. | 3325.2 |
| Stddev | 11.9 | 10.9 | 171. | 12.4 |
| %RSD | .18728 | .26167 | .37833 | .37378 |

Sample Name: lcs 240-379754/2-a Acquired: 5/10/2019 22:20:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.158 | 2014.9 | 2041.5 | 1077.4 | 1936.4 | 49.410 | 48775. | 50.46 |
| Stddev | .701 | 39.6 | 9.9 | 3.2 | 1.3 | .274 | 30. | .47 |
| %RSD | 1.3700 | 1.9657 | .48448 | .29509 | .06481 | .55460 | .06172 | .9308 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 496.44 | 198.55 | 249.54 | 1004.3 | 49830. | 991.59 | 50494. | 508.67 |
| Stddev | 2.10 | 1.07 | .55 | 4.2 | 201. | 1.16 | 231. | .87 |
| %RSD | .42260 | .53672 | .21997 | .41834 | .40417 | .11746 | .45659 | .17039 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 970.26 | 49940. | 501.38 | 490.08 | 505.6 | 2088.0 | 1972.2 | 984.32 |
| Stddev | 7.70 | 137. | 1.12 | 2.81 | 3.2 | 11.0 | 11.7 | 1.21 |
| %RSD | .79319 | .27482 | .22289 | .57307 | .6243 | .52522 | .59271 | .12254 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-379754/2-a Acquired: 5/10/2019 22:20:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1966.0 | 493.70 | 515.24 | 1017.9 | 994.81 |
| Stddev | 21.0 | 9.87 | 2.20 | 3.4 | 12.83 |
| %RSD | 1.0706 | 1.9997 | .42754 | .33451 | 1.2897 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5697.9 | 3990.3 | 43071. | 3266.2 |
| Stddev | 3.7 | 5.7 | 21. | 10.3 |
| %RSD | .06503 | .14255 | .04875 | .31661 |

Sample Name: 240-111951-b-1-a Acquired: 5/10/2019 22:24:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.43545 | 36.267 | 6.0205 | 854.12 | 55.604 | .24217 | 245860. |
| Stddev | .18549 | 30.849 | 1.6688 | 3.23 | .355 | .17697 | 310. |
| %RSD | 42.599 | 85.061 | 27.718 | .37826 | .63850 | 73.078 | .12598 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4669 | 8.3506 | 1.0319 | 4.1822 | 81.800 | 5151.9 | 6.2531 |
| Stddev | .0453 | .1176 | .2002 | .9619 | 4.660 | 27.9 | 1.8520 |
| %RSD | 9.700 | 1.4087 | 19.398 | 23.000 | 5.6971 | .54160 | 29.618 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42322. | 480.41 | 14.476 | 16477. | 22.083 | 2.0847 | -.7759 |
| Stddev | 323. | 1.48 | .327 | 19. | .154 | 1.7700 | 3.519 |
| %RSD | .76304 | .30752 | 2.2620 | .11601 | .69830 | 84.907 | 453.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-1-a Acquired: 5/10/2019 22:24:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.8272 | 1.1688 | 1.7047 | 2.1951 | 4.5575 | 10.920 | 8956.6 |
| Stddev | 1.5625 | .2252 | .2236 | .5331 | 5.2241 | .011 | 45.7 |
| %RSD | 22.887 | 19.268 | 13.116 | 24.284 | 114.63 | .10328 | .50989 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1048.3 |
| Stddev | 11.1 |
| %RSD | 1.0556 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5642.4 | 3921.3 | 42660. | 3249.3 |
| Stddev | 13.0 | 10.5 | 49. | 17.7 |
| %RSD | .23094 | .26896 | .11483 | .54442 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.597% | 94.537% | 93.739% | 95.940% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 22:28:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1017.5 | 25304. | 516.34 | 5215.9 | 2027.0 | 2031.3 | 50780. | 515.5 |
| Stddev | 3.1 | 111. | 5.80 | 19.6 | 10.5 | 14.5 | 205. | 2.1 |
| %RSD | .30316 | .43991 | 1.1242 | .37562 | .51580 | .71273 | .40392 | .4019 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2055.0 | 2030.2 | 2015.0 | 25050. | 51395. | 5096.6 | 50967. | 2056.5 |
| Stddev | 11.1 | 3.2 | 4.2 | 115. | 276. | 30.0 | 310. | 1.9 |
| %RSD | .54188 | .15803 | .21008 | .45862 | .53728 | .58766 | .60907 | .09417 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2059.5 | 51510. | 2046.3 | 497.48 | 510.2 | 518.02 | 5173.3 | 5123.9 |
| Stddev | 12.3 | 283. | 12.5 | 2.19 | 7.8 | 6.92 | 28.3 | 15.1 |
| %RSD | .59882 | .54948 | .61315 | .43989 | 1.527 | 1.3351 | .54730 | .29407 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 22:28:43 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1017.4 | 2004.1 | 2103.5 | 4937.5 | 5042.9 |
| Stddev | 12.9 | 10.2 | 11.9 | 17.7 | 31.1 |
| %RSD | 1.2654 | .50802 | .56615 | .35911 | .61592 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5504.8 | 3913.2 | 42035. | 3185.1 |
| Stddev | 10.2 | 5.0 | 81. | 27.3 |
| %RSD | .18482 | .12696 | .19186 | .85579 |

Sample Name: CCB Acquired: 5/10/2019 22:32:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .41639 | -26.399 | 3.0719 | 39.107 | .32090 | .20346 | 28.803 | .0319 |
| Stddev | .39241 | 48.004 | 2.5700 | 1.034 | .32069 | .14912 | 6.720 | .2720 |
| %RSD | 94.240 | 181.84 | 83.663 | 2.6449 | 99.935 | 73.292 | 23.331 | 852.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .17338 | -.30039 | .58365 | 5.0360 | 107.63 | -1.6032 | -8.7920 | .59860 |
| Stddev | .19199 | .15625 | .27287 | 5.9124 | 13.67 | 4.8144 | 22.023 | .04985 |
| %RSD | 110.73 | 52.016 | 46.753 | 117.40 | 12.699 | 300.30 | 250.49 | 8.3276 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7995 | 358.30 | .27139 | .31877 | -1.517 | 1.1454 | 1.2425 | 1.3944 |
| Stddev | .3383 | 13.32 | .13792 | .57226 | 1.824 | .1825 | .4265 | .3517 |
| %RSD | 5.8338 | 3.7183 | 50.818 | 179.52 | 120.2 | 15.937 | 34.329 | 25.220 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 22:32:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12574 | -1.9036 | 2.6230 | 9.9165 | -9.6005 |
| Stddev | .50313 | 4.4525 | .0762 | 19.383 | 5.7248 |
| %RSD | 400.12 | 233.91 | 2.9058 | 195.46 | 59.631 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6286.6 | 4117.6 | 45082. | 3245.8 |
| Stddev | 2.4 | 3.6 | 40. | 16.1 |
| %RSD | .03747 | .08679 | .08969 | .49600 |

Sample Name: 240-111951-b-2-a Acquired: 5/10/2019 22:37:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .01847 | 178.02 | 3.5648 | 2987.3 | 43.329 | .64572 | 221130. |
| Stddev | .32150 | 36.06 | 2.8454 | 10.8 | .163 | .07213 | 194. |
| %RSD | 1740.3 | 20.255 | 79.820 | .36309 | .37511 | 11.171 | .08776 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2585 | .85322 | 1.8625 | 2.3632 | 43.732 | 7391.8 | 3.1595 |
| Stddev | .0763 | .14440 | .3120 | .3170 | 2.590 | 51.5 | 1.1962 |
| %RSD | 29.52 | 16.923 | 16.752 | 13.414 | 5.9218 | .69710 | 37.861 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20779. | 14.461 | 43.728 | 36670. | 3.0330 | 3.0157 | -.8434 |
| Stddev | 143. | .053 | .623 | 82. | .2046 | 2.1879 | .6215 |
| %RSD | .68616 | .36388 | 1.4257 | .22428 | 6.7446 | 72.551 | 73.69 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-2-a  Acquired: 5/10/2019 22:37:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 14.198 | .46870 | 1.3459 | .68936 | .23253 | 5.1205 | 4751.9 |
| Stddev | 1.064 | .11856 | .0188 | 2.3825 | 3.5941 | .1370 | 38.3 |
| %RSD | 7.4932 | 25.296 | 1.3951 | 345.62 | 1545.6 | 2.6759 | .80511 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1156.6 |
| Stddev | 9.8 |
| %RSD | .84512 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5734.0 | 4024.3 | 43461. | 3284.7 |
| Stddev | 23.2 | 20.3 | 126. | 3.2 |
| %RSD | .40376 | .50552 | .29033 | .09601 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.052% | 97.020% | 95.499% | 96.984% |
| Range | | | | |

Sample Name: 240-111951-b-3-a Acquired: 5/10/2019 22:41:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20456 | 184.05 | 3.2652 | 2985.0 | 42.839 | .80415 | 220370. |
| Stddev | .27764 | 44.89 | 1.8244 | 10.2 | .078 | .12054 | 240. |
| %RSD | 135.73 | 24.388 | 55.876 | .34323 | .18158 | 14.990 | .10904 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1413 | .88671 | 1.6969 | 2.2880 | 35.883 | 7412.2 | 2.5991 |
| Stddev | .0799 | .40892 | .2117 | .4749 | 1.595 | 53.6 | .7043 |
| %RSD | 56.56 | 46.117 | 12.478 | 20.757 | 4.4442 | .72351 | 27.098 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 20823. | 12.739 | 42.589 | 36490. | 2.7537 | .45189 | 1.333 |
| Stddev | 65. | .045 | .593 | 22. | .3758 | .27541 | 4.018 |
| %RSD | .31058 | .35103 | 1.3915 | .06059 | 13.648 | 60.946 | 301.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-3-a Acquired: 5/10/2019 22:41:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.252 | .34737 | 1.1067 | 1.4353 | -1.2283 | 4.7694 | 4743.9 |
| Stddev | 3.922 | .26456 | .0905 | 1.6909 | 3.4181 | .2068 | 16.5 |
| %RSD | 29.592 | 76.162 | 8.1788 | 117.81 | 278.28 | 4.3351 | .34882 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1163.1 |
| Stddev | 7.8 |
| %RSD | .66906 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5752.1 | 4039.2 | 44114. | 3315.0 |
| Stddev | .6 | 9.4 | 28. | 13.8 |
| %RSD | .01127 | .23395 | .06449 | .41744 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.339% | 97.380% | 96.935% | 97.880% |
| Range | | | | |

Sample Name: 240-111951-b-4-a Acquired: 5/10/2019 22:45:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.06248 | 70.157 | 6.8499 | W 18319. | 55.457 | .07973 | 413130. |
| Stddev | .19355 | 24.100 | 1.8817 | 26. | .515 | .15426 | 2655. |
| %RSD | 309.80 | 34.351 | 27.470 | .14270 | .92787 | 193.47 | .64274 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Warn | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | 18000. | | | |
| Low Limit | | | | -500000. | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0323 | .64327 | .99083 | 2.6706 | 5190.3 | 12991. | 10.509 |
| Stddev | .1129 | .41056 | .11021 | .3492 | 39.4 | 24. | 3.364 |
| %RSD | 350.0 | 63.824 | 11.123 | 13.075 | .75830 | .18722 | 32.015 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 71482. | 470.69 | 25.453 | 239330. | 3.0836 | 1.0526 | .0670 |
| Stddev | 278. | .72 | .159 | 570. | .3379 | 1.1713 | 2.538 |
| %RSD | .38913 | .15371 | .62627 | .23808 | 10.958 | 111.27 | 3791. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111951-b-4-a  Acquired: 5/10/2019 22:45:28  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.6854 | .25980 | .28704 | 1.5511 | -7.5365 | .57519 | 5605.0 |
| Stddev | .2067 | 1.3233 | .24718 | .7215 | 3.9270 | .03666 | 30.7 |
| %RSD | 12.263 | 509.33 | 86.113 | 46.513 | 52.106 | 6.3736 | .54692 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1161.4 |
| Stddev | 3.5 |
| %RSD | .30355 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5369.7 | 3873.1 | 41787. | 3252.0 |
| Stddev | 13.4 | 4.5 | 74. | 24.2 |
| %RSD | .24926 | .11718 | .17729 | .74379 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.267% | 93.377% | 91.820% | 96.021% |
| Range | | | | |

Sample Name: 240-112036-b-21-b@5 Acquired: 5/10/2019 22:49:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20533 | 3186.9 | 6.6481 | 62.930 | 39.012 | .52055 | 336650. |
| Stddev | .19454 | 28.1 | 2.5837 | 2.052 | .363 | .31929 | 1678. |
| %RSD | 94.746 | .88091 | 38.865 | 3.2611 | .93100 | 61.336 | .49857 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .7586 | 2.5332 | 10.380 | 11.598 | 7851.7 | 1262.6 | 22.237 |
| Stddev | .0396 | .1007 | .211 | .756 | 41.0 | 10.8 | 2.967 |
| %RSD | 5.223 | 3.9739 | 2.0351 | 6.5168 | .52173 | .85656 | 13.343 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 180630. | 273.48 | 1.2881 | 909.65 | 10.604 | 18.435 | 1.411 |
| Stddev | 542. | .43 | .2052 | 8.04 | .702 | .912 | 2.205 |
| %RSD | .30005 | .15650 | 15.934 | .88352 | 6.6199 | 4.9475 | 156.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-21-b@5 Acquired: 5/10/2019 22:49:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.41419 | 9.9581 | 57.799 | 1.2691 | 5.3422 | 66.596 | 1138.9 |
| Stddev | 2.5414 | .1616 | .169 | .7167 | 2.5747 | .559 | 12.3 |
| %RSD | 613.58 | 1.6225 | .29254 | 56.471 | 48.195 | .83934 | 1.0792 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 219.26 |
| Stddev | 3.32 |
| %RSD | 1.5125 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5401.6 | 3868.9 | 42453. | 3230.0 |
| Stddev | 4.0 | 8.6 | 119. | 20.7 |
| %RSD | .07464 | .22168 | .28080 | .64191 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.773% | 93.274% | 93.283% | 95.371% |
| Range | | | | |

Sample Name: SD 240-112036b21b@25 Acquired: 5/10/2019 22:54:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .58986 | 642.56 | 1.1228 | 37.083 | 8.2195 | .10535 | 69702. | .3368 |
| Stddev | .13282 | 23.09 | 3.7951 | .589 | .2668 | .04581 | 129. | .1131 |
| %RSD | 22.517 | 3.5941 | 338.00 | 1.5889 | 3.2458 | 43.484 | .18505 | 33.59 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .60622 | 2.8291 | 1.4386 | 1626.1 | 269.62 | .09912 | 38960. | 57.131 |
| Stddev | .46953 | .4456 | .8018 | 5.8 | 10.16 | 1.5838 | 36. | .177 |
| %RSD | 77.453 | 15.752 | 55.733 | .35897 | 3.7676 | 1597.8 | .09228 | .30993 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03397 | 438.56 | 2.4944 | 5.0204 | 1.335 | .65199 | 1.4354 | 12.136 |
| Stddev | .07693 | 2.67 | .2349 | .4386 | 1.173 | 2.2700 | .5951 | .166 |
| %RSD | 226.49 | .60807 | 9.4192 | 8.7354 | 87.85 | 348.17 | 41.462 | 1.3691 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112036b21b@25 Acquired: 5/10/2019 22:54:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.85435 | 8.5425 | 16.027 | 226.28 | 46.440 |
| Stddev | 1.3947 | 3.0937 | .201 | .50 | 1.099 |
| %RSD | 163.24 | 36.215 | 1.2561 | .21951 | 2.3674 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5987.1 | 4060.4 | 44572. | 3271.3 |
| Stddev | 8.1 | .9 | 60. | 19.4 |
| %RSD | .13593 | .02277 | .13503 | .59305 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.072% | 97.890% | 97.941% | 96.590% |
| Range | | | | |

Sample Name: 240-112036-b21c ms@5 Acquired: 5/10/2019 22:58:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.0050 | 6375.3 | 403.48 | 248.67 | 432.10 | 10.366 | 356900. |
| Stddev | .4659 | 29.2 | 2.43 | 1.30 | .53 | .196 | 5547. |
| %RSD | 5.1743 | .45762 | .60258 | .52346 | .12364 | 1.8871 | 1.5541 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.35 | 102.42 | 54.408 | 64.139 | 12716. | 12990. | 244.41 |
| Stddev | .18 | .52 | .176 | 1.038 | 15. | 39. | 1.41 |
| %RSD | 1.714 | .50616 | .32329 | 1.6184 | .11770 | .30268 | .57736 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 194850. | 443.07 | 187.62 | 10937. | 115.63 | 120.71 | 78.03 |
| Stddev | 344. | .99 | .92 | 16. | .33 | .66 | 2.16 |
| %RSD | .17664 | .22377 | .49021 | .14288 | .28680 | .54554 | 2.768 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b21c ms@5 Acquired: 5/10/2019 22:58:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 390.03 | 399.55 | 260.97 | 378.99 | 108.71 | 185.87 | 1984.8 |
| Stddev | 1.34 | 1.71 | .55 | 2.45 | 2.63 | .55 | 21.5 |
| %RSD | .34289 | .42878 | .21079 | .64760 | 2.4183 | .29464 | 1.0856 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 397.45 |
| Stddev | 6.07 |
| %RSD | 1.5266 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5300.2 | 3854.1 | 42265. | 3183.9 |
| Stddev | 15.8 | 8.0 | 112. | 8.7 |
| %RSD | .29891 | .20844 | .26445 | .27221 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 84.164% | 92.918% | 92.871% | 94.009% |
| Range | | | | |

Sample Name: 240-112036b21d msd@5 Acquired: 5/10/2019 23:02:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.5630 | 6014.6 | 409.46 | 248.13 | 441.62 | 10.492 | 373990. |
| Stddev | .4807 | 32.9 | 1.09 | 1.33 | 1.82 | .108 | 4678. |
| %RSD | 5.6137 | .54671 | .26629 | .53682 | .41302 | 1.0328 | 1.2508 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.79 | 103.83 | 56.347 | 64.752 | 11870. | 12974. | 242.82 |
| Stddev | .25 | 1.16 | .469 | .163 | 41. | 51. | 2.72 |
| %RSD | 2.339 | 1.1161 | .83272 | .25186 | .34482 | .39638 | 1.1210 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 211740. | 442.00 | 192.61 | 11175. | 116.60 | 120.67 | 73.97 |
| Stddev | 1082. | .29 | 1.64 | 54. | .56 | .66 | 2.51 |
| %RSD | .51088 | .06467 | .85086 | .48660 | .48242 | .54844 | 3.395 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036b21d msd@5 Acquired: 5/10/2019 23:02:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 400.95 | 406.15 | 264.36 | 386.37 | 108.10 | 193.42 | 2193.1 |
| Stddev | 6.01 | 3.26 | .14 | 2.88 | 1.74 | 1.31 | 14.1 |
| %RSD | 1.4989 | .80377 | .05470 | .74649 | 1.6061 | .67846 | .64126 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 440.25 |
| Stddev | 5.71 |
| %RSD | 1.2979 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5261.8 | 3819.2 | 41781. | 3167.6 |
| Stddev | 2.8 | 3.6 | 65. | 18.6 |
| %RSD | .05416 | .09305 | .15607 | .58733 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.555% | 92.077% | 91.807% | 93.527% |
| Range | | | | |

Sample Name: 240-112036-b-22-b@2 Acquired: 5/10/2019 23:06:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1265 | 68191. | 20.518 | 140.89 | 971.61 | 17.615 | 588300. |
| Stddev | .6752 | 718. | 3.805 | 1.11 | 7.87 | .224 | 8307. |
| %RSD | 59.937 | 1.0536 | 18.542 | .78597 | .80982 | 1.2710 | 1.4120 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.845 | 12.854 | 57.321 | 87.838 | 44336. | 4656.9 | 94.109 |
| Stddev | .147 | .368 | .926 | .466 | 332. | 78.1 | 1.021 |
| %RSD | 2.511 | 2.8664 | 1.6161 | .53014 | .74932 | 1.6775 | 1.0845 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 186270. | 4733.1 | 9.7122 | 3304.3 | 56.183 | 215.11 | -2.580 |
| Stddev | 1326. | 27.1 | .2330 | 27.5 | 1.707 | 3.19 | 1.297 |
| %RSD | .71161 | .57329 | 2.3994 | .83075 | 3.0390 | 1.4848 | 50.26 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-22-b@2 Acquired: 5/10/2019 23:06:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.048 | 46.522 | 1049.8 | -1.4447 | 30.508 | 1286.7 | 747.55 |
| Stddev | 1.704 | 1.018 | 5.6 | 1.1430 | 7.802 | 5.1 | 10.96 |
| %RSD | 16.958 | 2.1883 | .53119 | 79.117 | 25.575 | .40004 | 1.4660 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 872.04 |
| Stddev | 7.42 |
| %RSD | .85104 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5141.5 | 4233.7 | 45720. | 3508.0 |
| Stddev | 12.5 | 14.8 | 137. | 17.0 |
| %RSD | .24261 | .35003 | .30039 | .48393 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 81.644% | 102.07% | 100.46% | 103.58% |
| Range | | | | |

Sample Name: 240-112036-b-24-e@2 Acquired: 5/10/2019 23:11:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.8826 | 76624. | 37.762 | 135.32 | 1001.1 | 17.617 | 542500. |
| Stddev | .4909 | 70. | .632 | .65 | 1.0 | .236 | 2910. |
| %RSD | 5.5268 | .09101 | 1.6724 | .47983 | .10449 | 1.3422 | .53642 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55.19 | 22.158 | 174.17 | 293.60 | 92987. | 6551.8 | 99.077 |
| Stddev | .52 | .226 | .55 | .87 | 123. | 64.4 | 1.135 |
| %RSD | .9458 | 1.0202 | .31332 | .29566 | .13195 | .98354 | 1.1455 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 108320. | 8319.7 | 22.128 | 3234.1 | 99.132 | 1050.9 | 1.734 |
| Stddev | 395. | 74.5 | .094 | 18.0 | 2.245 | 19.0 | 3.501 |
| %RSD | .36466 | .89499 | .42578 | .55561 | 2.2643 | 1.8095 | 201.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-24-e@2 Acquired: 5/10/2019 23:11:12 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.064 | 159.59 | 1203.6 | -1.6438 | 49.221 | 11681. | 1870.7 |
| Stddev | 2.329 | 1.80 | 1.0 | 1.3086 | 3.321 | 103. | 9.5 |
| %RSD | 23.147 | 1.1305 | .08074 | 79.613 | 6.7467 | .88448 | .50760 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 843.58 |
| Stddev | 6.23 |
| %RSD | .73863 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5268.0 | 4263.7 | 46343. | 3551.2 |
| Stddev | 4.7 | 1.2 | 111. | 11.8 |
| %RSD | .08830 | .02830 | .23897 | .33214 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.652% | 102.79% | 101.83% | 104.85% |
| Range | | | | |

Sample Name: 240-112036-b-26-c@2 Acquired: 5/10/2019 23:15:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 19.526 | 86171. | k 36.965 | 145.37 | 854.53 | 15.145 | 591090. |
| Stddev | .082 | 267. | 5.917 | .64 | 3.02 | .205 | 3701. |
| %RSD | .41834 | .30973 | 16.007 | .44029 | .35366 | 1.3551 | .62621 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | k 102.8 | 19.501 | 209.17 | 337.43 | 101840. | 7428.8 | 95.992 |
| Stddev | .2 | .040 | .53 | .59 | 432. | 32.4 | .682 |
| %RSD | .2356 | .20607 | .25506 | .17552 | .42418 | .43649 | .71009 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 101630. | ^ ***** | 37.202 | 3898.4 | 106.59 | 2408.4 | 4.827 |
| Stddev | 325. | ----- | .238 | 24.6 | .41 | 10.7 | .729 |
| %RSD | .31965 | ----- | .63929 | .62974 | .38621 | .44586 | 15.11 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112036-b-26-c@2 Acquired: 5/10/2019 23:15:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | k 8.1226 | 355.10 | 1726.2 | k 4.6957 | 48.605 | 24033. | 1952.5 |
| Stddev | 1.9017 | 2.19 | 2.0 | 11.836 | .788 | 101. | 9.8 |
| %RSD | 23.413 | .61632 | .11670 | 252.05 | 1.6204 | .42061 | .50354 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1016.0 |
| Stddev | 19.8 |
| %RSD | 1.9487 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5220.6 | 4223.5 | 45731. | 3516.7 |
| Stddev | 17.6 | 14.9 | 303. | 15.0 |
| %RSD | .33805 | .35277 | .66196 | .42752 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 82.900% | 101.82% | 100.49% | 103.84% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 23:19:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 976.06 | 25255. | 520.59 | 5209.2 | 2036.6 | 2123.6 | 50769. | 517.7 |
| Stddev | 1.03 | 59. | 1.09 | 4.7 | 6.0 | 5.9 | 137. | 1.8 |
| %RSD | .10537 | .23546 | .21024 | .09049 | .29410 | .27701 | .26994 | .3390 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2064.5 | 1948.5 | 1942.0 | 24992. | 53375. | 5155.7 | 52499. | 2040.8 |
| Stddev | 3.4 | 2.1 | 2.8 | 150. | 304. | 28.8 | 265. | 4.7 |
| %RSD | .16671 | .10643 | .14508 | .59969 | .57015 | .55843 | .50490 | .23238 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2040.1 | 52944. | 2079.8 | 495.78 | 514.7 | 520.48 | 5243.5 | 5099.2 |
| Stddev | 8.0 | 284. | 4.1 | .99 | 1.3 | 4.55 | 11.9 | 15.2 |
| %RSD | .39331 | .53582 | .19563 | .19955 | .2588 | .87457 | .22609 | .29728 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/10/2019 23:19:56 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1015.4 | 1952.7 | 2131.3 | 4905.8 | 5226.2 |
| Stddev | 4.3 | 17.6 | 3.3 | 28.0 | 39.2 |
| %RSD | .42556 | .90258 | .15457 | .57042 | .75037 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5596.9 | 4000.7 | 43349. | 3180.5 |
| Stddev | 8.3 | 7.3 | 69. | 28.5 |
| %RSD | .14868 | .18160 | .15990 | .89569 |

Sample Name: CCB Acquired: 5/10/2019 23:23:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .09003 | -28.042 | 3.3711 | 25.072 | .21079 | .32689 | 35.459 | -.0822 |
| Stddev | .06823 | 48.279 | .5471 | .725 | .23172 | .15524 | 3.989 | .1138 |
| %RSD | 75.788 | 172.17 | 16.230 | 2.8919 | 109.93 | 47.491 | 11.250 | 138.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16091 | .09113 | -.02685 | 3.7283 | 91.850 | -.24079 | -13.462 | .67479 |
| Stddev | .35358 | .24118 | .52638 | 2.1864 | 39.016 | 1.9696 | 40.320 | .02076 |
| %RSD | 219.73 | 264.64 | 1960.7 | 58.642 | 42.478 | 817.95 | 299.51 | 3.0770 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.5580 | 264.62 | .94242 | .98191 | -1.628 | 1.4016 | 1.1268 | 1.3816 |
| Stddev | .2724 | 4.75 | .29238 | .99683 | 2.090 | 2.3215 | .2062 | .2202 |
| %RSD | 4.9018 | 1.7938 | 31.024 | 101.52 | 128.4 | 165.63 | 18.295 | 15.935 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/10/2019 23:23:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .82056 | -1.4056 | 2.8563 | 1.1531 | -1.6438 |
| Stddev | 1.0826 | 2.9345 | .0302 | 11.623 | 5.5027 |
| %RSD | 131.93 | 208.78 | 1.0557 | 1008.0 | 334.76 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6321.1 | 4172.4 | 45693. | 3223.1 |
| Stddev | 9.0 | 5.5 | 44. | 6.5 |
| %RSD | .14234 | .13229 | .09670 | .20229 |

Sample Name: 240-112036-b-38-b@2 Acquired: 5/10/2019 23:28:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.32407 | 59933. | 134.73 | 50.289 | 708.37 | 4.0872 | 10613. |
| Stddev | .57546 | 145. | .95 | .412 | 1.03 | .1892 | 16. |
| %RSD | 177.57 | .24232 | .70768 | .81914 | .14571 | 4.6278 | .15090 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.740 | 156.94 | 90.606 | 142.87 | 205470. | 8975.6 | 89.634 |
| Stddev | .099 | .49 | .346 | .51 | 679. | 44.7 | 2.162 |
| %RSD | 3.602 | .31430 | .38145 | .35523 | .33058 | .49775 | 2.4116 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 19066. | W 9205.3 | 50.210 | 1731.1 | 287.14 | 77.485 | 1.212 |
| Stddev | 101. | 52.7 | .299 | 11.1 | 1.82 | 1.647 | 2.073 |
| %RSD | .52903 | .57198 | .59601 | .64034 | .63383 | 2.1255 | 171.1 |
| Check ? | Chk Pass | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | 9000.0 | | | | | |
| Low Limit | | -500000. | | | | | |

Sample Name: 240-112036-b-38-b@2 Acquired: 5/10/2019 23:28:13 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.5719 | 22.983 | 435.10 | -.25227 | 112.77 | 512.00 | 1217.6 |
| Stddev | 3.5613 | .651 | .99 | .75514 | 6.48 | .39 | 19.5 |
| %RSD | 63.915 | 2.8330 | .22746 | 299.34 | 5.7450 | .07536 | 1.6030 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 79.858 |
| Stddev | 4.342 |
| %RSD | 5.4368 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5950.8 | 4441.0 | 47852. | 3504.6 |
| Stddev | 17.9 | 14.1 | 60. | 6.4 |
| %RSD | .30037 | .31724 | .12438 | .18196 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.496% | 107.07% | 105.15% | 103.48% |
| Range | | | | |

Sample Name: 240-112119-b-1-a Acquired: 5/10/2019 23:32:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.4566 | 107230. | 79.276 | 74.970 | 790.77 | 7.2487 | 412110. |
| Stddev | .5755 | 310. | 1.220 | .522 | 1.46 | .1212 | 7378. |
| %RSD | 39.509 | .28925 | 1.5389 | .69566 | .18450 | 1.6718 | 1.7902 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.096 | 110.16 | 167.39 | 175.21 | 184310. | 14431. | 136.72 |
| Stddev | .280 | 1.49 | .25 | 1.01 | 324. | 59. | 1.21 |
| %RSD | 9.040 | 1.3509 | .15161 | .57364 | .17604 | .41116 | .88189 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 129470. | 5094.3 | 380.09 | 2446.0 | 566.84 | 135.93 | -1.137 |
| Stddev | 544. | 10.1 | 6.26 | 4.6 | 8.25 | 2.15 | .156 |
| %RSD | .42056 | .19768 | 1.6472 | .18755 | 1.4558 | 1.5823 | 13.74 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112119-b-1-a Acquired: 5/10/2019 23:32:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7494 | 43.643 | 848.55 | -3.3826 | 2437.8 | 965.47 | 3199.1 |
| Stddev | 1.2995 | .579 | .98 | 1.3360 | 3.6 | 12.82 | 73.7 |
| %RSD | 22.603 | 1.3256 | .11523 | 39.496 | .14857 | 1.3277 | 2.3025 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 451.91 |
| Stddev | 6.56 |
| %RSD | 1.4515 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5255.6 | 4426.1 | 47498. | 3698.4 |
| Stddev | 3.4 | 7.2 | 60. | 20.1 |
| %RSD | .06399 | .16268 | .12696 | .54302 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.456% | 106.71% | 104.37% | 109.20% |
| Range | | | | |

Sample Name: 240-112119-b-2-a@2 Acquired: 5/10/2019 23:36:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11536 | 49125. | 33.166 | 40.470 | 275.62 | 3.0397 | 130400. |
| Stddev | .77238 | 97. | 2.655 | .372 | .86 | .3296 | 334. |
| %RSD | 669.54 | .19818 | 8.0060 | .92023 | .31304 | 10.843 | .25612 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.436 | 37.168 | 76.522 | 87.788 | 53938. | 4361.6 | 38.412 |
| Stddev | .043 | .611 | .643 | .976 | 126. | 20.7 | 4.996 |
| %RSD | 1.785 | 1.6430 | .84059 | 1.1114 | .23360 | .47349 | 13.005 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 43387. | 1562.5 | 266.86 | 868.53 | 707.39 | 164.68 | 1.331 |
| Stddev | 167. | 1.9 | .80 | 14.45 | 3.39 | 2.12 | 5.014 |
| %RSD | .38516 | .12241 | .29895 | 1.6633 | .47917 | 1.2888 | 376.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112119-b-2-a@2 Acquired: 5/10/2019 23:36:56 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0955 | 24.254 | 411.61 | -1.4194 | 4354.4 | 1271.6 | 1992.5 |
| Stddev | 1.8837 | .546 | .62 | 1.1079 | 36.7 | 5.2 | 33.3 |
| %RSD | 45.995 | 2.2504 | .15056 | 78.053 | .84265 | .40768 | 1.6728 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 318.43 |
| Stddev | 7.90 |
| %RSD | 2.4817 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5748.5 | 4187.9 | 44940. | 3357.0 |
| Stddev | 10.1 | 1.9 | 89. | 15.9 |
| %RSD | .17599 | .04572 | .19876 | .47444 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.282% | 100.96% | 98.750% | 99.119% |
| Range | | | | |

Sample Name: 240-112119-b-3-a@2 Acquired: 5/10/2019 23:41:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .49631 | 38959. | 27.064 | 35.670 | 201.53 | 2.5527 | 38085. | 1.777 |
| Stddev | .12384 | 68. | .687 | .300 | .58 | .1607 | 41. | .155 |
| %RSD | 24.952 | .17550 | 2.5384 | .83983 | .28657 | 6.2968 | .10724 | 8.706 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 32.306 | 178.19 | 99.245 | 51766. | 4515.0 | 33.027 | 23313. | 1708.8 |
| Stddev | .339 | .84 | 1.542 | 94. | 82.4 | 2.006 | 136. | 3.0 |
| %RSD | 1.0497 | .47030 | 1.5539 | .18135 | 1.8241 | 6.0751 | .58306 | .17458 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 248.13 | 756.28 | 387.55 | 139.47 | 3.007 | 4.4599 | 32.699 | 421.10 |
| Stddev | 2.21 | 14.55 | 4.16 | .55 | 2.872 | 3.8640 | .841 | .16 |
| %RSD | .89204 | 1.9236 | 1.0728 | .39324 | 95.54 | 86.638 | 2.5705 | .03752 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112119-b-3-a@2 Acquired: 5/10/2019 23:41:05 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.0934 | 3855.8 | 942.61 | 2079.2 | 105.81 |
| Stddev | .6852 | 9.1 | 5.53 | 10.5 | 5.52 |
| %RSD | 32.730 | .23700 | .58716 | .50636 | 5.2144 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5906.1 | 4188.1 | 45127. | 3317.0 |
| Stddev | 3.9 | 1.5 | 144. | 3.4 |
| %RSD | .06661 | .03491 | .31873 | .10212 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.785% | 100.97% | 99.159% | 97.940% |
| Range | | | | |

Sample Name: mb 240-380453/1-a Acquired: 5/10/2019 23:45:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .00670 | -20.201 | 2.3417 | 13.978 | .70946 | .23439 | 55.648 | .0801 |
| Stddev | .25636 | 46.986 | 2.1872 | .547 | .36277 | .12527 | .833 | .1008 |
| %RSD | 3827.8 | 232.59 | 93.399 | 3.9160 | 51.134 | 53.446 | 1.4972 | 125.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11334 | .69249 | .19293 | 21.067 | 1.3513 | -2.4235 | 19.250 | .55090 |
| Stddev | .17293 | .63521 | .63295 | 4.704 | 42.141 | 4.1173 | 14.010 | .07706 |
| %RSD | 152.57 | 91.727 | 328.08 | 22.327 | 3118.5 | 169.89 | 72.783 | 13.987 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1179 | 280.11 | .87367 | 1.2148 | .3172 | -.45599 | 40.018 | .57346 |
| Stddev | .3359 | 11.74 | .17135 | 1.8565 | .8105 | 1.9557 | .250 | .18895 |
| %RSD | 30.044 | 4.1927 | 19.613 | 152.83 | 255.5 | 428.90 | .62349 | 32.949 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: mb 240-380453/1-a Acquired: 5/10/2019 23:45:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.0932 | -5.0244 | 12.854 | .26709 | -4.0420 |
| Stddev | .2894 | 5.6326 | .238 | 5.8228 | 2.4417 |
| %RSD | 26.475 | 112.10 | 1.8521 | 2180.0 | 60.408 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6207.4 | 4132.0 | 45069. | 3249.5 |
| Stddev | 9.2 | 8.2 | 120. | 16.8 |
| %RSD | .14808 | .19950 | .26656 | .51756 |

Sample Name: lcs 240-380453/2-a Acquired: 5/10/2019 23:49:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.247 | 2009.1 | 1974.7 | 986.60 | 1911.0 | 48.514 | 47827. | 48.72 |
| Stddev | .554 | 16.0 | 4.4 | 1.60 | 8.6 | .135 | 184. | .09 |
| %RSD | 1.1242 | .79547 | .22159 | .16222 | .45082 | .27925 | .38440 | .1942 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 491.30 | 198.34 | 246.31 | 999.16 | 48381. | 974.20 | 49145. | 504.54 |
| Stddev | 2.22 | 1.88 | .91 | 4.85 | 215. | 4.45 | 78. | 1.94 |
| %RSD | .45104 | .94956 | .36807 | .48555 | .44361 | .45705 | .15828 | .38408 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 973.56 | 48599. | 494.94 | 482.77 | 484.1 | 1968.4 | 2045.9 | 977.96 |
| Stddev | 4.15 | 152. | 2.03 | 2.30 | 2.4 | 4.0 | 9.3 | 3.50 |
| %RSD | .42620 | .31225 | .41086 | .47740 | .4915 | .20451 | .45392 | .35821 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380453/2-a Acquired: 5/10/2019 23:49:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1930.3 | 490.77 | 508.56 | 975.85 | 981.91 |
| Stddev | 6.1 | 2.30 | 2.04 | 8.39 | 10.11 |
| %RSD | .31407 | .46800 | .40060 | .85959 | 1.0296 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5600.5 | 3928.1 | 42626. | 3209.7 |
| Stddev | 14.0 | 8.4 | 82. | 14.3 |
| %RSD | .25010 | .21442 | .19333 | .44702 |

Sample Name: 240-111971-f-1-c Acquired: 5/10/2019 23:53:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.96465 | 4894.1 | 9.7597 | 11.847 | 11.169 | .39264 | 1107.8 | .1019 |
| Stddev | .42917 | 50.7 | 1.0168 | .540 | .154 | .18233 | 6.0 | .1365 |
| %RSD | 44.490 | 1.0352 | 10.419 | 4.5612 | 1.3819 | 46.438 | .53848 | 133.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7713 | 126.67 | 13.363 | 7007.4 | 237.81 | .56955 | 241.72 | 49.267 |
| Stddev | .1203 | .85 | .307 | 18.6 | 9.37 | 2.1914 | 21.24 | .215 |
| %RSD | 4.3420 | .66989 | 2.2980 | .26480 | 3.9384 | 384.75 | 8.7868 | .43650 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.8231 | 272.24 | 2.2551 | 8.3619 | .8323 | 2.6062 | 27.693 | 433.97 |
| Stddev | .1911 | 9.46 | .6104 | .7212 | .7960 | 2.6682 | .278 | 1.23 |
| %RSD | 6.7699 | 3.4755 | 27.069 | 8.6245 | 95.64 | 102.38 | 1.0052 | .28308 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-1-c Acquired: 5/10/2019 23:53:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.3855 | 109.49 | 5.5870 | 1890.5 | 2.0188 |
| Stddev | .5934 | 5.82 | .0735 | 8.1 | 2.1929 |
| %RSD | 42.827 | 5.3161 | 1.3157 | .42663 | 108.62 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6251.4 | 4321.4 | 47131. | 3433.0 |
| Stddev | 4.5 | 1.1 | 107. | 6.1 |
| %RSD | .07188 | .02596 | .22690 | .17787 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.268% | 104.18% | 103.56% | 101.36% |
| Range | | | | |

Sample Name: SD 240-111971-f-1c@5 Acquired: 5/10/2019 23:57:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.15675 | 1035.6 | 4.2336 | 8.9684 | 2.5557 | .17903 | 263.59 | -.0439 |
| Stddev | .35742 | 39.4 | .9211 | .3152 | .0573 | .16289 | 8.71 | .2239 |
| %RSD | 228.02 | 3.8043 | 21.757 | 3.5146 | 2.2421 | 90.985 | 3.3056 | 509.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .67713 | 26.560 | 2.4322 | 1469.2 | 52.982 | -1.4499 | 37.669 | 11.336 |
| Stddev | .30459 | .216 | .7758 | 13.0 | 34.607 | 3.6304 | 32.764 | .086 |
| %RSD | 44.983 | .81322 | 31.896 | .88413 | 65.319 | 250.39 | 86.980 | .76251 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .17060 | 214.44 | .81008 | 3.0025 | 2.844 | -.06979 | 6.2772 | 93.991 |
| Stddev | .15791 | 5.16 | .73027 | .9952 | 2.155 | 1.9697 | .2702 | 1.228 |
| %RSD | 92.566 | 2.4059 | 90.147 | 33.147 | 75.79 | 2822.3 | 4.3049 | 1.3061 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-111971-f-1c@5 Acquired: 5/10/2019 23:57:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .64847 | 15.015 | 5.3126 | 434.46 | -3.0917 |
| Stddev | .92787 | 6.144 | .1642 | 12.38 | 5.8945 |
| %RSD | 143.09 | 40.922 | 3.0906 | 2.8495 | 190.66 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6284.1 | 4190.9 | 45693. | 3307.0 |
| Stddev | 6.6 | 3.7 | 220. | 2.7 |
| %RSD | .10437 | .08723 | .48131 | .08057 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.788% | 101.04% | 100.40% | 97.645% |
| Range | | | | |

Sample Name: PDS 240-111971-f-1-c Acquired: 5/11/2019 0:02:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 47.801 | 6740.3 | 1978.3 | 1005.1 | 1963.2 | 49.844 | 49853. | 49.37 |
| Stddev | 1.009 | 56.2 | 6.2 | 2.1 | 3.6 | .748 | 92. | .21 |
| %RSD | 2.1109 | .83335 | .31240 | .20779 | .18350 | 1.5002 | .18407 | .4349 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 513.47 | 317.62 | 256.46 | 7639.0 | 49753. | 990.61 | 49977. | 541.62 |
| Stddev | 1.73 | .56 | .97 | 41.9 | 25. | 2.27 | 382. | .51 |
| %RSD | .33639 | .17787 | .37759 | .54906 | .05114 | .22916 | .76349 | .09363 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1002.4 | 49724. | 514.86 | 488.56 | 488.0 | 1989.3 | 2106.7 | 1436.7 |
| Stddev | 5.3 | 21. | 1.69 | 2.12 | 2.0 | 9.1 | 8.2 | 2.9 |
| %RSD | .52904 | .04143 | .32730 | .43489 | .4004 | .45706 | .39067 | .19892 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: PDS 240-111971-f-1-c Acquired: 5/11/2019 0:02:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2035.4 | 593.61 | 530.28 | 2909.3 | 987.45 |
| Stddev | 7.7 | 5.49 | 2.22 | 10.1 | 11.36 |
| %RSD | .37644 | .92545 | .41791 | .34861 | 1.1501 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5663.1 | 4134.0 | 44510. | 3364.1 |
| Stddev | 11.2 | 14.3 | 69. | 17.1 |
| %RSD | .19807 | .34599 | .15496 | .50720 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.926% | 99.666% | 97.804% | 99.329% |
| Range | | | | |

Sample Name: 240-111971-f-1-d ms  Acquired: 5/11/2019 0:06:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 45.962 | 22053. | 1744.7 | 934.85 | 1867.0 | 47.341 | 47015. | 46.99 |
| Stddev | .793 | 49. | 4.1 | 1.79 | 5.0 | .772 | 113. | .29 |
| %RSD | 1.7253 | .22003 | .23412 | .19160 | .26816 | 1.6314 | .24071 | .6237 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 492.44 | 414.43 | 251.09 | 9082.4 | 47407. | 945.67 | 46810. | 525.98 |
| Stddev | 2.02 | .99 | .71 | 20.0 | 116. | 1.56 | 129. | .42 |
| %RSD | .41082 | .23890 | .28466 | .21996 | .24570 | .16451 | .27597 | .08073 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 893.97 | 47158. | 498.98 | 469.66 | 359.8 | 1775.7 | 1893.2 | 1167.3 |
| Stddev | 3.48 | 73. | 1.37 | .42 | 1.6 | 4.0 | 7.2 | 2.1 |
| %RSD | .38900 | .15559 | .27410 | .08950 | .4409 | .22365 | .38150 | .18055 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-1-d ms  Acquired: 5/11/2019 0:06:04  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1909.7 | 575.86 | 511.84 | 5623.4 | 952.77 |
| Stddev | 8.5 | 6.60 | 2.19 | 34.2 | 9.56 |
| %RSD | .44436 | 1.1465 | .42800 | .60754 | 1.0030 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5612.9 | 4114.8 | 44510. | 3360.9 |
| Stddev | 18.8 | 8.1 | 53. | 14.0 |
| %RSD | .33519 | .19567 | .11996 | .41624 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.129% | 99.203% | 97.804% | 99.236% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 0:10:03 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1005.5 | 25250. | 516.19 | 5171.9 | 2029.7 | 2047.2 | 50621. | 516.2 |
| Stddev | 2.6 | 124. | 3.14 | 19.1 | 4.0 | 9.2 | 129. | 1.9 |
| %RSD | .26325 | .48955 | .60862 | .36843 | .19644 | .44854 | .25505 | .3760 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2042.3 | 1999.9 | 1998.3 | 24981. | 51960. | 5127.2 | 51216. | 2045.2 |
| Stddev | 10.8 | 3.4 | .8 | 43. | 110. | 1.9 | 46. | 3.1 |
| %RSD | .53092 | .17070 | .03781 | .17390 | .21138 | .03780 | .09075 | .15242 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2049.5 | 51824. | 2038.5 | 494.05 | 514.1 | 515.95 | 5145.8 | 5100.7 |
| Stddev | 12.6 | 78. | 11.3 | 2.45 | 2.9 | 1.29 | 33.7 | 26.6 |
| %RSD | .61631 | .15003 | .55636 | .49637 | .5631 | .25034 | .65427 | .52166 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 0:10:03 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1008.5 | 1993.3 | 2091.0 | 4901.6 | 5087.6 |
| Stddev | 6.4 | 1.2 | 11.7 | 43.2 | 29.1 |
| %RSD | .63036 | .06036 | .56018 | .88132 | .57283 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5556.2 | 3943.0 | 42729. | 3185.2 |
| Stddev | 12.7 | 8.9 | 91. | 7.3 |
| %RSD | .22894 | .22603 | .21182 | .23005 |

Sample Name: CCB Acquired: 5/11/2019 0:14:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.04601 | -4.8425 | 1.3816 | 11.607 | .34115 | .28247 | 26.697 | .0712 |
| Stddev | .33945 | 9.3671 | 1.3252 | .685 | .26121 | .29540 | 1.244 | .1703 |
| %RSD | 737.83 | 193.44 | 95.919 | 5.8970 | 76.566 | 104.58 | 4.6589 | 239.1 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .10777 | -.23447 | 1.1093 | 6.1207 | 113.81 | .73306 | 5.8134 | .61099 |
| Stddev | .09330 | .59131 | .2087 | .8098 | 37.12 | 2.6862 | 26.421 | .07112 |
| %RSD | 86.577 | 252.19 | 18.816 | 13.230 | 32.615 | 366.44 | 454.47 | 11.640 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7447 | 190.19 | .10475 | .30007 | .1412 | .47857 | 1.2817 | 1.3448 |
| Stddev | .4931 | 9.01 | .72227 | 1.0979 | 2.598 | .91748 | .1267 | .2478 |
| %RSD | 8.5835 | 4.7352 | 689.49 | 365.89 | 1839. | 191.71 | 9.8865 | 18.425 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 0:14:06 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0543 | .76891 | 2.6857 | -1.0827 | -9.7936 |
| Stddev | .3038 | 2.3697 | .1363 | 14.114 | 8.6043 |
| %RSD | 28.816 | 308.19 | 5.0759 | 1303.6 | 87.856 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6321.9 | 4134.5 | 45419. | 3256.0 |
| Stddev | 16.1 | 10.7 | 58. | 21.3 |
| %RSD | .25451 | .25859 | .12797 | .65464 |

Sample Name: 240-111971-f-1-e msd  Acquired: 5/11/2019 0:18:24  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 45.418 | 17688. | 1767.2 | 946.21 | 1878.9 | 48.440 | 47131. | 47.39 |
| Stddev | .741 | 109. | 4.3 | 2.43 | 2.6 | .413 | 104. | .04 |
| %RSD | 1.6323 | .61822 | .24283 | .25732 | .13792 | .85317 | .21983 | .0932 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 493.64 | 350.37 | 252.37 | 7782.0 | 48068. | 955.89 | 47512. | 519.32 |
| Stddev | 1.39 | .48 | 1.51 | 21.1 | 121. | 2.74 | 102. | .96 |
| %RSD | .28152 | .13721 | .59795 | .27118 | .25185 | .28620 | .21499 | .18528 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 905.02 | 47947. | 499.47 | 470.39 | 384.3 | 1792.6 | 1913.9 | 1194.7 |
| Stddev | 3.33 | 107. | 1.37 | 2.73 | 3.9 | 7.1 | 5.7 | 2.4 |
| %RSD | .36812 | .22361 | .27404 | .58103 | 1.016 | .39810 | .29559 | .19909 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-1-e msd  Acquired: 5/11/2019 0:18:24  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1915.9 | 551.63 | 554.08 | 5288.4 | 964.39 |
| Stddev | 9.9 | 4.04 | 1.73 | 22.8 | 8.55 |
| %RSD | .51706 | .73149 | .31293 | .43133 | .88654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5622.7 | 4104.8 | 44571. | 3335.5 |
| Stddev | 10.4 | 6.2 | 58. | 10.1 |
| %RSD | .18513 | .15034 | .13020 | .30304 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.284% | 98.961% | 97.939% | 98.485% |
| Range | | | | |

Sample Name: 240-112215-b-1-a Acquired: 5/11/2019 0:22:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.8963 | 70689. | 103.30 | 44.977 | 5157.6 | 6.5713 |
| Stddev | 1.0138 | 66. | 3.85 | 1.057 | 11.1 | .0649 |
| %RSD | 53.464 | .09368 | 3.7229 | 2.3494 | .21451 | .98839 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | F 1121800. | 6.009 | 133.79 | 148.85 | 398.06 | 207000. |
| Stddev | 12967. | .136 | 1.67 | .64 | 1.50 | 394. |
| %RSD | 1.1559 | 2.258 | 1.2471 | .43328 | .37629 | .19026 |
| Check ? | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 800000. | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7554.1 | 69.626 | 96687. | 8409.4 | 21.136 | 1072.4 |
| Stddev | 61.7 | 1.873 | 344. | 38.6 | .440 | 18.7 |
| %RSD | .81658 | 2.6894 | .35556 | .45947 | 2.0836 | 1.7474 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112215-b-1-a Acquired: 5/11/2019 0:22:23 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 235.45 | 455.33 | 7.987 | 8.2202 | 51.658 | 2956.9 |
| Stddev | 2.73 | 3.77 | 3.934 | 2.6352 | 1.034 | 1.8 |
| %RSD | 1.1614 | .82905 | 49.25 | 32.058 | 2.0021 | .06014 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0535 | 166.94 | 1425.2 | 10407. | 1488.3 |
| Stddev | .5521 | 5.06 | 19.2 | 149. | 13.8 |
| %RSD | 52.407 | 3.0288 | 1.3454 | 1.4289 | .92872 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 4962.8 | 3927.1 | 42198. | 3361.9 |
| Stddev | 11.3 | 4.1 | 159. | 17.6 |
| %RSD | .22721 | .10533 | .37661 | .52261 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 78.806% | 94.677% | 92.725% | 99.265% |
| Range | | | | |

Sample Name: 240-112215-b-2-a Acquired: 5/11/2019 0:26:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.9963 | 144400. | 52.709 | 18.539 | 330.69 | 1.8655 | 7049.7 |
| Stddev | .4984 | 276. | 2.220 | .433 | .36 | .0822 | 4.0 |
| %RSD | 24.965 | .19136 | 4.2124 | 2.3366 | .10922 | 4.4035 | .05663 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3398 | 10.585 | 219.15 | 56.506 | 166360. | 7789.6 | 119.66 |
| Stddev | .2024 | .096 | .36 | .465 | 218. | 51.1 | 1.67 |
| %RSD | 59.57 | .90567 | .16535 | .82216 | .13123 | .65648 | 1.3980 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10789. | 349.74 | 7.8573 | 460.64 | 33.596 | 87.774 | 2.250 |
| Stddev | 26. | 1.06 | .1489 | 17.93 | .687 | 3.291 | 1.687 |
| %RSD | .23915 | .30201 | 1.8948 | 3.8914 | 2.0450 | 3.7499 | 74.96 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112215-b-2-a  Acquired: 5/11/2019 0:26:49  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.0627 | 40.590 | 796.10 | -4.1948 | 382.25 | 164.39 | 3299.2 |
| Stddev | .4815 | .368 | 1.28 | .4885 | 5.64 | .62 | 33.8 |
| %RSD | 9.5115 | .90703 | .16045 | 11.645 | 1.4746 | .37955 | 1.0244 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 57.147 |
| Stddev | 4.742 |
| %RSD | 8.2974 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5905.1 | 4194.8 | 45188. | 3374.7 |
| Stddev | 5.3 | 6.5 | 101. | 9.6 |
| %RSD | .08922 | .15521 | .22404 | .28568 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.769% | 101.13% | 99.295% | 99.641% |
| Range | | | | |

Sample Name: 240-112215-b-3-a Acquired: 5/11/2019 0:31:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.0405 | 195690. | 283.11 | 5.9339 | 253.09 | 11.781 |
| Stddev | .8064 | 446. | 1.72 | .6166 | .93 | .300 |
| %RSD | 39.517 | .22802 | .60646 | 10.392 | .36642 | 2.5453 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1853.5 | 1.539 | 57.623 | 709.71 | 423.82 | F 1047100. |
| Stddev | 19.4 | .076 | .598 | 1.22 | .50 | 12637. |
| %RSD | 1.0451 | 4.951 | 1.0374 | .17122 | .11752 | 1.2069 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6768.2 | 95.953 | 7017.1 | 783.35 | 15.685 | 451.53 |
| Stddev | 49.7 | 3.916 | 69.5 | .49 | .443 | 8.13 |
| %RSD | .73451 | 4.0812 | .99079 | .06251 | 2.8249 | 1.8014 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112215-b-3-a Acquired: 5/11/2019 0:31:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 226.14 | 429.88 | 4.391 | 27.030 | 42.581 | 815.77 |
| Stddev | .99 | 1.47 | 3.518 | 1.530 | 1.560 | 1.06 |
| %RSD | .43664 | .34313 | 80.11 | 5.6596 | 3.6639 | .12967 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -6.7615 | 911.85 | 816.39 | 4260.2 | 40.997 |
| Stddev | .3637 | 5.38 | 5.59 | 87.2 | 5.214 |
| %RSD | 5.3794 | .59009 | .68530 | 2.0463 | 12.719 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5825.9 | 4267.9 | 46131. | 3506.6 |
| Stddev | 7.4 | 8.7 | 59. | 4.3 |
| %RSD | .12650 | .20300 | .12735 | .12292 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.512% | 102.89% | 101.37% | 103.54% |
| Range | | | | |

Sample Name: 240-112215-b-4-a Acquired: 5/11/2019 0:35:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.46616 | 64927. | 49.906 | 12.808 | 526.84 | 4.1421 | 237160. |
| Stddev | .79626 | 106. | .577 | .681 | .71 | .1614 | 236. |
| %RSD | 170.81 | .16270 | 1.1559 | 5.3176 | .13499 | 3.8956 | .09934 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.117 | 72.543 | 125.76 | 89.640 | 139380. | 6404.7 | 249.80 |
| Stddev | .215 | .462 | .59 | .286 | 292. | 76.9 | 3.32 |
| %RSD | 19.29 | .63743 | .46899 | .31939 | .20926 | 1.2010 | 1.3293 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 93966. | 1173.0 | 3.9257 | 448.46 | 113.82 | 194.21 | 1.723 |
| Stddev | 209. | 2.0 | .2049 | 17.37 | .44 | 1.36 | 2.715 |
| %RSD | .22283 | .16872 | 5.2204 | 3.8741 | .38820 | .70169 | 157.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112215-b-4-a Acquired: 5/11/2019 0:35:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7647 | 38.333 | 690.94 | -3.5482 | 3390.0 | 427.56 | 10415. |
| Stddev | 1.8349 | .402 | 1.26 | 1.2648 | 23.4 | .74 | 57. |
| %RSD | 66.369 | 1.0480 | .18208 | 35.645 | .69041 | .17406 | .55022 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 315.56 |
| Stddev | 6.99 |
| %RSD | 2.2136 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5529.1 | 4459.2 | 48568. | 3658.0 |
| Stddev | 11.7 | 14.1 | 94. | 10.5 |
| %RSD | .21088 | .31727 | .19258 | .28692 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.798% | 107.50% | 106.72% | 108.01% |
| Range | | | | |

Sample Name: 240-112215-b-5-a Acquired: 5/11/2019 0:39:25 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.0163 | 147300. | 94.676 | 13.685 | 3273.7 | 6.1636 | 88092. |
| Stddev | .4316 | 749. | 1.649 | .521 | 1.9 | .2888 | 173. |
| %RSD | 10.745 | .50829 | 1.7420 | 3.8107 | .05926 | 4.6855 | .19622 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.779 | 174.31 | 238.94 | 172.26 | 259520. | 13146. | 86.533 |
| Stddev | .226 | 1.84 | 1.06 | 1.68 | 145. | 38. | 1.358 |
| %RSD | 3.328 | 1.0584 | .44259 | .97770 | .05569 | .28592 | 1.5694 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13802. | 3438.0 | 8.3469 | 684.29 | 157.99 | 215.17 | 2.713 |
| Stddev | 19. | 22.5 | .2891 | 22.16 | 1.04 | 1.51 | 2.319 |
| %RSD | .13990 | .65484 | 3.4637 | 3.2378 | .65629 | .70188 | 85.46 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112215-b-5-a  Acquired: 5/11/2019 0:39:25  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.8793 | 43.072 | 1886.9 | -10.344 | 325.65 | 877.94 | 3861.0 |
| Stddev | 1.8000 | .234 | 1.9 | .813 | 8.50 | 9.20 | 46.1 |
| %RSD | 36.890 | .54403 | .09860 | 7.8601 | 2.6096 | 1.0483 | 1.1944 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 210.11 |
| Stddev | 1.69 |
| %RSD | .80391 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5726.8 | 4570.5 | 49524. | 3709.2 |
| Stddev | 9.8 | 12.0 | 175. | 5.9 |
| %RSD | .17097 | .26343 | .35423 | .15869 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.937% | 110.19% | 108.82% | 109.52% |
| Range | | | | |

Sample Name: 240-112215-b-6-a Acquired: 5/11/2019 0:43:42 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .18690 | 112010. | 164.25 | 8.6256 | 13028. | 6.4473 | 13153. |
| Stddev | .70791 | 606. | 1.59 | .1221 | 145. | .1480 | 52. |
| %RSD | 378.77 | .54075 | .96587 | 1.4155 | 1.1156 | 2.2950 | .39655 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.417 | 146.13 | 240.54 | 169.98 | 417520. | 4536.3 | 74.790 |
| Stddev | .111 | .83 | 1.41 | .65 | 991. | 29.8 | 1.130 |
| %RSD | 1.726 | .56666 | .58490 | .38302 | .23726 | .65730 | 1.5110 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8149.3 | 5020.8 | 12.030 | 329.52 | 205.28 | 320.66 | 10.87 |
| Stddev | 95.1 | 43.9 | .145 | 6.77 | 1.68 | 2.32 | 1.60 |
| %RSD | 1.1668 | .87497 | 1.2065 | 2.0538 | .81635 | .72244 | 14.67 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112215-b-6-a  Acquired: 5/11/2019 0:43:42  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.1825 | 45.785 | 1297.8 | -4.6204 | 441.87 | 1426.3 | 3559.2 |
| Stddev | 2.7029 | .786 | 2.0 | 2.4499 | 11.87 | 8.2 | 27.6 |
| %RSD | 37.631 | 1.7161 | .15349 | 53.024 | 2.6870 | .57439 | .77642 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 146.84 |
| Stddev | 6.54 |
| %RSD | 4.4510 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5876.4 | 4556.1 | 49634. | 3628.0 |
| Stddev | 9.7 | 5.5 | 88. | 23.4 |
| %RSD | .16567 | .12028 | .17729 | .64494 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.314% | 109.84% | 109.06% | 107.12% |
| Range | | | | |

Sample Name: 240-112215-b-7-a Acquired: 5/11/2019 0:48:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34197 | 94384. | 114.22 | 5.5502 | 7008.2 | 4.6734 | 11494. |
| Stddev | .28870 | 57. | 3.80 | .3108 | 6.3 | .2495 | 22. |
| %RSD | 84.423 | .06044 | 3.3295 | 5.6005 | .08967 | 5.3383 | .19088 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 3.126 | 236.32 | 156.45 | 160.04 | 266980. | 3540.2 | 70.002 |
| Stddev | .076 | 2.14 | .24 | 2.31 | 453. | 58.0 | 1.359 |
| %RSD | 2.434 | .90590 | .15209 | 1.4423 | .16963 | 1.6396 | 1.9420 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8184.7 | 6653.8 | 8.8950 | 318.16 | 168.28 | 252.40 | 11.58 |
| Stddev | 9.2 | 37.2 | .1855 | 6.44 | .19 | 3.04 | 2.99 |
| %RSD | .11241 | .55915 | 2.0857 | 2.0244 | .11365 | 1.2054 | 25.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112215-b-7-a Acquired: 5/11/2019 0:48:09 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.3865 | 42.725 | 987.96 | -2.8724 | 274.51 | 1033.4 | 2849.0 |
| Stddev | 3.7965 | .368 | 1.12 | 1.0412 | 7.51 | 8.0 | 29.8 |
| %RSD | 51.398 | .86159 | .11377 | 36.249 | 2.7368 | .77097 | 1.0475 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 90.078 |
| Stddev | 8.494 |
| %RSD | 9.4293 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5919.2 | 4336.9 | 47233. | 3401.4 |
| Stddev | 13.0 | 5.1 | 7. | 9.7 |
| %RSD | .22029 | .11818 | .01508 | .28609 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.994% | 104.56% | 103.79% | 100.43% |
| Range | | | | |

Sample Name: 240-111971-f-2-c Acquired: 5/11/2019 0:52:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03351 | 12389. | 6.5191 | 5.6266 | 23.196 | .60023 | 1225.5 | .2171 |
| Stddev | .58451 | 65. | 1.1808 | .2981 | .423 | .15230 | 2.5 | .1156 |
| %RSD | 1744.5 | .52062 | 18.112 | 5.2974 | 1.8222 | 25.374 | .20667 | 53.24 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18.647 | 66.045 | 26.361 | 15524. | 460.01 | 8.7091 | 942.09 | 99.155 |
| Stddev | .096 | .499 | .752 | 8. | 9.30 | 2.2042 | 16.63 | .072 |
| %RSD | .51737 | .75493 | 2.8521 | .05344 | 2.0227 | 25.309 | 1.7649 | .07284 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .57872 | 192.40 | 9.3424 | 8.2245 | 1.889 | -.57991 | 28.060 | 351.77 |
| Stddev | .32411 | 13.00 | .3250 | .8572 | 2.387 | .22693 | .469 | .75 |
| %RSD | 56.004 | 6.7560 | 3.4786 | 10.422 | 126.4 | 39.131 | 1.6703 | .21339 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-2-c Acquired: 5/11/2019 0:52:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5763 | 76.589 | 20.004 | 1453.1 | 8.3880 |
| Stddev | .7808 | 6.391 | .254 | 14.0 | 5.5174 |
| %RSD | 49.533 | 8.3440 | 1.2719 | .96634 | 65.777 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6256.2 | 4242.3 | 46452. | 3249.4 |
| Stddev | 10.6 | 5.7 | 51. | 13.1 |
| %RSD | .16870 | .13427 | .11016 | .40324 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.345% | 102.28% | 102.07% | 95.943% |
| Range | | | | |

Sample Name: 240-111971-f-3-c Acquired: 5/11/2019 0:56:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5078 | 66029. | 24.211 | 8.8969 | 307.36 | 2.8188 | 37351. | .2208 |
| Stddev | .2774 | 157. | .538 | .2248 | .96 | .1787 | 81. | .1369 |
| %RSD | 18.399 | .23784 | 2.2201 | 2.5264 | .31351 | 6.3392 | .21675 | 62.02 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.933 | 151.13 | 31.327 | 78642. | 2662.0 | 46.816 | 23208. | 150.44 |
| Stddev | .152 | .99 | .497 | 54. | 41.2 | 3.311 | 315. | .30 |
| %RSD | 1.3911 | .65481 | 1.5854 | .06844 | 1.5467 | 7.0720 | 1.3575 | .19814 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2745 | 597.18 | 30.572 | 52.838 | .0178 | -1.9841 | 33.681 | 608.91 |
| Stddev | .0699 | 6.30 | .640 | .509 | 1.224 | 2.2108 | .569 | 1.59 |
| %RSD | 5.4856 | 1.0558 | 2.0942 | .96323 | 6870. | 111.42 | 1.6904 | .26078 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-3-c Acquired: 5/11/2019 0:56:40 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -4.0559 | 212.81 | 96.871 | 2191.1 | 49.513 |
| Stddev | .4354 | 5.21 | .641 | 29.1 | 7.251 |
| %RSD | 10.734 | 2.4487 | .66216 | 1.3283 | 14.644 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5917.9 | 4468.1 | 48467. | 3471.1 |
| Stddev | 12.7 | 3.2 | 251. | 5.1 |
| %RSD | .21438 | .07230 | .51781 | .14834 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.973% | 107.72% | 106.50% | 102.49% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 1:00:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 993.50 | 25327. | 523.79 | 5211.5 | 2043.2 | 2086.3 | 50988. | 517.2 |
| Stddev | 1.40 | 238. | 1.34 | 1.5 | 3.7 | 7.8 | 173. | 1.3 |
| %RSD | .14096 | .94146 | .25570 | .02905 | .18116 | .37412 | .33946 | .2479 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2080.5 | 1997.1 | 1974.6 | 25134. | 52903. | 5158.6 | 52244. | 2049.5 |
| Stddev | 4.9 | 3.5 | .9 | 26. | 244. | 4.3 | 66. | 5.1 |
| %RSD | .23757 | .17747 | .04777 | .10491 | .46211 | .08324 | .12706 | .24961 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2049.6 | 52715. | 2091.9 | 499.74 | 512.4 | 518.97 | 5281.4 | 5127.9 |
| Stddev | 6.0 | 175. | 2.8 | 1.22 | 2.8 | 3.14 | 10.5 | 46.3 |
| %RSD | .29240 | .33280 | .13507 | .24441 | .5493 | .60503 | .19883 | .90201 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 1:00:53 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1025.2 | 1996.6 | 2143.5 | 4922.0 | 5197.4 |
| Stddev | 1.5 | 21.4 | 4.2 | 18.2 | 23.1 |
| %RSD | .14989 | 1.0736 | .19768 | .37006 | .44490 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5572.4 | 3993.1 | 43037. | 3147.7 |
| Stddev | 3.8 | 2.1 | 66. | 7.5 |
| %RSD | .06738 | .05303 | .15346 | .23717 |

Sample Name: CCB Acquired: 5/11/2019 1:04:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.36211 | -54.276 | 2.6380 | 8.9936 | .41232 | .27272 | 26.029 | -.0279 |
| Stddev | .22561 | 54.417 | .9997 | .6933 | .20031 | .16926 | 2.161 | .0990 |
| %RSD | 62.304 | 100.26 | 37.894 | 7.7084 | 48.580 | 62.063 | 8.3030 | 354.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .03450 | .10187 | -.06280 | 9.0395 | -10.889 | .74945 | -36.316 | .67919 |
| Stddev | .11800 | .18597 | .23933 | 3.9604 | 66.324 | 3.4818 | 6.617 | .04785 |
| %RSD | 341.99 | 182.56 | 381.10 | 43.813 | 609.11 | 464.58 | 18.220 | 7.0449 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.2115 | 128.56 | .48296 | .36881 | .9019 | .78520 | .90458 | 1.4856 |
| Stddev | .0560 | 10.60 | .37249 | .87237 | 1.117 | 4.4478 | .43068 | .1300 |
| %RSD | 1.0747 | 8.2417 | 77.127 | 236.53 | 123.9 | 566.45 | 47.611 | 8.7473 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 1:04:57 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .06119 | 4.3182 | 2.6646 | -4.3036 | -.42667 |
| Stddev | .92350 | 5.9037 | .0234 | 5.6565 | 4.0831 |
| %RSD | 1509.3 | 136.72 | .87970 | 131.44 | 956.98 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6303.0 | 4168.5 | 45483. | 3191.8 |
| Stddev | 8.9 | 5.2 | 181. | 15.8 |
| %RSD | .14081 | .12585 | .39696 | .49549 |

Sample Name: CCVL-4100714 Acquired: 5/11/2019 1:09:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 9.4974 | 149.48 | 18.808 | 108.21 | 201.30 | 5.1945 | 5175.8 | 5.115 |
| Stddev | .1798 | 40.96 | 1.712 | .54 | .56 | .2447 | 58.8 | .135 |
| %RSD | 1.8935 | 27.403 | 9.1002 | .49901 | .27660 | 4.7112 | 1.1356 | 2.647 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 10.103 | 9.4827 | 25.377 | 208.73 | 5192.5 | 52.097 | 5357.8 | 16.733 |
| Stddev | .446 | .5496 | .406 | 3.77 | 74.1 | 4.362 | 60.7 | .092 |
| %RSD | 4.4148 | 5.7963 | 1.5982 | 1.8073 | 1.4277 | 8.3728 | 1.1324 | .54931 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 42.546 | 5346.5 | 41.418 | 10.940 | 20.57 | 21.652 | 102.02 | 50.578 |
| Stddev | .151 | 31.7 | .541 | .728 | 1.29 | 2.502 | .84 | .260 |
| %RSD | .35509 | .59370 | 1.3051 | 6.6561 | 6.270 | 11.553 | .81859 | .51317 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCVL-4100714 Acquired: 5/11/2019 1:09:16 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 19.299 | 49.124 | 53.722 | 482.47 | 46.776 |
| Stddev | .780 | 3.444 | .444 | 8.52 | 9.738 |
| %RSD | 4.0439 | 7.0114 | .82695 | 1.7665 | 20.819 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6122.7 | 4084.7 | 44498. | 3141.3 |
| Stddev | 14.0 | 3.5 | 38. | 13.8 |
| %RSD | .22786 | .08532 | .08548 | .43941 |

Sample Name: 240-111971-f-4-c Acquired: 5/11/2019 1:13:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.5160 | 79145. | 32.553 | 21.858 | 412.45 | 6.5501 | 4222.5 | .5651 |
| Stddev | 1.0253 | 350. | 2.183 | .417 | 1.31 | .0363 | 28.0 | .2237 |
| %RSD | 40.753 | .44222 | 6.7061 | 1.9082 | .31769 | .55391 | .66206 | 39.59 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55.424 | 228.00 | 107.47 | 74385. | 6056.6 | 68.708 | 18274. | 286.88 |
| Stddev | .371 | .70 | .88 | 176. | 57.9 | 1.900 | 69. | .59 |
| %RSD | .66878 | .30824 | .81837 | .23599 | .95679 | 2.7648 | .37957 | .20503 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7716 | 790.38 | 147.75 | 63.139 | 2.258 | 1.7609 | 39.536 | 1720.3 |
| Stddev | .1424 | 17.34 | .63 | .562 | 2.565 | 1.0555 | .435 | 1.1 |
| %RSD | 5.1391 | 2.1932 | .42656 | .89074 | 113.6 | 59.943 | 1.1001 | .06593 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-4-c Acquired: 5/11/2019 1:13:28 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -5.9410 | 275.17 | 394.31 | 2120.8 | 80.542 |
| Stddev | 1.0399 | 1.68 | 1.97 | 41.4 | 5.746 |
| %RSD | 17.504 | .60883 | .49837 | 1.9517 | 7.1340 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5922.2 | 4742.7 | 50888. | 3745.4 |
| Stddev | 10.3 | 2.4 | 152. | 30.0 |
| %RSD | .17314 | .05070 | .29965 | .80138 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.041% | 114.34% | 111.82% | 110.59% |
| Range | | | | |

Sample Name: 240-111971-f-5-c Acquired: 5/11/2019 1:17:39 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.7778 | 57417. | 22.207 | 15.844 | 253.67 | 3.5854 | 15122. | .1942 |
| Stddev | .6654 | 209. | 1.717 | .831 | .94 | .2307 | 29. | .1301 |
| %RSD | 37.428 | .36446 | 7.7303 | 5.2437 | .37125 | 6.4350 | .19073 | 66.97 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33.857 | 186.96 | 58.734 | 59024. | 4513.1 | 44.872 | 17419. | 172.83 |
| Stddev | .328 | .13 | 1.287 | 19. | 45.6 | 2.330 | 141. | .45 |
| %RSD | .96760 | .06774 | 2.1907 | .03295 | 1.0093 | 5.1922 | .81046 | .25763 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.9779 | 577.16 | 75.695 | 48.693 | .2652 | .78052 | 44.142 | 1154.0 |
| Stddev | .3041 | 4.48 | .318 | 1.033 | 2.502 | .67424 | .443 | .6 |
| %RSD | 15.376 | .77640 | .41960 | 2.1206 | 943.5 | 86.383 | 1.0029 | .05629 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-5-c Acquired: 5/11/2019 1:17:39 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.6628 | 164.77 | 213.03 | 1928.6 | 56.634 |
| Stddev | 1.0099 | 4.14 | .54 | 16.0 | 5.743 |
| %RSD | 27.572 | 2.5125 | .25268 | .83055 | 10.140 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5949.9 | 4526.8 | 48614. | 3601.1 |
| Stddev | 9.6 | 7.6 | 48. | 14.3 |
| %RSD | .16184 | .16882 | .09781 | .39581 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.481% | 109.14% | 106.82% | 106.33% |
| Range | | | | |

Sample Name: 240-111971-f-6-c Acquired: 5/11/2019 1:21:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.66414 | 20977. | 12.154 | 2.6324 | 52.004 | 1.6262 | 1610.0 | .3181 |
| Stddev | .25627 | 88. | .239 | .3238 | .499 | .1759 | 12.3 | .0959 |
| %RSD | 38.587 | .41783 | 1.9688 | 12.300 | .95909 | 10.815 | .76347 | 30.14 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2838 | 980.18 | 65.346 | 43253. | 366.28 | 14.287 | 2546.5 | 8.8539 |
| Stddev | .3841 | 2.27 | .537 | 242. | 32.44 | 3.250 | 13.7 | .0516 |
| %RSD | 8.9667 | .23170 | .82157 | .55931 | 8.8567 | 22.750 | .53895 | .58285 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .31299 | 284.34 | 13.126 | 20.594 | 1.080 | 4.1889 | 44.355 | 177.55 |
| Stddev | .24220 | 11.74 | .801 | .660 | 1.463 | 3.2563 | 1.080 | 1.54 |
| %RSD | 77.382 | 4.1284 | 6.1017 | 3.2048 | 135.4 | 77.736 | 2.4354 | .86809 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-111971-f-6-c Acquired: 5/11/2019 1:21:49 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.9416 | 598.36 | 15.595 | 2745.9 | 22.306 |
| Stddev | 2.3851 | 4.11 | .059 | 20.7 | 6.021 |
| %RSD | 81.083 | .68700 | .37711 | .75546 | 26.992 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6139.1 | 4831.9 | 52562. | 3867.1 |
| Stddev | 3.5 | 6.9 | 316. | 11.4 |
| %RSD | .05661 | .14187 | .60116 | .29435 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 97.486% | 116.49% | 115.50% | 114.18% |
| Range | | | | |

Sample Name: 240-111971-f-9-c Acquired: 5/11/2019 1:26:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -2.0737 | 92289. | 34.074 | 20.641 | 350.43 | 4.0034 | 2474.0 |
| Stddev | .6176 | 156. | .914 | .470 | .86 | .1841 | 6.5 |
| %RSD | 29.782 | .16957 | 2.6830 | 2.2791 | .24451 | 4.5983 | .26279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .4606 | 28.011 | 282.05 | 109.16 | 120550. | 6304.1 | 75.754 |
| Stddev | .0754 | .361 | 2.05 | 1.09 | 266. | 26.2 | 1.544 |
| %RSD | 16.38 | 1.2871 | .72721 | .99971 | .22072 | .41540 | 2.0384 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 14536. | 316.27 | 2.4466 | 706.24 | 88.686 | 74.270 | 2.920 |
| Stddev | 21. | .84 | .0822 | 10.32 | 1.047 | 1.649 | 1.266 |
| %RSD | .14246 | .26504 | 3.3607 | 1.4605 | 1.1808 | 2.2207 | 43.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-111971-f-9-c  Acquired: 5/11/2019 1:26:03  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.0388 | 38.774 | 1637.5 | -5.4397 | 268.50 | 298.70 | 2188.1 |
| Stddev | .7764 | .744 | 1.6 | .9766 | 3.94 | 2.22 | 23.0 |
| %RSD | 38.082 | 1.9189 | .09958 | 17.953 | 1.4669 | .74220 | 1.0507 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 71.653 |
| Stddev | .851 |
| %RSD | 1.1874 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5930.6 | 4597.1 | 48868. | 3674.4 |
| Stddev | 5.7 | 3.5 | 125. | 10.2 |
| %RSD | .09641 | .07520 | .25677 | .27848 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.174% | 110.83% | 107.38% | 108.49% |
| Range | | | | |

Sample Name: 240-112189-b-1-a Acquired: 5/11/2019 1:30:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | W 276.29 | 36270. | k 427.80 | 6.3719 | 380.85 | .33577 |
| Stddev | 1.24 | 179. | 7.55 | .5161 | .23 | .11522 |
| %RSD | .45022 | .49423 | 1.7639 | 8.1000 | .05979 | 34.314 |
| Check ? | Chk Warn | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | 100.00 | | | | | |
| Low Limit | -500000. | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 85696. | k 11.77 | 420.15 | 12994. | 18314. | F 2081500. |
| Stddev | 123. | .36 | 2.60 | 36. | 37. | 11810. |
| %RSD | .14385 | 3.091 | .61969 | .27539 | .20378 | .56738 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -114.88 | 22.474 | 12278. | ^ ***** | 7220.7 | 1908.1 |
| Stddev | 49.71 | 3.138 | 18. | ----- | 73.9 | 27.3 |
| %RSD | 43.275 | 13.963 | .14343 | ----- | 1.0229 | 1.4295 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

Sample Name: 240-112189-b-1-a Acquired: 5/11/2019 1:30:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12998. | 2245.0 | 169.5 | k 98.542 | 1017.9 | 208.37 |
| Stddev | 89. | 17.0 | 1.7 | 5.919 | 8.1 | .61 |
| %RSD | .68217 | .75636 | 1.013 | 6.0066 | .79272 | .29514 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | k 110.40 | 757.73 | 15467. | 13925. | 155.00 |
| Stddev | 1.22 | 7.86 | 104. | 186. | 2.44 |
| %RSD | 1.1040 | 1.0371 | .67209 | 1.3328 | 1.5722 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5528.5 | 3625.8 | 40345. | 3196.3 |
| Stddev | 3.9 | 5.7 | 120. | 7.9 |
| %RSD | .07089 | .15645 | .29636 | .24688 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.789% | 87.413% | 88.652% | 94.375% |
| Range | | | | |

Sample Name: mb 240-380411/1-a Acquired: 5/11/2019 1:34:29 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.11961 | 11.041 | 2.5338 | 1.6329 | .17154 | .15557 | 75.188 |
| Stddev | .32120 | 15.725 | .7601 | .1886 | .28183 | .17107 | 2.716 |
| %RSD | 268.54 | 142.43 | 30.001 | 11.548 | 164.30 | 109.96 | 3.6123 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2361 | .46898 | -.27756 | .55328 | 47.824 | -79.884 | 2.1221 |
| Stddev | .0599 | .11964 | .55999 | .53079 | 1.020 | 24.284 | 2.2487 |
| %RSD | 25.36 | 25.511 | 201.75 | 95.936 | 2.1336 | 30.399 | 105.96 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -3.0454 | .92293 | F 10.102 | 106.01 | .28969 | -.92409 | 1.275 |
| Stddev | 42.599 | .04505 | .520 | 5.39 | .13759 | .87461 | .619 |
| %RSD | 1398.8 | 4.8812 | 5.1494 | 5.0875 | 47.497 | 94.646 | 48.52 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 10.000 | | | | |
| Low Limit | | | -1000.0 | | | | |

Sample Name: mb 240-380411/1-a  Acquired: 5/11/2019 1:34:29  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .55285 | .05057 | .05160 | -.07090 | 2.5056 | 1.2539 | -.28323 |
| Stddev | 1.9042 | .24714 | .39365 | .48067 | 2.3807 | .0524 | 6.7991 |
| %RSD | 344.42 | 488.75 | 762.85 | 677.94 | 95.017 | 4.1802 | 2400.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | -5.7560 |
| Stddev | 7.1747 |
| %RSD | 124.65 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6394.8 | 4208.0 | 45946. | 3334.0 |
| Stddev | 21.4 | 17.3 | 58. | 24.7 |
| %RSD | .33539 | .41076 | .12663 | .74232 |

Sample Name: lcs 240-380411/2-a Acquired: 5/11/2019 1:38:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.736 | 1982.6 | 2071.4 | 1041.9 | 1960.0 | 50.669 | 48913. | 51.44 |
| Stddev | .516 | 14.7 | 10.7 | 2.8 | 4.0 | .513 | 146. | .42 |
| %RSD | 1.0171 | .74044 | .51726 | .27217 | .20220 | 1.0119 | .29838 | .8249 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 504.38 | 200.46 | 252.87 | 1041.0 | 50472. | 1009.0 | 50800. | 517.16 |
| Stddev | 1.84 | .96 | 1.73 | 3.9 | 68. | 1.4 | 163. | 1.92 |
| %RSD | .36384 | .47792 | .68568 | .37793 | .13397 | .13432 | .32155 | .37161 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 990.14 | 50598. | 508.22 | 498.77 | 515.1 | 2109.9 | 2002.7 | 997.87 |
| Stddev | 6.00 | 100. | 1.81 | 2.05 | 1.4 | 7.4 | 10.1 | 1.84 |
| %RSD | .60584 | .19759 | .35655 | .41076 | .2792 | .34968 | .50256 | .18403 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380411/2-a Acquired: 5/11/2019 1:38:46 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1989.9 | 501.25 | 525.49 | 1057.1 | 1013.4 |
| Stddev | 16.6 | 1.84 | 2.36 | 9.8 | 4.3 |
| %RSD | .83632 | .36695 | .44956 | .92279 | .42832 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5738.1 | 4013.7 | 43408. | 3259.0 |
| Stddev | 15.3 | 11.8 | 141. | 7.3 |
| %RSD | .26702 | .29336 | .32512 | .22520 |

Sample Name: 240-112193-c-2-a Acquired: 5/11/2019 1:42:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28460 | 5.2925 | 7.7528 | 119.34 | 70.542 | .22345 | 126690. |
| Stddev | .30902 | 32.428 | .2986 | .74 | .220 | .02404 | 431. |
| %RSD | 108.58 | 612.70 | 3.8514 | .61930 | .31136 | 10.759 | .34047 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1264 | .43572 | 1.7740 | 8.8227 | 123.35 | 7122.3 | 22.198 |
| Stddev | .1848 | .42402 | .2341 | .1062 | 2.17 | 91.5 | 2.063 |
| %RSD | 146.2 | 97.313 | 13.198 | 1.2039 | 1.7633 | 1.2850 | 9.2957 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 34482. | 60.633 | 56.969 | 82609. | 39.867 | 36.766 | 1.268 |
| Stddev | 181. | .165 | .561 | 702. | .753 | .557 | 1.907 |
| %RSD | .52410 | .27148 | .98418 | .84956 | 1.8881 | 1.5144 | 150.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112193-c-2-a  Acquired: 5/11/2019 1:42:47  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.420 | 1.3965 | 1.3836 | 2.3987 | -2.0028 | 27.164 | 4955.0 |
| Stddev | 2.384 | .1318 | .1252 | .2597 | 5.8521 | .038 | 25.5 |
| %RSD | 4.5473 | 9.4385 | 9.0487 | 10.828 | 292.20 | .14154 | .51382 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 277.81 |
| Stddev | 2.83 |
| %RSD | 1.0171 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5740.9 | 3990.2 | 43158. | 3250.8 |
| Stddev | 5.1 | 4.9 | 164. | 34.9 |
| %RSD | .08893 | .12302 | .37926 | 1.0737 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.162% | 96.199% | 94.833% | 95.985% |
| Range | | | | |

Sample Name: SD 240-112193-c-2a@5 Acquired: 5/11/2019 1:46:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03862 | -39.361 | 4.6232 | 21.937 | 14.006 | .32586 | 25194. | .0817 |
| Stddev | .61698 | 14.044 | .1195 | .452 | .522 | .13750 | 89. | .0478 |
| %RSD | 1597.5 | 35.680 | 2.5836 | 2.0611 | 3.7244 | 42.195 | .35252 | 58.52 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .19253 | .10437 | 1.4651 | 27.168 | 1414.8 | 5.2894 | 6984.3 | 12.819 |
| Stddev | .14249 | .07332 | .7691 | 2.534 | 34.3 | 1.2550 | 31.8 | .041 |
| %RSD | 74.010 | 70.250 | 52.494 | 9.3253 | 2.4245 | 23.727 | .45536 | .31867 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.029 | 16540. | 8.6382 | 7.5515 | 2.093 | 8.8998 | .23586 | .30171 |
| Stddev | .631 | 30. | .1335 | 1.0190 | .863 | 2.9068 | .61718 | .42261 |
| %RSD | 5.2468 | .18138 | 1.5453 | 13.494 | 41.23 | 32.662 | 261.68 | 140.07 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112193-c-2a@5 Acquired: 5/11/2019 1:46:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2207 | 2.8451 | 8.3987 | 961.01 | 53.758 |
| Stddev | .2174 | 7.9963 | .0394 | 9.17 | 4.081 |
| %RSD | 17.809 | 281.06 | .46888 | .95429 | 7.5917 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6194.5 | 4146.8 | 45265. | 3296.5 |
| Stddev | 3.0 | 4.7 | 113. | 12.2 |
| %RSD | .04808 | .11407 | .24861 | .37127 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 98.365% | 99.973% | 99.462% | 97.334% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 1:51:12 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1001.8 | 25306. | 517.81 | 5200.7 | 2039.5 | 2081.1 | 50814. | 517.8 |
| Stddev | 1.2 | 93. | 1.19 | 12.2 | 2.0 | 3.6 | 45. | 1.4 |
| %RSD | .12126 | .36803 | .23072 | .23367 | .09750 | .17208 | .08797 | .2688 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2061.7 | 1990.4 | 1986.8 | 24883. | 52411. | 5120.2 | 51637. | 2056.1 |
| Stddev | 5.5 | 3.8 | .5 | 18. | 38. | 2.9 | 121. | 4.6 |
| %RSD | .26610 | .18967 | .02573 | .07169 | .07315 | .05668 | .23410 | .22299 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2049.0 | 52504. | 2066.7 | 494.74 | 513.5 | 518.63 | 5209.7 | 5075.6 |
| Stddev | 8.8 | 24. | 5.8 | 4.14 | .4 | .68 | 17.1 | 42.2 |
| %RSD | .42838 | .04502 | .27828 | .83621 | .0682 | .13118 | .32881 | .83147 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 1:51:12 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1013.9 | 1977.1 | 2122.1 | 4923.4 | 5129.4 |
| Stddev | 4.2 | 9.2 | 5.3 | 24.9 | 18.7 |
| %RSD | .41205 | .46762 | .24905 | .50538 | .36402 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5591.8 | 3987.4 | 43114. | 3204.5 |
| Stddev | 5.3 | 5.8 | 43. | 13.0 |
| %RSD | .09539 | .14599 | .10025 | .40448 |

Sample Name: CCB Acquired: 5/11/2019 1:55:19 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .00235 | -27.674 | 3.3464 | 5.3274 | .39295 | .13437 | 32.389 | .0282 |
| Stddev | .15774 | 20.106 | .4166 | .5332 | .18117 | .20670 | 3.151 | .1486 |
| %RSD | 6710.2 | 72.652 | 12.448 | 10.009 | 46.104 | 153.82 | 9.7277 | 527.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .24485 | .09444 | .56841 | 10.018 | 42.915 | 3.7621 | 20.458 | .71803 |
| Stddev | .13277 | .54513 | .15015 | .752 | 34.519 | 2.0341 | 25.325 | .01064 |
| %RSD | 54.226 | 577.21 | 26.417 | 7.5105 | 80.436 | 54.068 | 123.79 | 1.4825 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7934 | 84.606 | .64303 | -.75807 | -1.483 | .94663 | .39810 | 1.5265 |
| Stddev | .2847 | 9.961 | .33602 | 1.4381 | 1.623 | 2.1550 | .63390 | .3322 |
| %RSD | 4.9146 | 11.773 | 52.256 | 189.70 | 109.4 | 227.65 | 159.23 | 21.762 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 1:55:19 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .20049 | -.29997 | 2.6344 | -5.3056 | -1.5521 |
| Stddev | 2.0178 | 3.9429 | .0850 | 3.7822 | 3.0162 |
| %RSD | 1006.4 | 1314.4 | 3.2258 | 71.288 | 194.33 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6340.7 | 4168.3 | 45672. | 3247.9 |
| Stddev | 14.8 | 14.4 | 46. | 3.2 |
| %RSD | .23393 | .34572 | .09998 | .09752 |

Sample Name: 240-112193-c-2-b ms  Acquired: 5/11/2019 1:59:36  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 48.791 | 2013.1 | 2059.8 | 1129.5 | 1968.5 | 50.343 | 158800. |
| Stddev | .512 | 35.5 | 6.3 | 3.7 | 2.9 | .636 | 286. |
| %RSD | 1.0502 | 1.7645 | .30488 | .32610 | .14853 | 1.2642 | .17980 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49.38 | 493.68 | 190.21 | 241.88 | 1066.7 | 56118. | 992.66 |
| Stddev | .36 | 1.07 | .39 | .61 | 2.5 | 218. | 6.39 |
| %RSD | .7294 | .21766 | .20466 | .25024 | .23821 | .38873 | .64391 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 77646. | 550.23 | 994.31 | 122180. | 534.36 | 503.74 | 504.6 |
| Stddev | 290. | .62 | 5.46 | 369. | .94 | 3.36 | 2.4 |
| %RSD | .37336 | .11307 | .54957 | .30240 | .17512 | .66629 | .4850 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112193-c-2-b ms  Acquired: 5/11/2019 1:59:36  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2112.2 | 1996.3 | 962.57 | 1916.2 | 484.60 | 540.78 | 7094.7 |
| Stddev | 15.7 | 8.0 | 1.20 | 13.4 | 13.72 | 2.32 | 24.3 |
| %RSD | .74507 | .39894 | .12486 | .69896 | 2.8314 | .42813 | .34238 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1236.6 |
| Stddev | 15.1 |
| %RSD | 1.2199 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5474.0 | 3941.8 | 42568. | 3199.8 |
| Stddev | 3.0 | 5.2 | 260. | 6.5 |
| %RSD | .05453 | .13257 | .61036 | .20323 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.923% | 95.033% | 93.536% | 94.477% |
| Range | | | | |

Sample Name: 240-112193-c-2-c msd  Acquired: 5/11/2019 2:03:35  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50.723 | 2114.5 | 2150.8 | 1177.0 | 2060.4 | 52.568 | 167260. |
| Stddev | .187 | 15.0 | 6.6 | 2.8 | 5.3 | .115 | 534. |
| %RSD | .36933 | .71032 | .30612 | .23384 | .25746 | .21965 | .31943 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.03 | 514.81 | 198.14 | 253.09 | 1142.2 | 59178. | 1044.0 |
| Stddev | .36 | 2.19 | 1.18 | 2.32 | 10.8 | 160. | 7.9 |
| %RSD | .7068 | .42563 | .59786 | .91807 | .94750 | .27080 | .75484 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 81977. | 574.89 | 1035.8 | 128540. | 557.23 | 523.94 | 526.5 |
| Stddev | 154. | .43 | 5.8 | 444. | 2.09 | 1.34 | 2.0 |
| %RSD | .18801 | .07504 | .55691 | .34572 | .37470 | .25648 | .3835 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112193-c-2-c msd  Acquired: 5/11/2019 2:03:35  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2202.2 | 2077.0 | 1006.4 | 1994.5 | 502.34 | 564.46 | 7489.0 |
| Stddev | 6.2 | 12.4 | 2.2 | 19.2 | 5.24 | 2.25 | 31.8 |
| %RSD | .28320 | .59499 | .22222 | .96196 | 1.0429 | .39844 | .42492 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1295.7 |
| Stddev | 6.9 |
| %RSD | .53592 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5451.7 | 3934.0 | 42463. | 3191.8 |
| Stddev | 11.4 | 5.6 | 94. | 16.7 |
| %RSD | .20828 | .14295 | .22243 | .52193 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.569% | 94.845% | 93.305% | 94.241% |
| Range | | | | |

Sample Name: 240-112153-a-1-a Acquired: 5/11/2019 2:07:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.36593 | 101.86 | 8.1431 | 15.753 | 36.773 | .00680 | 20054. | .1134 |
| Stddev | 1.1285 | 19.77 | 1.3016 | .169 | .406 | .05457 | 14. | .2243 |
| %RSD | 308.38 | 19.410 | 15.984 | 1.0701 | 1.1050 | 802.90 | .06955 | 197.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .05050 | .77178 | .51817 | 120.94 | 324.81 | 7.7651 | 5012.2 | 4.1530 |
| Stddev | .14139 | .49375 | .52288 | 3.01 | 77.09 | 2.0200 | 68.8 | .0260 |
| %RSD | 280.01 | 63.976 | 100.91 | 2.4851 | 23.733 | 26.013 | 1.3732 | .62655 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 6.1001 | 4774.7 | .73260 | 1.7485 | -1.573 | 3.5355 | .57311 | 7.2158 |
| Stddev | .3342 | 6.2 | .43891 | 1.1542 | 1.630 | .8404 | .54672 | .0825 |
| %RSD | 5.4787 | .12989 | 59.910 | 66.010 | 103.6 | 23.772 | 95.394 | 1.1438 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112153-a-1-a Acquired: 5/11/2019 2:07:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7942 | 11.555 | 1.8318 | 14210. | 135.86 |
| Stddev | .7239 | 6.025 | .0603 | 137. | 2.45 |
| %RSD | 40.347 | 52.145 | 3.2909 | .96321 | 1.8041 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6276.0 | 4187.3 | 45317. | 3265.1 |
| Stddev | 5.5 | 5.2 | 101. | 7.3 |
| %RSD | .08809 | .12491 | .22201 | .22259 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.658% | 100.95% | 99.578% | 96.407% |
| Range | | | | |

Sample Name: 240-112153-a-2-a Acquired: 5/11/2019 2:11:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.53643 | 6485.6 | 8.9853 | 81.715 | 198.10 | .61124 | 58719. | .0980 |
| Stddev | .60849 | 14.2 | 1.9753 | .444 | .66 | .05461 | 200. | .2111 |
| %RSD | 113.43 | .21870 | 21.984 | .54376 | .33534 | 8.9345 | .34018 | 215.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.7023 | 7.1208 | 5.8723 | 6763.7 | 2974.7 | 13.280 | 21568. | 121.56 |
| Stddev | .1752 | .1819 | .2163 | 58.1 | 37.4 | 1.452 | 205. | .03 |
| %RSD | 10.294 | 2.5543 | 3.6830 | .85953 | 1.2582 | 10.936 | .95259 | .02189 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0057 | 25546. | 2.8554 | 1.9649 | 1.442 | -.99301 | 1.4933 | 372.72 |
| Stddev | .1960 | 85. | 1.2275 | 1.9240 | 2.033 | 1.1503 | .8091 | .51 |
| %RSD | 4.8927 | .33350 | 42.989 | 97.918 | 141.0 | 115.84 | 54.180 | .13702 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112153-a-2-a Acquired: 5/11/2019 2:11:50 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .76055 | 28.958 | 31.969 | 31045. | 414.30 |
| Stddev | 1.5302 | 4.337 | .639 | 546. | 4.62 |
| %RSD | 201.19 | 14.977 | 1.9986 | 1.7578 | 1.1146 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5921.5 | 4134.2 | 44383. | 3235.4 |
| Stddev | 5.8 | 7.2 | 42. | 18.3 |
| %RSD | .09814 | .17302 | .09407 | .56681 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.030% | 99.670% | 97.524% | 95.529% |
| Range | | | | |

Sample Name: 240-112153-a-3-a Acquired: 5/11/2019 2:16:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.95444 | -49.907 | 7.4659 | 92.903 | 163.74 | .16847 | 80374. | .2889 |
| Stddev | .68985 | 30.145 | 1.6851 | .328 | .29 | .18639 | 50. | .1819 |
| %RSD | 72.278 | 60.403 | 22.571 | .35299 | .17698 | 110.64 | .06234 | 62.98 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.37461 | .73218 | 10.372 | 7.2017 | 4044.1 | 13.144 | 23700. | .22318 |
| Stddev | .48180 | .38520 | .973 | .4051 | 13.3 | .844 | 182. | .01377 |
| %RSD | 128.62 | 52.610 | 9.3836 | 5.6249 | .32956 | 6.4189 | .76969 | 6.1708 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .99897 | 32858. | .43396 | .55804 | .2460 | -2.9892 | .65166 | .55908 |
| Stddev | .15647 | 48. | .84257 | 1.8365 | 2.958 | .2152 | .64659 | .17023 |
| %RSD | 15.663 | .14555 | 194.16 | 329.10 | 1203. | 7.1980 | 99.222 | 30.448 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112153-a-3-a Acquired: 5/11/2019 2:16:02 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3008 | 20.824 | 78.571 | 27636. | 495.96 |
| Stddev | .4315 | 7.527 | .279 | 130. | 5.91 |
| %RSD | 33.168 | 36.147 | .35511 | .46866 | 1.1911 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5894.0 | 4087.7 | 43746. | 3246.4 |
| Stddev | 2.4 | 9.2 | 56. | 10.1 |
| %RSD | .04139 | .22569 | .12767 | .30995 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.592% | 98.548% | 96.125% | 95.855% |
| Range | | | | |

Sample Name: 240-112153-a-4-a Acquired: 5/11/2019 2:20:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.33695 | 3.0071 | 4.2128 | 3.6085 | .64515 | .10693 | 173.90 | .0647 |
| Stddev | .63154 | 25.820 | 1.8481 | .5191 | .35099 | .09222 | 3.40 | .0402 |
| %RSD | 187.43 | 858.63 | 43.869 | 14.386 | 54.404 | 86.244 | 1.9550 | 62.22 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .15073 | -.13530 | .57013 | 6.4853 | -27.405 | .40065 | 19.925 | .01265 |
| Stddev | .15090 | .33388 | .40033 | 1.6182 | 29.912 | 1.5132 | 9.176 | .04754 |
| %RSD | 100.11 | 246.77 | 70.217 | 24.951 | 109.15 | 377.70 | 46.055 | 375.75 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.07382 | 600.36 | .54261 | 1.4006 | 1.184 | -.07226 | .30436 | .21166 |
| Stddev | .04346 | 12.97 | .27202 | 2.1215 | 1.937 | 3.3674 | .30452 | .38972 |
| %RSD | 58.870 | 2.1611 | 50.131 | 151.47 | 163.7 | 4659.9 | 100.05 | 184.12 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112153-a-4-a Acquired: 5/11/2019 2:20:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .84177 | -.34350 | .63209 | 673.55 | -7.4043 |
| Stddev | .49836 | 6.1936 | .10611 | 26.43 | 4.6595 |
| %RSD | 59.204 | 1803.1 | 16.787 | 3.9246 | 62.929 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6356.8 | 4230.6 | 45550. | 3280.5 |
| Stddev | 14.7 | 12.9 | 117. | 14.4 |
| %RSD | .23119 | .30539 | .25604 | .43861 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.94% | 102.00% | 100.09% | 96.860% |
| Range | | | | |

Sample Name: 240-112153-a-5-a Acquired: 5/11/2019 2:24:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.02090 | 13.339 | 10.530 | 91.479 | 164.02 | .09717 | 80698. | .0634 |
| Stddev | .57836 | 63.051 | .606 | .603 | .47 | .12328 | 179. | .2729 |
| %RSD | 2767.7 | 472.68 | 5.7515 | .65879 | .28782 | 126.87 | .22171 | 430.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20460 | .43277 | 9.5759 | 6.6121 | 3972.9 | 11.657 | 23469. | .11055 |
| Stddev | .24475 | .56524 | 1.1727 | 3.2476 | 71.0 | 2.815 | 120. | .02751 |
| %RSD | 119.62 | 130.61 | 12.247 | 49.116 | 1.7860 | 24.145 | .50950 | 24.884 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40831 | 32681. | .46649 | .66471 | -.3720 | -2.0197 | .72876 | .19113 |
| Stddev | .25560 | 101. | .44679 | .39504 | 2.165 | .1759 | .68991 | .18088 |
| %RSD | 62.599 | .31024 | 95.778 | 59.430 | 582.0 | 8.7106 | 94.669 | 94.634 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112153-a-5-a Acquired: 5/11/2019 2:24:33 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2852 | 16.047 | 79.712 | 26867. | 493.33 |
| Stddev | .5667 | 8.667 | .474 | 192. | 4.24 |
| %RSD | 44.092 | 54.010 | .59473 | .71439 | .85893 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5871.3 | 4086.6 | 43681. | 3260.8 |
| Stddev | 19.4 | 14.7 | 187. | 17.5 |
| %RSD | .33066 | .35917 | .42841 | .53781 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.233% | 98.523% | 95.983% | 96.279% |
| Range | | | | |

Sample Name: 240-112156-a-1-a Acquired: 5/11/2019 2:28:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.93776 | 698.98 | 5.6463 | 77.447 | 230.49 | .24869 | 62970. | .0178 |
| Stddev | .41768 | 3.00 | 1.8787 | .445 | .48 | .19715 | 196. | .1251 |
| %RSD | 44.540 | .42863 | 33.273 | .57421 | .20889 | 79.274 | .31087 | 700.9 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .20345 | 1.4196 | 1.8069 | 688.01 | 3037.3 | 5.2241 | 14969. | 19.045 |
| Stddev | .23767 | .3268 | .6152 | 11.18 | 81.5 | 1.8832 | 127. | .101 |
| %RSD | 116.82 | 23.021 | 34.051 | 1.6254 | 2.6842 | 36.049 | .84716 | .53215 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.6188 | 65279. | .77592 | -.21189 | -.4343 | -.57755 | .33838 | 43.366 |
| Stddev | .1793 | 247. | .12228 | 1.1884 | 1.053 | 2.0709 | .19853 | .104 |
| %RSD | 11.076 | .37885 | 15.759 | 560.85 | 242.5 | 358.57 | 58.670 | .24089 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112156-a-1-a Acquired: 5/11/2019 2:28:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .63526 | 3.0102 | 5.2961 | 17490. | 544.25 |
| Stddev | 1.1159 | 4.9612 | .1428 | 129. | 3.74 |
| %RSD | 175.66 | 164.81 | 2.6970 | .73718 | .68635 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5871.6 | 4085.7 | 43708. | 3247.9 |
| Stddev | 5.9 | 5.6 | 230. | 16.9 |
| %RSD | .10101 | .13764 | .52519 | .51893 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.237% | 98.502% | 96.042% | 95.899% |
| Range | | | | |

Sample Name: 240-112165-a-1-a Acquired: 5/11/2019 2:33:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.84133 | 1.6060 | 4.7211 | 5.7716 | 6.0382 | -.03152 | 4148.8 | -.0968 |
| Stddev | .78004 | 65.909 | .7836 | .4098 | .1629 | .15313 | 47.6 | .2454 |
| %RSD | 92.715 | 4104.0 | 16.599 | 7.0995 | 2.6976 | 485.86 | 1.1472 | 253.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .07417 | -.46547 | .39521 | 281.26 | 780.39 | 1.5413 | 1613.4 | 73.079 |
| Stddev | .16603 | .05168 | .51319 | 2.36 | 22.70 | 2.5944 | 38.8 | .213 |
| %RSD | 223.85 | 11.103 | 129.85 | .83835 | 2.9086 | 168.33 | 2.4067 | .29163 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.26383 | 1225.6 | .53736 | .12116 | 2.268 | .33823 | .15742 | .55102 |
| Stddev | .10241 | 4.7 | .45184 | 2.0213 | 3.167 | 1.4579 | .20788 | .28934 |
| %RSD | 38.818 | .38416 | 84.085 | 1668.2 | 139.7 | 431.03 | 132.06 | 52.510 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112165-a-1-a Acquired: 5/11/2019 2:33:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .69108 | 2.9791 | 1.6465 | 350.83 | 2.9417 |
| Stddev | .99612 | 5.5270 | .0746 | 17.48 | 3.1020 |
| %RSD | 144.14 | 185.52 | 4.5287 | 4.9818 | 105.45 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6317.0 | 4206.9 | 45158. | 3270.2 |
| Stddev | 7.7 | 2.2 | 69. | 31.3 |
| %RSD | .12154 | .05266 | .15375 | .95753 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 100.31% | 101.42% | 99.229% | 96.557% |
| Range | | | | |

Sample Name: 240-112166-a-1-a Acquired: 5/11/2019 2:37:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.77827 | 124.86 | 4.7883 | 9.8097 | 35.329 | .28420 | 14699. | -.0440 |
| Stddev | .11315 | 22.31 | 1.1717 | .2358 | .457 | .06004 | 7. | .1031 |
| %RSD | 14.539 | 17.872 | 24.470 | 2.4040 | 1.2947 | 21.127 | .05079 | 234.2 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.09462 | .57672 | 2.1154 | 126.99 | 720.33 | 2.1093 | 2840.0 | 2.2379 |
| Stddev | .44912 | .26663 | .4313 | 1.29 | 63.66 | .4825 | 30.4 | .0511 |
| %RSD | 474.64 | 46.232 | 20.386 | 1.0155 | 8.8375 | 22.876 | 1.0691 | 2.2823 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.47725 | 2775.6 | .90974 | .64579 | .7802 | -.02752 | .10665 | 1.3714 |
| Stddev | .04529 | 13.5 | .45756 | .97460 | 3.634 | 1.4165 | .37120 | .1811 |
| %RSD | 9.4889 | .48678 | 50.296 | 150.92 | 465.8 | 5147.1 | 348.04 | 13.205 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112166-a-1-a Acquired: 5/11/2019 2:37:18 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .86433 | 1.9741 | 40.047 | 2966.8 | 32.186 |
| Stddev | .88593 | 5.3874 | .059 | 33.7 | 2.811 |
| %RSD | 102.50 | 272.90 | .14746 | 1.1361 | 8.7323 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6260.1 | 4182.4 | 44979. | 3263.0 |
| Stddev | 5.9 | 3.0 | 47. | 13.1 |
| %RSD | .09449 | .07169 | .10460 | .40194 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.407% | 100.83% | 98.835% | 96.343% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 2:41:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1024.7 | 25218. | 519.41 | 5176.2 | 2029.2 | 2020.2 | 50774. | 511.1 |
| Stddev | 2.9 | 98. | 3.48 | 19.4 | 4.1 | 6.7 | 96. | 2.7 |
| %RSD | .28268 | .38909 | .67096 | .37563 | .20361 | .33383 | .18986 | .5283 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2070.5 | 2056.2 | 2016.4 | 24853. | 51110. | 5020.3 | 50714. | 2063.5 |
| Stddev | 11.0 | 1.3 | 4.5 | 30. | 125. | 15.1 | 77. | 6.1 |
| %RSD | .53089 | .06234 | .22299 | .11966 | .24529 | .30083 | .15156 | .29539 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2037.2 | 51352. | 2067.6 | 497.95 | 505.7 | 519.83 | 5233.7 | 5126.5 |
| Stddev | 15.3 | 129. | 9.8 | 6.14 | 2.8 | 3.89 | 24.8 | 7.7 |
| %RSD | .74942 | .25180 | .47470 | 1.2331 | .5575 | .74776 | .47334 | .14948 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 2:41:33 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1022.1 | 2000.1 | 2126.2 | 5033.8 | 5018.6 |
| Stddev | 9.4 | 3.7 | 11.1 | 16.1 | 6.8 |
| %RSD | .91647 | .18586 | .52019 | .32000 | .13609 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5535.3 | 3972.9 | 42166. | 3171.7 |
| Stddev | 12.5 | 17.1 | 131. | 10.8 |
| %RSD | .22526 | .43037 | .31044 | .34206 |

Sample Name: CCB Acquired: 5/11/2019 2:45:36 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20591 | 1.5242 | F 5.1857 | 5.8408 | .23294 | .18532 | 30.445 |
| Stddev | .75413 | 31.135 | .6461 | .6236 | .32821 | .12343 | 2.515 |
| %RSD | 366.24 | 2042.7 | 12.459 | 10.676 | 140.90 | 66.602 | 8.2626 |
| Check ? | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | 5.0000 | | | | |
| Low Limit | | | -5.0000 | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0459 | .08920 | .37296 | .18734 | 2.7946 | -37.952 | 3.0573 |
| Stddev | .2104 | .15440 | .37345 | 1.4769 | 5.1714 | 31.331 | 1.5836 |
| %RSD | 457.9 | 173.09 | 100.13 | 788.33 | 185.05 | 82.553 | 51.797 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -8.3381 | .78417 | 5.3907 | 90.463 | .53576 | .58551 | 1.034 |
| Stddev | 13.306 | .04926 | .3211 | 9.454 | .52977 | 1.2309 | 3.398 |
| %RSD | 159.59 | 6.2822 | 5.9575 | 10.450 | 98.882 | 210.22 | 328.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 2:45:36 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3057 | 1.3720 | 1.4874 | -.17801 | 5.7990 | 3.7656 | 51.045 |
| Stddev | 1.4549 | .1959 | .0601 | .67469 | 1.2578 | .1138 | 9.087 |
| %RSD | 111.43 | 14.279 | 4.0417 | 379.03 | 21.690 | 3.0209 | 17.802 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2.1214 |
| Stddev | 3.3434 |
| %RSD | 157.60 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6266.9 | 4155.2 | 44893. | 3232.1 |
| Stddev | 11.8 | 12.8 | 40. | 8.1 |
| %RSD | .18803 | .30743 | .08935 | .24961 |

Sample Name: 240-112179-m-2-a Acquired: 5/11/2019 2:49:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12798 | -49.884 | 3.8148 | 21.686 | 55.241 | .40686 | 97539. | .1030 |
| Stddev | .25327 | 43.820 | 2.2034 | .162 | .199 | .02324 | 345. | .1046 |
| %RSD | 197.89 | 87.844 | 57.760 | .74812 | .36066 | 5.7123 | .35400 | 101.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .73100 | .64363 | .94027 | 11.978 | 1654.0 | 7.8403 | 38216. | 48.697 |
| Stddev | .23069 | .64375 | .55179 | 1.751 | 86.3 | 1.1061 | 294. | .029 |
| %RSD | 31.558 | 100.02 | 58.684 | 14.614 | 5.2161 | 14.107 | .77002 | .05918 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.0489 | 7578.6 | 1.3997 | 1.4968 | -.2416 | -1.9138 | .47489 | .70285 |
| Stddev | .0793 | 16.5 | .1292 | 1.7156 | 1.879 | 2.3785 | .13001 | .32531 |
| %RSD | 1.9577 | .21778 | 9.2280 | 114.62 | 777.9 | 124.28 | 27.377 | 46.284 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112179-m-2-a Acquired: 5/11/2019 2:49:54 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .66152 | -1.0463 | 5.8344 | 5796.8 | 105.23 |
| Stddev | .59273 | 4.0771 | .0547 | 60.7 | 2.92 |
| %RSD | 89.600 | 389.68 | .93794 | 1.0463 | 2.7744 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5892.4 | 4082.2 | 43715. | 3230.1 |
| Stddev | 8.4 | 2.6 | 80. | 26.5 |
| %RSD | .14257 | .06330 | .18386 | .82118 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.567% | 98.417% | 96.056% | 95.374% |
| Range | | | | |

Sample Name: 240-112179-m-3-a Acquired: 5/11/2019 2:54:08 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.55016 | -21.474 | 3.4516 | 85.140 | 49.821 | .03530 | 100170. |
| Stddev | 1.2292 | 17.764 | 2.0476 | .410 | .288 | .17466 | 48. |
| %RSD | 223.42 | 82.724 | 59.324 | .48185 | .57898 | 494.84 | .04791 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2154 | .59985 | 1.0463 | 1.1936 | 265.59 | 1796.9 | 6.7023 |
| Stddev | .1341 | .23941 | .3816 | 1.0273 | 2.74 | 39.9 | 1.4028 |
| %RSD | 62.28 | 39.911 | 36.473 | 86.062 | 1.0299 | 2.2204 | 20.931 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52885. | 105.42 | 2.8670 | 12453. | 4.3064 | .40301 | 2.473 |
| Stddev | 336. | .27 | .1771 | 45. | .1371 | 1.2645 | 2.021 |
| %RSD | .63589 | .26009 | 6.1778 | .36454 | 3.1841 | 313.77 | 81.69 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112179-m-3-a  Acquired: 5/11/2019 2:54:08  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.40997 | 1.1744 | .21634 | 1.3092 | 8.1094 | 4.2442 | 6925.7 |
| Stddev | 1.2997 | .8836 | .31057 | .1306 | 1.4997 | .1030 | 41.4 |
| %RSD | 317.03 | 75.240 | 143.56 | 9.9781 | 18.493 | 2.4270 | .59785 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 111.24 |
| Stddev | 7.74 |
| %RSD | 6.9567 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5791.4 | 4043.7 | 43489. | 3245.7 |
| Stddev | 10.0 | 8.6 | 152. | 19.2 |
| %RSD | .17192 | .21335 | .34956 | .59044 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 91.964% | 97.489% | 95.560% | 95.832% |
| Range | | | | |

Sample Name: 240-112179-m-5-a Acquired: 5/11/2019 2:58:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.69432 | 25.688 | 2.3396 | 35.222 | 53.576 | -.05552 | 95618. | .0930 |
| Stddev | .64000 | 19.374 | 1.3760 | .345 | .634 | .23617 | 289. | .1582 |
| %RSD | 92.176 | 75.421 | 58.813 | .97966 | 1.1840 | 425.34 | .30219 | 170.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .86727 | .43732 | .90679 | 104.69 | 1653.8 | 7.6513 | 40221. | 35.101 |
| Stddev | .16119 | .23631 | .63494 | .41 | 38.6 | 1.6104 | 631. | .125 |
| %RSD | 18.586 | 54.035 | 70.020 | .39094 | 2.3316 | 21.048 | 1.5680 | .35742 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.9551 | 8220.6 | 1.8906 | .83652 | -1.184 | -1.7836 | .39267 | .42462 |
| Stddev | .1873 | 39.8 | .3033 | .24517 | .469 | 2.9782 | .24836 | .13774 |
| %RSD | 6.3394 | .48466 | 16.041 | 29.308 | 39.64 | 166.98 | 63.248 | 32.438 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112179-m-5-a Acquired: 5/11/2019 2:58:22 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .82240 | -2.5393 | 3.8577 | 5024.7 | 102.70 |
| Stddev | .30268 | 3.8791 | .1177 | 40.4 | 6.97 |
| %RSD | 36.805 | 152.76 | 3.0502 | .80429 | 6.7910 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5852.8 | 4061.2 | 43702. | 3253.9 |
| Stddev | 4.7 | 6.0 | 127. | 26.8 |
| %RSD | .07987 | .14672 | .29147 | .82321 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.938% | 97.910% | 96.029% | 96.075% |
| Range | | | | |

Sample Name: 240-112179-m-6-a Acquired: 5/11/2019 3:02:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.32723 | 908.09 | 12.010 | 13.367 | 167.34 | .24334 | 73513. | .1059 |
| Stddev | .38428 | 13.57 | 1.794 | .131 | .60 | .11183 | 153. | .1001 |
| %RSD | 117.44 | 1.4939 | 14.936 | .98189 | .36062 | 45.957 | .20786 | 94.55 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3229 | 3.0133 | 3.1679 | 1545.6 | 1601.0 | 4.5347 | 26886. | 62.122 |
| Stddev | .0796 | .1333 | 1.1814 | 3.9 | 14.7 | .7504 | 96. | .191 |
| %RSD | 6.0149 | 4.4247 | 37.292 | .25094 | .92015 | 16.548 | .35734 | .30757 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.7840 | 3814.3 | 3.6757 | 2.6992 | 2.528 | -1.2389 | .64379 | 16.531 |
| Stddev | .1423 | 23.0 | .2866 | .9757 | 5.219 | 2.7303 | 1.1778 | .547 |
| %RSD | 5.1126 | .60409 | 7.7975 | 36.147 | 206.4 | 220.38 | 182.94 | 3.3090 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112179-m-6-a Acquired: 5/11/2019 3:02:35 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0233 | 1.8798 | 208.83 | 9409.5 | 94.590 |
| Stddev | .9405 | 6.3615 | 1.19 | 21.7 | 4.893 |
| %RSD | 91.907 | 338.41 | .57051 | .23088 | 5.1730 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5962.0 | 4116.4 | 44172. | 3265.4 |
| Stddev | 7.0 | 1.7 | 93. | 5.9 |
| %RSD | .11674 | .04156 | .21037 | .18169 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.673% | 99.242% | 97.062% | 96.414% |
| Range | | | | |

Sample Name: 240-112187-b-1-a Acquired: 5/11/2019 3:06:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.61755 | 32.479 | 2.1460 | 64.583 | 2.6235 | .27475 | 4186.4 |
| Stddev | 1.0298 | 36.730 | 1.0509 | .407 | .1231 | .40378 | 6.4 |
| %RSD | 166.75 | 113.09 | 48.971 | .63037 | 4.6939 | 146.96 | .15317 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .0676 | 5.9556 | .26228 | 4.0403 | 42.422 | 1181.3 | .90657 |
| Stddev | .0950 | .1874 | .22588 | .6753 | 4.373 | 46.4 | 3.1699 |
| %RSD | 140.5 | 3.1471 | 86.120 | 16.715 | 10.309 | 3.9256 | 349.66 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 774.38 | 4.7534 | 10.362 | 110090. | 12.381 | -1.0374 | 1.255 |
| Stddev | 26.43 | .0098 | .367 | 145. | .485 | 1.1532 | 2.572 |
| %RSD | 3.4134 | .20718 | 3.5421 | .13143 | 3.9172 | 111.15 | 205.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112187-b-1-a Acquired: 5/11/2019 3:06:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.82685 | 1.0173 | .38397 | 1.0720 | 1.7243 | 25.358 | 391.50 |
| Stddev | 1.2727 | .5483 | .29975 | .8062 | 3.9118 | .113 | 9.02 |
| %RSD | 153.93 | 53.894 | 78.066 | 75.205 | 226.86 | .44643 | 2.3030 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 10.364 |
| Stddev | 2.569 |
| %RSD | 24.784 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5918.7 | 4098.7 | 43678. | 3257.6 |
| Stddev | 10.3 | 5.5 | 25. | .4 |
| %RSD | .17322 | .13371 | .05730 | .01176 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 93.985% | 98.814% | 95.975% | 96.185% |
| Range | | | | |

Sample Name: 240-112200-a-1-a Acquired: 5/11/2019 3:11:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.39067 | -68.116 | 3.3626 | 19.362 | 65.400 | .38709 | 41799. | .0523 |
| Stddev | .23083 | 11.694 | .5194 | .472 | .145 | .25897 | 91. | .1256 |
| %RSD | 59.085 | 17.168 | 15.447 | 2.4383 | .22231 | 66.901 | .21764 | 240.5 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .39097 | .55960 | 4.1359 | 17.797 | 1247.2 | 13.715 | 8682.8 | .27126 |
| Stddev | .37173 | .58300 | .8762 | 4.585 | 16.1 | 1.978 | 24.7 | .12702 |
| %RSD | 95.080 | 104.18 | 21.185 | 25.763 | 1.2869 | 14.424 | .28412 | 46.827 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .10310 | 18289. | 1.2382 | -.01875 | 1.061 | 1.8673 | .32759 | .07570 |
| Stddev | .21935 | 56. | .1562 | .81792 | 4.758 | .5412 | 1.1626 | .35765 |
| %RSD | 212.75 | .30717 | 12.612 | 4361.6 | 448.4 | 28.984 | 354.91 | 472.47 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112200-a-1-a Acquired: 5/11/2019 3:11:01 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.09159 | 1.6695 | 29.272 | 4703.4 | 148.63 |
| Stddev | .87698 | 7.1947 | .272 | 38.3 | 3.94 |
| %RSD | 957.47 | 430.94 | .93006 | .81449 | 2.6492 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6067.9 | 4126.5 | 44359. | 3254.9 |
| Stddev | 1.4 | 1.1 | 70. | 19.7 |
| %RSD | .02311 | .02584 | .15742 | .60507 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.354% | 99.484% | 97.472% | 96.104% |
| Range | | | | |

Sample Name: 240-112204-a-1-a Acquired: 5/11/2019 3:15:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.26132 | 42.483 | 3.0753 | 5.1784 | 25.423 | .17148 | 7805.4 | .0210 |
| Stddev | .77592 | 3.927 | 1.0032 | .1576 | .167 | .15725 | 15.2 | .1151 |
| %RSD | 296.93 | 9.2444 | 32.621 | 3.0433 | .65658 | 91.704 | .19464 | 547.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .55752 | .12181 | .07561 | 119.65 | 451.83 | -1.9542 | 1051.5 | 29.395 |
| Stddev | .43634 | .43791 | .62369 | 2.03 | 45.76 | 2.3213 | 26.6 | .101 |
| %RSD | 78.264 | 359.50 | 824.92 | 1.6929 | 10.129 | 118.79 | 2.5292 | .34447 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.67635 | 1025.6 | .25725 | .65359 | 1.466 | 1.1161 | -.10289 | .81302 |
| Stddev | .29378 | 16.0 | .84151 | .77935 | .663 | .9959 | .33654 | .12079 |
| %RSD | 43.437 | 1.5633 | 327.11 | 119.24 | 45.21 | 89.224 | 327.09 | 14.857 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112204-a-1-a Acquired: 5/11/2019 3:15:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1325 | 2.8925 | 1.7500 | 255.54 | 12.729 |
| Stddev | .3469 | 3.9992 | .0489 | 6.93 | 17.015 |
| %RSD | 30.629 | 138.26 | 2.7947 | 2.7120 | 133.67 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6296.8 | 4187.2 | 45131. | 3285.9 |
| Stddev | 14.5 | 14.7 | 108. | 8.6 |
| %RSD | .22952 | .35158 | .24012 | .26182 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.989% | 100.95% | 99.168% | 97.020% |
| Range | | | | |

Sample Name: 240-112207-a-1-a Acquired: 5/11/2019 3:19:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.42187 | 146.66 | 3.5347 | 6.0305 | 8.1877 | .22976 | 5991.1 | -.0926 |
| Stddev | .27668 | 41.40 | .3967 | .1169 | .1704 | .14056 | 11.3 | .3009 |
| %RSD | 65.583 | 28.228 | 11.223 | 1.9390 | 2.0813 | 61.178 | .18852 | 324.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .40655 | .01137 | 1.7707 | 180.84 | 129.78 | -1.7107 | 1183.0 | 20.483 |
| Stddev | .27130 | .32145 | 1.0853 | 1.47 | 45.58 | 1.4971 | 16.3 | .068 |
| %RSD | 66.732 | 2828.4 | 61.295 | .81372 | 35.121 | 87.513 | 1.3771 | .33145 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.59418 | 1182.2 | 1.0469 | -.12858 | -.5901 | 1.0882 | -.38222 | 1.6069 |
| Stddev | .12831 | 11.4 | .5585 | .95835 | 1.242 | 1.7988 | .42369 | .0974 |
| %RSD | 21.594 | .96060 | 53.347 | 745.31 | 210.5 | 165.31 | 110.85 | 6.0615 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112207-a-1-a Acquired: 5/11/2019 3:19:31 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20684 | 2.4956 | 1.7762 | 852.00 | 16.927 |
| Stddev | 1.5307 | 4.7174 | .0614 | 5.56 | 1.373 |
| %RSD | 740.05 | 189.03 | 3.4540 | .65238 | 8.1109 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6286.4 | 4191.7 | 45453. | 3307.2 |
| Stddev | 4.5 | 4.5 | 56. | 11.0 |
| %RSD | .07196 | .10641 | .12386 | .33376 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.825% | 101.06% | 99.876% | 97.650% |
| Range | | | | |

Sample Name: 240-112210-a-1-a Acquired: 5/11/2019 3:23:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.22710 | 42.608 | 2.0408 | 4.3389 | 10.535 | .14872 | 10023. | -.0092 |
| Stddev | .27517 | 18.610 | 1.2308 | .4517 | .289 | .13495 | 16. | .3133 |
| %RSD | 121.16 | 43.678 | 60.311 | 10.410 | 2.7407 | 90.742 | .15889 | 3408. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .59552 | .51254 | .30925 | 397.04 | 1041.2 | .71298 | 2528.6 | 107.07 |
| Stddev | .16372 | .24565 | .14310 | 1.44 | 87.9 | 3.2295 | 38.1 | .16 |
| %RSD | 27.492 | 47.928 | 46.271 | .36349 | 8.4437 | 452.96 | 1.5078 | .14524 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.54592 | 1353.2 | .83129 | -.46062 | 1.723 | -.20373 | -.50360 | .60871 |
| Stddev | .31773 | 3.5 | .26220 | 1.0199 | 1.405 | 1.6060 | .70400 | .16132 |
| %RSD | 58.201 | .25534 | 31.542 | 221.43 | 81.53 | 788.30 | 139.79 | 26.502 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112210-a-1-a Acquired: 5/11/2019 3:23:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .08079 | -.57660 | 2.1970 | 89.477 | 7.9551 |
| Stddev | 1.1689 | 1.6940 | .0450 | 14.854 | 2.5298 |
| %RSD | 1446.9 | 293.79 | 2.0484 | 16.601 | 31.801 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6272.7 | 4192.2 | 45351. | 3276.8 |
| Stddev | 2.1 | 5.1 | 79. | 4.0 |
| %RSD | .03368 | .12154 | .17329 | .12105 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 99.606% | 101.07% | 99.652% | 96.750% |
| Range | | | | |

Sample Name: mb 240-380397/1-a Acquired: 5/11/2019 3:28:04 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.50595 | 2.0918 | 1.2528 | -.23418 | .09702 | .14175 | 86.465 |
| Stddev | .11166 | 26.294 | 1.7500 | .17331 | .10214 | .37664 | 2.667 |
| %RSD | 22.069 | 1257.0 | 139.69 | 74.006 | 105.27 | 265.70 | 3.0847 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0720 | .34314 | 1.7145 | 1.5592 | F 274.09 | -71.023 | -3.0742 |
| Stddev | .0944 | .18019 | .0648 | .9234 | 1.08 | 49.797 | 2.6975 |
| %RSD | 131.1 | 52.513 | 3.7770 | 59.224 | .39512 | 70.114 | 87.747 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail | Chk Pass | Chk Pass |
| High Limit | | | | | 100.00 | | |
| Low Limit | | | | | -1000.0 | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.9488 | 1.9721 | -.35582 | 139.90 | .47757 | .86161 | 2.248 |
| Stddev | 5.3956 | .0503 | .01368 | 11.38 | .58614 | 2.0865 | 1.839 |
| %RSD | 109.03 | 2.5517 | 3.8458 | 8.1321 | 122.73 | 242.16 | 81.79 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: mb 240-380397/1-a  Acquired: 5/11/2019 3:28:04  Type: QC
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -1.5765 | .18059 | .26566 | .52118 | 2.2406 | 2.8367 | -.18796 |
| Stddev | .4292 | .46506 | .37418 | .35624 | 2.6777 | .0325 | 9.2681 |
| %RSD | 27.225 | 257.53 | 140.85 | 68.352 | 119.51 | 1.1455 | 4930.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 4.2452 |
| Stddev | 8.7214 |
| %RSD | 205.44 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6317.8 | 4209.5 | 45600. | 3287.3 |
| Stddev | 12.0 | 9.1 | 63. | 13.4 |
| %RSD | .18989 | .21691 | .13766 | .40737 |

Sample Name: CCV-4140446 Acquired: 5/11/2019 3:32:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1012.1 | 25083. | 522.74 | 5217.8 | 2034.1 | 2005.6 | 50690. | 513.9 |
| Stddev | 4.1 | 91. | 2.54 | 4.6 | 8.2 | 8.1 | 209. | 1.3 |
| %RSD | .40650 | .36233 | .48627 | .08799 | .40452 | .40548 | .41136 | .2596 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2082.7 | 2048.6 | 2003.7 | 25135. | 51269. | 5084.3 | 50865. | 2050.9 |
| Stddev | 5.5 | 7.2 | 4.9 | 107. | 262. | 16.9 | 262. | 5.5 |
| %RSD | .26553 | .35151 | .24434 | .42529 | .51014 | .33183 | .51453 | .26904 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2059.9 | 51565. | 2080.7 | 504.56 | 513.1 | 522.08 | 5269.2 | 5105.9 |
| Stddev | 9.6 | 247. | 3.9 | 5.61 | 6.4 | 2.66 | 23.4 | 24.7 |
| %RSD | .46513 | .47830 | .18604 | 1.1118 | 1.251 | .50946 | .44389 | .48324 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 3:32:23 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1038.4 | 2010.3 | 2132.2 | 4895.8 | 5055.2 |
| Stddev | 6.3 | 11.6 | 7.1 | 4.4 | 26.6 |
| %RSD | .60782 | .57913 | .33267 | .08936 | .52597 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5535.7 | 3967.6 | 42433. | 3184.2 |
| Stddev | 15.7 | 15.9 | 112. | 29.7 |
| %RSD | .28296 | .40002 | .26486 | .93154 |

Sample Name: CCB Acquired: 5/11/2019 3:36:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.34643 | -4.6321 | 3.2418 | 4.8083 | .38558 | .07100 | 33.463 | .0259 |
| Stddev | .51200 | 18.049 | 2.5606 | .6105 | .33341 | .09221 | 3.956 | .1475 |
| %RSD | 147.79 | 389.66 | 78.985 | 12.697 | 86.468 | 129.87 | 11.823 | 570.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.03297 | .18618 | .73292 | 2.6614 | -38.118 | 2.4565 | -21.758 | .77394 |
| Stddev | .09270 | .24156 | 1.4548 | .4277 | 53.401 | .4586 | 34.651 | .05718 |
| %RSD | 281.19 | 129.74 | 198.50 | 16.071 | 140.09 | 18.668 | 159.25 | 7.3880 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.6707 | 86.083 | .39592 | .49646 | .8062 | 1.3013 | 1.1619 | 1.4325 |
| Stddev | .3483 | 20.092 | .41419 | .78706 | 3.163 | 2.7938 | .2904 | .4442 |
| %RSD | 6.1418 | 23.341 | 104.61 | 158.53 | 392.3 | 214.70 | 24.992 | 31.010 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 3:36:30 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .09455 | -.85226 | 3.7851 | -5.7466 | -3.2495 |
| Stddev | 1.1910 | 7.9437 | .1004 | 9.4994 | 5.1571 |
| %RSD | 1259.6 | 932.07 | 2.6523 | 165.30 | 158.70 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6268.9 | 4156.8 | 45020. | 3219.1 |
| Stddev | 2.1 | 4.4 | 58. | 14.9 |
| %RSD | .03414 | .10640 | .12951 | .46361 |

Sample Name: lcs 240-380397/2-a Acquired: 5/11/2019 3:40:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 51.986 | 2076.7 | 2198.5 | 1099.2 | 2055.1 | 52.346 | 51054. | 53.67 |
| Stddev | .862 | 23.2 | 9.7 | 3.9 | 4.7 | .878 | 127. | .31 |
| %RSD | 1.6589 | 1.1177 | .44068 | .35593 | .22984 | 1.6781 | .24906 | .5831 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 534.76 | 211.00 | 260.94 | 1065.7 | 52596. | 1054.1 | 52992. | 534.69 |
| Stddev | 1.01 | .78 | .64 | 1.5 | 154. | 2.8 | 364. | 1.32 |
| %RSD | .18955 | .37128 | .24400 | .14518 | .29348 | .26938 | .68689 | .24620 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1033.3 | 52710. | 540.71 | 523.51 | 534.7 | 2243.0 | 2127.7 | 1044.0 |
| Stddev | 4.3 | 164. | 2.25 | 2.35 | 2.9 | 1.9 | 10.2 | .9 |
| %RSD | .41138 | .31206 | .41653 | .44929 | .5453 | .08461 | .48116 | .08477 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: lcs 240-380397/2-a Acquired: 5/11/2019 3:40:48 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2118.2 | 529.00 | 556.62 | 1086.8 | 1065.2 |
| Stddev | 15.5 | 7.60 | 1.56 | 14.1 | 20.6 |
| %RSD | .73113 | 1.4363 | .28036 | 1.2939 | 1.9314 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5698.6 | 4033.6 | 43375. | 3233.0 |
| Stddev | 6.5 | .8 | 129. | 25.3 |
| %RSD | .11409 | .01966 | .29663 | .78296 |

Sample Name: 240-112174-k-1-a Acquired: 5/11/2019 3:44:48 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.59197 | 18.588 | 7.8115 | 335.98 | 165.51 | .14612 | 115010. |
| Stddev | .17464 | 14.664 | 1.3884 | .70 | .46 | .14888 | 137. |
| %RSD | 29.502 | 78.891 | 17.773 | .20717 | .27822 | 101.89 | .11891 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1330 | .84521 | 2.2876 | 2.9820 | 1926.1 | 8779.7 | 37.872 |
| Stddev | .0482 | .28711 | .3953 | .8822 | 25.8 | 14.7 | 2.434 |
| %RSD | 36.27 | 33.970 | 17.281 | 29.586 | 1.3400 | .16799 | 6.4267 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 50854. | 114.81 | 10.698 | 86838. | 4.8911 | -.41277 | 1.945 |
| Stddev | 331. | .43 | .182 | 207. | .7407 | 3.1503 | 1.295 |
| %RSD | .65167 | .37522 | 1.7024 | .23798 | 15.145 | 763.22 | 66.62 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112174-k-1-a  Acquired: 5/11/2019 3:44:48  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16364 | 1.1758 | 1.6491 | 2.0791 | -1.2066 | 1.9783 | 8648.5 |
| Stddev | 2.1305 | .5997 | .0705 | .0955 | 10.369 | .1231 | 75.1 |
| %RSD | 1302.0 | 51.002 | 4.2751 | 4.5936 | 859.32 | 6.2238 | .86813 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 1306.7 |
| Stddev | 6.6 |
| %RSD | .50177 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5663.4 | 4022.9 | 42835. | 3240.2 |
| Stddev | 6.4 | 7.4 | 136. | 6.0 |
| %RSD | .11274 | .18326 | .31670 | .18529 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 89.931% | 96.988% | 94.123% | 95.670% |
| Range | | | | |

Sample Name: SD 240-112174-k-1a@5 Acquired: 5/11/2019 3:49:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.67944 | -11.977 | 2.7784 | 64.231 | 33.543 | .32577 | 22864. | -.0724 |
| Stddev | .80214 | 14.676 | 1.5342 | .172 | .304 | .13780 | 50. | .0853 |
| %RSD | 118.06 | 122.53 | 55.218 | .26765 | .90619 | 42.302 | .21917 | 117.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .35974 | .83833 | 1.4644 | 384.28 | 1693.8 | 3.7334 | 10264. | 23.733 |
| Stddev | .32430 | .20485 | .9977 | 7.40 | 64.5 | 1.5959 | 56. | .027 |
| %RSD | 90.149 | 24.435 | 68.128 | 1.9251 | 3.8098 | 42.746 | .54705 | .11356 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2342 | 17437. | .92787 | -.14224 | .3059 | .78158 | .33486 | .73539 |
| Stddev | .2148 | 66. | .46442 | .48573 | 1.691 | .91193 | .27078 | .38416 |
| %RSD | 9.6131 | .37777 | 50.053 | 341.48 | 552.7 | 116.68 | 80.864 | 52.239 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: SD 240-112174-k-1a@5 Acquired: 5/11/2019 3:49:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .66092 | -1.2924 | 4.5035 | 1679.7 | 262.80 |
| Stddev | .40419 | 7.3950 | .1154 | 32.4 | 8.19 |
| %RSD | 61.155 | 572.17 | 2.5617 | 1.9265 | 3.1169 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6077.0 | 4116.2 | 44248. | 3225.4 |
| Stddev | 15.7 | 4.5 | 92. | 7.6 |
| %RSD | .25813 | .10908 | .20818 | .23550 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.500% | 99.237% | 97.228% | 95.234% |
| Range | | | | |

Sample Name: 240-112174-k-1-b ms  Acquired: 5/11/2019 3:53:15  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.309 | 2163.5 | 2229.0 | 1440.7 | 2227.2 | 52.277 | 165570. |
| Stddev | .280 | 24.3 | 6.9 | 3.5 | 4.6 | .243 | 11. |
| %RSD | .53513 | 1.1244 | .30814 | .24171 | .20739 | .46540 | .00646 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 53.88 | 540.23 | 212.70 | 262.84 | 2955.1 | 61911. | 1089.2 |
| Stddev | .12 | 2.33 | .86 | .68 | 6.7 | 159. | 1.6 |
| %RSD | .2262 | .43152 | .40417 | .25823 | .22690 | .25626 | .14933 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 100380. | 646.38 | 1043.6 | 138660. | 547.28 | 516.23 | 539.4 |
| Stddev | 198. | .29 | 4.3 | 547. | 1.22 | 3.40 | 4.0 |
| %RSD | .19690 | .04459 | .41004 | .39438 | .22356 | .65823 | .7487 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112174-k-1-b ms  Acquired: 5/11/2019 3:53:15  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2242.9 | 2176.9 | 1045.8 | 2106.0 | 518.68 | 561.17 | 9801.7 |
| Stddev | 4.5 | 9.9 | 1.2 | 16.2 | 4.70 | 2.28 | 13.0 |
| %RSD | .20050 | .45675 | .11294 | .76912 | .90635 | .40619 | .13283 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2352.6 |
| Stddev | 13.3 |
| %RSD | .56373 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5387.1 | 3920.2 | 41942. | 3201.3 |
| Stddev | 14.7 | 7.2 | 118. | .8 |
| %RSD | .27236 | .18425 | .28053 | .02423 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.543% | 94.511% | 92.160% | 94.523% |
| Range | | | | |

Sample Name: 240-112174-k-1-c msd  Acquired: 5/11/2019 3:57:14  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 52.845 | 2119.4 | 2241.1 | 1444.1 | 2235.0 | 52.411 | 165920. |
| Stddev | .816 | 59.9 | 5.8 | 1.8 | 3.1 | .097 | 456. |
| %RSD | 1.5441 | 2.8258 | .25835 | .12427 | .13889 | .18426 | .27509 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 54.17 | 541.18 | 211.62 | 261.96 | 2982.7 | 62448. | 1103.5 |
| Stddev | .14 | 1.40 | .54 | 1.09 | 7.8 | 165. | 5.3 |
| %RSD | .2630 | .25906 | .25526 | .41707 | .26316 | .26410 | .48000 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 101300. | 645.79 | 1056.0 | 139370. | 550.18 | 517.54 | 541.3 |
| Stddev | 274. | .52 | 3.1 | 214. | .39 | 1.43 | 2.1 |
| %RSD | .27071 | .08038 | .29684 | .15373 | .07017 | .27700 | .3882 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112174-k-1-c msd  Acquired: 5/11/2019 3:57:14  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2257.1 | 2189.0 | 1048.0 | 2122.6 | 526.06 | 564.08 | 9759.5 |
| Stddev | 5.6 | 6.3 | 1.2 | 10.5 | 5.76 | .84 | 51.0 |
| %RSD | .24953 | .28584 | .11623 | .49594 | 1.0959 | .14867 | .52279 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 2371.1 |
| Stddev | 16.7 |
| %RSD | .70396 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5371.6 | 3906.3 | 41978. | 3191.9 |
| Stddev | 4.5 | 3.4 | 113. | 4.2 |
| %RSD | .08412 | .08672 | .26810 | .13027 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 85.298% | 94.176% | 92.240% | 94.246% |
| Range | | | | |

Sample Name: 190-19611-c-1-a Acquired: 5/11/2019 4:01:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.64878 | 87.989 | 7.4833 | 48.938 | 45.376 | .10040 | 37707. | .1246 |
| Stddev | .31646 | 32.890 | 2.2454 | .526 | .518 | .10741 | 126. | .1536 |
| %RSD | 48.777 | 37.380 | 30.006 | 1.0743 | 1.1416 | 106.98 | .33343 | 123.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .52614 | 2.0191 | 57.002 | 1992.9 | 12854. | 4.0886 | 9761.5 | 52.708 |
| Stddev | .43073 | .7688 | .471 | 6.2 | 40. | 1.2937 | 95.5 | .095 |
| %RSD | 81.866 | 38.074 | .82699 | .30951 | .31435 | 31.642 | .97791 | .17984 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 7.0167 | 96971. | 2.8245 | 2.1276 | 1.048 | 4.2836 | 3.8606 | 2.6593 |
| Stddev | .2938 | 387. | .6949 | 1.0692 | 1.549 | 2.1864 | .6593 | .2988 |
| %RSD | 4.1873 | .39904 | 24.602 | 50.253 | 147.8 | 51.040 | 17.077 | 11.237 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 190-19611-c-1-a Acquired: 5/11/2019 4:01:14 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 2.2286 | -.64247 | 105.48 | 1515.9 | 131.52 |
| Stddev | .1461 | 4.9464 | .47 | 20.7 | 5.89 |
| %RSD | 6.5552 | 769.91 | .44940 | 1.3631 | 4.4819 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5841.9 | 4073.2 | 43459. | 3269.7 |
| Stddev | 5.1 | 9.4 | 87. | 20.5 |
| %RSD | .08762 | .23058 | .19934 | .62594 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.766% | 98.200% | 95.495% | 96.542% |
| Range | | | | |

Sample Name: 190-19617-a-1-a Acquired: 5/11/2019 4:05:27 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.84953 | 1132.9 | 30.978 | 283.19 | 1.8112 | .28683 | 67035. |
| Stddev | .25283 | 5.3 | 1.068 | 1.74 | .2558 | .17613 | 191. |
| %RSD | 29.761 | .46945 | 3.4472 | .61482 | 14.125 | 61.405 | .28550 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.1032 | .55007 | .33971 | 18.086 | 24.343 | 7726.2 | 104.51 |
| Stddev | .1728 | .19847 | .40263 | .865 | 2.554 | 70.6 | 1.79 |
| %RSD | 167.5 | 36.081 | 118.52 | 4.7825 | 10.492 | .91367 | 1.7103 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 27288. | 42.492 | 10.595 | 313140. | 6.8401 | .10646 | 1.025 |
| Stddev | 218. | .084 | .179 | 2238. | .7099 | 1.6547 | .711 |
| %RSD | .80006 | .19867 | 1.6868 | .71468 | 10.378 | 1554.3 | 69.34 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 190-19617-a-1-a  Acquired: 5/11/2019 4:05:27  Type: Unk
Method: ICP I9 6010 200.7 Methods(v692)  Mode: CONC  Corr. Factor: 1.000000
User: analyst  Custom ID1:  Custom ID2:  Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.3250 | .69614 | .70631 | 1.4570 | -1.6586 | 142.22 | 12577. |
| Stddev | 1.0080 | .22345 | .25270 | .9882 | .3626 | 1.20 | 111. |
| %RSD | 76.078 | 32.098 | 35.778 | 67.829 | 21.861 | .84129 | .88374 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 860.31 |
| Stddev | 14.52 |
| %RSD | 1.6883 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5517.7 | 3976.9 | 42003. | 3198.2 |
| Stddev | 9.1 | 7.1 | 85. | 13.3 |
| %RSD | .16462 | .17788 | .20288 | .41451 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 87.618% | 95.878% | 92.295% | 94.430% |
| Range | | | | |

Sample Name: 240-112172-b-1-a Acquired: 5/11/2019 4:09:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 25.132 | 36.815 | 6.8051 | 69.312 | 82.851 | .11912 | 73668. | .0926 |
| Stddev | .340 | 32.028 | 2.0186 | 1.091 | .800 | .12030 | 64. | .0421 |
| %RSD | 1.3517 | 86.998 | 29.662 | 1.5748 | .96578 | 100.99 | .08713 | 45.49 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4.2988 | .90409 | 7.9653 | 78.971 | 2751.7 | 8.7400 | 51204. | 5.9493 |
| Stddev | .0484 | .24232 | 1.3460 | 1.431 | 50.3 | .2030 | 288. | .0307 |
| %RSD | 1.1257 | 26.802 | 16.898 | 1.8120 | 1.8273 | 2.3226 | .56212 | .51629 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.8230 | 78198. | 1.6488 | 3.1047 | 3.246 | 2.1977 | 1.0628 | .61522 |
| Stddev | .0875 | 121. | .9075 | 1.3943 | 1.464 | 1.3885 | .3163 | .19285 |
| %RSD | 1.5031 | .15501 | 55.041 | 44.910 | 45.11 | 63.181 | 29.765 | 31.347 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112172-b-1-a Acquired: 5/11/2019 4:09:46 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.88500 | .11272 | 381.33 | 4047.0 | 356.72 |
| Stddev | .78434 | 4.3348 | .82 | 17.8 | 8.69 |
| %RSD | 88.626 | 3845.6 | .21561 | .43875 | 2.4359 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5706.5 | 4024.5 | 43076. | 3237.6 |
| Stddev | 12.0 | 5.6 | 96. | 12.2 |
| %RSD | .21001 | .13798 | .22197 | .37575 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.615% | 97.027% | 94.653% | 95.595% |
| Range | | | | |

Sample Name: 240-112216-a-2-a Acquired: 5/11/2019 4:14:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.43963 | 574.99 | 270.32 | 209.28 | 88.217 | .66499 | 55584. | .2615 |
| Stddev | .62553 | 41.24 | .77 | .40 | .409 | .36035 | 75. | .0948 |
| %RSD | 142.29 | 7.1722 | .28565 | .18999 | .46316 | 54.188 | .13578 | 36.26 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.2978 | 23.438 | 6.7470 | 28288. | 3798.6 | 24.668 | 11973. | 704.09 |
| Stddev | .3192 | .123 | .9538 | 49. | 60.5 | 1.404 | 22. | 1.68 |
| %RSD | 24.594 | .52332 | 14.136 | .17406 | 1.5925 | 5.6933 | .18035 | .23918 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18.311 | 82601. | 3.5984 | 3.3290 | 4.360 | 7.6218 | 1.0657 | 13.998 |
| Stddev | .084 | 441. | .9083 | .9288 | .659 | 1.0193 | .3519 | .189 |
| %RSD | .46052 | .53387 | 25.243 | 27.900 | 15.12 | 13.373 | 33.014 | 1.3484 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112216-a-2-a Acquired: 5/11/2019 4:14:00 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .52833 | 68.857 | 42.760 | 19062. | 214.19 |
| Stddev | .56743 | 4.452 | .032 | 204. | 11.73 |
| %RSD | 107.40 | 6.4661 | .07581 | 1.0701 | 5.4750 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5840.2 | 4146.8 | 44238. | 3292.7 |
| Stddev | 10.8 | 12.7 | 23. | 14.6 |
| %RSD | .18419 | .30730 | .05254 | .44229 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 92.739% | 99.974% | 97.208% | 97.221% |
| Range | | | | |

Sample Name: 240-112216-a-4-a Acquired: 5/11/2019 4:18:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.18010 | -13.767 | 5.6193 | 82.634 | 8.5733 | .29762 | 37221. | .7927 |
| Stddev | .44803 | 29.189 | 1.6465 | .523 | .3066 | .15919 | 75. | .0887 |
| %RSD | 248.77 | 212.03 | 29.301 | .63247 | 3.5759 | 53.486 | .20258 | 11.19 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .28567 | 1.1656 | 23.565 | 22.445 | 3172.6 | 17.261 | 7003.3 | 7.2789 |
| Stddev | .13362 | .4022 | .460 | 1.621 | 30.7 | 2.223 | 36.6 | .0705 |
| %RSD | 46.774 | 34.507 | 1.9521 | 7.2230 | .96679 | 12.880 | .52295 | .96813 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.4688 | 35179. | .69235 | 12.825 | 1.837 | 2.2979 | .20514 | .48237 |
| Stddev | .4390 | 138. | .31339 | 1.103 | 2.063 | 1.3798 | .35555 | .06406 |
| %RSD | 5.1840 | .39258 | 45.264 | 8.5991 | 112.3 | 60.045 | 173.32 | 13.280 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112216-a-4-a Acquired: 5/11/2019 4:18:10 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .04358 | 6.9857 | 4.6984 | 6377.2 | 97.290 |
| Stddev | .99130 | 6.1517 | .0365 | 54.5 | 1.750 |
| %RSD | 2274.8 | 88.062 | .77766 | .85390 | 1.7987 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6060.4 | 4129.1 | 44297. | 3270.9 |
| Stddev | 18.7 | 15.1 | 40. | 9.4 |
| %RSD | .30897 | .36675 | .09058 | .28635 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 96.235% | 99.548% | 97.336% | 96.578% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 4:22:27 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1000.4 | 24950. | 519.65 | 5193.5 | 2033.4 | 1998.6 | 50556. | 512.0 |
| Stddev | 1.0 | 77. | 1.11 | 18.2 | 7.3 | 4.4 | 163. | 2.8 |
| %RSD | .09928 | .30892 | .21385 | .35001 | .35839 | .22112 | .32327 | .5522 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2077.0 | 2033.9 | 1985.5 | 25206. | 51481. | 5108.4 | 50977. | 2025.1 |
| Stddev | 7.7 | 3.3 | 2.0 | 110. | 194. | 20.3 | 227. | 4.1 |
| %RSD | .36882 | .16070 | .10111 | .43832 | .37746 | .39742 | .44474 | .20287 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2060.8 | 51632. | 2075.4 | 500.10 | 507.3 | 523.90 | 5255.9 | 5137.8 |
| Stddev | 13.7 | 139. | 7.0 | 1.56 | 8.2 | 2.46 | 29.7 | 36.5 |
| %RSD | .66306 | .26881 | .33933 | .31208 | 1.607 | .46879 | .56518 | .71044 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 4:22:27 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1031.5 | 2022.5 | 2124.2 | 4893.1 | 5092.4 |
| Stddev | 8.4 | 5.4 | 7.8 | 18.9 | 22.0 |
| %RSD | .81787 | .26919 | .36519 | .38723 | .43287 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5568.3 | 3990.5 | 42472. | 3177.8 |
| Stddev | 10.4 | 10.2 | 116. | 21.2 |
| %RSD | .18696 | .25532 | .27242 | .66853 |

Sample Name: CCB Acquired: 5/11/2019 4:26:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.79779 | -11.677 | 4.6166 | 5.4747 | .47657 | .18983 | 33.791 | -.0246 |
| Stddev | .14889 | 37.545 | .7338 | .4199 | .38791 | .14013 | 3.402 | .3313 |
| %RSD | 18.662 | 321.53 | 15.895 | 7.6692 | 81.397 | 73.818 | 10.068 | 1344. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .16405 | .13229 | .58987 | 5.1669 | 36.115 | .60583 | -24.615 | .73327 |
| Stddev | .21422 | .58011 | 1.3921 | 1.2001 | 30.078 | 2.4686 | 16.822 | .07667 |
| %RSD | 130.58 | 438.52 | 236.00 | 23.226 | 83.285 | 407.47 | 68.338 | 10.455 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.5769 | 98.836 | .21822 | -.46802 | .1978 | -.07547 | .90174 | 1.4501 |
| Stddev | .3528 | 5.293 | .16884 | 1.2201 | 1.970 | 1.8999 | .87377 | .1010 |
| %RSD | 6.3267 | 5.3557 | 77.373 | 260.68 | 995.7 | 2517.5 | 96.898 | 6.9674 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 4:26:28 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.0098 | 3.0891 | 3.8582 | -17.139 | -6.7932 |
| Stddev | 1.0525 | 3.1119 | .1520 | 4.127 | 9.0126 |
| %RSD | 104.23 | 100.74 | 3.9398 | 24.077 | 132.67 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6303.7 | 4174.5 | 45203. | 3235.8 |
| Stddev | 10.3 | 6.6 | 103. | 11.5 |
| %RSD | .16366 | .15707 | .22760 | .35414 |

Sample Name: 240-112216-a-6-a Acquired: 5/11/2019 4:30:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.12334 | 24.267 | 3.6180 | 72.391 | 18.857 | .31584 | 42947. | .0447 |
| Stddev | .39152 | 52.428 | 2.0040 | .316 | .290 | .30869 | 65. | .1057 |
| %RSD | 317.44 | 216.04 | 55.390 | .43639 | 1.5361 | 97.736 | .15035 | 236.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .14466 | .77106 | 1.5896 | 21.089 | 2336.3 | 8.3922 | 10786. | 2.8139 |
| Stddev | .30045 | .33689 | .3890 | 1.926 | 47.7 | 2.8077 | 97. | .0268 |
| %RSD | 207.69 | 43.691 | 24.472 | 9.1331 | 2.0415 | 33.456 | .89858 | .95276 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 8.3432 | 25846. | 1.3013 | 1.2299 | 1.967 | 2.8228 | .08475 | .44725 |
| Stddev | .2070 | 66. | .3471 | .9728 | .851 | .9792 | .24378 | .13030 |
| %RSD | 2.4815 | .25500 | 26.671 | 79.097 | 43.28 | 34.690 | 287.64 | 29.133 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112216-a-6-a Acquired: 5/11/2019 4:30:47 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .18732 | 1.2069 | 6.6964 | 3851.6 | 228.58 |
| Stddev | .31677 | 2.0965 | .2119 | 43.7 | 1.42 |
| %RSD | 169.11 | 173.71 | 3.1646 | 1.1334 | .62095 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6029.1 | 4112.8 | 44354. | 3257.5 |
| Stddev | 9.7 | 7.6 | 202. | 9.4 |
| %RSD | .16047 | .18587 | .45524 | .28997 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.737% | 99.154% | 97.461% | 96.183% |
| Range | | | | |

Sample Name: 240-112235-c-3-a Acquired: 5/11/2019 4:35:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.37554 | 725.06 | 4.9619 | 181.23 | 21.771 | .28391 | 58511. |
| Stddev | .44963 | 27.01 | .8537 | .44 | .293 | .13101 | 225. |
| %RSD | 119.73 | 3.7257 | 17.204 | .24439 | 1.3479 | 46.145 | .38463 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .1390 | .58441 | 1.0360 | 8.2821 | 70.858 | 10186. | 21.839 |
| Stddev | .1551 | .21607 | .3061 | .4273 | 2.779 | 34. | .782 |
| %RSD | 111.5 | 36.972 | 29.544 | 5.1594 | 3.9217 | .32922 | 3.5820 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 18322. | 7.0021 | 2.5095 | 158210. | 10.207 | .40537 | .2830 |
| Stddev | 139. | .0710 | .2812 | 650. | .245 | 1.1991 | .9442 |
| %RSD | .75981 | 1.0142 | 11.204 | .41063 | 2.4017 | 295.79 | 333.7 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112235-c-3-a Acquired: 5/11/2019 4:35:03 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.21535 | 1.0725 | .67140 | .72476 | 3.2850 | 26.384 | 3939.8 |
| Stddev | 3.1341 | .2037 | .13327 | 1.2590 | 4.7799 | .451 | 34.7 |
| %RSD | 1455.4 | 18.997 | 19.849 | 173.71 | 145.51 | 1.7105 | .88039 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 302.26 |
| Stddev | 5.40 |
| %RSD | 1.7858 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5696.7 | 4026.7 | 42915. | 3252.2 |
| Stddev | 17.9 | 12.9 | 114. | 11.2 |
| %RSD | .31421 | .32045 | .26448 | .34370 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.460% | 97.078% | 94.299% | 96.024% |
| Range | | | | |

Sample Name: 240-112240-c-1-a Acquired: 5/11/2019 4:39:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.31888 | 201.40 | 3.8321 | 40.524 | 22.090 | .29765 | 34459. | .0056 |
| Stddev | .18956 | 26.38 | 1.1480 | .185 | .186 | .07245 | 157. | .1272 |
| %RSD | 59.444 | 13.100 | 29.957 | .45662 | .84245 | 24.342 | .45446 | 2257. |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .62771 | .63686 | 8.4170 | 375.45 | 5967.7 | 3.4993 | 6263.0 | 52.265 |
| Stddev | .18819 | .29182 | .3590 | 2.23 | 57.2 | .3775 | 37.8 | .109 |
| %RSD | 29.980 | 45.821 | 4.2657 | .59341 | .95928 | 10.788 | .60282 | .20848 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 30.018 | 58119. | 2.2892 | 1.6145 | .5545 | -4.0384 | 4.3786 | 1.0627 |
| Stddev | .343 | 233. | .2908 | 2.7777 | 2.601 | 1.1330 | .5638 | .3502 |
| %RSD | 1.1418 | .40139 | 12.702 | 172.05 | 469.1 | 28.055 | 12.877 | 32.951 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112240-c-1-a Acquired: 5/11/2019 4:39:15 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .88617 | 2.6299 | 55.924 | 1484.7 | 116.53 |
| Stddev | 1.1073 | 4.1323 | .447 | 19.1 | 3.03 |
| %RSD | 124.96 | 157.13 | .79967 | 1.2893 | 2.5985 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5974.2 | 4129.4 | 44261. | 3294.6 |
| Stddev | 9.2 | 7.7 | 70. | 2.6 |
| %RSD | .15393 | .18699 | .15841 | .07951 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.867% | 99.554% | 97.256% | 97.278% |
| Range | | | | |

Sample Name: 240-112169-b-1-a Acquired: 5/11/2019 4:43:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.50901 | 437.91 | 15.972 | 17.652 | 399.79 | .81347 | 189600. |
| Stddev | 1.0981 | 22.52 | 3.095 | .325 | .20 | .09430 | 283. |
| %RSD | 215.73 | 5.1425 | 19.375 | 1.8395 | .04964 | 11.593 | .14900 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.1329 | .52265 | 2.3850 | 63.198 | 18593. | 2801.8 | 9.8689 |
| Stddev | .1197 | .26471 | .3820 | .736 | 24. | 88.7 | 4.4615 |
| %RSD | 90.04 | 50.647 | 16.018 | 1.1641 | .12905 | 3.1668 | 45.208 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 40409. | 385.44 | 2.3118 | 248360. | 2.4118 | 1.1504 | -.4770 |
| Stddev | 94. | 1.09 | .4700 | 342. | .8196 | .5425 | 1.458 |
| %RSD | .23141 | .28338 | 20.329 | .13762 | 33.982 | 47.157 | 305.6 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112169-b-1-a Acquired: 5/11/2019 4:43:29 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.02011 | 1.6630 | 12.545 | 1.0419 | 4.3715 | 23.216 | 9522.9 |
| Stddev | 1.7632 | .4599 | .434 | 1.3580 | 6.8632 | .244 | 28.7 |
| %RSD | 8768.2 | 27.653 | 3.4619 | 130.34 | 157.00 | 1.0491 | .30179 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 245.39 |
| Stddev | 5.41 |
| %RSD | 2.2051 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5435.3 | 3936.8 | 42152. | 3248.9 |
| Stddev | 1.5 | 3.0 | 296. | 10.7 |
| %RSD | .02798 | .07535 | .70239 | .32937 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 86.310% | 94.911% | 92.623% | 95.929% |
| Range | | | | |

Sample Name: 240-112169-b-2-a Acquired: 5/11/2019 4:47:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.78370 | -2.0446 | 5.6236 | 26.127 | 158.61 | .19405 |
| Stddev | .56957 | 34.295 | 1.8316 | .520 | .50 | .05477 |
| %RSD | 72.677 | 1677.3 | 32.570 | 1.9895 | .31579 | 28.223 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Ca3179 | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 170340. | -.0167 | 1.1431 | 1.2745 | 1.9205 | 136.47 |
| Stddev | 325. | .2295 | .1710 | .3186 | .4876 | 4.38 |
| %RSD | .19057 | 1371. | 14.956 | 24.995 | 25.389 | 3.2065 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | K_7664 | Li6707 | Mg2790 | Mn2576 | Mo2020 | Na5895 |
|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 4438.2 | 19.828 | 29736. | 476.47 | 1.0709 | F 768860. |
| Stddev | 78.0 | 2.316 | 157. | .52 | .3048 | 6607. |
| %RSD | 1.7575 | 11.679 | .52905 | .11008 | 28.460 | .85931 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Fail |
| High Limit | | | | | | 500000. |
| Low Limit | | | | | | -500000. |

Sample Name: 240-112169-b-2-a Acquired: 5/11/2019 4:47:41 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 13.392 | 1.7970 | 1.073 | .76887 | .72249 | 1.3361 |
| Stddev | .493 | 2.3506 | 2.175 | 2.8117 | .28512 | .0835 |
| %RSD | 3.6779 | 130.81 | 202.7 | 365.70 | 39.463 | 6.2496 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | |
| Low Limit | | | | | | |

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.4991 | 10.341 | 2.0101 | 5357.6 | 363.82 |
| Stddev | 1.0165 | 3.080 | .0981 | 10.4 | 1.66 |
| %RSD | 67.805 | 29.780 | 4.8794 | .19473 | .45689 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5089.2 | 3800.9 | 39743. | 3178.1 |
| Stddev | 11.9 | 8.9 | 100. | 5.6 |
| %RSD | .23353 | .23540 | .25183 | .17463 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 80.813% | 91.636% | 87.329% | 93.839% |
| Range | | | | |

Sample Name: 240-112169-b-3-a Acquired: 5/11/2019 4:52:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.32232 | -35.091 | 8.2120 | 18.746 | 317.10 | .14473 | 103820. |
| Stddev | .06108 | 12.631 | 1.2520 | .191 | 1.28 | .31505 | 234. |
| %RSD | 18.950 | 35.996 | 15.246 | 1.0205 | .40348 | 217.68 | .22506 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.0247 | .39352 | .70235 | 7.1568 | 1916.4 | 2366.1 | 17.321 |
| Stddev | .1332 | .04605 | .22577 | .8691 | 15.5 | 27.4 | 2.666 |
| %RSD | 539.8 | 11.702 | 32.145 | 12.144 | .80760 | 1.1600 | 15.392 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 33864. | 43.739 | 5.9155 | 100580. | 1.7634 | .18396 | .4256 |
| Stddev | 220. | .157 | .0946 | 409. | .0775 | 3.1282 | .6757 |
| %RSD | .65089 | .35825 | 1.5991 | .40699 | 4.3923 | 1700.5 | 158.8 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112169-b-3-a Acquired: 5/11/2019 4:52:04 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.29916 | .37258 | .38748 | 1.8012 | -.01262 | 2.9060 | 8195.5 |
| Stddev | .70002 | .04190 | .17062 | .6480 | 2.9884 | .1611 | 71.5 |
| %RSD | 234.00 | 11.246 | 44.032 | 35.975 | 23677. | 5.5430 | .87224 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 250.82 |
| Stddev | 7.13 |
| %RSD | 2.8417 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5716.8 | 4023.9 | 43199. | 3263.8 |
| Stddev | 1.3 | 4.7 | 68. | 13.5 |
| %RSD | .02270 | .11657 | .15667 | .41443 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.780% | 97.011% | 94.923% | 96.367% |
| Range | | | | |

Sample Name: 240-112169-b-4-a Acquired: 5/11/2019 4:56:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.45547 | 15297. | 21.272 | 52.733 | 225.65 | 1.1825 | 220010. |
| Stddev | .72618 | 62. | 1.013 | .259 | .90 | .1158 | 896. |
| %RSD | 159.43 | .40781 | 4.7643 | .49050 | .40003 | 9.7928 | .40725 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .3228 | 30.459 | 8781.0 | 176.60 | 45488. | 6049.5 | 40.151 |
| Stddev | .1826 | .595 | 34.4 | 1.13 | 279. | 11.5 | 2.635 |
| %RSD | 56.59 | 1.9529 | .39191 | .64223 | .61443 | .19056 | 6.5635 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 55065. | 828.65 | 85.440 | 426000. | 348.53 | 20.120 | 3.614 |
| Stddev | 345. | 1.33 | .942 | 2063. | 1.55 | .996 | 2.362 |
| %RSD | .62655 | .16032 | 1.1020 | .48423 | .44502 | 4.9516 | 65.37 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112169-b-4-a Acquired: 5/11/2019 4:56:17 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .43886 | 14.244 | 283.80 | 1.6062 | 63.392 | 236.80 | 24875. |
| Stddev | 3.3027 | .536 | .82 | .0685 | .522 | 1.94 | 695. |
| %RSD | 752.57 | 3.7611 | .28746 | 4.2650 | .82370 | .82134 | 2.7949 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 535.19 |
| Stddev | 11.55 |
| %RSD | 2.1582 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5236.8 | 3959.2 | 41981. | 3262.5 |
| Stddev | 10.1 | 14.5 | 82. | 4.6 |
| %RSD | .19337 | .36629 | .19537 | .13974 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 83.157% | 95.452% | 92.248% | 96.331% |
| Range | | | | |

Sample Name: 240-112169-b-5-a Acquired: 5/11/2019 5:00:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .34399 | 10763. | 10.206 | 59.658 | 198.21 | .53349 | 198940. |
| Stddev | .33954 | 93. | 2.756 | .569 | .42 | .04091 | 663. |
| %RSD | 98.707 | .86112 | 27.005 | .95366 | .21383 | 7.6691 | .33318 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Cd2288 | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .2938 | 5.9896 | 69.193 | 21.723 | 18809. | 10459. | 15.815 |
| Stddev | .3312 | .1599 | .493 | .996 | 19. | 26. | 2.159 |
| %RSD | 112.7 | 2.6697 | .71251 | 4.5847 | .09988 | .25300 | 13.654 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Mg2790 | Mn2576 | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3710) | (Y_3600) | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 49069. | 552.42 | 11.569 | 9942.5 | 41.199 | 7.9692 | 1.847 |
| Stddev | 83. | .90 | .245 | 16.5 | .152 | 2.6383 | 1.853 |
| %RSD | .16936 | .16274 | 2.1141 | .16621 | .36968 | 33.106 | 100.3 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

Sample Name: 240-112169-b-5-a Acquired: 5/11/2019 5:00:34 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Se1960 | Sn1899 | Ti3372 | Tl1908 | V_2908 | Zn2062 | Si2516 |
|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (In2306) | (Y_3600) | (In2306) | (Y_3710) | (In2306) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.75689 | 5.1516 | 233.53 | .20972 | 15.282 | 64.948 | 28371. |
| Stddev | 1.4793 | .7597 | .67 | 1.6422 | 2.268 | .663 | 151. |
| %RSD | 195.45 | 14.747 | .28651 | 783.06 | 14.840 | 1.0209 | .53357 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | |
| Low Limit | | | | | | | |

| Elem | Sr3464 |
|---|---|
| IS Ref | (Y_3710) |
| Units | ppb |
| Avg | 257.54 |
| Stddev | 6.31 |
| %RSD | 2.4507 |
| Check ? | Chk Pass |
| High Limit | |
| Low Limit | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5674.2 | 4081.1 | 43739. | 3290.4 |
| Stddev | .5 | 9.7 | 103. | 10.4 |
| %RSD | .00908 | .23649 | .23655 | .31716 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 90.102% | 98.390% | 96.110% | 97.154% |
| Range | | | | |

Sample Name: 240-112218-e-1-a Acquired: 5/11/2019 5:04:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.74114 | 163.71 | 5.9655 | 178.33 | 18.066 | .42366 | 60221. | .0149 |
| Stddev | .20618 | 43.51 | .5146 | .86 | .482 | .26019 | 31. | .0388 |
| %RSD | 27.819 | 26.576 | 8.6258 | .48483 | 2.6703 | 61.416 | .05214 | 261.0 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .24521 | 4.5090 | 1.5764 | 306.73 | 10940. | 38.988 | 9751.2 | 15.845 |
| Stddev | .21397 | .2414 | .5985 | 2.40 | 15. | .525 | 138.0 | .021 |
| %RSD | 87.260 | 5.3547 | 37.967 | .78101 | .13868 | 1.3461 | 1.4150 | .13250 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 62.504 | 54309. | 2.2451 | 2.0317 | 3.211 | 5.5542 | .48218 | 2.0915 |
| Stddev | .188 | 61. | .1560 | 1.6156 | 3.255 | 1.7754 | .36295 | .1223 |
| %RSD | .30061 | .11141 | 6.9489 | 79.520 | 101.3 | 31.966 | 75.274 | 5.8485 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112218-e-1-a Acquired: 5/11/2019 5:04:44 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .35601 | 10.381 | 5.7398 | 9235.8 | 306.58 |
| Stddev | 1.0116 | 6.208 | .1048 | 120.6 | 7.42 |
| %RSD | 284.14 | 59.804 | 1.8253 | 1.3053 | 2.4189 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5964.4 | 4106.5 | 44292. | 3310.7 |
| Stddev | 7.9 | 7.1 | 111. | 9.1 |
| %RSD | .13224 | .17361 | .24965 | .27456 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 94.711% | 99.002% | 97.326% | 97.752% |
| Range | | | | |

Sample Name: 240-112218-e-2-a Acquired: 5/11/2019 5:08:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.25712 | 1619.4 | 4.0390 | 79.474 | 35.385 | .20306 | 52486. | .1274 |
| Stddev | .78354 | 39.6 | 1.1477 | .549 | .398 | .35233 | 136. | .0642 |
| %RSD | 304.73 | 2.4437 | 28.416 | .69102 | 1.1246 | 173.52 | .25853 | 50.42 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .82921 | 3.8864 | 4.9309 | 2176.2 | 5602.5 | 11.177 | 12592. | 130.91 |
| Stddev | .24264 | .2823 | .6853 | 12.0 | 7.1 | 3.191 | 137. | .33 |
| %RSD | 29.261 | 7.2648 | 13.897 | .55259 | .12704 | 28.551 | 1.0895 | .25073 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 12.475 | 34204. | 6.7359 | 7.1495 | 1.156 | 1.6604 | .18435 | 22.774 |
| Stddev | .043 | 85. | .2683 | .9147 | .240 | 1.7608 | .66910 | .657 |
| %RSD | .34381 | .24736 | 3.9830 | 12.794 | 20.74 | 106.05 | 362.94 | 2.8842 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: 240-112218-e-2-a Acquired: 5/11/2019 5:08:57 Type: Unk
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1.1707 | 5.3444 | 30.265 | 5816.0 | 182.82 |
| Stddev | .9268 | 1.3763 | .378 | 67.0 | 8.37 |
| %RSD | 79.172 | 25.753 | 1.2474 | 1.1523 | 4.5807 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5983.9 | 4127.7 | 44482. | 3313.4 |
| Stddev | 5.8 | 7.9 | 125. | 20.3 |
| %RSD | .09615 | .19224 | .28029 | .61131 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | 95.021% | 99.514% | 97.742% | 97.831% |
| Range | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 5:13:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1005.5 | 25045. | 522.14 | 5212.6 | 2037.1 | 2011.2 | 50677. | 514.7 |
| Stddev | 4.1 | 86. | 2.25 | 4.9 | 4.6 | 5.3 | 181. | 1.2 |
| %RSD | .41236 | .34347 | .43161 | .09355 | .22480 | .26276 | .35654 | .2332 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2079.8 | 2029.3 | 1994.0 | 25149. | 51701. | 5114.1 | 50997. | 2037.7 |
| Stddev | 7.0 | 4.8 | 9.9 | 101. | 60. | 6.8 | 106. | 5.9 |
| %RSD | .33547 | .23876 | .49671 | .40323 | .11558 | .13348 | .20737 | .28943 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2064.1 | 51796. | 2079.5 | 502.36 | 509.6 | 521.33 | 5266.1 | 5104.8 |
| Stddev | 5.1 | 98. | 6.8 | 2.33 | 3.1 | 2.29 | 19.2 | 13.1 |
| %RSD | .24610 | .18938 | .32510 | .46291 | .6073 | .43991 | .36517 | .25626 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 5:13:10 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1032.8 | 2010.7 | 2126.0 | 4986.1 | 5090.2 |
| Stddev | 4.8 | 23.5 | 7.1 | 17.4 | 10.8 |
| %RSD | .46711 | 1.1712 | .33585 | .34941 | .21118 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5551.2 | 3974.6 | 42627. | 3178.1 |
| Stddev | 18.8 | 8.6 | 72. | 8.8 |
| %RSD | .33927 | .21748 | .16929 | .27637 |

Sample Name: CCB Acquired: 5/11/2019 5:17:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20434 | -30.157 | 2.9105 | 4.3648 | .34045 | .33188 | 37.015 | .1067 |
| Stddev | .28128 | 66.676 | 1.7489 | .3466 | .16680 | .25539 | 4.507 | .0603 |
| %RSD | 137.65 | 221.09 | 60.090 | 7.9406 | 48.993 | 76.953 | 12.175 | 56.51 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .23625 | .23530 | -.84323 | 5.3676 | 11.325 | .90096 | -13.578 | .74210 |
| Stddev | .33846 | .08106 | .46596 | 1.5046 | 36.180 | 3.8905 | 29.749 | .01349 |
| %RSD | 143.26 | 34.450 | 55.259 | 28.031 | 319.47 | 431.82 | 219.10 | 1.8173 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.7786 | 119.64 | .43992 | .10395 | .4188 | 3.4197 | 1.0556 | 1.4370 |
| Stddev | .1954 | 11.28 | .04007 | .67230 | 1.946 | 1.7989 | .4573 | .1914 |
| %RSD | 3.3807 | 9.4283 | 9.1079 | 646.74 | 464.6 | 52.604 | 43.319 | 13.321 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 5:17:14 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | .36343 | .03815 | 3.7483 | 22.486 | -2.7130 |
| Stddev | .92310 | 3.1131 | .1141 | 18.864 | 3.8509 |
| %RSD | 254.00 | 8159.4 | 3.0430 | 83.892 | 141.94 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6301.6 | 4172.0 | 45387. | 3230.7 |
| Stddev | 3.3 | 3.5 | 65. | 7.3 |
| %RSD | .05218 | .08405 | .14431 | .22698 |

Sample Name: CCV-4140446 Acquired: 5/11/2019 5:21:31 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 1006.5 | 25023. | 521.15 | 5193.4 | 2036.6 | 2016.5 | 50657. | 512.4 |
| Stddev | 2.8 | 170. | 1.92 | 7.2 | 8.2 | 17.5 | 249. | .6 |
| %RSD | .27441 | .67772 | .36923 | .13790 | .40422 | .86686 | .49074 | .1239 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2074.2 | 2025.8 | 1990.2 | 25151. | 51655. | 5108.2 | 51074. | 2035.0 |
| Stddev | 8.8 | 5.5 | 5.7 | 65. | 328. | 18.8 | 160. | 1.7 |
| %RSD | .42259 | .27079 | .28606 | .25680 | .63538 | .36858 | .31379 | .08163 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 2058.6 | 51805. | 2074.6 | 499.27 | 507.4 | 519.93 | 5244.9 | 5104.2 |
| Stddev | 8.3 | 295. | 9.0 | 1.12 | 2.1 | 1.62 | 30.2 | 19.6 |
| %RSD | .40253 | .57032 | .43484 | .22379 | .4140 | .31221 | .57656 | .38366 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | | | | |
| Range | | | | | | | | |

Sample Name: CCV-4140446 Acquired: 5/11/2019 5:21:31 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | 1029.3 | 2001.8 | 2124.1 | 4941.0 | 5094.4 |
| Stddev | 6.9 | 8.9 | 10.3 | 29.8 | 10.7 |
| %RSD | .67469 | .44217 | .48314 | .60268 | .20988 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| Value | | | | | |
| Range | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5556.3 | 3982.8 | 42631. | 3179.7 |
| Stddev | 9.3 | 4.4 | 20. | 15.8 |
| %RSD | .16686 | .11028 | .04681 | .49586 |

Sample Name: CCB Acquired: 5/11/2019 5:25:35 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Ag3280 | Al3082 | As1890 | B_1826 | Ba4554 | Be3130 | Ca3179 | Cd2288 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_3600) | (Y_3710) | (Y_2243) | (Y_2243) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_2243) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | -.42966 | -19.857 | 2.8932 | 6.7684 | .27355 | .41541 | 33.679 | .1268 |
| Stddev | .51014 | 20.282 | 3.3456 | .8750 | .43104 | .19558 | 3.221 | .0441 |
| %RSD | 118.73 | 102.14 | 115.64 | 12.928 | 157.58 | 47.081 | 9.5636 | 34.81 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Co2286 | Cr2677 | Cu3273 | Fe2599 | K_7664 | Li6707 | Mg2790 | Mn2576 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3600) | (Y_3600) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3710) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | .11514 | .17133 | .61446 | 2.7651 | 29.028 | 4.4572 | 5.7876 | .78966 |
| Stddev | .23305 | .24005 | .65177 | 2.3091 | 16.848 | 1.4306 | 15.632 | .06431 |
| %RSD | 202.40 | 140.11 | 106.07 | 83.509 | 58.043 | 32.095 | 270.09 | 8.1438 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

| Elem | Mo2020 | Na5895 | Ni2316 | Pb2203 | Sb2175 | Se1960 | Sn1899 | Ti3372 |
|---|---|---|---|---|---|---|---|---|
| IS Ref | (Y_2243) | (Y_3710) | (In2306) | (Y_2243) | (Y_2243) | (Y_2243) | (In2306) | (Y_3600) |
| Units | ppb | ppb | ppb | ppb | ppb | ppb | ppb | ppb |
| Avg | 5.8633 | 101.01 | .54248 | .15298 | 2.579 | -1.4863 | 1.0192 | 1.7947 |
| Stddev | .0617 | 5.52 | .25022 | 1.2438 | 1.191 | 2.2732 | .2385 | .2920 |
| %RSD | 1.0518 | 5.4617 | 46.125 | 813.09 | 46.17 | 152.95 | 23.396 | 16.271 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | | | | |
| Low Limit | | | | | | | | |

Sample Name: CCB Acquired: 5/11/2019 5:25:35 Type: QC
Method: ICP I9 6010 200.7 Methods(v692) Mode: CONC Corr. Factor: 1.000000
User: analyst Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Tl1908 | V_2908 | Zn2062 | Si2516 | Sr3464 |
|---|---|---|---|---|---|
| IS Ref | (In2306) | (Y_3710) | (In2306) | (Y_3710) | (Y_3710) |
| Units | ppb | ppb | ppb | ppb | ppb |
| Avg | -.20391 | -1.0186 | 3.7700 | 1.5078 | -.13554 |
| Stddev | .89087 | 4.2707 | .0140 | 6.5856 | 9.1241 |
| %RSD | 436.90 | 419.28 | .37194 | 436.77 | 6731.4 |
| Check ? | Chk Pass | Chk Pass | Chk Pass | Chk Pass | Chk Pass |
| High Limit | | | | | |
| Low Limit | | | | | |

| Int. Std. | In2306 | Y_2243 | Y_3600 | Y_3710 |
|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 6291.7 | 4160.9 | 45204. | 3230.5 |
| Stddev | 6.2 | 1.6 | 54. | 5.2 |
| %RSD | .09807 | .03877 | .11968 | .16080 |

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
|---|---|
| MRC-NMW-2S-050719 | 240-112234-2 |

Comments:

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112234-1

SDG No.:

Project: MRC Block I GW Sampling

| Client Sample ID | Lab Sample ID |
|---|---|
| MRC-NMW-2S-050719 | 240-112234-2 |

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-2S-050719 Lab Sample ID: 240-112234-2

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG ID.:

Matrix: Water Date Sampled: 05/07/2019 12:00

Reporting Basis: WET Date Received: 05/08/2019 09:20

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| | Alkalinity | 67 | 5.0 | 2.6 | mg/L | | | 1 | 2320B-1997 |
| 14808-79-8 | Sulfate | 17 | 1.0 | 0.35 | mg/L | | | 1 | 300.0 |

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MRC-NMW-2S-050719 Lab Sample ID: 240-112234-2

Lab Name: Eurofins TestAmerica, Nashville Job No.: 240-112234-1

SDG ID.:

Matrix: Water Date Sampled: 05/07/2019 12:00

Reporting Basis: WET Date Received: 05/08/2019 09:20

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-44-0 | Total Organic Carbon | 8.8 | 1.0 | 0.50 | mg/L | | B | 1 | 9060A |

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Analyst: JWW  Batch Start Date: 04/13/2019

Reporting Units: mg/L  Analytical Batch No.: 376335

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 10 | ICV | 05:18 | Sulfate | 51.3 | 50.0 | 103 | 90-110 | | WCICLCS_00704 |
| 11 | ICB | 05:38 | Sulfate | 0.35 | | | | U | |

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Analyst: JWW  Batch Start Date: 05/21/2019

Reporting Units: mg/L  Analytical Batch No.: 382420

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 1 | CCV | 16:54 | Sulfate | 50.6 | 50.0 | 101 | 90-110 | | WCICCCV_00875 |
| 2 | CCB | 17:14 | Sulfate | 0.35 | | | | U | |
| 13 | CCV | 20:56 | Sulfate | 50.6 | 50.0 | 101 | 90-110 | | WCICCCV_00875 |
| 14 | CCB | 21:16 | Sulfate | 0.35 | | | | U | |
| 25 | CCV | 00:57 | Sulfate | 50.6 | 50.0 | 101 | 90-110 | | WCICCCV_00875 |
| 26 | CCB | 01:17 | Sulfate | 0.35 | | | | U | |

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Analyst: VRP  Batch Start Date: 05/10/2019

Reporting Units: mg/L  Analytical Batch No.: 594412

| Sample Number | QC Type | Time | Analyte | Result | Spike Amount | (%) Recovery | Limits | Qual | Reagent |
|---|---|---|---|---|---|---|---|---|---|
| 4 | CCV | 13:08 | Total Organic Carbon | 26.3 | 25.0 | 105 | 90-110 | | TOC_CCV@1000_00043 |
| 5 | CCB | 13:31 | Total Organic Carbon | 0.849 | | | | J | |
| 20 | CCV | 21:12 | Total Organic Carbon | 25.4 | 25.0 | 101 | 90-110 | | TOC_CCV@1000_00043 |
| 21 | CCB | 21:35 | Total Organic Carbon | 0.849 | | | | J | |

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

| Method | Lab Sample ID | Analyte | Result | Qual | Units | RL | Dil |
|---|---|---|---|---|---|---|---|
| Batch ID: 382067 | Date: 05/17/2019 17:09 | | | | | | |
| 2320B-1997 | MB 240-382067/30 | Alkalinity | 2.6 | U | mg/L | 5.0 | 1 |
| Batch ID: 382420 | Date: 05/21/2019 17:34 | | | | | | |
| 300.0 | MB 240-382420/3 | Sulfate | 0.35 | U | mg/L | 1.0 | 1 |

FORM III-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

| Method | Lab Sample ID | Analyte | Result | Qual | Units | RL | Dil |
|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 12:44 | | | | | | |
| 9060A | MB 490-594412/3 | Total Organic Carbon | 0.910 | J | mg/L | 1.0 | 1 |

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 382420 Date: 05/21/2019 21:56 | | | | | | | | | | | |
| 300.0 | 240-111424-A-5 | Sulfate | 73 | | mg/L | | | | | | |
| 300.0 | 240-111424-A-5 MS | Sulfate | 124 | | mg/L | 50.0 | 101 | 80-120 | | | |

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 382420 Date: 05/21/2019 22:16 | | | | | | | | | | | |
| 300.0 | 240-111424-A-5 MSD | Sulfate | 125 | | mg/L | 50.0 | 104 | 80-120 | 1 | 15 | |

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

FORM V-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 Date: 05/10/2019 20:19 | | | | | | | | | | | |
| 9060A | 490-173121-H-2 | Total Organic Carbon | 13 | | mg/L | | | | | | B |
| 9060A | 490-173121-H-2 MS | Total Organic Carbon | 33.1 | | mg/L | 20.0 | 99 | 75-122 | | | |

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 Date: 05/10/2019 20:46 | | | | | | | | | | | |
| 9060A | 490-173121-H-2 MSD | Total Organic Carbon | 33.0 | | mg/L | 20.0 | 99 | 75-122 | 0 | 20 | |

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Client Sample ID | Lab Sample ID | Analyte | Result | Unit | RPD | RPD Limit | Qual |
|---|---|---|---|---|---|---|---|---|
| Batch ID: 382067 Date: 05/17/2019 18:02 | | | | | | | | |
| 2320B-1997 | | 240-112182-D-4 | Alkalinity | 22 | mg/L | | | |
| 2320B-1997 | | 240-112182-D-4 DU | Alkalinity | 22.0 | mg/L | 1 | 20 | |

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 382067 | Date: 05/17/2019 17:05 | | | | | | | | | | |
| | | | | | | LCS Source: WCPHENOMINER_00025 | | | | | |
| 2320B-1997 | LCS 240-382067/29 | Alkalinity | 164 | | mg/L | 168 | 97 | 86-123 | | | |
| Batch ID: 382420 | Date: 05/21/2019 17:54 | | | | | | | | | | |
| | | | | | | LCS Source: WCICLCS_00710 | | | | | |
| 300.0 | LCS 240-382420/4 | Sulfate | 51.6 | | mg/L | 50.0 | 103 | 90-110 | | | |

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 13:56 | | | | | | | | | | |
| | | | | | | LCS Source: TOC_LCS@1000_00023 | | | | | |
| 9060A | LCS 490-594412/6 | Total Organic Carbon | 10.1 | | mg/L | 10.0 | 101 | 90-110 | 0 | 20 | |

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

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Matrix: Water

| Method | Lab Sample ID | Analyte | Result | C | Unit | Spike Amount | Pct. Rec. | Limits | RPD | RPD Limit | Q |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Batch ID: 594412 | Date: 05/10/2019 15:00 | | | | | | | | | | |
| | | | | | | LCSD Source: TOC_LCS@1000_00023 | | | | | |
| 9060A | LCSD 490-594412/7 | Total Organic Carbon | 10.1 | | mg/L | 10.0 | 101 | 90-110 | 0 | 20 | |

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: Severus

Method: 2320B-1997  MDL Date: 08/21/2018 15:58

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Alkalinity | | 5 | 2.6 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: Severus

Method: 2320B-1997  XMDL Date: 04/25/2017 09:53

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Alkalinity | | 5 | 2.6 |

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: VERONICA

Method: 300.0  MDL Date: 05/02/2017 14:42

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Sulfate | | 1 | 0.348 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: VERONICA

Method: 300.0  XMDL Date: 05/02/2017 14:43

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Sulfate | | 1 | 0.348 |

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: TOC7

Method: 9060A  MDL Date: 01/16/2012 09:25

| Analyte | Wavelength/ Mass | RL (mg/L) | MDL (mg/L) |
|---|---|---|---|
| Total Organic Carbon | | 1 | 0.5 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job Number: 240-112234-1

SDG Number:

Matrix: Water  Instrument ID: TOC7

Method: 9060A  XMDL Date: 01/16/2012 09:26

| Analyte | Wavelength/ Mass | XRL (mg/L) | XMDL (mg/L) |
|---|---|---|---|
| Total Organic Carbon | | 1 | 0.5 |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: Severus  Analysis Method: 2320B-1997

Start Date: 05/17/2019 14:54  End Date: 05/17/2019 18:27

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Alk | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:09 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:27 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:51 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:03 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:22 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:31 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:40 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:47 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:52 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:56 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:01 | | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-382067/29 | 1 | T | 17:05 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-382067/30 | 1 | T | 17:09 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:30 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:40 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:49 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:58 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: Severus  Analysis Method: 2320B-1997

Start Date: 05/17/2019 14:54  End Date: 05/17/2019 18:27

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Alk | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112182-D-4 DU | 1 | T | 18:02 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:07 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:11 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:21 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112234-2 | 1 | T | 18:25 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:27 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: VERONICA  Analysis Method: 300.0

Start Date: 04/13/2019 02:17  End Date: 04/13/2019 05:38

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | |
| STD1 240-376335/1 IC | 1 | | 02:17 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD2 240-376335/2 IC | 1 | | 02:37 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD3 240-376335/3 IC | 1 | | 02:57 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD4 240-376335/4 IC | 1 | | 03:17 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD5 240-376335/5 ICRT | 1 | | 03:37 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD6 240-376335/6 IC | 1 | | 03:58 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD7 240-376335/7 IC | 1 | | 04:18 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD8 240-376335/8 IC | 1 | | 04:38 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| STD9 240-376335/9 IC | 1 | | 04:58 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICV 240-376335/10 | 1 | | 05:18 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ICB 240-376335/11 | 1 | | 05:38 | X | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: VERONICA  Analysis Method: 300.0

Start Date: 05/21/2019 16:54  End Date: 05/22/2019 07:20

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-382420/1 | 1 | | 16:54 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-382420/2 | 1 | | 17:14 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 240-382420/3 | 1 | T | 17:34 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 240-382420/4 | 1 | T | 17:54 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:14 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:55 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 20:35 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-382420/13 | 1 | | 20:56 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-382420/14 | 1 | | 21:16 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 21:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-111424-A-5 MS | 1 | T | 21:56 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-111424-A-5 MSD | 1 | T | 22:16 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:36 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:57 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112234-2 | 1 | T | 23:57 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-382420/25 | 1 | | 00:57 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-382420/26 | 1 | | 01:17 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:37 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:38 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 04:18 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-382420/37 | | | 04:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-382420/38 | | | 05:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:39 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 05:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-382420/43 | | | 06:59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-382420/44 | | | 07:20 | | | | | | | | | | | | | | | | | | | | | | | | | |

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Instrument ID: VERONICA  Analysis Method: 300.0

Start Date: 05/21/2019 16:54  End Date: 05/22/2019 07:20

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SO4 | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Nashville  Job No.: 240-112234-1

SDG No.:

Instrument ID: TOC7  Analysis Method: 9060A

Start Date: 05/10/2019 11:58  End Date: 05/11/2019 04:31

| Lab Sample Id | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TOC | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:20 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MB 490-594412/3 | 1 | T | 12:44 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/4 | 1 | | 13:08 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/5 | 1 | | 13:31 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCS 490-594412/6 | 1 | T | 13:56 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| LCSD 490-594412/7 | 1 | T | 15:00 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:29 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 240-112234-2 | 1 | T | 17:08 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:28 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:54 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:26 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:53 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 490-173121-H-2 MS | 1 | T | 20:19 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 490-173121-H-2 MSD | 1 | T | 20:46 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/20 | 1 | | 21:12 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/21 | 1 | | 21:35 | X | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 22:32 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 23:45 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:17 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 00:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:19 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 01:58 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:23 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 02:46 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:15 | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 03:42 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCV 490-594412/34 | | | 04:08 | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCB 490-594412/35 | | | 04:31 | | | | | | | | | | | | | | | | | | | | | | | | | |

Prep Types:
T = Total/NA

FORM XIII-IN

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 382067  Batch Start Date: 05/17/19 14:54  Batch Analyst: Moser, Morgan

Batch Method: 2320B-1997  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | CalcMsg | FinalAmount | WCPHENOMINER 00025 | | |
|---|---|---|---|---|---|---|---|---|---|
| LCS 240-382067/29 | | 2320B-1997 | | 10 mL | BuretStart2 is blank | 10 mL | 10 mL | | |
| MB 240-382067/30 | | 2320B-1997 | | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112182-D-4 DU | | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |
| 240-112234-I-2 | MRC-NMW-2S-050719 | 2320B-1997 | T | 10 mL | BuretStart2 is blank | 10 mL | | | |

| Batch Notes | |
|---|---|
| Acid ID | 4131080 |
| pH Buffer 1 ID | 4-4159474 |
| pH Buffer 2 ID | 74159477 |
| pH Buffer 3 ID | 10-3892956 |
| pH Buffer 4 ID | 12-4094593 |
| Nominal Amount Used | 10 mL |
| Probe ID | WCP137 |
| Normality of First Titrant | 0.02 N |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 376335  Batch Start Date: 04/13/19 02:17  Batch Analyst: Weimer, Joshua W

Batch Method: 300.0  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | WCICCALSOLN 00296 | WCICLCS 00704 | | | |
|---|---|---|---|---|---|---|---|---|---|
| STD1 240-376335/1 IC | | 300.0 | | 5 mL | 0.025 mL | | | | |
| STD2 240-376335/2 IC | | 300.0 | | 5 mL | 0.125 mL | | | | |
| STD3 240-376335/3 IC | | 300.0 | | 5 mL | 0.25 mL | | | | |
| STD4 240-376335/4 IC | | 300.0 | | 5 mL | 0.5 mL | | | | |
| STD5 240-376335/5 ICRT | | 300.0 | | 5 mL | 1.25 mL | | | | |
| STD6 240-376335/6 IC | | 300.0 | | 5 mL | 2 mL | | | | |
| STD7 240-376335/7 IC | | 300.0 | | 5 mL | 2.5 mL | | | | |
| STD8 240-376335/8 IC | | 300.0 | | 5 mL | 3.75 mL | | | | |
| STD9 240-376335/9 IC | | 300.0 | | 5 mL | 5 mL | | | | |
| ICV 240-376335/10 | | 300.0 | | 5 mL | | 5 mL | | | |
| ICB 240-376335/11 | | 300.0 | | 5 mL | | | | | |

| Batch Notes | |
|---|---|
| Eluent 1 ID | Water |

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 382006  Batch Start Date: 05/19/19 19:47  Batch Analyst: Weimer, Joshua W

Batch Method: 300.0  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | WCICLCS 00709 | WCICSOLNA1 00020 | WCICSOLNB1 00021 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-382006/3 | | 300.0 | | 5 mL | | | | | |
| LCS 240-382006/4 | | 300.0 | | 5 mL | 5 mL | | | | |
| 240-112150-S-1 MS | | 300.0 | T | 5 mL | | 0.1 mL | 0.1 mL | | |
| 240-112150-S-1 MSD | | 300.0 | T | 5 mL | | 0.1 mL | 0.1 mL | | |
| 240-112234-J-2 | MRC-NMW-2S-050719 | 300.0 | T | 5 mL | | | | | |

| Batch Notes | |
|---|---|
| Eluent 1 ID | Water |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton  Job No.: 240-112234-1

SDG No.:

Batch Number: 382420  Batch Start Date: 05/21/19 16:54  Batch Analyst: Weimer, Joshua W

Batch Method: 300.0  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | WCICCCV 00875 | WCICLCS 00710 | WCICSOLNA1 00020 | WCICSOLNB1 00021 | |
|---|---|---|---|---|---|---|---|---|---|
| CCV 240-382420/1 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-382420/2 | | 300.0 | | 5 mL | | | | | |
| MB 240-382420/3 | | 300.0 | | 5 mL | | | | | |
| LCS 240-382420/4 | | 300.0 | | 5 mL | | 5 mL | | | |
| CCV 240-382420/13 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-382420/14 | | 300.0 | | 5 mL | | | | | |
| 240-111424-A-5 MS | GAMW-01B-042319 | 300.0 | T | 5 mL | | | 0.1 mL | 0.1 mL | |
| 240-111424-A-5 MSD | GAMW-01B-042319 | 300.0 | T | 5 mL | | | 0.1 mL | 0.1 mL | |
| 240-112234-J-2 | MRC-NMW-2S-050719 | 300.0 | T | 5 mL | | | | | |
| CCV 240-382420/25 | | 300.0 | | 5 mL | 5 mL | | | | |
| CCB 240-382420/26 | | 300.0 | | 5 mL | | | | | |

| Batch Notes | |
|---|---|
| Eluent 1 ID | Water |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Nashvill  Job No.: 240-112234-1

SDG No.:

Batch Number: 594412  Batch Start Date: 05/10/19 11:58  Batch Analyst: Patel, Viren R

Batch Method: 9060A  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | TOC_CCV@1000 00043 | TOC_LCS@1000 00023 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 490-594412/3 | | 9060A | | 50 mL | 50 mL | | | | |
| CCV 490-594412/4 | | 9060A | | 50 mL | 50 mL | 1.25 mL | | | |
| CCB 490-594412/5 | | 9060A | | 50 mL | 50 mL | | | | |
| LCS 490-594412/6 | | 9060A | | 50 mL | 50 mL | | 0.5 mL | | |
| LCSD 490-594412/7 | | 9060A | | 50 mL | 50 mL | | 0.5 mL | | |
| 240-112234-H-2 | MRC-NMW-2S-050719 | 9060A | T | 50 mL | 50 mL | | | | |
| 490-173121-H-2 MS | | 9060A | T | 50 mL | 50 mL | | 1 mL | | |
| 490-173121-H-2 MSD | | 9060A | T | 50 mL | 50 mL | | 1 mL | | |
| CCV 490-594412/20 | | 9060A | | 50 mL | 50 mL | 1.25 mL | | | |
| CCB 490-594412/21 | | 9060A | | 50 mL | 50 mL | | | | |

| Batch Notes | |
|---|---|
| Pipette/Syringe/Dispenser ID | 21061149 1011026 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

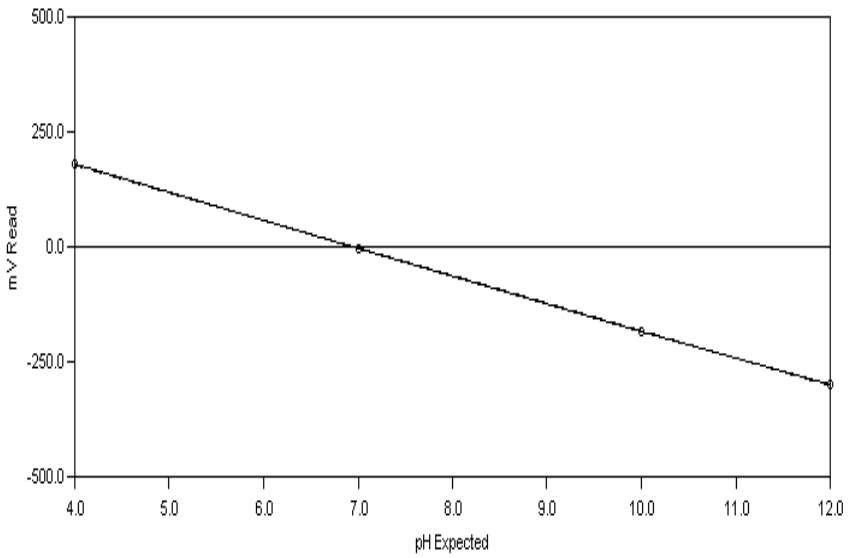
The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Test America-Canton

Report Date: 5/20/2019 : 8:33 AM

## Calibration Report

### Calibration Record # 230




**Calibration Settings**

| | | | |
|---|---|---|---|
| Calibration ID | PH | Date | 5/17/2019 |
| Channel | 1 | Time | 3:02 PM |
| Probe Type | pH | Temperature | 303.16 K 30.01 C |
| Probe ID | PH ELECTRODE | Analysis Type | Single Line Fit |

**Calibration Results**

| | | | |
|---|---|---|---|
| Slope | -60.041 | CorrCoeff | 1.0000 |
| Intercept | -2.464 | Equation: | Y = (-60.041) X + ( -2.464 ) |

**Calibration Validity** **True** Operator

| | Result | Minimum | Maximum |
|---|---|---|---|
| **Slope** | -60.041 | -65.00 | -54.00 |
| **Intercept** | -2.464 | -100.00 | 100.00 |
| **Correlation Coefficient** | 1.0000 | 0.99 | 1.00 |

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

| Calibration Data | Standard | Reading |
|---|---|---|
| | 4.00 | 178.58 |
| | 7.00 | -3.05 |
| | 10.00 | -184.81 |
| | 12.00 | -300.78 |

Severus

# TestAmerica Canton
# Alkalinity 2320B

**Run Number** 506 **Order Number** 20190517-1

| SampleID | Schedule Name | RunDate | RunTime | Temp | pH | palk-ppm | talk-ppm | bcarb-ppm | carb-ppm | hydr-ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| Tap Water | PH-ALK | 5/17/2019 | 2:54 PM | 30.94 | 5.55 | .00 | .86 | .86 | .00 | .00 |
| pH 7 | PH | 5/17/2019 | 3:04 PM | 30.07 | 6.99 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| LCS | PH-ALK | 5/17/2019 | 3:09 PM | 30.10 | 8.46 | 3.73 | 164.47 | 157.00 | 7.47 | .00 |
| MB | PH-ALK | 5/17/2019 | 3:13 PM | 29.88 | 5.59 | .00 | .78 | .78 | .00 | .00 |
| du | PH-ALK | 5/17/2019 | 3:18 PM | 29.64 | 7.94 | .00 | 204.60 | 204.60 | .00 | .00 |
| 180-89845-C-2 | PH-ALK | 5/17/2019 | 3:23 PM | 30.05 | 7.94 | .00 | 204.03 | 204.03 | .00 | .00 |
| 180-89845-C-1 | PH-ALK | 5/17/2019 | 3:27 PM | 30.07 | 7.84 | .00 | 235.90 | 235.90 | .00 | .00 |
| 240-112236-E-1 | PH-ALK | 5/17/2019 | 3:32 PM | 29.73 | 7.12 | .00 | 76.57 | 76.57 | .00 | .00 |
| 180-89796-C-1 | PH-ALK | 5/17/2019 | 3:37 PM | 29.50 | 7.87 | .00 | 43.51 | 43.51 | .00 | .00 |
| 180-89796-C-2 | PH-ALK | 5/17/2019 | 3:42 PM | 29.56 | 8.04 | .00 | 61.53 | 61.53 | .00 | .00 |
| 180-89796-C-3 | PH-ALK | 5/17/2019 | 3:47 PM | 29.71 | 6.56 | .00 | 20.81 | 20.81 | .00 | .00 |
| 180-89796-C-4 | PH-ALK | 5/17/2019 | 3:51 PM | 29.73 | 6.79 | .00 | 17.38 | 17.38 | .00 | .00 |
| pH 7-2 | PH | 5/17/2019 | 3:53 PM | 29.79 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 180-89796-C-5 | PH-ALK | 5/17/2019 | 3:58 PM | 29.56 | 7.60 | .00 | 32.98 | 32.98 | .00 | .00 |
| 180-89796-C-6 | PH-ALK | 5/17/2019 | 4:03 PM | 30.21 | 7.44 | .00 | 28.42 | 28.42 | .00 | .00 |
| 180-89798-C-1 | PH-ALK | 5/17/2019 | 4:08 PM | 30.54 | 7.72 | .00 | 59.40 | 59.40 | .00 | .00 |
| du | PH-ALK | 5/17/2019 | 4:13 PM | 30.78 | 7.76 | .00 | 108.94 | 108.94 | .00 | .00 |
| 180-89798-C-2 | PH-ALK | 5/17/2019 | 4:17 PM | 30.52 | 7.77 | .00 | 107.87 | 107.87 | .00 | .00 |
| 180-89798-C-3 | PH-ALK | 5/17/2019 | 4:22 PM | 30.54 | 7.86 | .00 | 214.78 | 214.78 | .00 | .00 |
| 180-89798-C-4 | PH-ALK | 5/17/2019 | 4:26 PM | 30.58 | 7.64 | .00 | 174.26 | 174.26 | .00 | .00 |
| 180-89798-C-5 | PH-ALK | 5/17/2019 | 4:31 PM | 30.49 | 7.70 | .00 | 170.22 | 170.22 | .00 | .00 |
| 180-89798-C-6 | PH-ALK | 5/17/2019 | 4:36 PM | 30.91 | 7.38 | .00 | 136.07 | 136.07 | .00 | .00 |
| 180-89798-C-7 | PH-ALK | 5/17/2019 | 4:40 PM | 30.91 | 7.51 | .00 | 160.83 | 160.83 | .00 | .00 |
| pH 7-3 | PH | 5/17/2019 | 4:42 PM | 30.96 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 180-89798-C-8 | PH-ALK | 5/17/2019 | 4:47 PM | 30.87 | 7.82 | .00 | 180.95 | 180.95 | .00 | .00 |
| 180-89798-C-9 | PH-ALK | 5/17/2019 | 4:52 PM | 31.56 | 7.74 | .00 | 162.77 | 162.77 | .00 | .00 |
| 180-89798-C-10 | PH-ALK | 5/17/2019 | 4:56 PM | 31.72 | 8.06 | .00 | 253.36 | 253.36 | .00 | .00 |

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**Run Number** 506 **Order Number** 20190517-1

| SampleID | Schedule Name | RunDate | RunTime | Temp | pH | palk-ppm | talk-ppm | bcarb-ppm | carb-ppm | hydr-ppm |
|---|---|---|---|---|---|---|---|---|---|---|
| 180-89798-C-11 | PH-ALK | 5/17/2019 | 5:01 PM | 31.51 | 7.56 | .00 | 156.98 | 156.98 | .00 | .00 |
| lcs | PH-ALK | 5/17/2019 | 5:05 PM | 31.47 | 8.48 | 3.35 | 163.67 | 156.96 | 6.71 | .00 |
| mb | PH-ALK | 5/17/2019 | 5:09 PM | 31.54 | 5.53 | .00 | .31 | .31 | .00 | .00 |
| du | PH-ALK | 5/17/2019 | 5:13 PM | 31.54 | 8.08 | .00 | 272.42 | 272.42 | .00 | .00 |
| 180-89798-C-12 | PH-ALK | 5/17/2019 | 5:18 PM | 31.77 | 8.10 | .00 | 278.38 | 278.38 | .00 | .00 |
| 180-89798-C-13 | PH-ALK | 5/17/2019 | 5:23 PM | 31.86 | 7.87 | .00 | 179.95 | 179.95 | .00 | .00 |
| 240-112150-M-1 | PH-ALK | 5/17/2019 | 5:28 PM | 32.05 | 7.96 | .00 | 305.01 | 305.01 | .00 | .00 |
| pH 7-4 | PH | 5/17/2019 | 5:30 PM | 31.84 | 7.03 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 240-112179-L-2 | PH-ALK | 5/17/2019 | 5:34 PM | 31.79 | 7.98 | .00 | 323.01 | 323.01 | .00 | .00 |
| 240-112179-L-3 | PH-ALK | 5/17/2019 | 5:40 PM | 32.23 | 8.00 | .00 | 407.88 | 407.88 | .00 | .00 |
| 240-112179-L-5 | PH-ALK | 5/17/2019 | 5:45 PM | 32.15 | 8.02 | .00 | 352.98 | 352.98 | .00 | .00 |
| 240-112179-L-6 | PH-ALK | 5/17/2019 | 5:49 PM | 32.13 | 8.09 | .00 | 271.24 | 271.24 | .00 | .00 |
| 240-112182-D-2 | PH-ALK | 5/17/2019 | 5:54 PM | 32.13 | 6.43 | .00 | 11.63 | 11.63 | .00 | .00 |
| 240-112182-D-3 | PH-ALK | 5/17/2019 | 5:58 PM | 32.15 | 7.36 | .00 | 114.38 | 114.38 | .00 | .00 |
| du | PH-ALK | 5/17/2019 | 6:02 PM | 31.93 | 6.24 | .00 | 22.03 | 22.03 | .00 | .00 |
| 240-112182-D-4 | PH-ALK | 5/17/2019 | 6:07 PM | 31.89 | 6.25 | .00 | 21.76 | 21.76 | .00 | .00 |
| 240-112182-D-5 | PH-ALK | 5/17/2019 | 6:11 PM | 32.03 | 6.47 | .00 | 30.94 | 30.94 | .00 | .00 |
| 240-112182-D-6 | PH-ALK | 5/17/2019 | 6:15 PM | 32.00 | 6.45 | .00 | 28.57 | 28.57 | .00 | .00 |
| pH 7-5 | PH | 5/17/2019 | 6:17 PM | 31.98 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |
| 240-112182-D-7 | PH-ALK | 5/17/2019 | 6:21 PM | 31.91 | 7.43 | .00 | 110.83 | 110.83 | .00 | .00 |
| 240-112234-I-2 | PH-ALK | 5/17/2019 | 6:25 PM | 32.08 | 6.54 | .00 | 67.25 | 67.25 | .00 | .00 |
| pH 7-5 | PH | 5/17/2019 | 6:27 PM | 32.00 | 7.02 | -1.00 | -1.00 | -1.00 | -1.00 | -1.00 |

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Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-001_02_ECD_1.d
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 13-Apr-2019 02:17:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-001
Misc. Info.: STD1
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:23 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 12:58:42

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.070 | 4.067 | 0.003 | 1127777 | 0.0500 | 0.0457 | |
| 2 | Chloride | 6.440 | 6.430 | 0.010 | 16076553 | 1.00 | 1.01 | |
| 3 | Nitrite as N | 7.910 | 7.900 | 0.010 | 1717929 | 0.0500 | 0.0481 | |
| 4 | Bromide | 9.950 | 9.907 | 0.043 | 1191702 | 0.2000 | 0.1819 | |
| 5 | Nitrate as N | 11.313 | 11.257 | 0.056 | 1740841 | 0.0500 | 0.0467 | |
| 6 | Sulfate | 14.990 | 14.707 | 0.283 | 11523753 | 1.00 | 0.99 | |
| S 7 | Nitrate Nitrite as N | | | | | | 0.0949 | |

## Reagents:

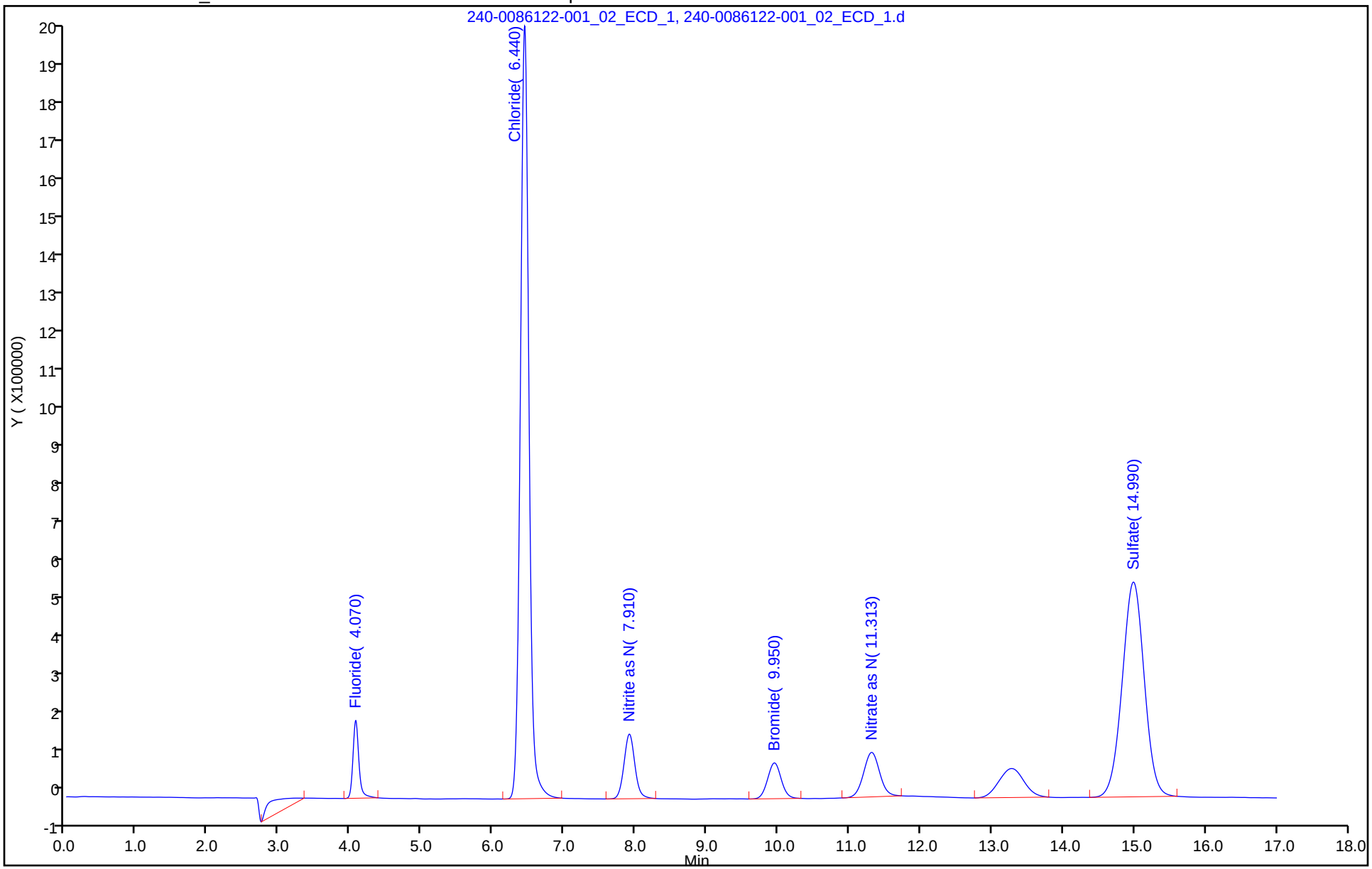
WCICCALSOLN_00296 Amount Added: 0.03 Units: mL

Report Date: 15-Apr-2019 13:35:23 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-001_02_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 02:17:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD1 | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-002_03_ECD_1.d
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 13-Apr-2019 02:37:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-002
Misc. Info.: STD2
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:24 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 12:59:39

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.060 | 4.067 | -0.007 | 6064154 | 0.2500 | 0.2456 | M |
| 2 | Chloride | 6.430 | 6.430 | 0.000 | 80435157 | 5.00 | 5.07 | |
| 3 | Nitrite as N | 7.900 | 7.900 | 0.000 | 8885079 | 0.2500 | 0.2490 | |
| 4 | Bromide | 9.933 | 9.907 | 0.026 | 6190372 | 1.00 | 0.9451 | |
| 5 | Nitrate as N | 11.300 | 11.257 | 0.043 | 8864449 | 0.2500 | 0.2380 | |
| 6 | Sulfate | 14.950 | 14.707 | 0.243 | 58466306 | 5.00 | 5.04 | |
| S 7 | Nitrate Nitrite as N | | | | | | 0.4870 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

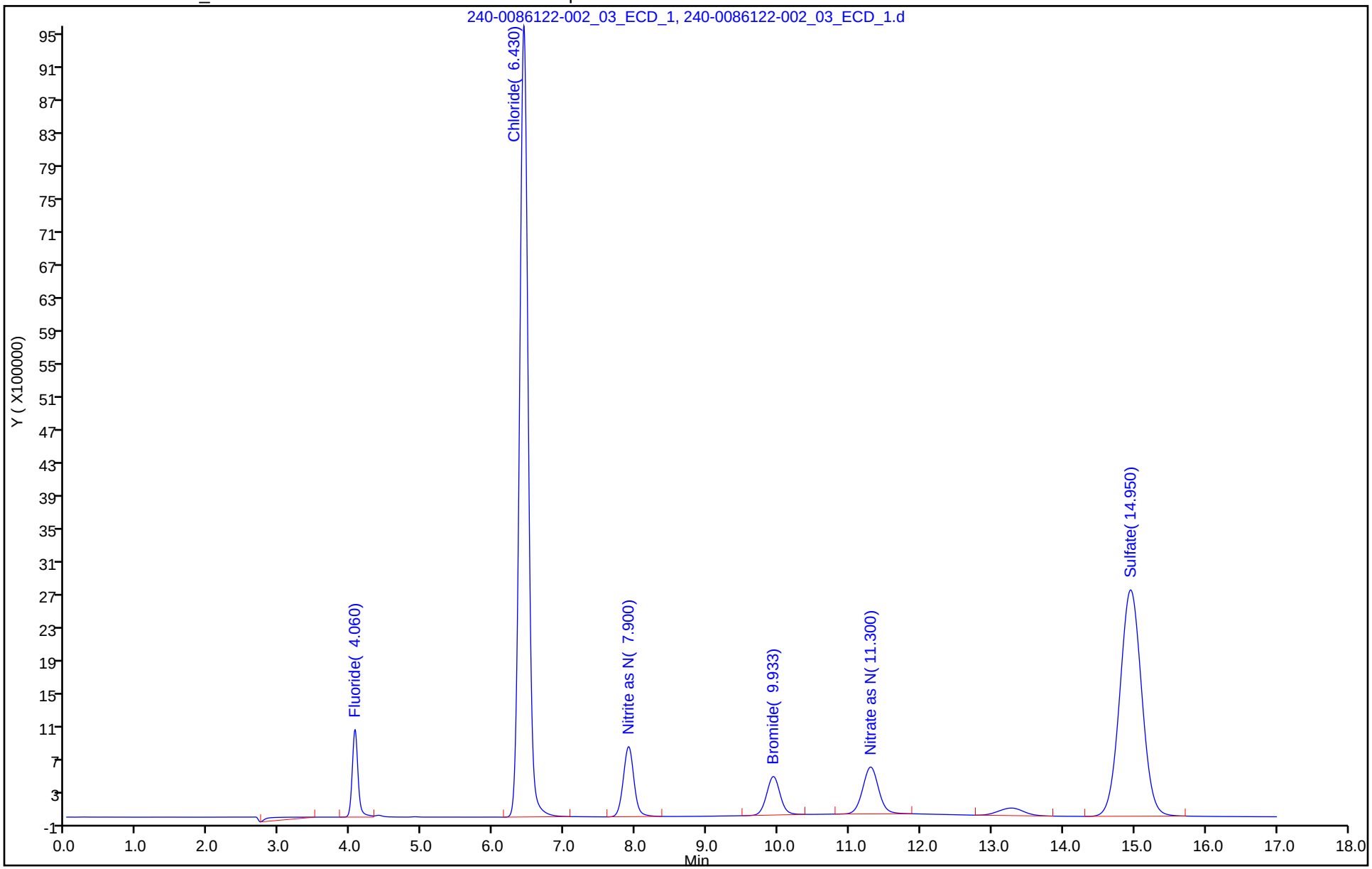
WCICCALSOLN_00296 Amount Added: 0.13 Units: mL

Report Date: 15-Apr-2019 13:35:24 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-002_03_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 02:37:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD2 | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

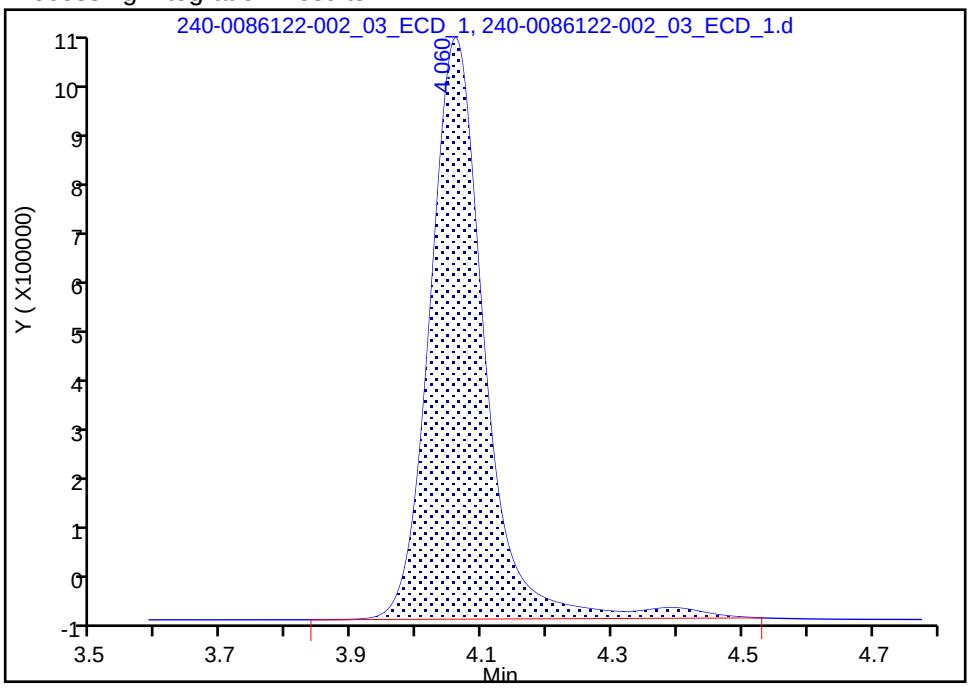
Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-002_03_ECD_1.d
Injection Date: 13-Apr-2019 02:37:00 Instrument ID: VERONICA
Lims ID: STD2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_Veronica Limit Group: WET IC ICAL
Column: Detector IC 0001

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

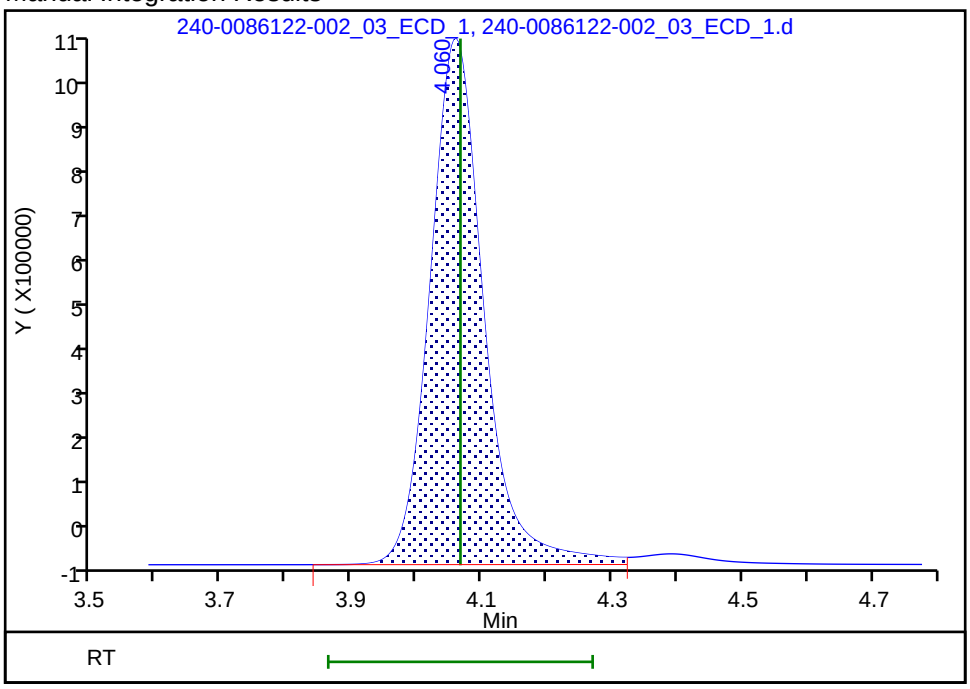
Processing Integration Results

RT: 4.06
Area: 6166858
Amount: 0.248550
Amount Units: ug/ml




Manual Integration Results

RT: 4.06
Area: 6064154
Amount: 0.245637
Amount Units: ug/ml




Reviewer: weimerj, 15-Apr-2019 12:59:19
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-003_04_ECD_1.d
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 13-Apr-2019 02:57:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-003
Misc. Info.: STD3
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:25 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 12:59:52

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.073 | 4.067 | 0.006 | 12271804 | 0.5000 | 0.4971 | |
| 2 | Chloride | 6.443 | 6.430 | 0.013 | 156378873 | 10.0 | 9.85 | |
| 3 | Nitrite as N | 7.913 | 7.900 | 0.013 | 17687396 | 0.5000 | 0.4957 | |
| 4 | Bromide | 9.943 | 9.907 | 0.036 | 12399957 | 2.00 | 1.89 | |
| 5 | Nitrate as N | 11.303 | 11.257 | 0.046 | 17706092 | 0.5000 | 0.4753 | |
| 6 | Sulfate | 14.930 | 14.707 | 0.223 | 113963067 | 10.0 | 9.83 | |
| S 7 | Nitrate Nitrite as N | | | | | | 0.9710 | |

## Reagents:

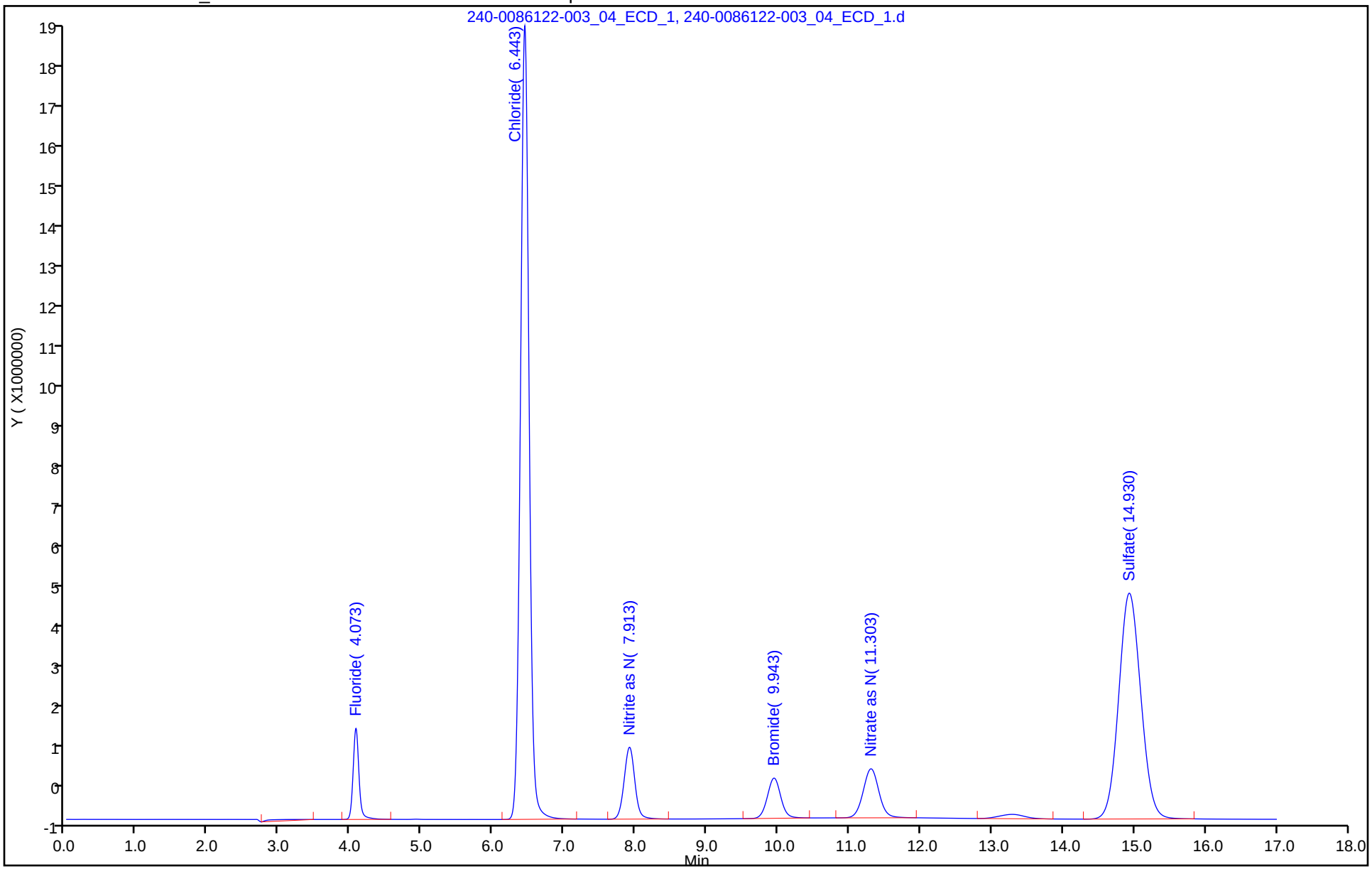
WCICCALSOLN_00296 Amount Added: 0.25 Units: mL

Report Date: 15-Apr-2019 13:35:25 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-003_04_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 02:57:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD3 | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-004_05_ECD_1.d
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 13-Apr-2019 03:17:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-004
Misc. Info.: STD4
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:25 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:00:03

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.063 | 4.067 | -0.004 | 25258251 | 1.00 | 1.02 | |
| 2 | Chloride | 6.430 | 6.430 | 0.000 | 313372796 | 20.0 | 19.7 | |
| 3 | Nitrite as N | 7.903 | 7.900 | 0.003 | 36126044 | 1.00 | 1.01 | |
| 4 | Bromide | 9.927 | 9.907 | 0.020 | 25547708 | 4.00 | 3.90 | |
| 5 | Nitrate as N | 11.283 | 11.257 | 0.026 | 36234087 | 1.00 | 0.9727 | |
| 6 | Sulfate | 14.863 | 14.707 | 0.156 | 229161548 | 20.0 | 19.8 | |
| S 7 | Nitrate Nitrite as N | | | | | | 1.99 | |

## Reagents:

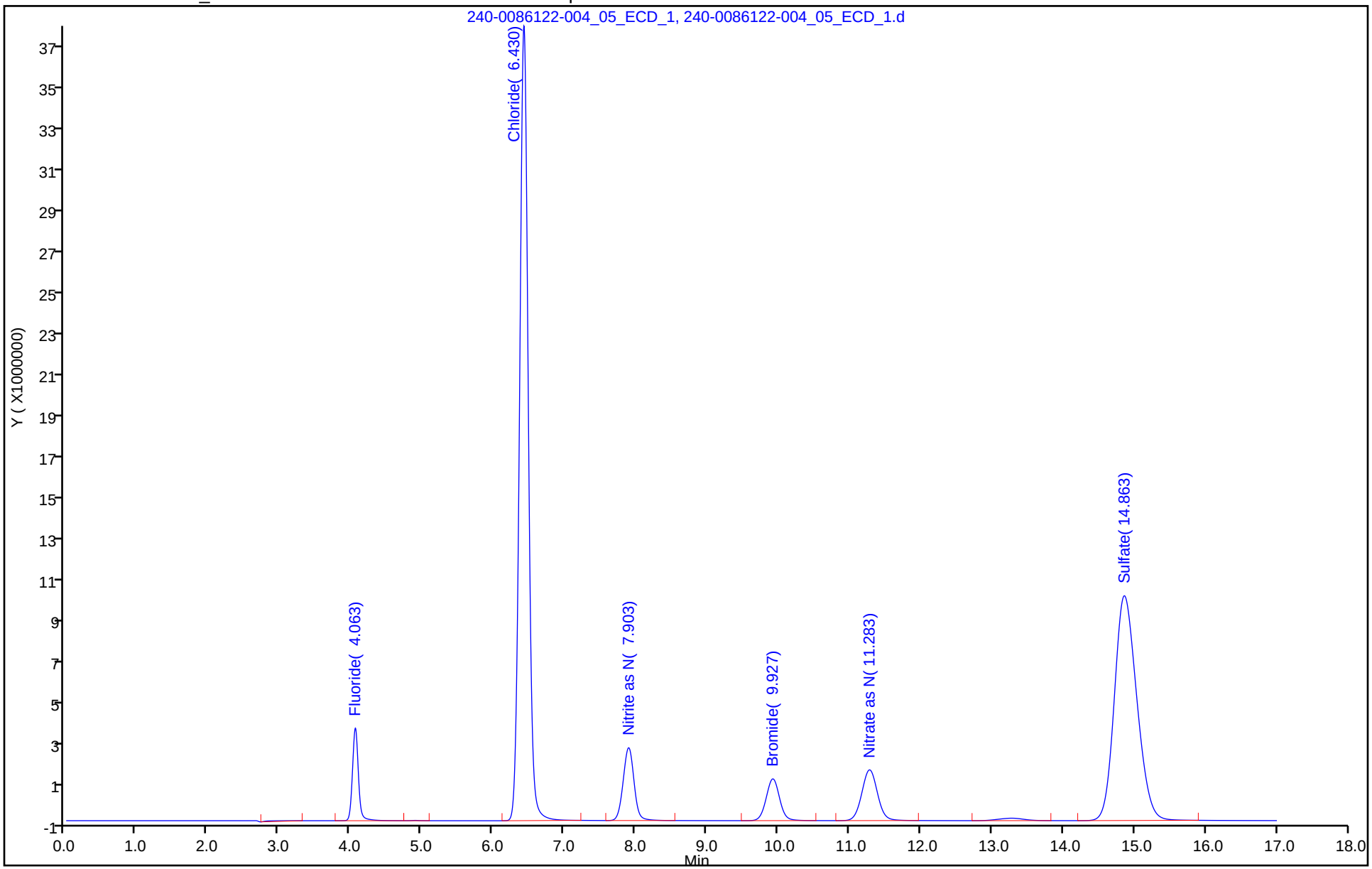
WCICCALSOLN_00296 Amount Added: 0.50 Units: mL

Report Date: 15-Apr-2019 13:35:26 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-004_05_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 03:17:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD4 | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-005_06_ECD_1.d
Lims ID: STD5
Client ID:
Sample Type: ICRT Calib Level: 5
Inject. Date: 13-Apr-2019 03:37:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-005
Misc. Info.: STD5
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:26 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:00:46

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 4.067 | 4.067 | 0.000 | 64307380 | 2.50 | 2.60 | M |
| 2 Chloride | 6.430 | 6.430 | 0.000 | 795435997 | 50.0 | 50.1 | |
| 3 Nitrite as N | 7.900 | 7.900 | 0.000 | 91671343 | 2.50 | 2.57 | |
| 4 Bromide | 9.907 | 9.907 | 0.000 | 67259086 | 10.0 | 10.3 | |
| 5 Nitrate as N | 11.257 | 11.257 | 0.000 | 95129465 | 2.50 | 2.55 | |
| 6 Sulfate | 14.707 | 14.707 | 0.000 | 583555138 | 50.0 | 50.3 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

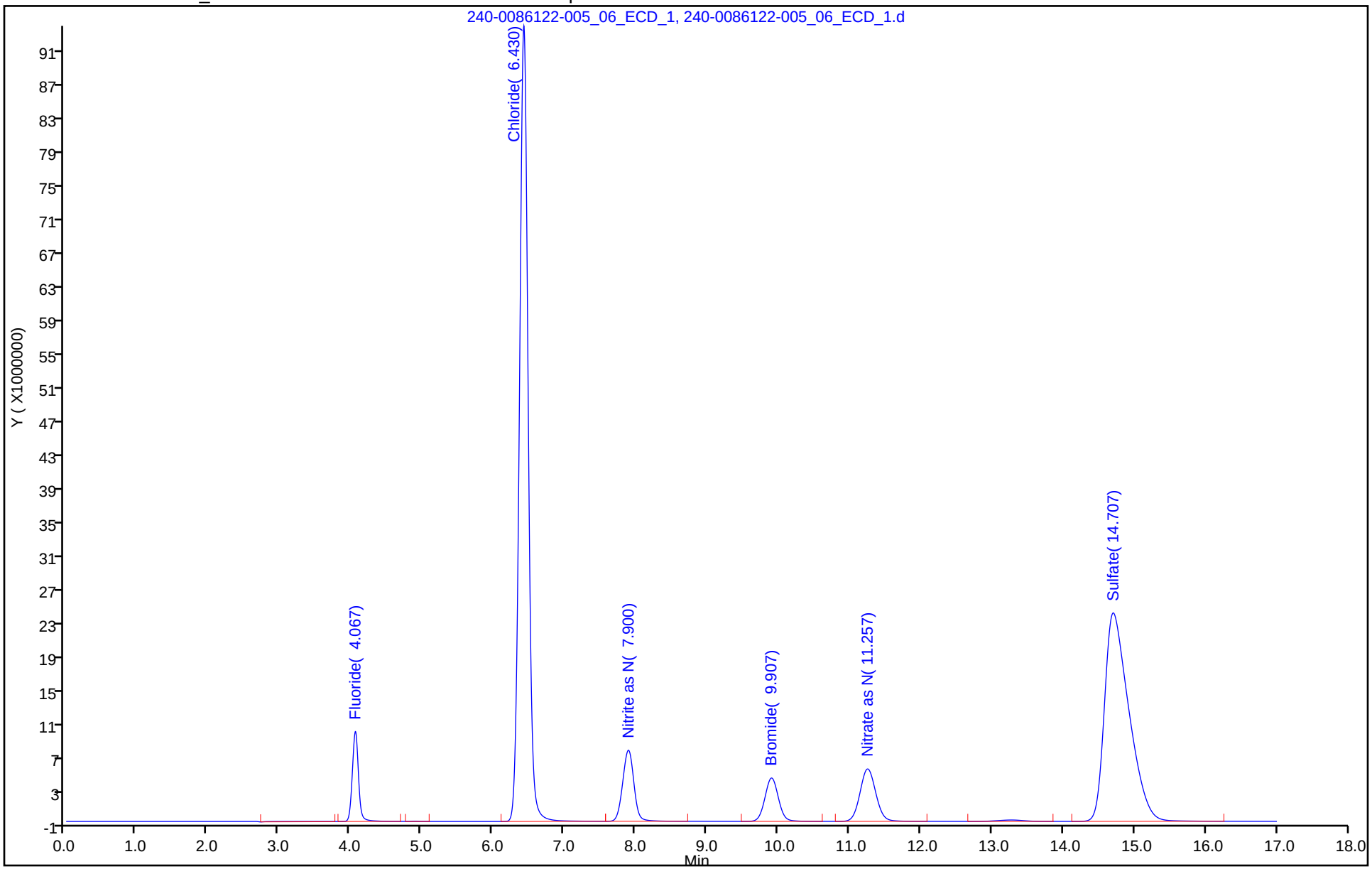
WCICCALSOLN_00296 Amount Added: 1.25 Units: mL

Report Date: 15-Apr-2019 13:35:26 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-005_06_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 03:37:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD5 | | | Worklist Smp#: | 5 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

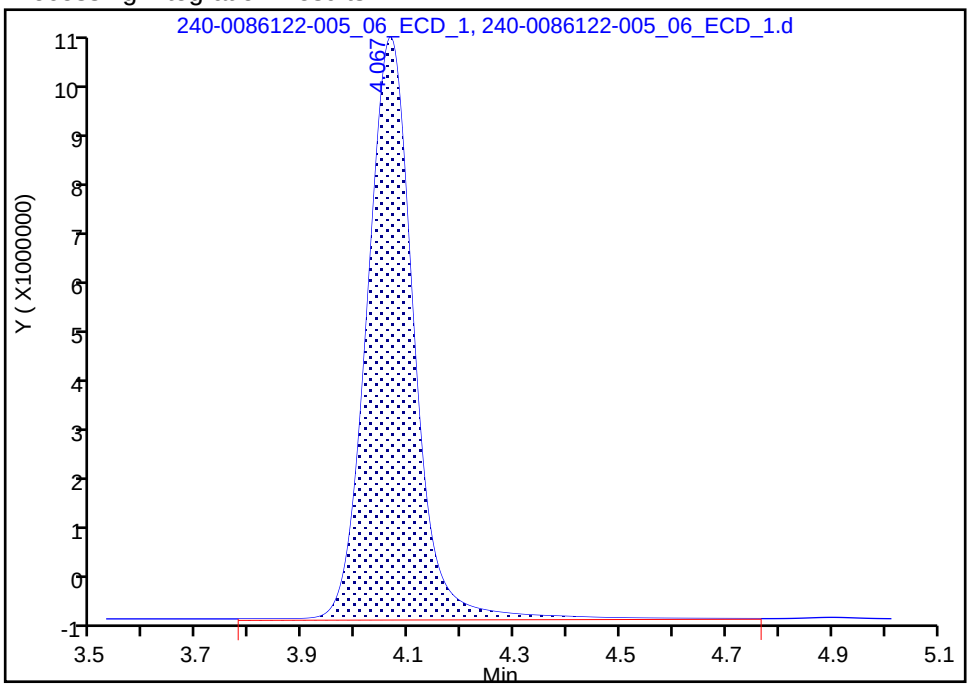
Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-005_06_ECD_1.d
Injection Date: 13-Apr-2019 03:37:00 Instrument ID: VERONICA
Lims ID: STD5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_Veronica Limit Group: WET IC ICAL
Column: Detector IC 0001

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

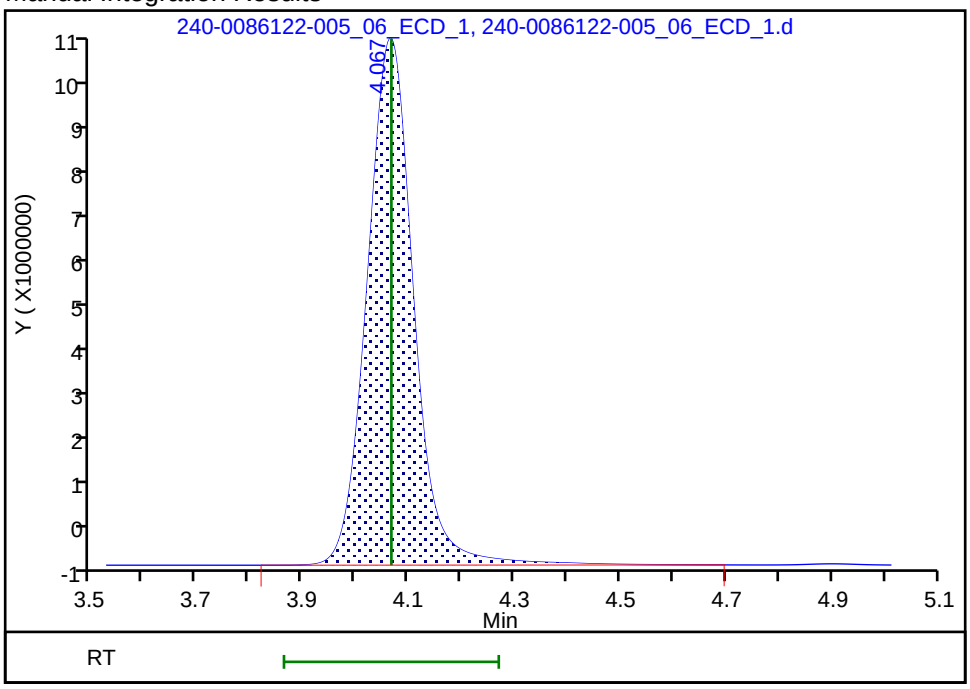
Processing Integration Results

RT: 4.07
Area: 65456678
Amount: 2.643043
Amount Units: ug/ml




Manual Integration Results

RT: 4.07
Area: 64307380
Amount: 2.604863
Amount Units: ug/ml




Reviewer: weimerj, 15-Apr-2019 13:00:18
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-006_07_ECD_1.d
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 13-Apr-2019 03:58:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-006
Misc. Info.: STD6
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:27 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:01:01

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.070 | 4.067 | 0.003 | 101961485 | 4.00 | 4.13 | |
| 2 | Chloride | 6.433 | 6.430 | 0.003 | 1270849457 | 80.0 | 80.1 | |
| 3 | Nitrite as N | 7.900 | 7.900 | 0.000 | 145021310 | 4.00 | 4.06 | |
| 4 | Bromide | 9.897 | 9.907 | -0.010 | 108815634 | 16.0 | 16.6 | |
| 5 | Nitrate as N | 11.233 | 11.257 | -0.024 | 153723217 | 4.00 | 4.13 | |
| 6 | Sulfate | 14.577 | 14.707 | -0.130 | 931359174 | 80.0 | 80.4 | |
| S 7 | Nitrate Nitrite as N | | | | | | 8.19 | |

## Reagents:

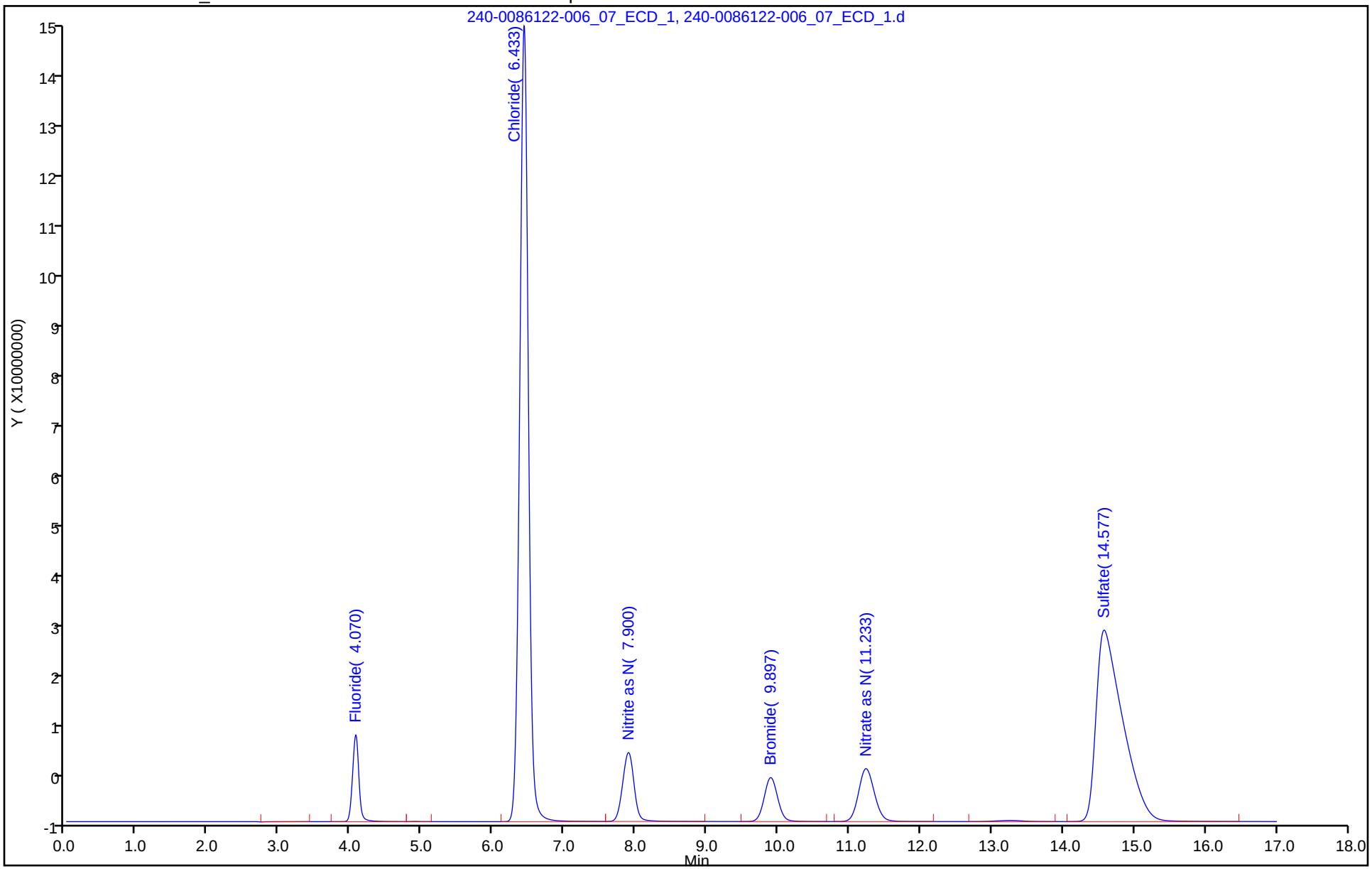
WCICCALSOLN_00296 Amount Added: 2.00 Units: mL

Report Date: 15-Apr-2019 13:35:27 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-006_07_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 03:58:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD6 | | | Worklist Smp#: | 6 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-007_08_ECD_1.d
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 13-Apr-2019 04:18:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-007
Misc. Info.: STD7
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:28 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:01:39

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.080 | 4.067 | 0.013 | 126356347 | 5.00 | 5.12 | M |
| 2 | Chloride | 6.443 | 6.430 | 0.013 | 1591043339 | 100.0 | 100.3 | |
| 3 | Nitrite as N | 7.907 | 7.900 | 0.007 | 180817649 | 5.00 | 5.07 | |
| 4 | Bromide | 9.897 | 9.907 | -0.010 | 137150215 | 20.0 | 20.9 | |
| 5 | Nitrate as N | 11.227 | 11.257 | -0.030 | 193731033 | 5.00 | 5.20 | |
| 6 | Sulfate | 14.513 | 14.707 | -0.194 | 1167048855 | 100.0 | 100.7 | |
| S 7 | Nitrate Nitrite as N | | | | | | 10.3 | |

## QC Flag Legend

Review Flags
M - Manually Integrated

## Reagents:

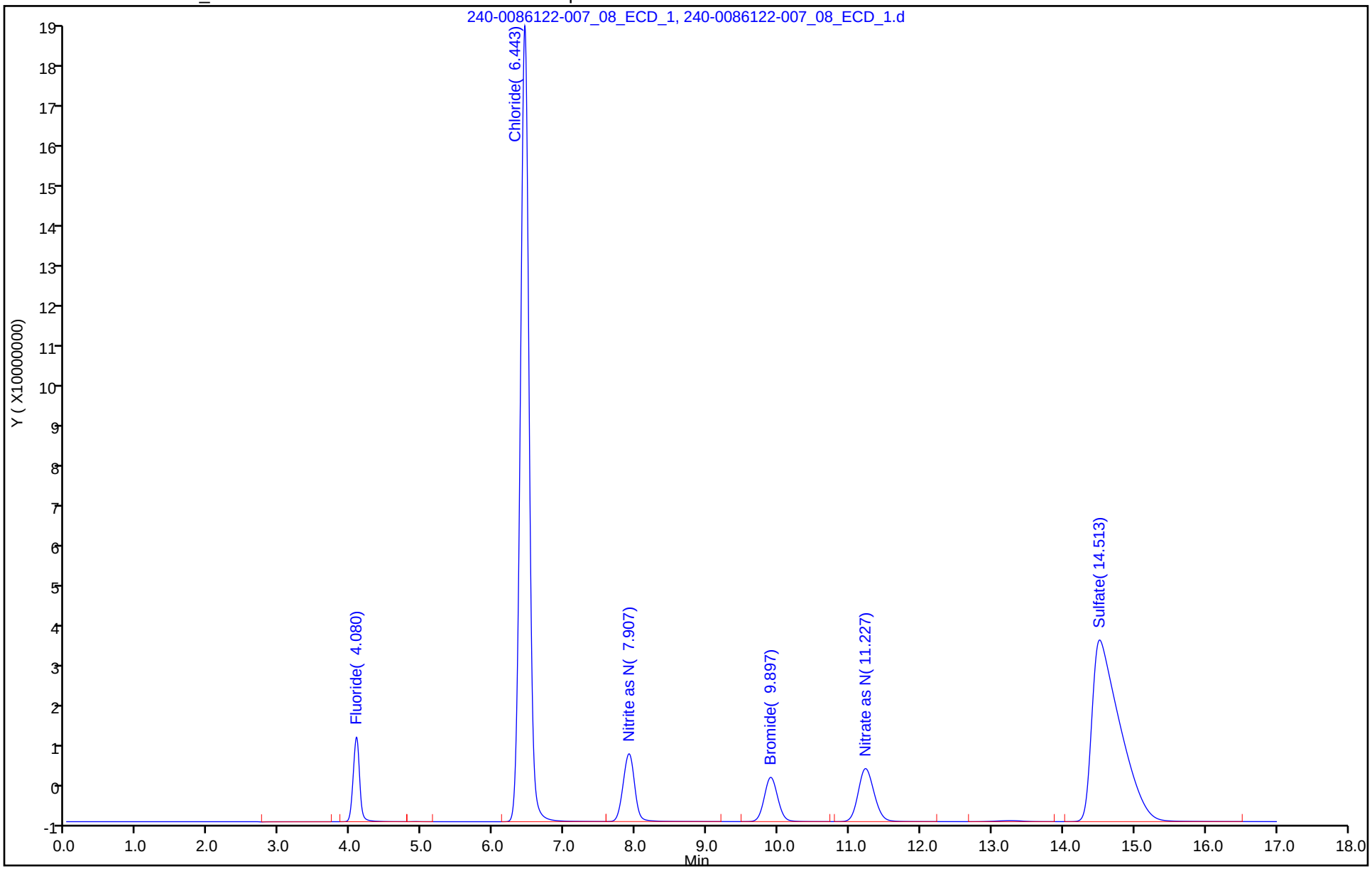
WCICCALSOLN_00296 Amount Added: 2.50 Units: mL

Report Date: 15-Apr-2019 13:35:28 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-007_08_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 04:18:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD7 | | | Worklist Smp#: | 7 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

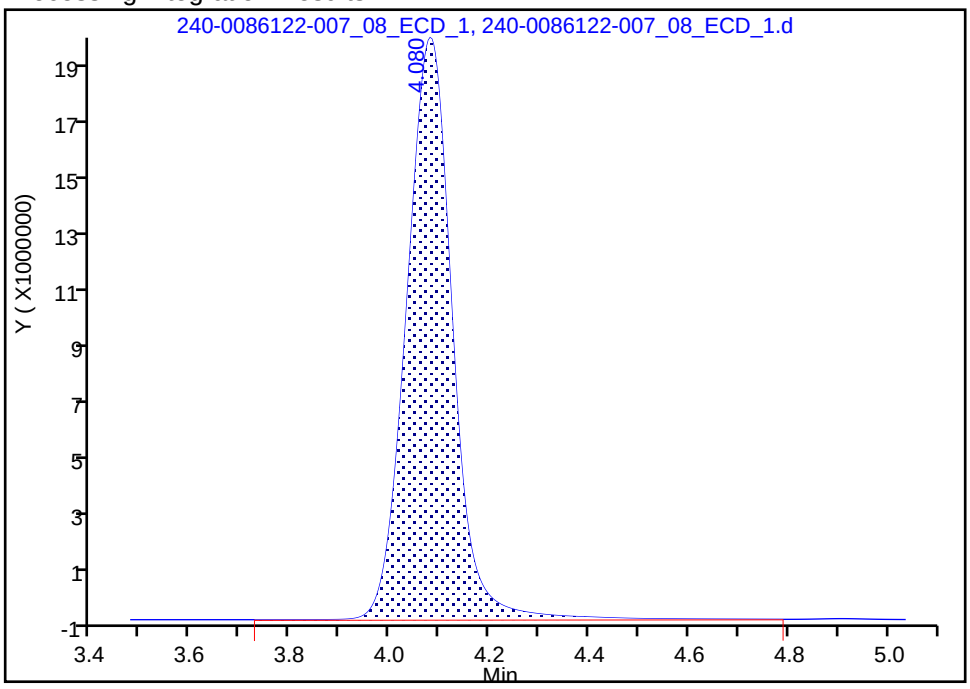
Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-007_08_ECD_1.d
Injection Date: 13-Apr-2019 04:18:00 Instrument ID: VERONICA
Lims ID: STD7
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Method: 300_Veronica Limit Group: WET IC ICAL
Column: Detector IC 0001

## 1 Fluoride, CAS: 16984-48-8

Signal: 1

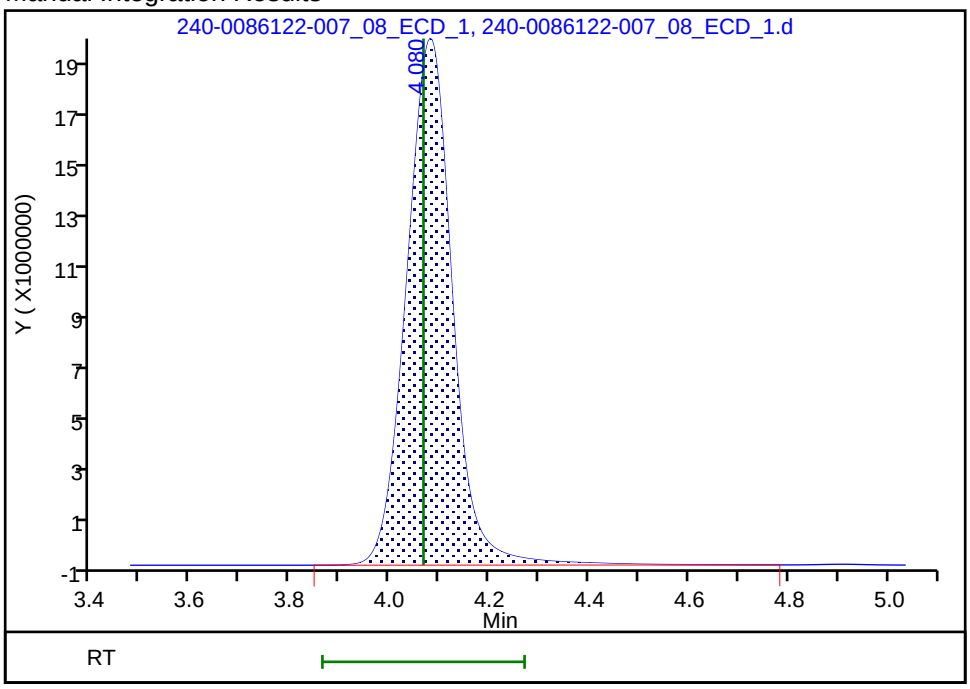
Processing Integration Results

RT: 4.08
Area: 127577626
Amount: 5.162040
Amount Units: ug/ml




Manual Integration Results

RT: 4.08
Area: 126356347
Amount: 5.118245
Amount Units: ug/ml




Reviewer: weimerj, 15-Apr-2019 13:01:28
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-008_09_ECD_1.d
Lims ID: STD8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 13-Apr-2019 04:38:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-008
Misc. Info.: STD8
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:28 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:01:50

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.087 | 4.067 | 0.020 | 186027829 | 7.50 | 7.54 | |
| 2 | Chloride | 6.450 | 6.430 | 0.020 | 2378677951 | 150.0 | 149.9 | |
| 3 | Nitrite as N | 7.903 | 7.900 | 0.003 | 266754946 | 7.50 | 7.48 | |
| 4 | Bromide | 9.877 | 9.907 | -0.030 | 207319800 | 30.0 | 31.7 | |
| 5 | Nitrate as N | 11.193 | 11.257 | -0.064 | 292359035 | 7.50 | 7.85 | |
| 6 | Sulfate | 14.367 | 14.707 | -0.340 | 1746855314 | 150.0 | 150.7 | |
| S 7 | Nitrate Nitrite as N | | | | | | 15.3 | |

## Reagents:

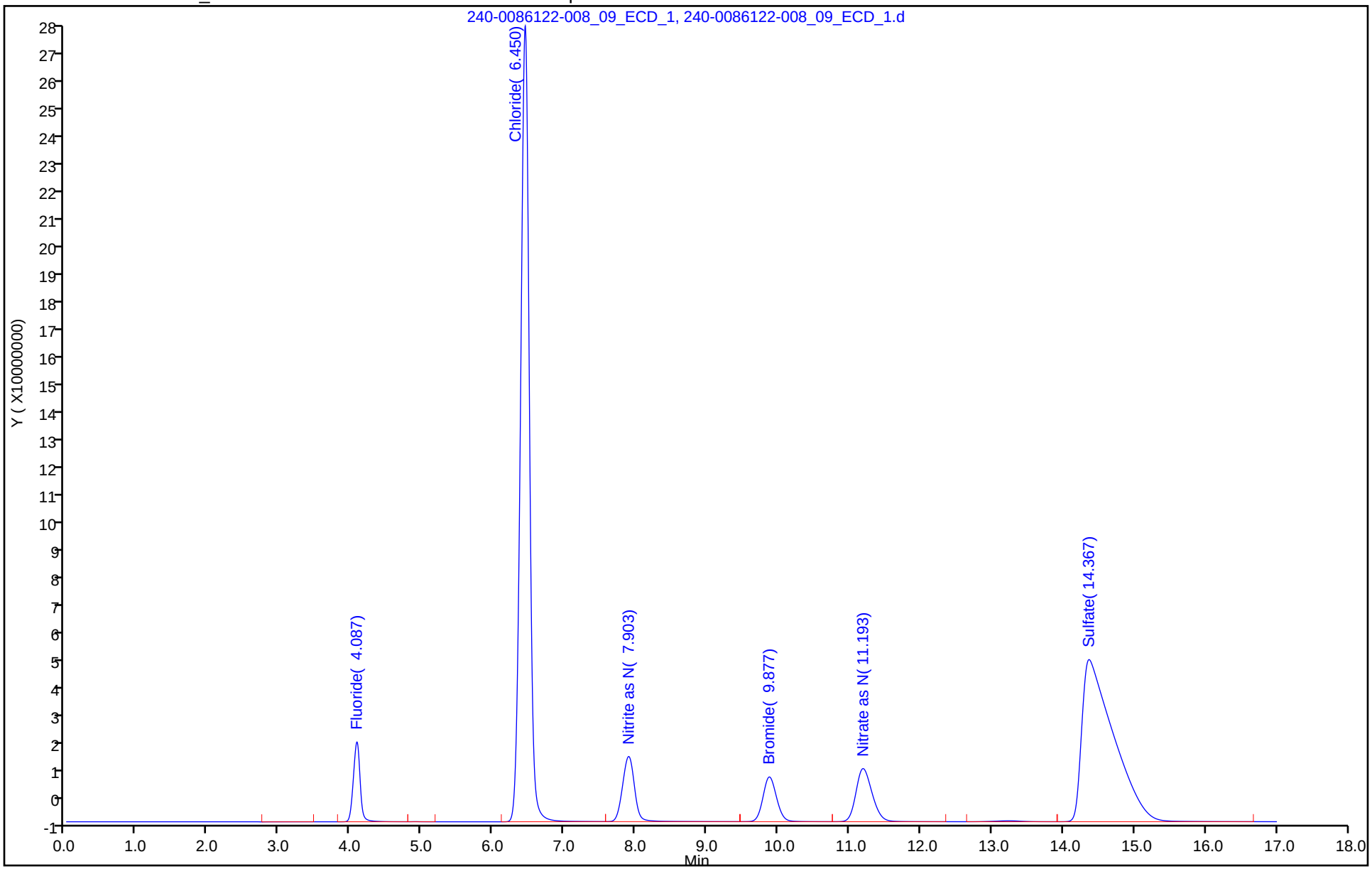
WCICCALSOLN_00296 Amount Added: 3.75 Units: mL

Report Date: 15-Apr-2019 13:35:29 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-008_09_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 04:38:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD8 | | | Worklist Smp#: | 8 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d
Lims ID: STD9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 13-Apr-2019 04:58:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-009
Misc. Info.: STD9
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:29 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:02:08

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.087 | 4.067 | 0.020 | 242845883 | 10.0 | 9.84 | |
| 2 | Chloride | 6.453 | 6.430 | 0.023 | 3160116506 | 200.0 | 199.1 | |
| 3 | Nitrite as N | 7.897 | 7.900 | -0.003 | 350826126 | 10.0 | 9.83 | |
| 4 | Bromide | 9.860 | 9.907 | -0.047 | 276826451 | 40.0 | 42.3 | |
| 5 | Nitrate as N | 11.160 | 11.257 | -0.097 | 391198996 | 10.0 | 10.5 | |
| 6 | Sulfate | 14.240 | 14.707 | -0.467 | 2321874024 | 200.0 | 200.3 | |
| S 7 | Nitrate Nitrite as N | | | | | | 20.3 | |

## Reagents:

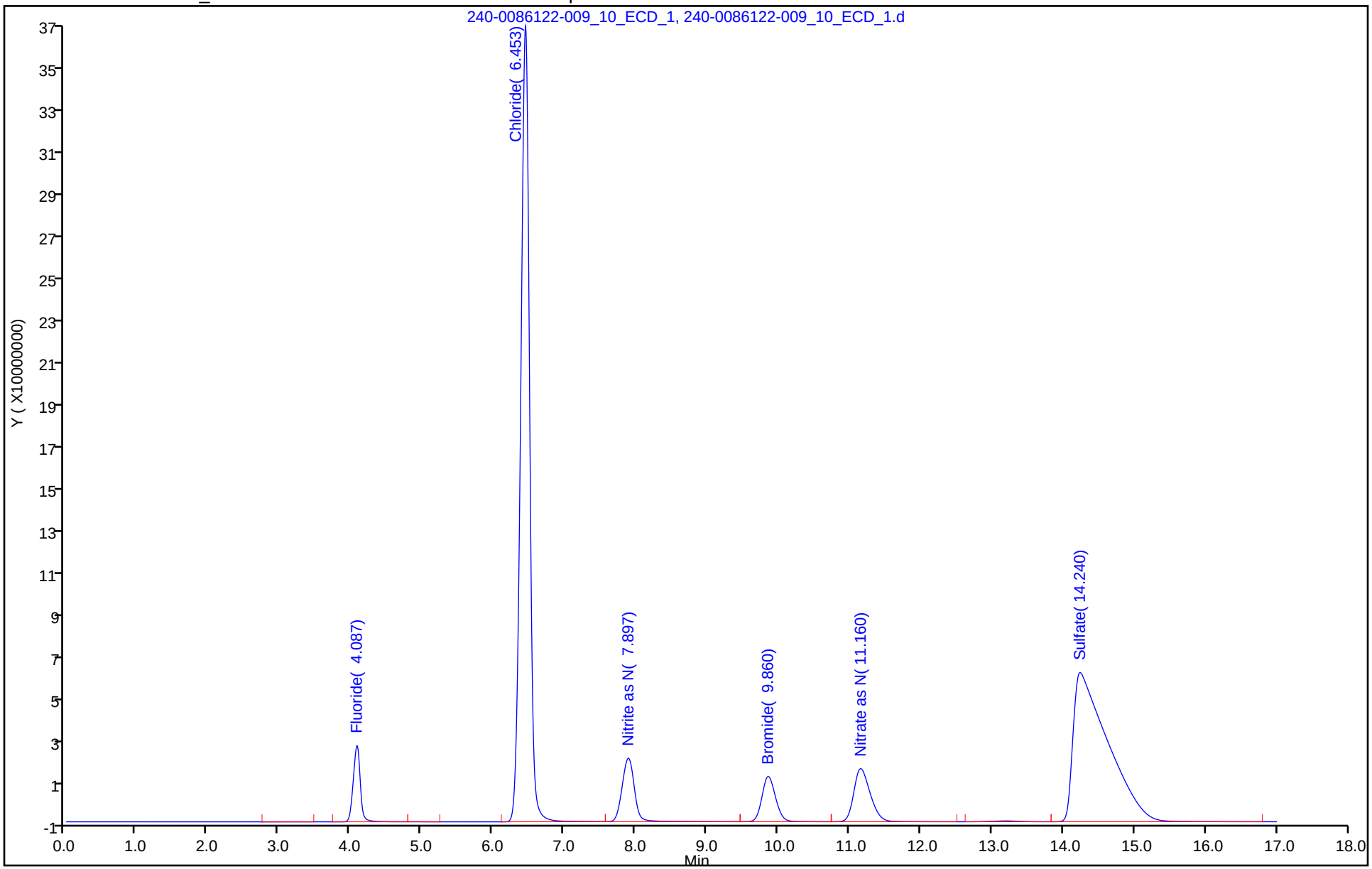
WCICCALSOLN_00296 Amount Added: 5.00 Units: mL

Report Date: 15-Apr-2019 13:35:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 04:58:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | STD9 | | | Worklist Smp#: | 9 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



TestAmerica Laboratories
Initial Calibration RF Report

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Instrument: VERONICA Lims Location: 240
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Apr-2019 13:35:29
No.Compounds:9

## Initial Calibration Batches

Ical Batch: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b
Inj Date : 13-Apr-2019 02:17:00, Sublist: chrom-300_Veronica*sub4

Limit Group: WET IC ICAL

Column 1 : Det: IC 0001

| Compound | Level 1 RF/%Drift | Level 2 RF/%Drift | Level 3 RF/%Drift | Level 4 RF/%Drift | Level 5 RF/%Drift | Level 6 RF/%Drift | Level 7 RF/%Drift | Level 8 RF/%Drift | Level 9 RF/%Drift | Avg RF | Curve | Rse/ Rsd | R^2/ COD | Flags |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Fluoride | 22555540 | 24256616 | 24543608 | 25258251 | 25722952 | 25490371 | 25271269 | 24803711 | 24284588 | 24687434 | WAvg | 3.9 | | |
| | -8.6 | -1.7 | -0.6 | 2.3 | 4.2 | 3.3 | 2.4 | 0.5 | -1.6 | | | | | |
| 2 Chloride | 16076553 | 16087031 | 15637887 | 15668640 | 15908720 | 15885618 | 15910433 | 15857853 | 15800583 | 15870369 | WAvg | 1.0 | | |
| | 1.3 | 1.4 | -1.5 | -1.3 | 0.2 | 0.1 | 0.3 | -0.1 | -0.4 | | | | | |
| 3 Nitrite as N | 34358580 | 35540316 | 35374792 | 36126044 | 36668537 | 36255328 | 36163530 | 35567326 | 35082613 | 35681896 | WAvg | 2.0 | | |
| | -3.7 | -0.4 | -0.9 | 1.2 | 2.8 | 1.6 | 1.3 | -0.3 | -1.7 | | | | | |
| 4 Bromide | 5958510 | 6190372 | 6199979 | 6386927 | 6725909 | 6800977 | 6857511 | 6910660 | 6920661 | 6550167 | WAvg | 5.6 | | |
| | -9.0 | -5.5 | -5.3 | -2.5 | 2.7 | 3.8 | 4.7 | 5.5 | 5.7 | | | | | |
| 5 Nitrate as N | 34816820 | 35457796 | 35412184 | 36234087 | 38051786 | 38430804 | 38746207 | 38981205 | 39119900 | 37250088 | WAvg | 4.7 | | |
| | -6.5 | -4.8 | -4.9 | -2.7 | 2.2 | 3.2 | 4.0 | 4.6 | 5.0 | | | | | |
| 6 Sulfate | 11523753 | 11693261 | 11396307 | 11458077 | 11671103 | 11641990 | 11670489 | 11645702 | 11609370 | 11590006 | WAvg | 0.9 | | |
| | -0.6 | 0.9 | -1.7 | -1.1 | 0.7 | 0.4 | 0.7 | 0.5 | 0.2 | | | | | |

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-010_11_ECD_1.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 13-Apr-2019 05:18:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-010
Misc. Info.: ICV
Operator ID: Instrument ID: VERONICA
Sublist:

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:29 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:02:22

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 4.070 | 4.067 | 0.003 | 66088835 | 2.50 | 2.68 | |
| 2 Chloride | 6.433 | 6.430 | 0.003 | 803654845 | 50.0 | 50.6 | |
| 3 Nitrite as N | 7.900 | 7.900 | 0.000 | 91366342 | 2.50 | 2.56 | |
| 4 Bromide | 9.907 | 9.907 | 0.000 | 65420708 | 10.0 | 9.99 | |
| 5 Nitrate as N | 11.253 | 11.257 | -0.004 | 98718310 | 2.50 | 2.65 | |
| 6 Sulfate | 14.687 | 14.707 | -0.020 | 595113842 | 50.0 | 51.3 | |

## Reagents:

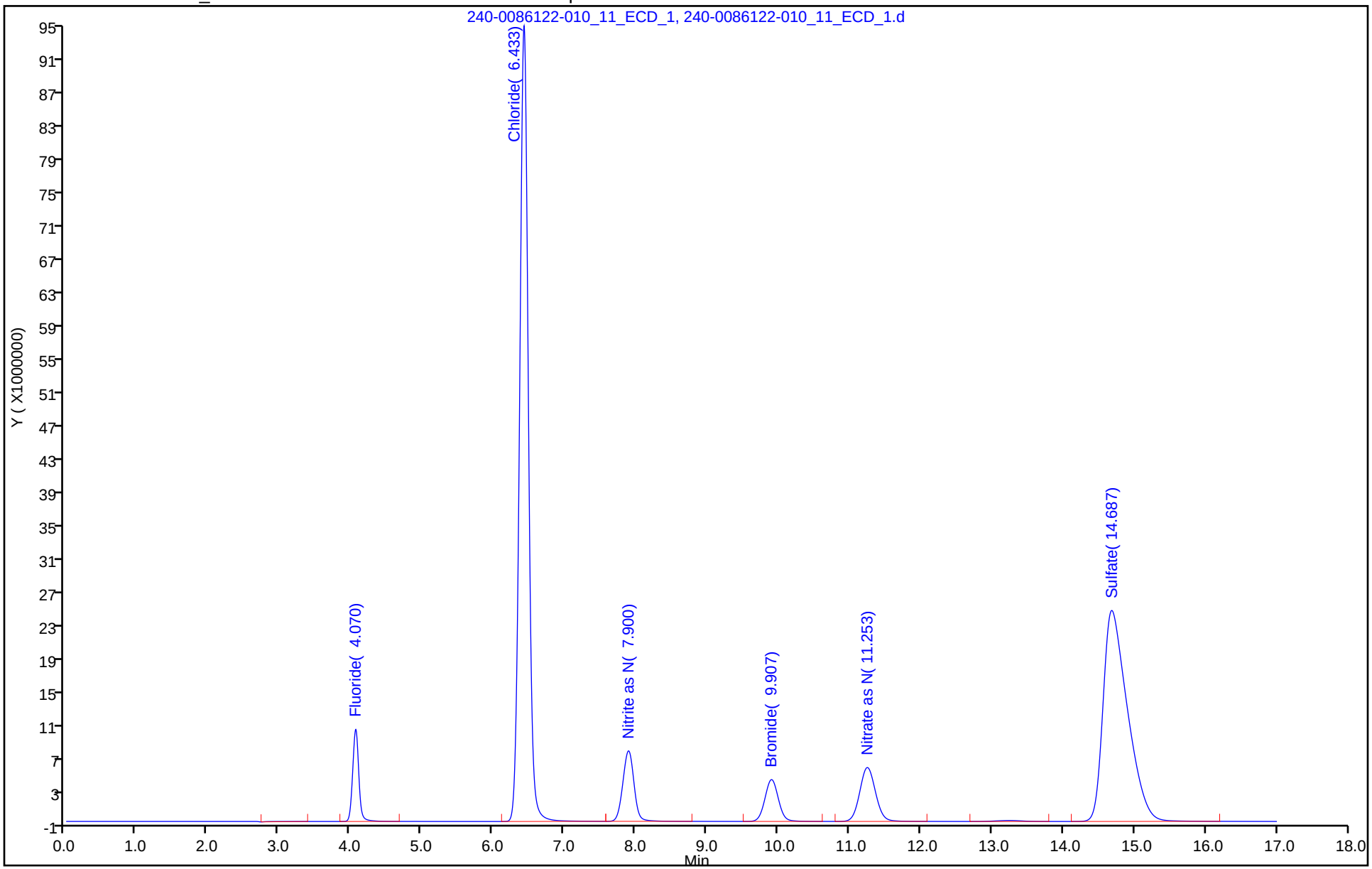
WCICLCS_00704 Amount Added: 5.00 Units: mL

Report Date: 15-Apr-2019 13:35:30 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-010_11_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 05:18:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | ICV | | | Worklist Smp#: | 10 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-011_12_ECD_1.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 13-Apr-2019 05:38:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086122-011
Misc. Info.: ICB
Operator ID: Instrument ID: VERONICA

Method: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 15-Apr-2019 13:35:29 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0309

First Level Reviewer: weimerj Date: 15-Apr-2019 13:02:31

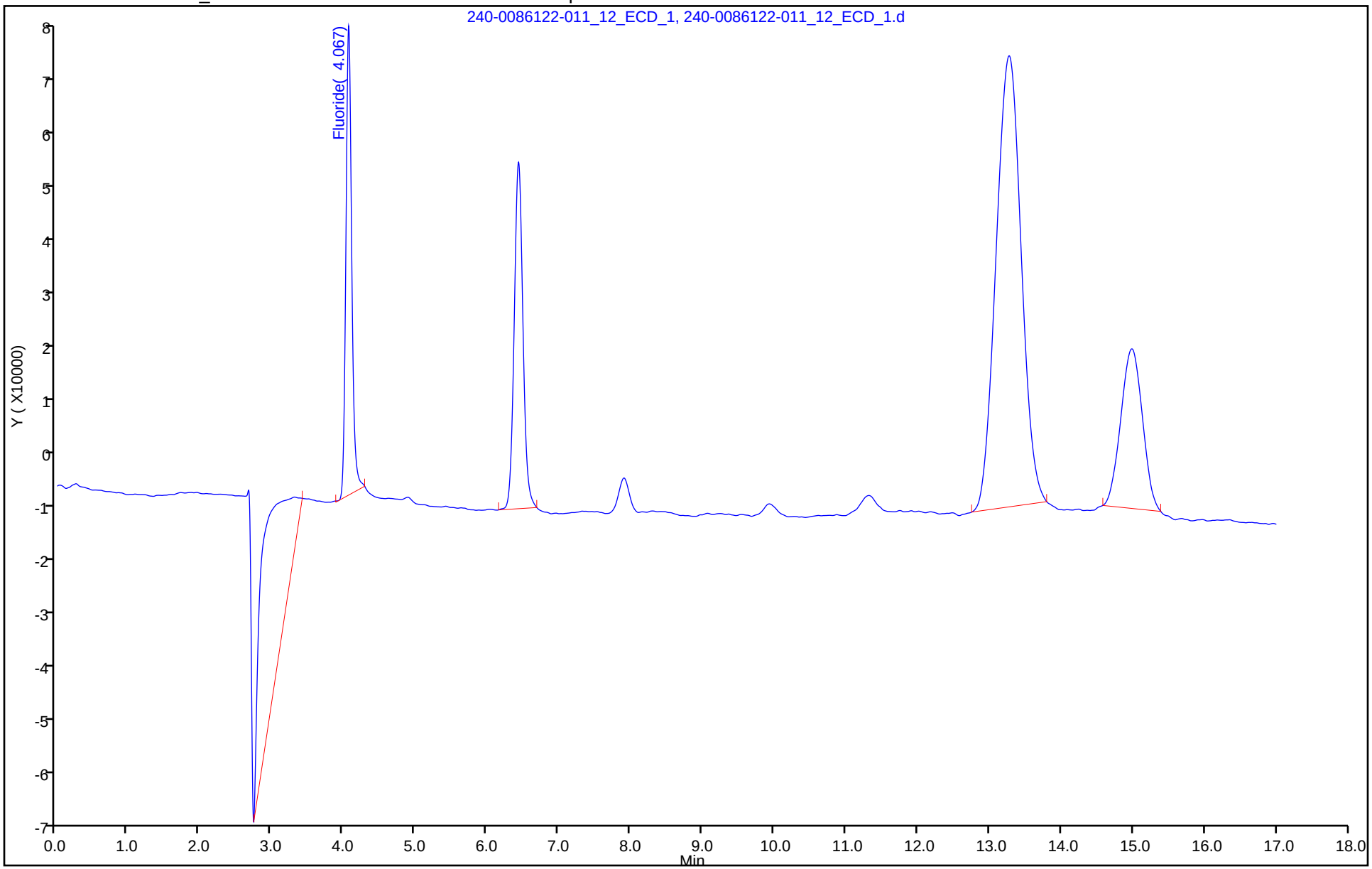
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 4.067 | 4.067 | 0.000 | 457381 | | 0.0185 | |
| 2 | Chloride | | 6.430 | | | | ND | |
| 3 | Nitrite as N | | 7.900 | | | | ND | |
| 4 | Bromide | | 9.907 | | | | ND | |
| 5 | Nitrate as N | | 11.257 | | | | ND | |
| 6 | Sulfate | | 14.707 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 15-Apr-2019 13:35:31 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-011_12_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 13-Apr-2019 05:38:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | ICB | | | Worklist Smp#: | 11 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-001_02_ECD_1.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-May-2019 16:54:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087334-001
Misc. Info.: CCV
Operator ID: Instrument ID: VERONICA
Sublist: chrom-300_Veronica*sub4

Method: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 22-May-2019 12:22:49 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0332

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.950 | 3.950 | 0.000 | 64012346 | 2.50 | 2.59 | |
| 2 Chloride | 5.983 | 5.983 | 0.000 | 795871911 | 50.0 | 50.1 | |
| 3 Nitrite as N | 7.200 | 7.200 | 0.000 | 91400537 | 2.50 | 2.56 | |
| 4 Bromide | 8.883 | 8.883 | 0.000 | 67375728 | 10.0 | 10.3 | |
| 5 Nitrate as N | 9.957 | 9.957 | 0.000 | 95753963 | 2.50 | 2.57 | |
| 6 Sulfate | 12.380 | 12.380 | 0.000 | 585945111 | 50.0 | 50.6 | |

## Reagents:

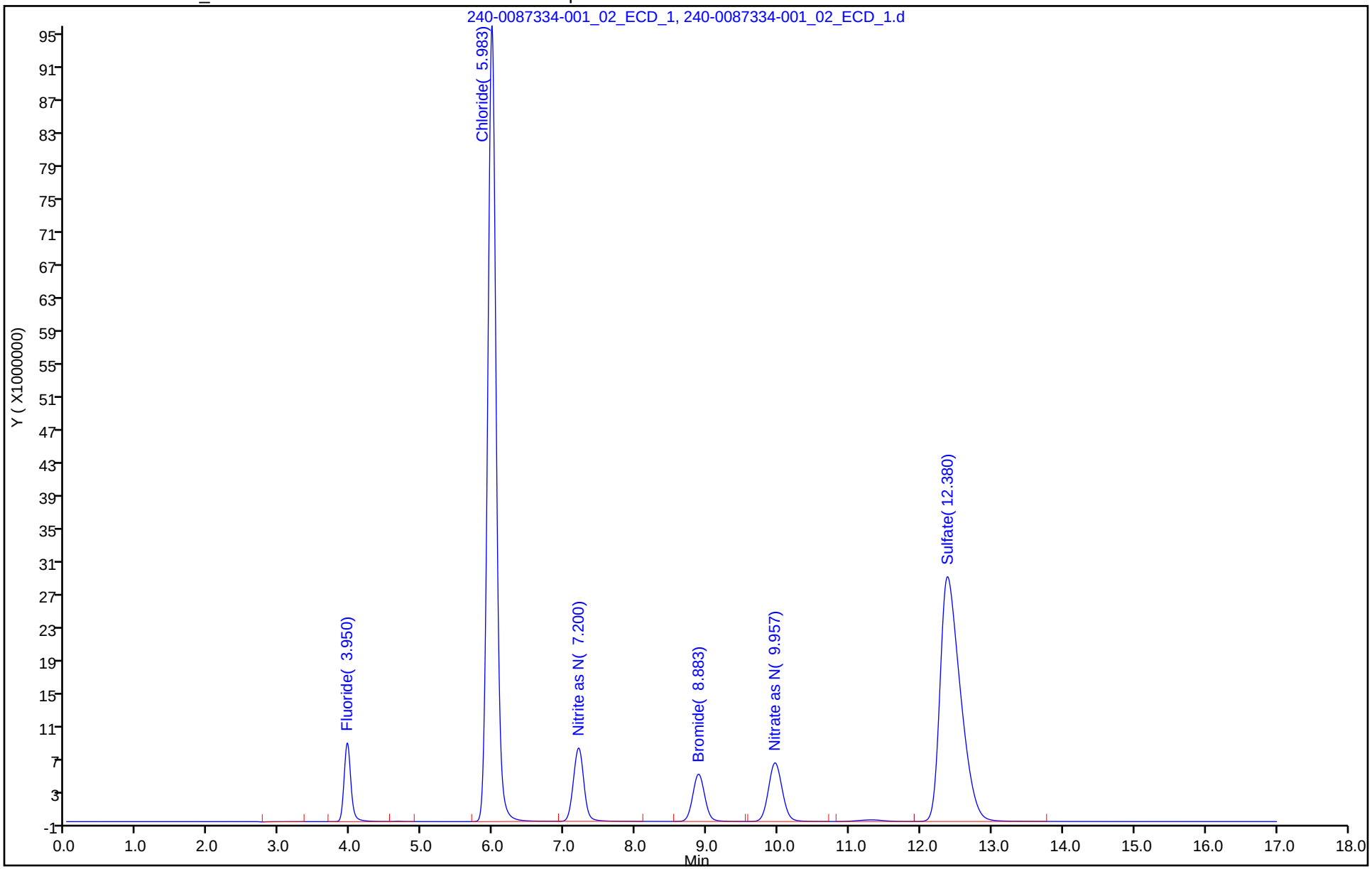
WCICCCV_00875 Amount Added: 5.00 Units: mL

Report Date: 22-May-2019 12:22:50 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-001_02_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 16:54:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 1 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-002_03_ECD_1.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 21-May-2019 17:14:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087334-002
Misc. Info.: CCB
Operator ID: Instrument ID: VERONICA

Method: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 22-May-2019 12:22:49 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0332

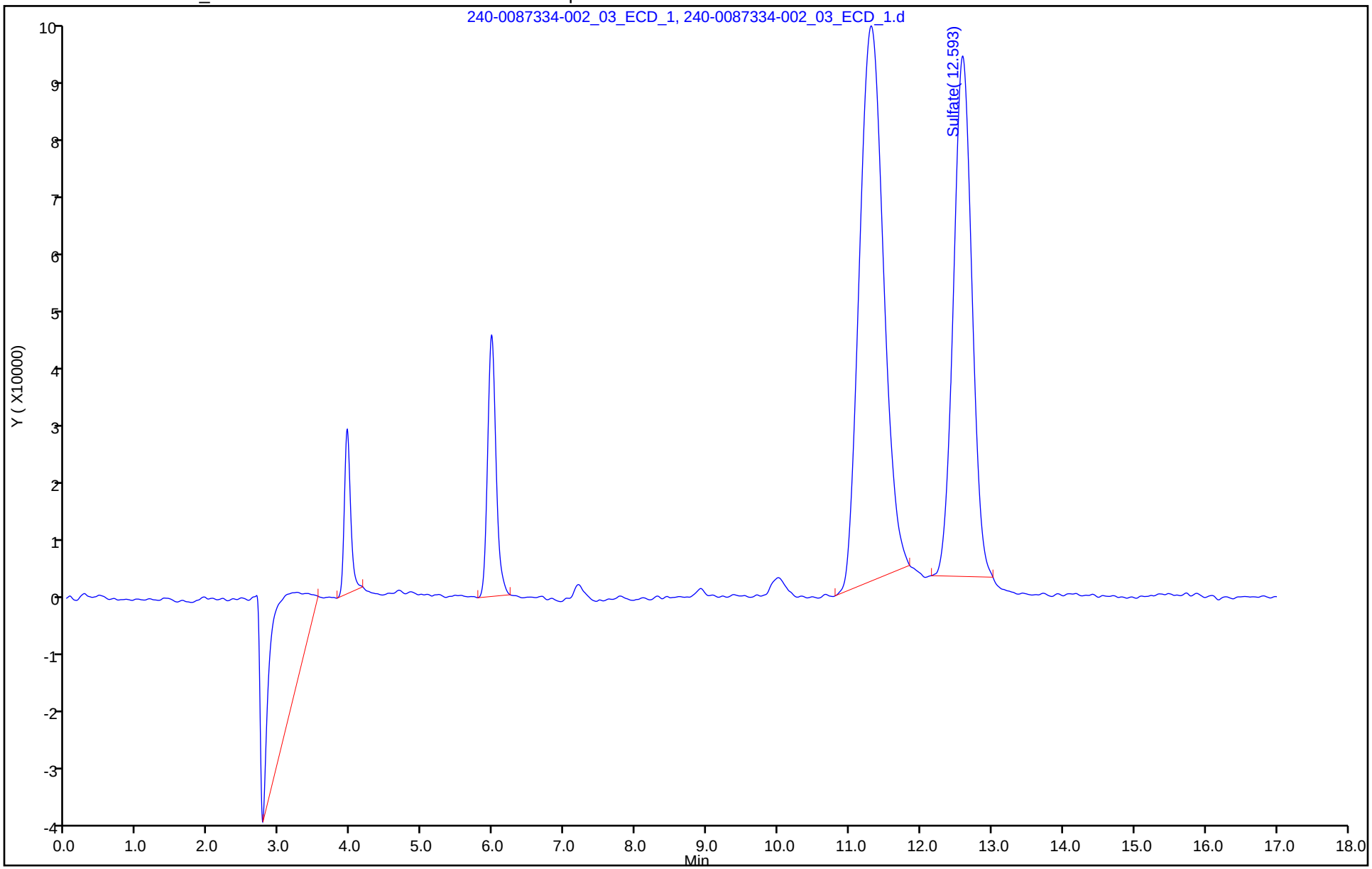
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.950 | | | | ND | |
| 2 | Chloride | | 5.983 | | | | ND | |
| 3 | Nitrite as N | | 7.200 | | | | ND | |
| 4 | Bromide | | 8.883 | | | | ND | |
| 5 | Nitrate as N | | 9.957 | | | | ND | |
| 6 | Sulfate | 12.593 | 12.380 | 0.213 | 1530985 | | 0.1321 | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 22-May-2019 12:22:51 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-002_03_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 17:14:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 2 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-003_04_ECD_1.d | | | | |
| Lims ID: | MB | | | | |
| Client ID: | | | | | |
| Sample Type: | MB | | | | |
| Inject. Date: | 21-May-2019 17:34:00 | ALS Bottle#: | 0 | Worklist Smp#: | 3 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-003 | | | | |
| Misc. Info.: | MB | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:22:49 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

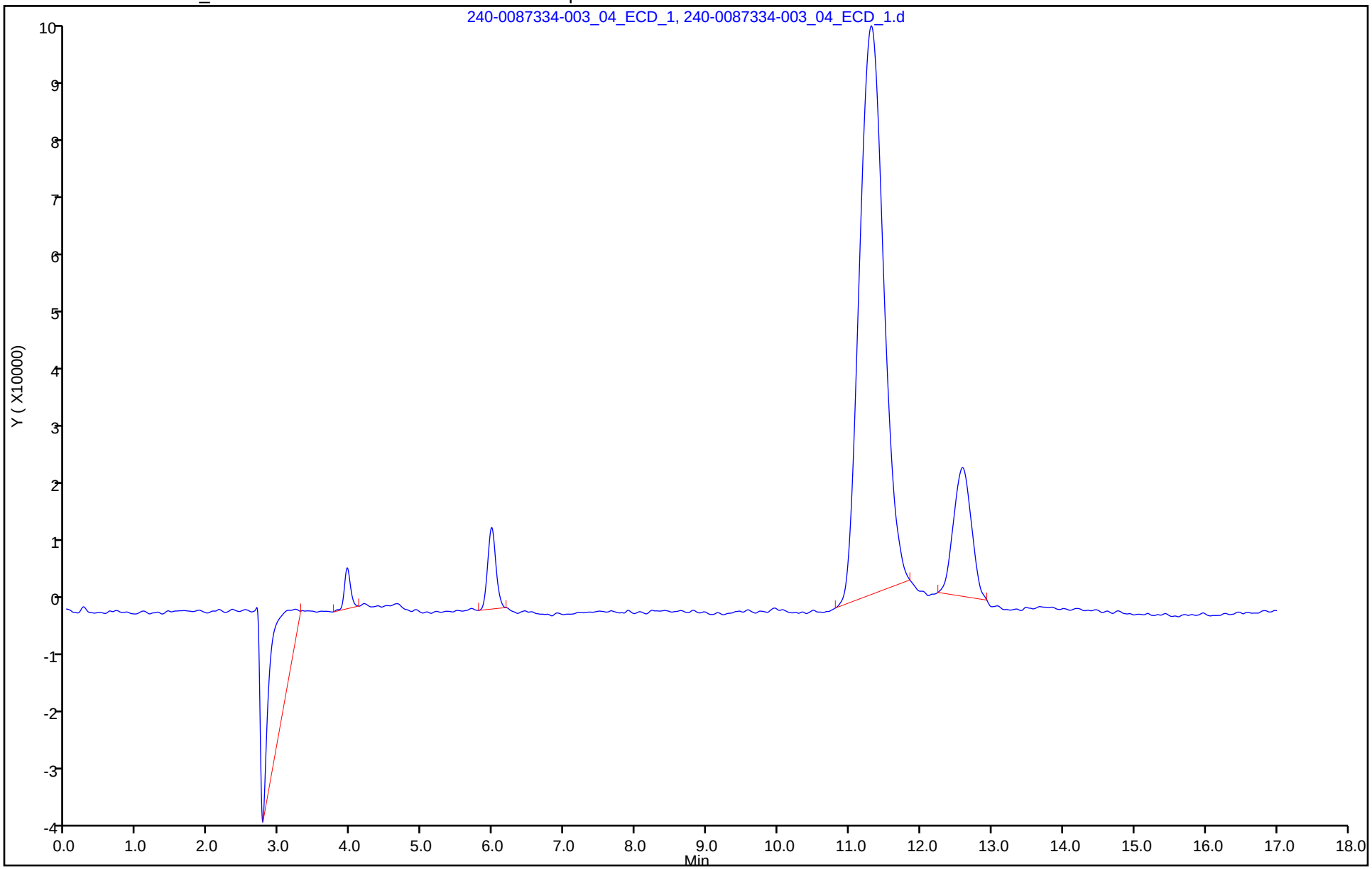
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| | 1 Fluoride | | 3.950 | | | | ND | |
| | 2 Chloride | | 5.983 | | | | ND | |
| | 3 Nitrite as N | | 7.200 | | | | ND | |
| | 4 Bromide | | 8.883 | | | | ND | |
| | 5 Nitrate as N | | 9.957 | | | | ND | |
| | 6 Sulfate | | 12.380 | | | | ND | |
| | 11 Nitrate as NO3 | | 0.000 | | | | ND | |
| | 10 Nitrite as NO2 | | 0.000 | | | | ND | |
| S | 7 Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 22-May-2019 12:22:52 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-003_04_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 17:34:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | MB | | | Worklist Smp#: | 3 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-004_05_ECD_1.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 21-May-2019 17:54:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087334-004
Misc. Info.: LCS
Operator ID: Instrument ID: VERONICA

Method: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 22-May-2019 12:22:49 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0332

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|
| 1 Fluoride | 3.953 | 3.950 | 0.003 | 64854741 | 2.50 | 2.63 | |
| 2 Chloride | 5.980 | 5.983 | -0.003 | 801629713 | 50.0 | 50.5 | |
| 3 Nitrite as N | 7.197 | 7.200 | -0.003 | 89987402 | 2.50 | 2.52 | |
| 4 Bromide | 8.883 | 8.883 | 0.000 | 65581046 | 10.0 | 10.0 | |
| 5 Nitrate as N | 9.953 | 9.957 | -0.004 | 99476790 | 2.50 | 2.67 | |
| 6 Sulfate | 12.363 | 12.380 | -0.017 | 598052536 | 50.0 | 51.6 | |

## Reagents:

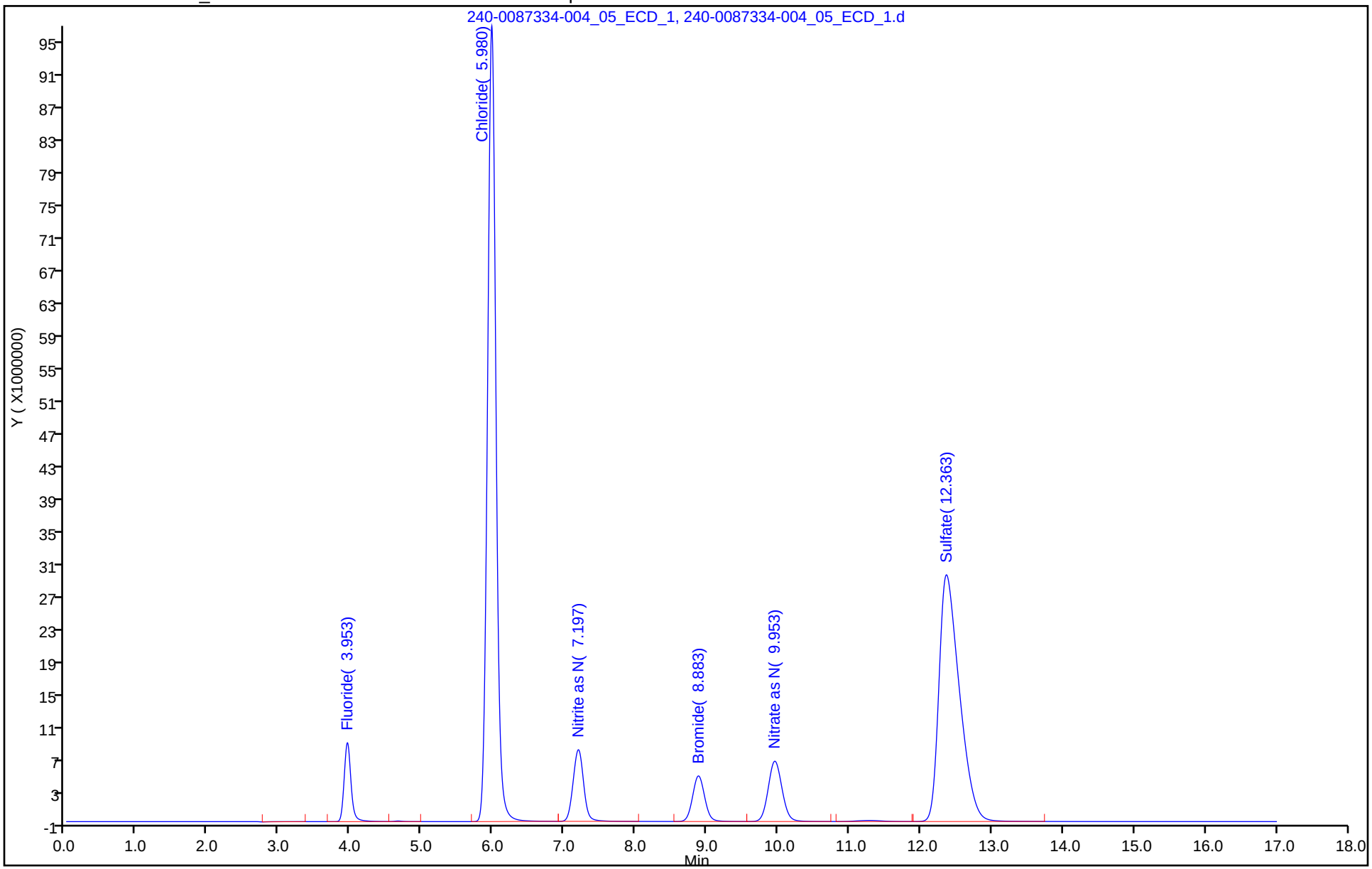
WCICLCS_00710 Amount Added: 5.00 Units: mL

Report Date: 22-May-2019 12:22:53 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-004_05_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 17:54:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | LCS | | | Worklist Smp#: | 4 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-013_14_ECD_1.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 21-May-2019 20:56:00 | ALS Bottle#: | 0 | Worklist Smp#: | 13 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-013 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Sublist: | chrom-300_Veronica*sub4 | | | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:23:01 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.950 | 3.950 | 0.000 | 63879807 | 2.50 | 2.59 | |
| 2 | Chloride | 5.980 | 5.983 | -0.003 | 796407746 | 50.0 | 50.2 | |
| 3 | Nitrite as N | 7.197 | 7.200 | -0.003 | 91502889 | 2.50 | 2.56 | |
| 4 | Bromide | 8.880 | 8.883 | -0.003 | 67440296 | 10.0 | 10.3 | |
| 5 | Nitrate as N | 9.950 | 9.957 | -0.007 | 95870031 | 2.50 | 2.57 | |
| 6 | Sulfate | 12.357 | 12.380 | -0.023 | 586450042 | 50.0 | 50.6 | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.14 | |

## Reagents:

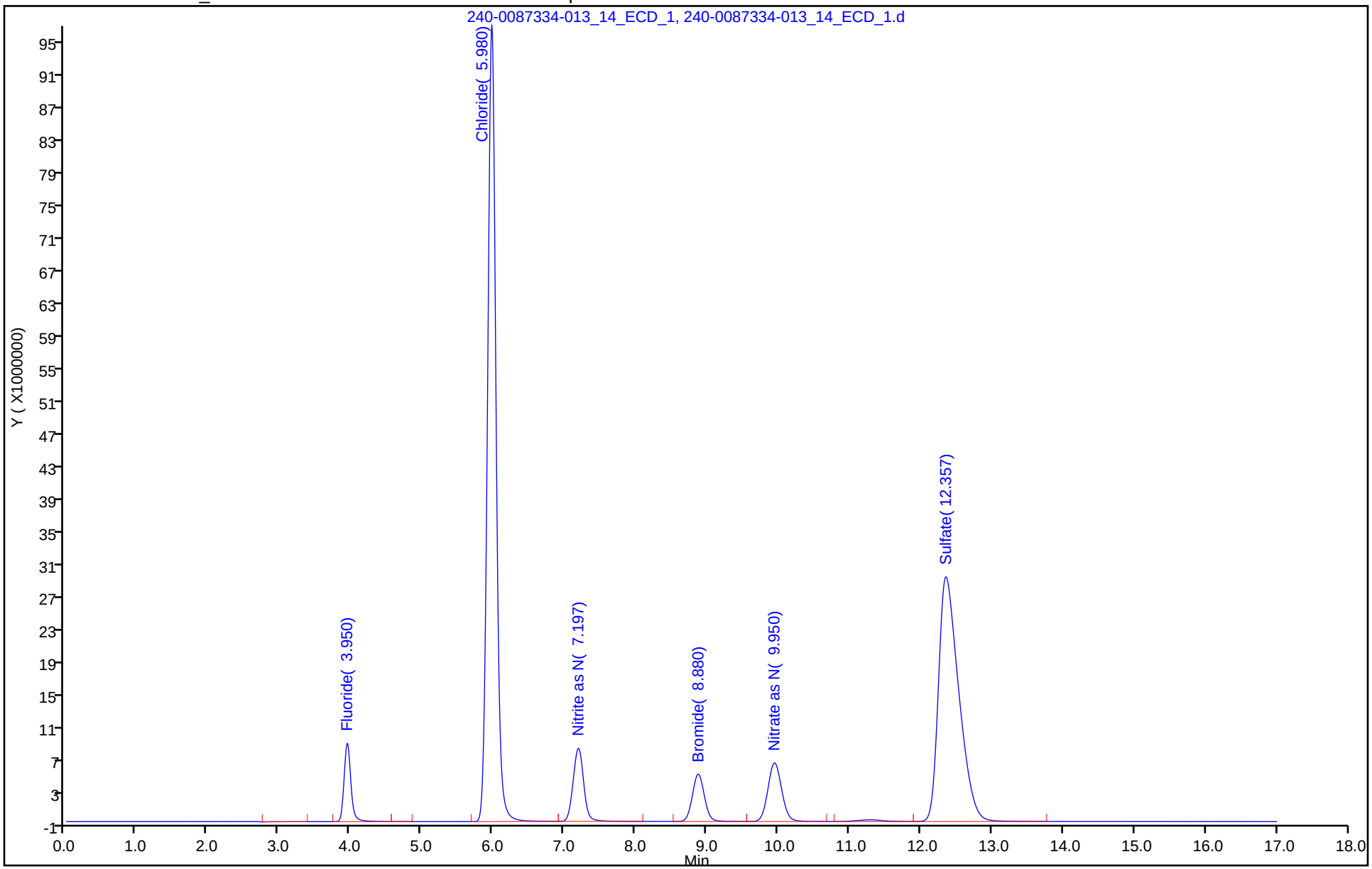
WCICCCV_00875 Amount Added: 5.00 Units: mL

Report Date: 22-May-2019 12:23:01 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-013_14_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 20:56:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 13 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-014_15_ECD_1.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 21-May-2019 21:16:00 | ALS Bottle#: | 0 | Worklist Smp#: | 14 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-014 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:23:01 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

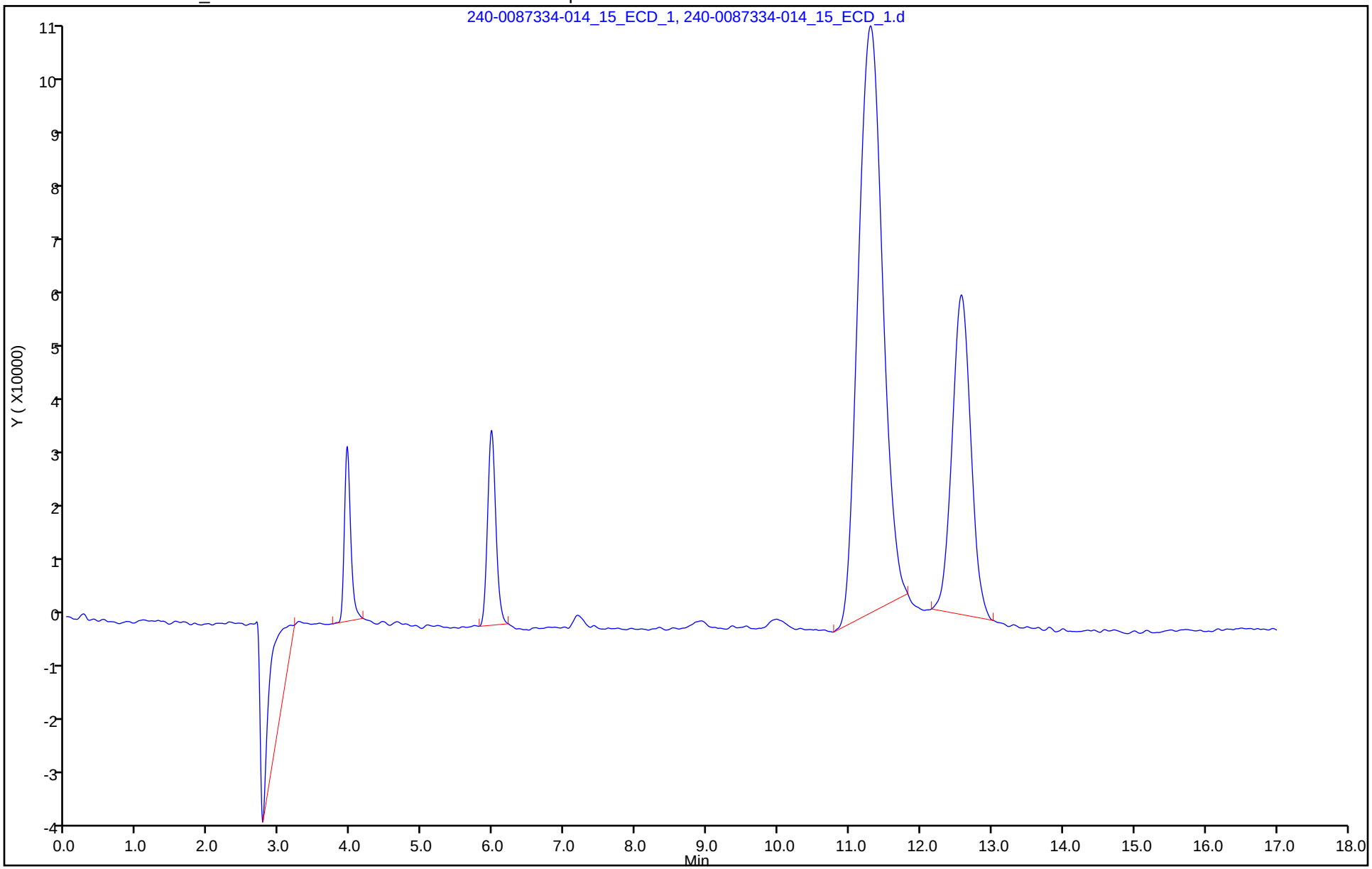
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | | 3.950 | | | | ND | |
| 2 | Chloride | | 5.983 | | | | ND | |
| 3 | Nitrite as N | | 7.200 | | | | ND | |
| 4 | Bromide | | 8.883 | | | | ND | |
| 5 | Nitrate as N | | 9.957 | | | | ND | |
| 6 | Sulfate | | 12.380 | | | | ND | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 22-May-2019 12:23:03 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-014_15_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 21-May-2019 21:16:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 14 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-016_17_ECD_1.d
Lims ID: 240-111424-A-5 MS
Client ID: GAMW-01B-042319
Sample Type: MS
Inject. Date: 21-May-2019 21:56:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087334-016
Misc. Info.: 240-111424-A-5 MS
Operator ID: Instrument ID: VERONICA

Method: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 22-May-2019 12:23:01 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0332

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.953 | 3.950 | 0.003 | 72077714 | 2.50 | 2.92 | |
| 2 | Chloride | 5.983 | 5.983 | 0.000 | 1180907146 | 50.0 | 74.4 | |
| 3 | Nitrite as N | 7.190 | 7.200 | -0.010 | 97399428 | 2.50 | 2.73 | |
| 4 | Bromide | 8.840 | 8.883 | -0.043 | 74020914 | 10.0 | 11.3 | |
| 5 | Nitrate as N | 9.853 | 9.957 | -0.104 | 102840191 | 2.50 | 2.76 | |
| 6 | Sulfate | 12.130 | 12.380 | -0.250 | 1438875978 | 50.0 | 124.1 | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.49 | |

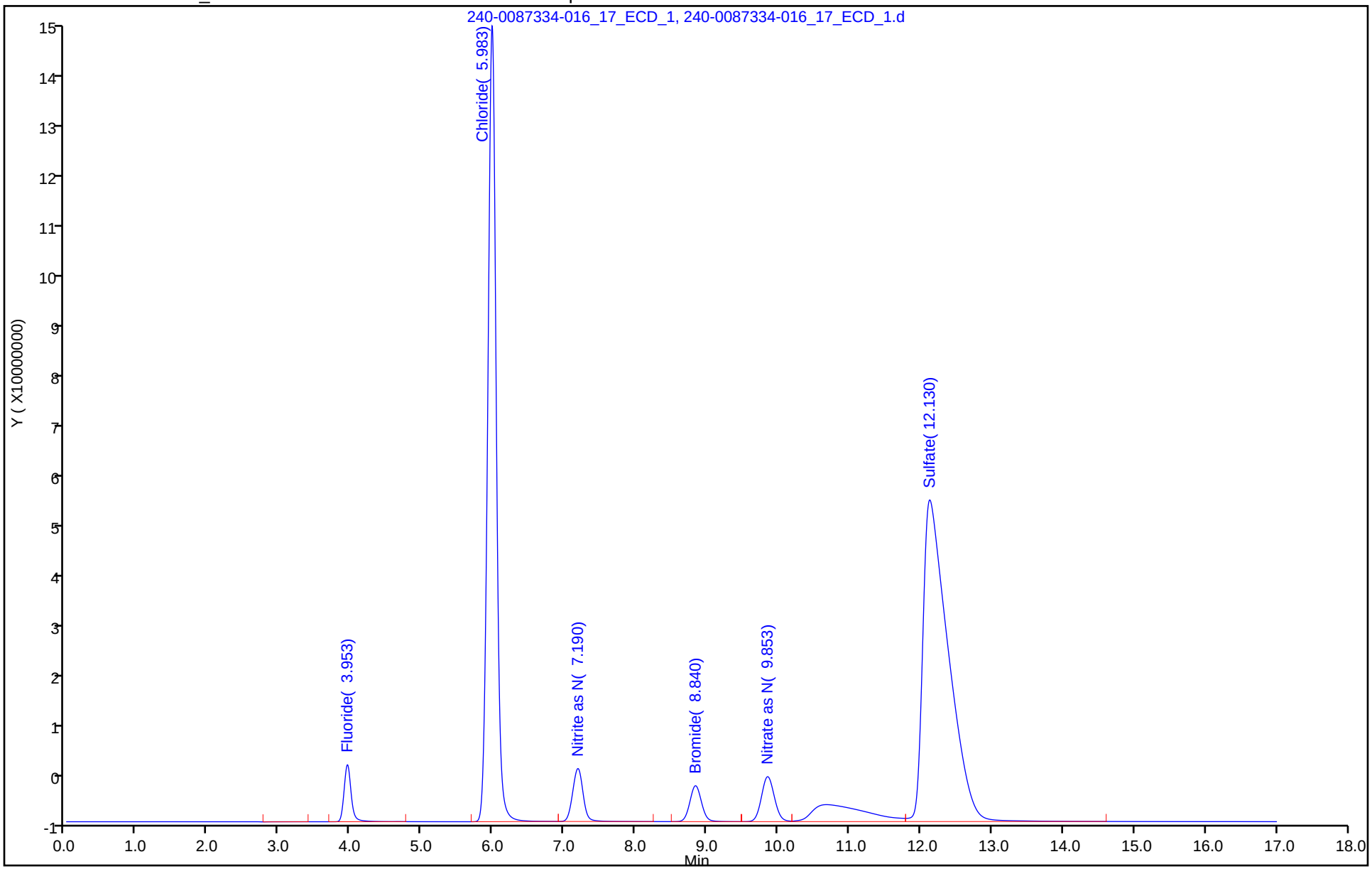
## Reagents:

WCICSOLNB1_00021 Amount Added: 0.10 Units: mL
WCICSOLNA1_00020 Amount Added: 0.10 Units: mL

Report Date: 22-May-2019 12:23:07 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-016_17_ECD_1.d | | | | |
| Injection Date: | 21-May-2019 21:56:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | 240-111424-A-5 MS | | | Worklist Smp#: | 16 |
| Client ID: | GAMW-01B-042319 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-017_18_ECD_1.d
Lims ID: 240-111424-A-5 MSD
Client ID: GAMW-01B-042319
Sample Type: MSD
Inject. Date: 21-May-2019 22:16:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 25.0 ul Dil. Factor: 1.0000
Sample Info: 240-0087334-017
Misc. Info.: 240-111424-A-5 MSD
Operator ID: Instrument ID: VERONICA

Method: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m
Limit Group: WET IC ICAL
Last Update: 22-May-2019 12:23:01 Calib Date: 13-Apr-2019 04:58:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d

Column 1 : Det: IC 0001
Process Host: CTX0332

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.960 | 3.950 | 0.010 | 73602710 | 2.50 | 2.98 | |
| 2 | Chloride | 5.990 | 5.983 | 0.007 | 1198331136 | 50.0 | 75.5 | |
| 3 | Nitrite as N | 7.197 | 7.200 | -0.003 | 98353879 | 2.50 | 2.76 | |
| 4 | Bromide | 8.843 | 8.883 | -0.040 | 75302715 | 10.0 | 11.5 | |
| 5 | Nitrate as N | 9.857 | 9.957 | -0.100 | 104668049 | 2.50 | 2.81 | |
| 6 | Sulfate | 12.133 | 12.380 | -0.247 | 1451655204 | 50.0 | 125.3 | |
| 11 | Nitrate as NO3 | | 0.000 | | | | ND | |
| 10 | Nitrite as NO2 | | 0.000 | | | | ND | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.57 | |

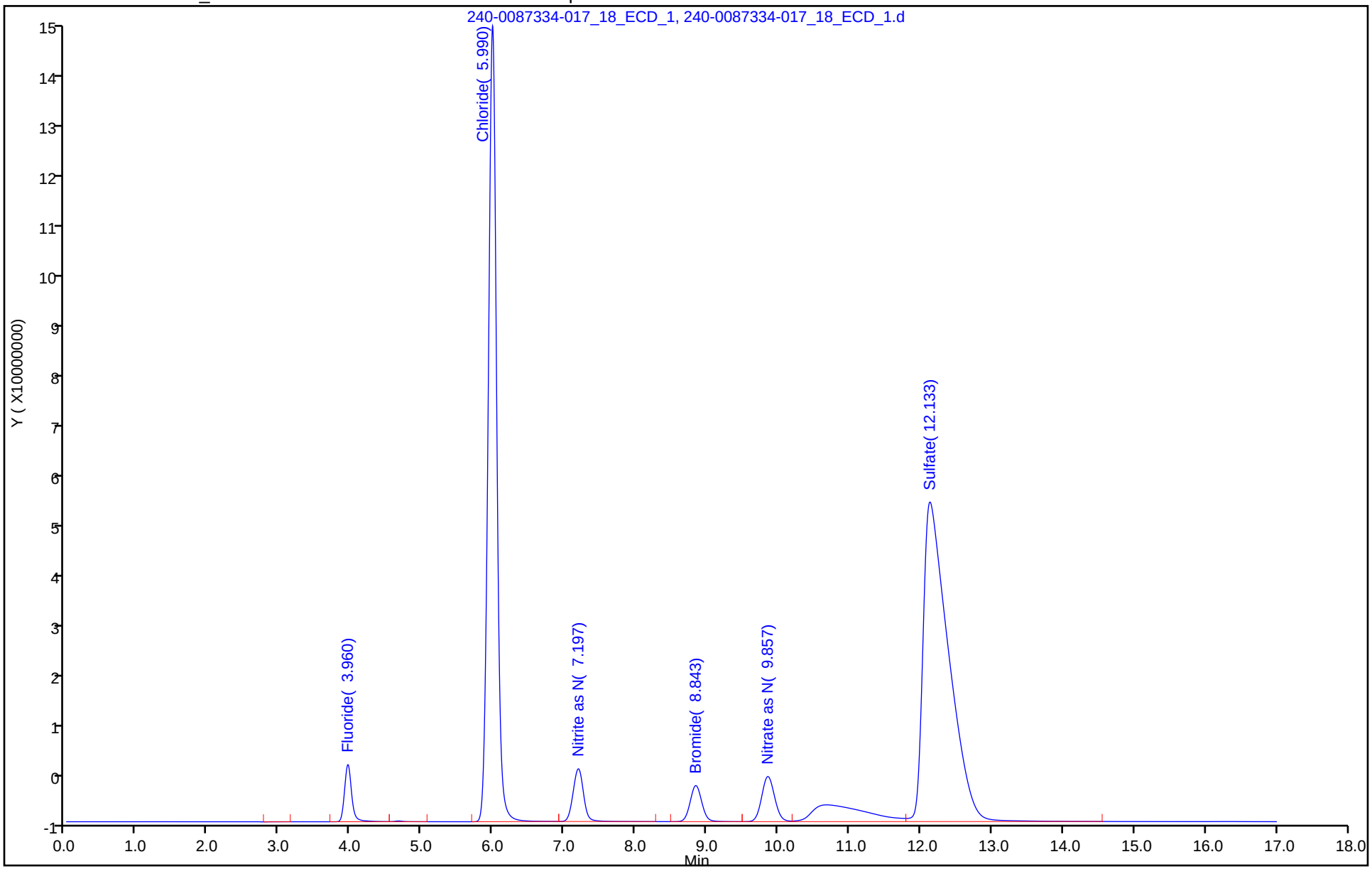
## Reagents:

WCICSOLNB1_00021 Amount Added: 0.10 Units: mL
WCICSOLNA1_00020 Amount Added: 0.10 Units: mL

Report Date: 22-May-2019 12:23:08 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-017_18_ECD_1.d | | | | |
| Injection Date: | 21-May-2019 22:16:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | 240-111424-A-5 MSD | | | Worklist Smp#: | 17 |
| Client ID: | GAMW-01B-042319 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

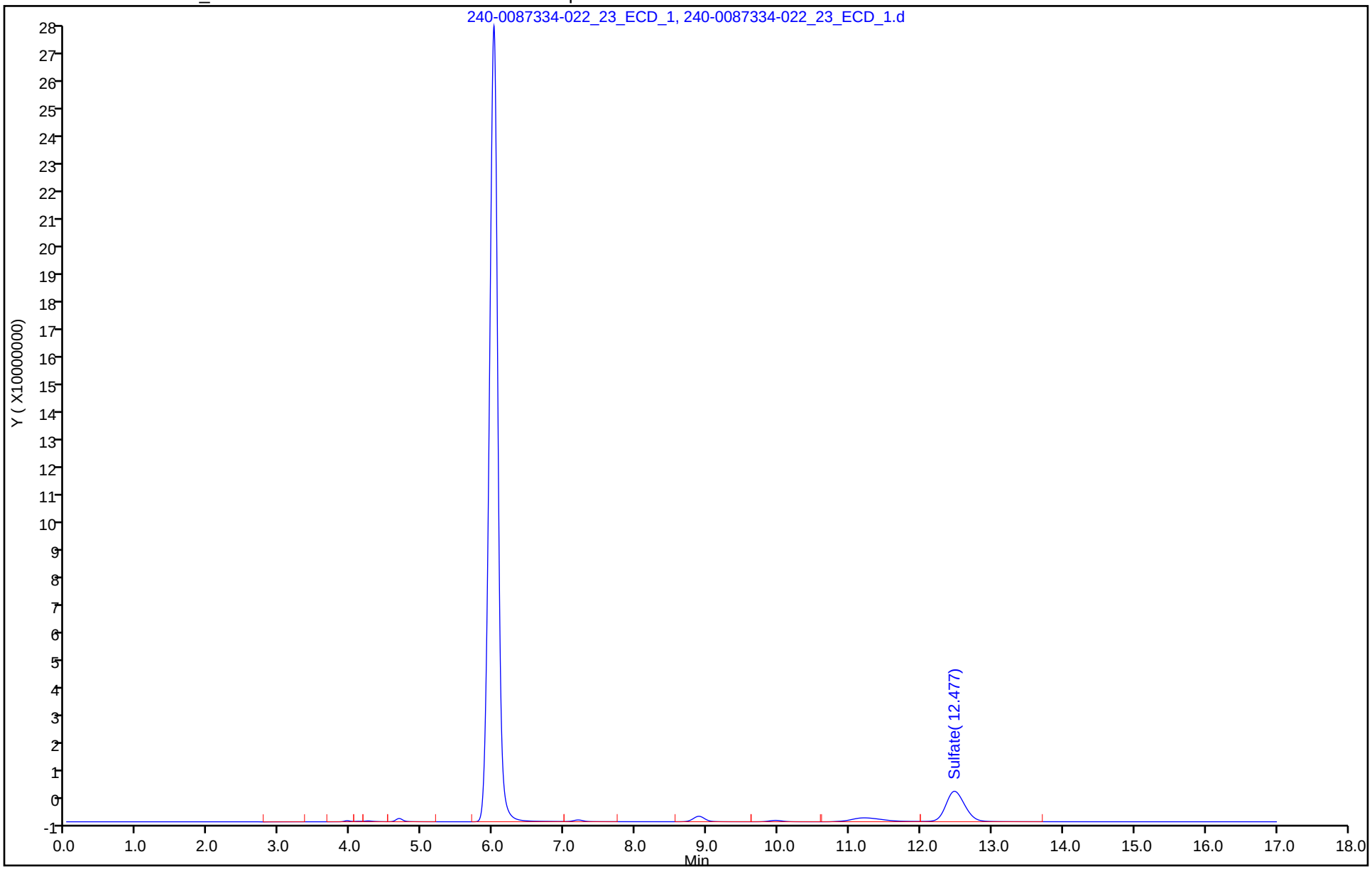
| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-022_23_ECD_1.d | | | | |
| Lims ID: | 240-112234-J-2 | | | | |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Sample Type: | Client | | | | |
| Inject. Date: | 21-May-2019 23:57:00 | ALS Bottle#: | 0 | Worklist Smp#: | 22 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-022 | | | | |
| Misc. Info.: | 240-112234-J-2 | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:23:01 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

| Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|
| 6 Sulfate | 12.477 | 12.380 | 0.097 | 196462404 | 17.0 | |

Report Date: 22-May-2019 12:23:12 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-022_23_ECD_1.d | | | | |
| Injection Date: | 21-May-2019 23:57:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | 240-112234-J-2 | Lab Sample ID: | 240-112234-2 | Worklist Smp#: | 22 |
| Client ID: | MRC-NMW-2S-050719 | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-025_26_ECD_1.d | | | | |
| Lims ID: | CCV | | | | |
| Client ID: | | | | | |
| Sample Type: | CCV | | | | |
| Inject. Date: | 22-May-2019 00:57:00 | ALS Bottle#: | 0 | Worklist Smp#: | 25 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-025 | | | | |
| Misc. Info.: | CCV | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Sublist: | chrom-300_Veronica*sub4 | | | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:23:14 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| 1 | Fluoride | 3.960 | 3.950 | 0.010 | 63697511 | 2.50 | 2.58 | |
| 2 | Chloride | 5.987 | 5.983 | 0.004 | 797557786 | 50.0 | 50.3 | |
| 3 | Nitrite as N | 7.203 | 7.200 | 0.003 | 91390061 | 2.50 | 2.56 | |
| 4 | Bromide | 8.883 | 8.883 | 0.000 | 67393375 | 10.0 | 10.3 | |
| 5 | Nitrate as N | 9.953 | 9.957 | -0.004 | 95804840 | 2.50 | 2.57 | |
| 6 | Sulfate | 12.363 | 12.380 | -0.017 | 586512639 | 50.0 | 50.6 | |
| S 7 | Nitrate Nitrite as N | | | | | | 5.13 | |

## Reagents:

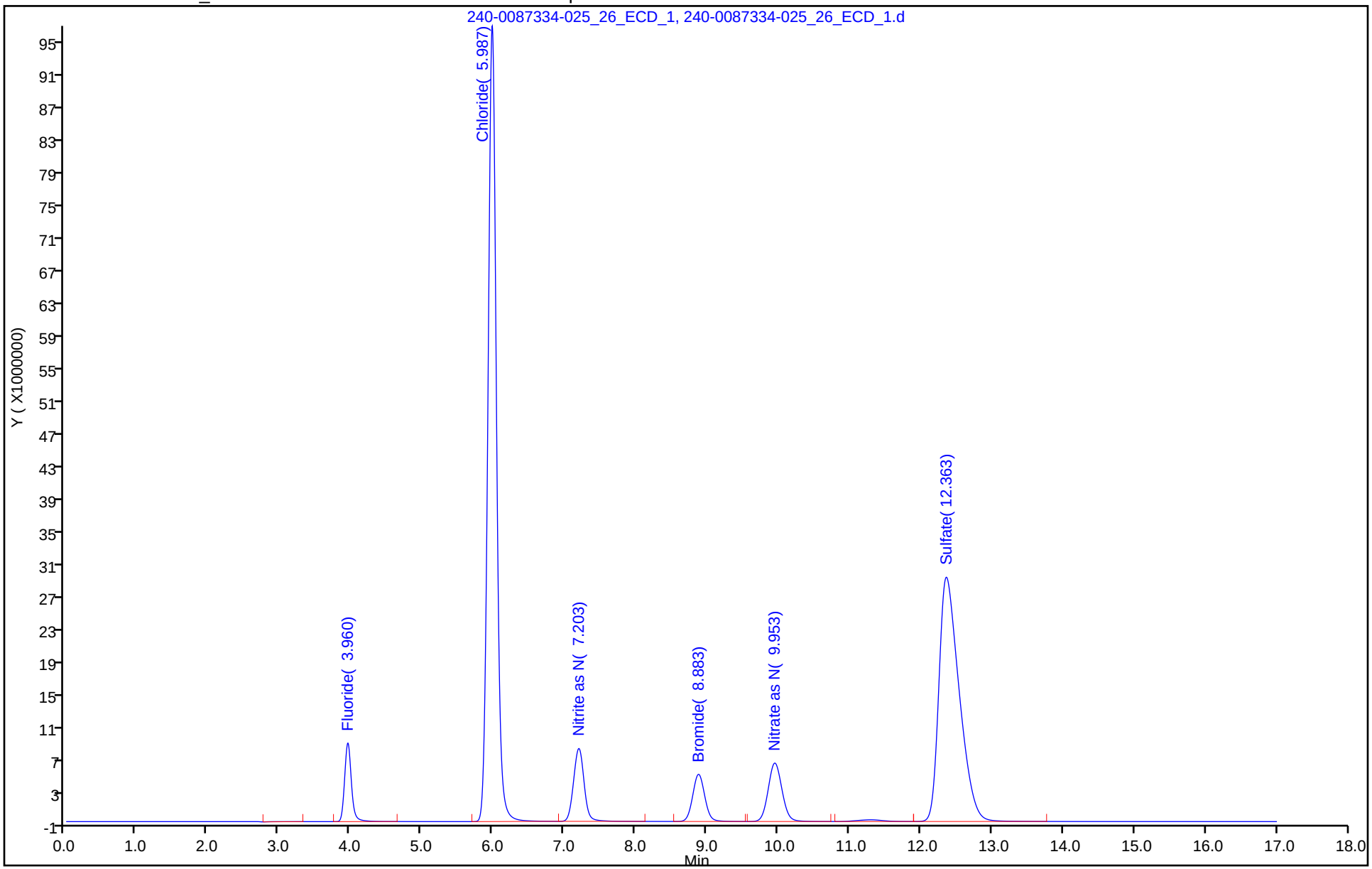
WCICCCV_00875 Amount Added: 5.00 Units: mL

Report Date: 22-May-2019 12:23:14 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-025_26_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 22-May-2019 00:57:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCV | | | Worklist Smp#: | 25 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

| | | | | | |
|---|---|---|---|---|---|
| Data File: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-026_27_ECD_1.d | | | | |
| Lims ID: | CCB | | | | |
| Client ID: | | | | | |
| Sample Type: | CCB | | | | |
| Inject. Date: | 22-May-2019 01:17:00 | ALS Bottle#: | 0 | Worklist Smp#: | 26 |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | | |
| Sample Info: | 240-0087334-026 | | | | |
| Misc. Info.: | CCB | | | | |
| Operator ID: | | Instrument ID: | VERONICA | | |
| Method: | \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\300_Veronica.m | | | | |
| Limit Group: | WET IC ICAL | | | | |
| Last Update: | 22-May-2019 12:23:14 | Calib Date: | 13-Apr-2019 04:58:00 | | |
| Integrator: | Falcon | | | | |
| Quant Method: | External Standard | Quant By: | Initial Calibration | | |
| Last ICal File: | \\chromna\Canton\ChromData\VERONICA\20190412-86122.b\240-0086122-009_10_ECD_1.d | | | | |
| Column 1 : | | | Det: IC 0001 | | |
| Process Host: | CTX0332 | | | | |

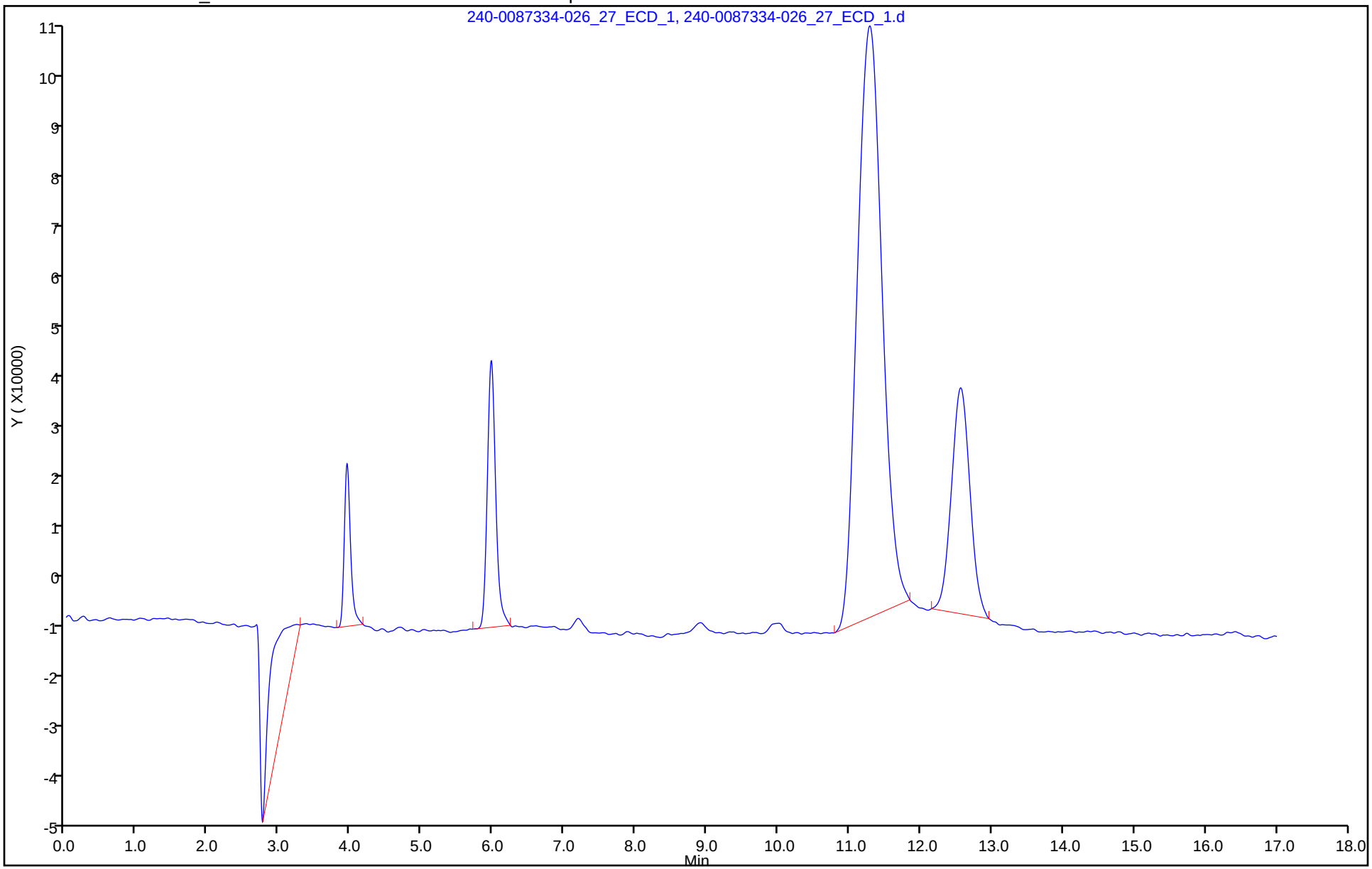
| | Compound | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Response | Cal Amt ug/ml | OnCol Amt ug/ml | Flags |
|---|---|---|---|---|---|---|---|---|
| | 1 Fluoride | | 3.950 | | | | ND | |
| | 2 Chloride | | 5.983 | | | | ND | |
| | 3 Nitrite as N | | 7.200 | | | | ND | |
| | 4 Bromide | | 8.883 | | | | ND | |
| | 5 Nitrate as N | | 9.957 | | | | ND | |
| | 6 Sulfate | | 12.380 | | | | ND | |
| | 11 Nitrate as NO3 | | 0.000 | | | | ND | |
| | 10 Nitrite as NO2 | | 0.000 | | | | ND | |
| S | 7 Nitrate Nitrite as N | | 0.000 | | | | ND | |

Report Date: 22-May-2019 12:23:15 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\VERONICA\20190521-87334.b\240-0087334-026_27_ECD_1.d

| | | | | | |
|---|---|---|---|---|---|
| Injection Date: | 22-May-2019 01:17:00 | Instrument ID: | VERONICA | Operator ID: | |
| Lims ID: | CCB | | | Worklist Smp#: | 26 |
| Client ID: | | | | | |
| Injection Vol: | 25.0 ul | Dil. Factor: | 1.0000 | ALS Bottle#: | 0 |
| Method: | 300_Veronica | Limit Group: | WET IC ICAL | | |



| | Analysis | Sample Name | Manual Dilution | Result | Date / Time | Vial |
|---|---|---|---|---|---|---|
| 1 | NPOC | ADC 4728624 | 1.000 | NPOC:105.7mg/L | 5/10/2019 12:09:06 PM | 1 |
| 2 | NPOC | IPCS 4853971 | 1.000 | NPOC:0.8872mg/L | 5/10/2019 12:31:11 PM | 2 |
| 3 | NPOC | MB | 1.000 | NPOC:0.9098mg/L | 5/10/2019 12:52:47 PM | 3 |
| 4 | NPOC | CCV 4728624 | 1.000 | NPOC:26.34mg/L | 5/10/2019 1:20:02 PM | 4 |
| 5 | NPOC | CCB | 1.000 | NPOC:0.8490mg/L | 5/10/2019 1:41:38 PM | 5 |
| 6 | NPOC | LCS 4728655 | 1.000 | NPOC:10.06mg/L | 5/10/2019 2:07:54 PM | 6 |
| 7 | NPOC | LCSD 4728655 | 1.000 | NPOC:10.06mg/L | 5/10/2019 3:12:13 PM | 7 |
| 8 | NPOC | 240-112111-h-2 | 1.000 | NPOC:3.079mg/L | 5/10/2019 3:38:46 PM | 8 |
| 9 | NPOC | 240-112111-g-3 | 1.000 | NPOC:9.135mg/L | 5/10/2019 4:05:11 PM | 9 |
| 10 | NPOC | 240-112111-g-4 | 1.000 | NPOC:8.617mg/L | 5/10/2019 4:30:51 PM | 10 |
| 11 | NPOC | 240-112111-g-5 | 1.000 | NPOC:1.991mg/L | 5/10/2019 4:53:18 PM | 11 |
| 12 | NPOC | 240-112234-h-2 | 1.000 | NPOC:8.774mg/L | 5/10/2019 5:19:30 PM | 12 |
| 13 | NPOC | 490-173086-d-5 | 1.000 | NPOC:32.64mg/L | 5/10/2019 6:11:55 PM | 13 |
| 14 | NPOC | 490-173086-d-10 | 1.000 | NPOC:15.02mg/L | 5/10/2019 6:39:46 PM | 14 |
| 15 | NPOC | 490-173086-d-11 | 1.000 | NPOC:11.88mg/L | 5/10/2019 7:09:34 PM | 15 |
| 16 | NPOC | 490-173086-g-12 | 1.000 | NPOC:12.83mg/L | 5/10/2019 7:38:06 PM | 16 |
| 17 | NPOC | 490-173121-h-2 | 1.000 | NPOC:13.23mg/L | 5/10/2019 8:04:00 PM | 17 |
| 18 | NPOC | MS 490-173121-h-2 | 1.000 | NPOC:33.12mg/L | 5/10/2019 8:31:02 PM | 18 |
| 19 | NPOC | MSD 490-173121-h-2 | 1.000 | NPOC:32.95mg/L | 5/10/2019 8:57:57 PM | 19 |
| 20 | NPOC | CCV | 1.000 | NPOC:25.35mg/L | 5/10/2019 9:24:40 PM | 20 |
| 21 | NPOC | CCB | 1.000 | NPOC:0.8494mg/L | 5/10/2019 9:47:07 PM | 21 |
| 22 | NPOC | 490-173086-d-13 | 1.000 | NPOC:12.70mg/L | 5/10/2019 10:15:05 PM | 22 |
| 23 | NPOC | 490-173086-d-24 | 1.000 | NPOC:12.86mg/L | 5/10/2019 10:43:28 PM | 23 |
| 24 | NPOC | 490-173307-d-7 | 1.000 | NPOC:255.5mg/L | 5/10/2019 11:24:38 PM | 24 |
| 25 | NPOC | 490-173364-j-1 | 1.000 | NPOC:73.20mg/L | 5/10/2019 11:59:56 PM | 25 |
| 26 | NPOC | 490-173364-j-2 | 1.000 | NPOC:40.52mg/L | 5/11/2019 12:28:19 AM | 26 |
| 27 | NPOC | 490-173364-j-3 | 1.000 | NPOC:4.580mg/L | 5/11/2019 12:54:59 AM | 27 |
| 28 | NPOC | 490-173364-j-4 | 1.000 | NPOC:97.52mg/L | 5/11/2019 1:44:15 AM | 28 |
| 29 | NPOC | 490-173408-i-1 | 1.000 | NPOC:2.821mg/L | 5/11/2019 2:09:08 AM | 29 |
| 30 | NPOC | 490-173408-g-2 | 1.000 | NPOC:3.147mg/L | 5/11/2019 2:31:39 AM | 30 |
| 31 | NPOC | 490-173121-h-3 | 1.000 | NPOC:8.187mg/L | 5/11/2019 2:56:47 AM | 31 |
| 32 | NPOC | MS 490-173121-h-3 | 1.000 | NPOC:26.85mg/L | 5/11/2019 3:26:53 AM | 32 |
| 33 | NPOC | MSD 490-173121-h-3 | 1.000 | NPOC:27.61mg/L | 5/11/2019 3:53:38 AM | 33 |
| 34 | NPOC | CCV | 1.000 | NPOC:25.60mg/L | 5/11/2019 4:20:13 AM | 34 |
| 35 | NPOC | CCB | 1.000 | NPOC:0.9067mg/L | 5/11/2019 4:42:21 AM | 35 |

TOC 7
9060A
Batch #594412
VP 5111119

Instr.Information

| | |
|---|---|
| System | TOC V |
| Instrument Options | TOC/ASI/ |
| Catalyst | Regular Sensitivity |

Sample

| | |
|---|---|
| Sample Name: | ADC 4728624 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

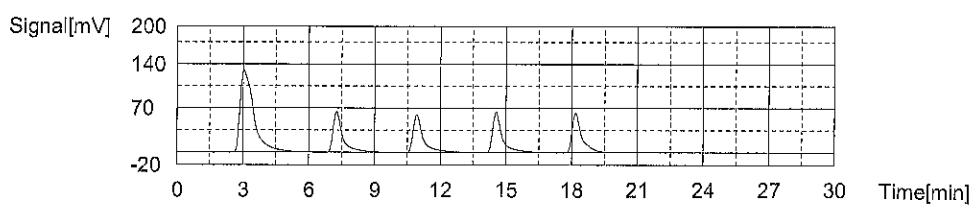
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:105.7mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.5340 | 0.8773mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:49:54 AM |
| 2 | 561.1 | 108.9mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:54:20 AM |
| 3 | 199.3 | 107.5mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:58:09 AM |
| 4 | 189.7 | 102.3mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:01:56 PM |
| 5 | 198.8 | 107.2mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:05:43 PM |
| 6 | 196.1 | 105.7mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:09:06 PM |

Mean Area 196.0
Mean Conc. 105.7mg/L




Sample

| | |
|---|---|
| Sample Name: | IPCS 4853971 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

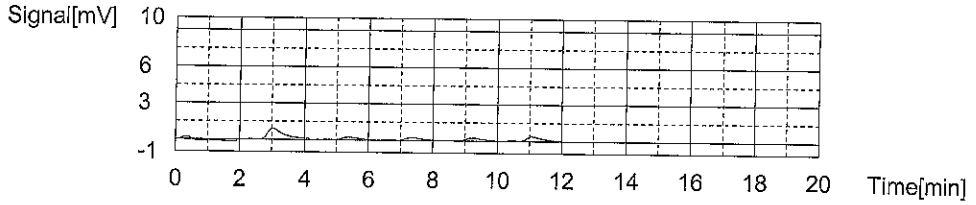
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8872mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3626 | 0.8442mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:20:20 PM |
| 2 | 2.712 | 1.297mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:22:45 PM |
| 3 | 0.6309 | 0.8959mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:24:52 PM |
| 4 | 0.7018 | 0.9096mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:26:55 PM |
| 5 | 0.6464 | 0.8989mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:28:58 PM |
| 6 | 1.103 | 0.9869mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:31:11 PM |

Mean Area 0.5854
Mean Conc. 0.8872mg/L




Sample

Sample Name: MB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

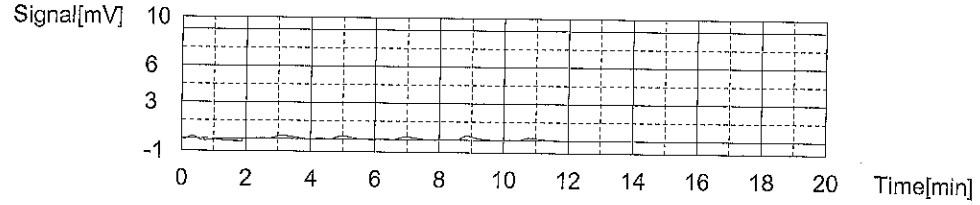
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9098mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4419 | 0.8595mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:42:26 PM |
| 2 | 0.6418 | 0.8980mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:44:29 PM |
| 3 | 0.8020 | 0.9289mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:46:36 PM |
| 4 | 0.7212 | 0.9133mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:48:39 PM |
| 5 | 0.9070 | 0.9491mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:50:42 PM |
| 6 | 0.6473 | 0.8991mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 12:52:47 PM |

Mean Area 0.7031
Mean Conc. 0.9098mg/L




Sample

Sample Name: CCV 4728624
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

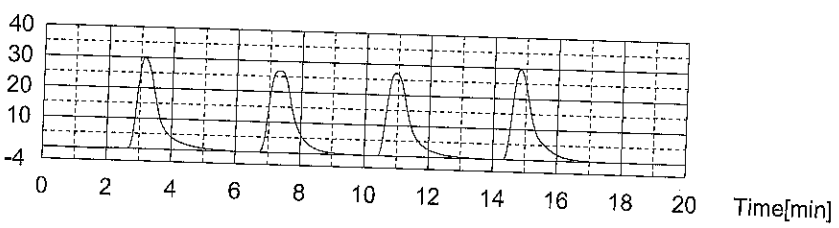
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:26.34mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3137 | 0.8348mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:04:02 PM |
| 2 | 132.5 | 26.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:08:11 PM |
| 3 | 138.4 | 27.45mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:12:02 PM |
| 4 | 130.2 | 25.87mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:16:05 PM |
| 5 | 129.6 | 25.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:20:02 PM |

Mean Area 132.7
Mean Conc. 26.34mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

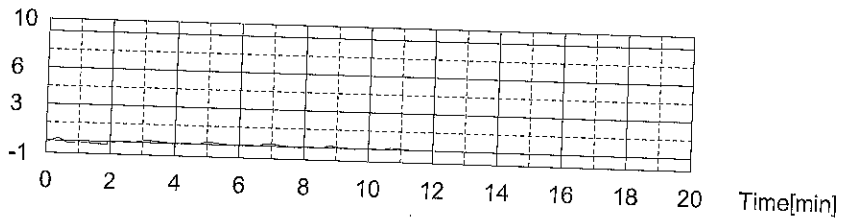
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8490mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3385 | 0.8396mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:31:23 PM |
| 2 | 0.4026 | 0.8519mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:33:25 PM |
| 3 | 0.5783 | 0.8858mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:35:28 PM |
| 4 | 0.5873 | 0.8875mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:37:31 PM |
| 5 | 0.4100 | 0.8534mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:39:34 PM |
| 6 | 0.3981 | 0.8511mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:41:38 PM |

Mean Area 0.3873
Mean Conc. 0.8490mg/L




Sample

Sample Name: LCS 4728655
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

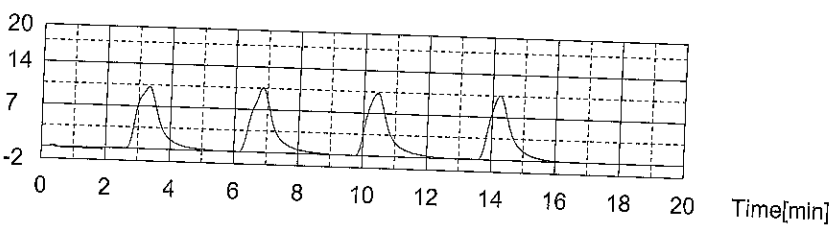
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.06mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3000 | 0.8322mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:52:53 PM |
| 2 | 48.16 | 10.06mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 1:56:28 PM |
| 3 | 48.52 | 10.12mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:00:14 PM |
| 4 | 48.17 | 10.06mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:04:11 PM |
| 5 | 47.89 | 10.00mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:07:54 PM |

Mean Area 48.19
Mean Conc. 10.06mg/L




Sample

Sample Name:
Sample ID: LCSD 4728655
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

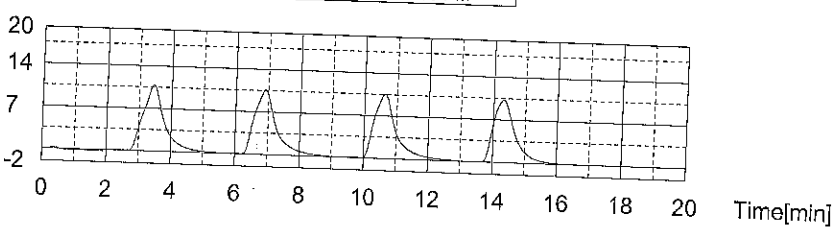
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.06mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3311 | 0.8382mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 2:57:09 PM |
| 2 | 48.75 | 10.17mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:00:49 PM |
| 3 | 48.51 | 10.12mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:04:41 PM |
| 4 | 48.30 | 10.08mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:08:34 PM |
| 5 | 47.28 | 9.886mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:12:13 PM |

Mean Area 48.21
Mean Conc. 10.06mg/L




Sample

Sample Name:
Sample ID: 240-112111-h-2
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

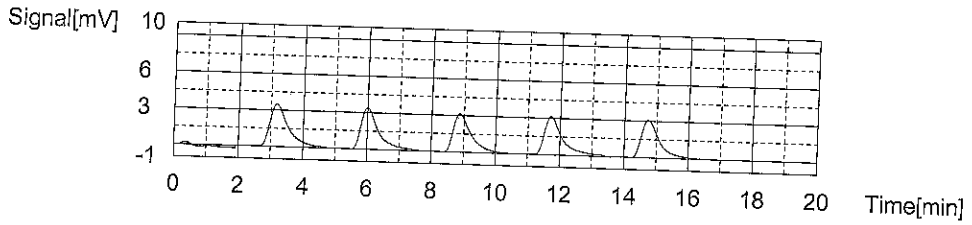
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:3.079mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3882 | 0.8492mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:23:34 PM |
| 2 | 13.16 | 3.310mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:26:32 PM |
| 3 | 12.51 | 3.185mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:29:33 PM |
| 4 | 11.93 | 3.073mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:32:31 PM |
| 5 | 11.67 | 3.023mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:35:40 PM |
| 6 | 11.73 | 3.035mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:38:46 PM |

Mean Area 11.96
Mean Conc. 3.079mg/L




Sample

Sample Name: 240-112111-g-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

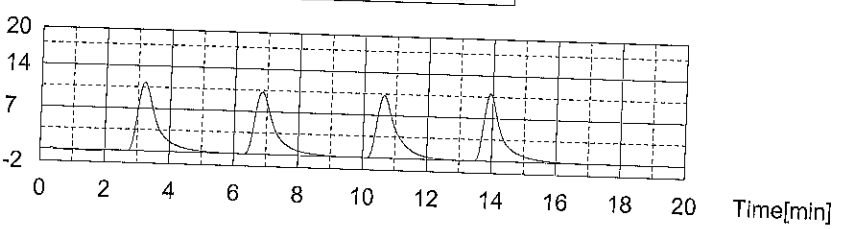
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:9.135mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3212 | 0.8362mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:50:01 PM |
| 2 | 45.75 | 9.591mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:53:46 PM |
| 3 | 43.36 | 9.130mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 3:57:42 PM |
| 4 | 41.78 | 8.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:01:12 PM |
| 5 | 42.64 | 8.992mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:05:11 PM |

Mean Area 43.38
Mean Conc. 9.135mg/L




Sample

Sample Name: 240-112111-g-4
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

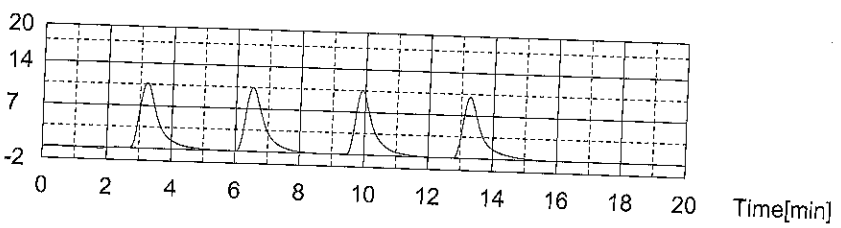
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.617mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4756 | 0.8660mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:16:31 PM |
| 2 | 42.14 | 8.895mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:19:58 PM |
| 3 | 41.30 | 8.733mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:23:33 PM |
| 4 | 39.36 | 8.359mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:26:59 PM |
| 5 | 39.99 | 8.481mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:30:51 PM |

Mean Area 40.70
Mean Conc. 8.617mg/L




Sample

Sample Name: 240-112111-g-5
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

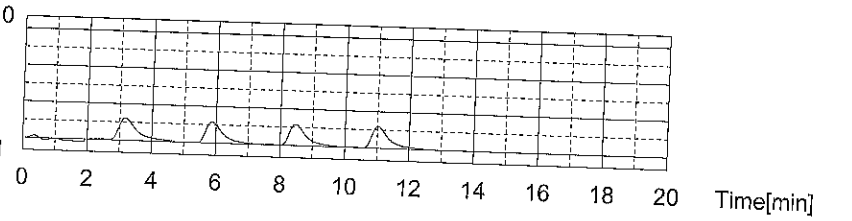
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.991mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4390 | 0.8589mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:42:11 PM |
| 2 | 6.583 | 2.043mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:45:03 PM |
| 3 | 6.245 | 1.978mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:47:47 PM |
| 4 | 6.151 | 1.960mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:50:30 PM |
| 5 | 6.269 | 1.982mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 4:53:18 PM |

Mean Area 6.312
Mean Conc. 1.991mg/L




Sample

Sample Name: 240-112234-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

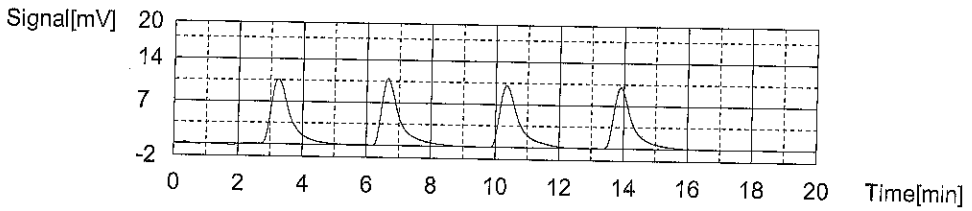
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.774mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4093 | 0.8532mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:04:39 PM |
| 2 | 42.60 | 8.984mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:08:16 PM |
| 3 | 41.78 | 8.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:12:03 PM |
| 4 | 41.65 | 8.801mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:15:45 PM |
| 5 | 40.02 | 8.487mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:19:30 PM |

Mean Area 41.51
Mean Conc. 8.774mg/L




Sample

Sample Name: 490-173086-d-5
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

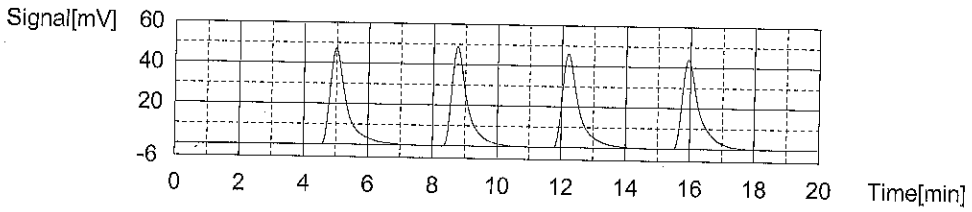
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:32.64mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2965 | 0.8315mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:54:41 PM |
| 2 | 0.1345 | 0.8003mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 5:56:44 PM |
| 3 | 168.2 | 33.19mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:00:39 PM |
| 4 | 163.2 | 32.22mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:04:12 PM |
| 5 | 166.3 | 32.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:08:06 PM |
| 6 | 163.7 | 32.32mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:11:55 PM |

Mean Area 165.4
Mean Conc. 32.64mg/L




Sample

Sample Name: 490-173086-d-10
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

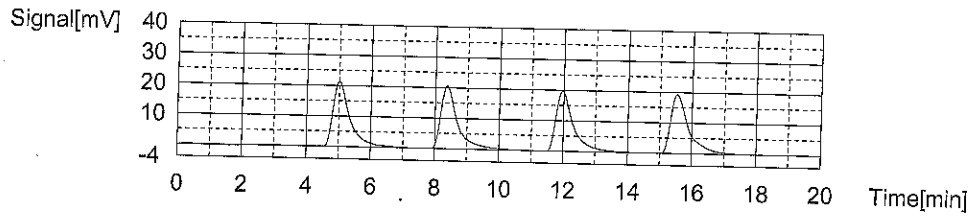
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:15.02mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3873 | 0.8490mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:23:10 PM |
| 2 | 0.1917 | 0.8113mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:25:12 PM |
| 3 | 75.81 | 15.38mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:28:42 PM |
| 4 | 72.99 | 14.84mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:32:25 PM |
| 5 | 73.41 | 14.92mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:36:07 PM |
| 6 | 73.47 | 14.93mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:39:46 PM |

Mean Area 73.92
Mean Conc. 15.02mg/L




Sample

Sample Name: 490-173086-d-11
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

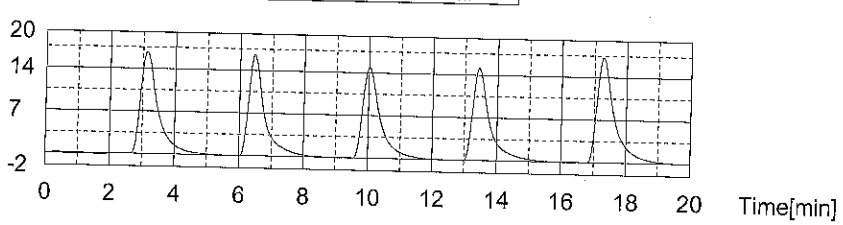
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:11.88mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.5004 | 0.8708mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:51:01 PM |
| 2 | 62.14 | 12.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:54:29 PM |
| 3 | 56.98 | 11.76mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 6:58:10 PM |
| 4 | 56.03 | 11.57mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:01:46 PM |
| 5 | 55.40 | 11.45mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:05:43 PM |
| 6 | 65.25 | 13.35mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:09:34 PM |

Mean Area 57.64
Mean Conc. 11.88mg/L




Sample

Sample Name: 490-173086-g-12
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

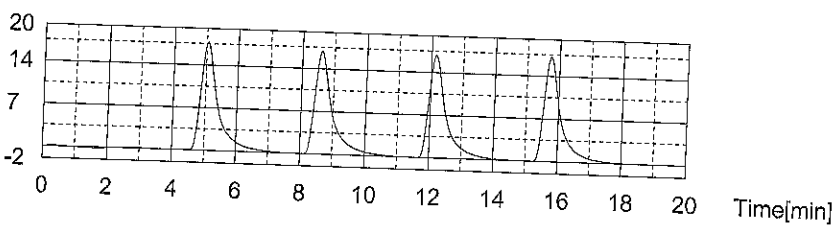
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.83mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3027 | 0.8327mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:20:48 PM |
| 2 | 0.2376 | 0.8201mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:22:51 PM |
| 3 | 64.25 | 13.16mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:26:34 PM |
| 4 | 62.50 | 12.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:30:15 PM |
| 5 | 61.68 | 12.66mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:34:10 PM |
| 6 | 61.83 | 12.69mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:38:06 PM |

Mean Area 62.57
Mean Conc. 12.83mg/L




Sample

Sample Name:
Sample ID: 490-173121-h-2
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

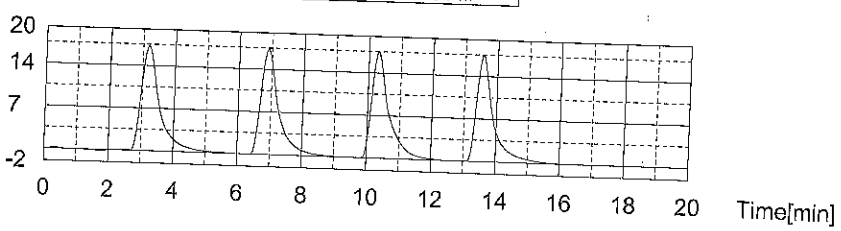
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:13.23mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4572 | 0.8625mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:49:21 PM |
| 2 | 67.18 | 13.72mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:53:11 PM |
| 3 | 65.54 | 13.40mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 7:56:50 PM |
| 4 | 63.28 | 12.97mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:00:13 PM |
| 5 | 62.49 | 12.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:04:00 PM |

Mean Area 64.62
Mean Conc. 13.23mg/L




Sample

Sample Name:
Sample ID: MS 490-173121-h-2
Origin: Untitled
Status 9060A NPOC.met
Chk. Result Completed

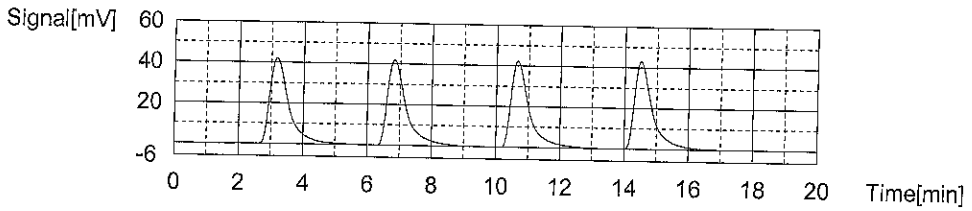
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:33.12mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2810 | 0.8285mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:15:19 PM |
| 2 | 171.1 | 33.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:19:08 PM |
| 3 | 169.0 | 33.34mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:23:09 PM |
| 4 | 164.9 | 32.55mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:27:07 PM |
| 5 | 166.4 | 32.84mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:31:02 PM |

Mean Area 167.8
Mean Conc. 33.12mg/L




Sample

Sample Name: MSD 490-173121-h-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

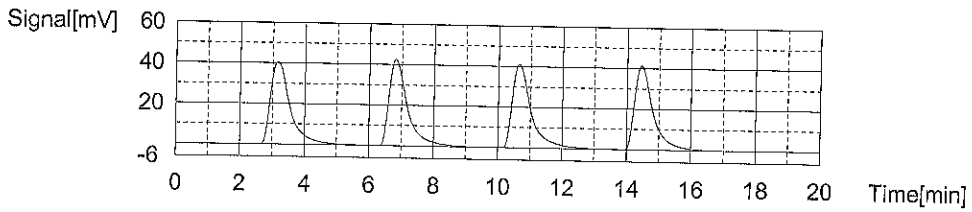
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:32.95mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3486 | 0.8415mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:42:22 PM |
| 2 | 169.7 | 33.48mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:46:11 PM |
| 3 | 168.4 | 33.23mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:50:08 PM |
| 4 | 165.9 | 32.75mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:54:05 PM |
| 5 | 163.9 | 32.36mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 8:57:57 PM |

Mean Area 167.0
Mean Conc. 32.95mg/L




Sample

Sample Name: CCV
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

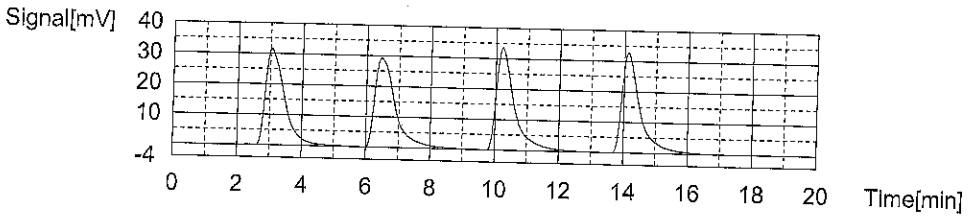
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:25.35mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3105 | 0.8342mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:09:17 PM |
| 2 | 125.6 | 24.98mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:12:46 PM |
| 3 | 127.8 | 25.40mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:16:41 PM |
| 4 | 129.5 | 25.73mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:20:45 PM |
| 5 | 127.2 | 25.29mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:24:40 PM |

Mean Area 127.5
Mean Conc. 25.35mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

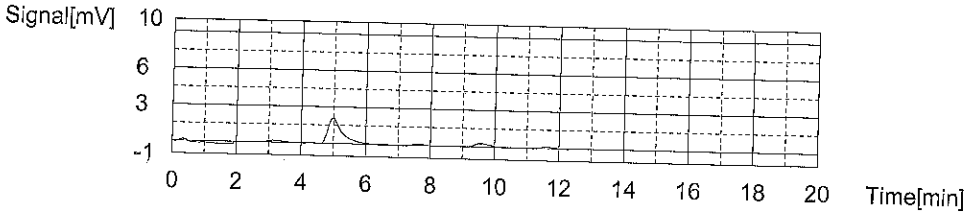
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8494mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3326 | 0.8384mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:35:59 PM |
| 2 | 0.4490 | 0.8609mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:38:03 PM |
| 3 | 6.550 | 2.037mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:40:47 PM |
| 4 | 0.4018 | 0.8518mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:42:50 PM |
| 5 | 0.9783 | 0.9629mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:45:04 PM |
| 6 | 0.3749 | 0.8466mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:47:07 PM |

Mean Area 0.3896
Mean Conc. 0.8494mg/L




Sample

Sample Name: 490-173086-d-13
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

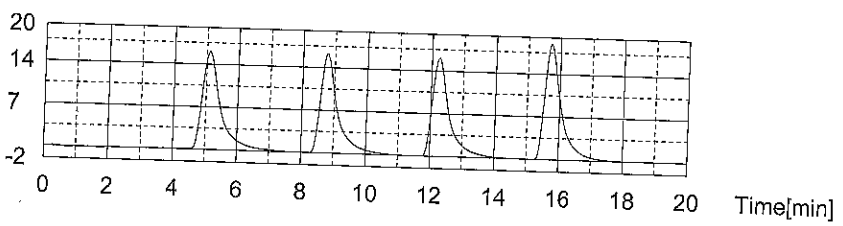
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.70mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3427 | 0.8404mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 9:58:22 PM |
| 2 | 0.000 | 0.7743mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:00:24 PM |
| 3 | 62.56 | 12.83mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:04:16 PM |
| 4 | 59.50 | 12.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:07:54 PM |
| 5 | 58.44 | 12.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:11:33 PM |
| 6 | 67.08 | 13.70mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:15:05 PM |

Mean Area 61.89
Mean Conc. 12.70mg/L




Sample

Sample Name: 490-173086-d-24
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

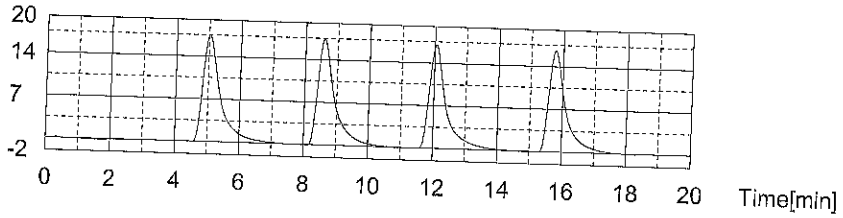
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:12.86mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4017 | 0.8518mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:26:19 PM |
| 2 | 0.1366 | 0.8007mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:28:22 PM |
| 3 | 65.10 | 13.32mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:32:05 PM |
| 4 | 62.71 | 12.86mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:35:39 PM |
| 5 | 62.00 | 12.72mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:39:33 PM |
| 6 | 61.07 | 12.54mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:43:28 PM |

Mean Area 62.72
Mean Conc. 12.86mg/L




Sample

Sample Name: 490-173307-d-7
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

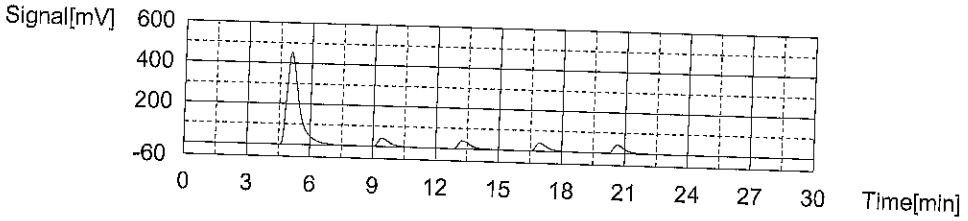
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:255.5mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3533 | 0.8424mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:54:43 PM |
| 2 | 0.6967 | 0.9086mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 10:56:45 PM |
| 3 | 1825 | 352.5mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:01:21 PM |
| 4 | 164.5 | 259.8mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:13:10 PM |
| 5 | 163.9 | 258.9mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:17:00 PM |
| 6 | 161.2 | 254.7mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:20:52 PM |
| 7 | 157.3 | 248.7mg/L | 50uL | 8 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:24:38 PM |

Mean Area 161.7
Mean Conc. 255.5mg/L




Sample

Sample Name: 490-173364-j-1
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

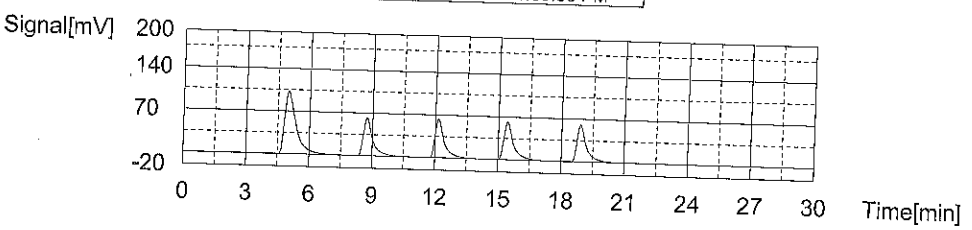
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:73.20mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3752 | 0.8467mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:36:00 PM |
| 2 | 0.2869 | 0.8296mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:38:03 PM |
| 3 | 386.5 | 75.26mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:42:02 PM |
| 4 | 197.5 | 73.97mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:45:37 PM |
| 5 | 195.8 | 73.34mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:49:01 PM |
| 6 | 200.2 | 74.97mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:52:40 PM |
| 7 | 188.2 | 70.52mg/L | 26uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/10/2019 11:59:56 PM |

Mean Area 195.4
Mean Conc. 73.20mg/L




Sample

Sample Name: 490-173364-j-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

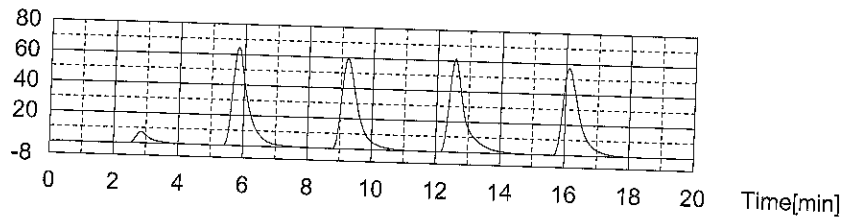
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:40.52mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.4033 | 0.8521mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:11:11 AM |
| 2 | 22.83 | 5.174mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:14:08 AM |
| 3 | 210.0 | 41.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:17:37 AM |
| 4 | 207.8 | 40.82mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:21:08 AM |
| 5 | 204.4 | 40.16mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:24:48 AM |
| 6 | 202.8 | 39.86mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:28:19 AM |

Mean Area 206.3
Mean Conc. 40.52mg/L




Sample

Sample Name: 490-173364-j-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

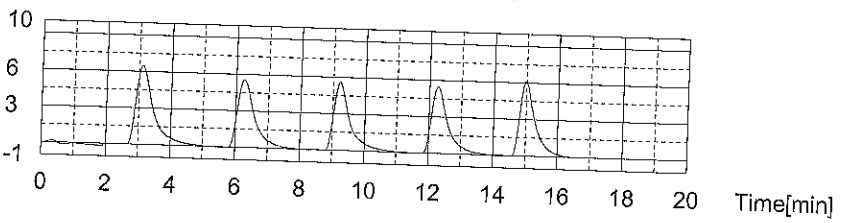
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:4.580mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3661 | 0.8449mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:39:35 AM |
| 2 | 23.79 | 5.359mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:42:50 AM |
| 3 | 20.53 | 4.731mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:46:00 AM |
| 4 | 19.43 | 4.519mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:49:11 AM |
| 5 | 19.05 | 4.445mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:52:08 AM |
| 6 | 19.98 | 4.625mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 12:54:59 AM |

Mean Area 19.75
Mean Conc. 4.580mg/L




Sample

Sample Name: 490-173364-j-4
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

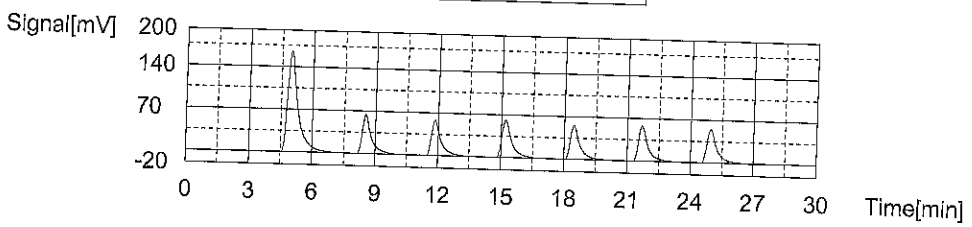
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:97.52mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2579 | 0.8240mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:06:15 AM |
| 2 | 0.000 | 0.7743mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:08:18 AM |
| 3 | 567.7 | 110.2mg/L | 50uL | 1 | R | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:12:08 AM |
| 4 | 199.8 | 107.7mg/L | 18uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:15:39 AM |
| 5 | 184.5 | 99.54mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:19:08 AM |
| 6 | 200.3 | 108.0mg/L | 18uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:22:34 AM |
| 7 | 176.9 | 95.47mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:29:46 AM |
| 8 | 180.5 | 97.40mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:36:59 AM |
| 9 | 181.0 | 97.67mg/L | 18uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:44:15 AM |

Mean Area 180.7
Mean Conc. 97.52mg/L




Sample

Sample Name: 490-173408-i-1
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

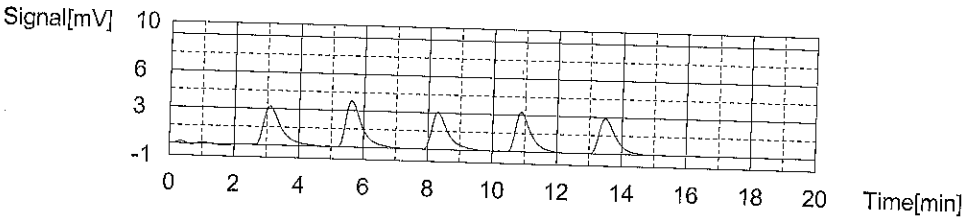
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:2.821mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.6383 | 0.8974mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:55:31 AM |
| 2 | 11.40 | 2.971mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 1:58:15 AM |
| 3 | 12.96 | 3.272mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:01:03 AM |
| 4 | 10.38 | 2.775mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:03:49 AM |
| 5 | 10.71 | 2.838mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:06:29 AM |
| 6 | 9.986 | 2.699mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:09:08 AM |

Mean Area 10.62
Mean Conc. 2.821mg/L




Sample

Sample Name: 490-173408-g-2
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

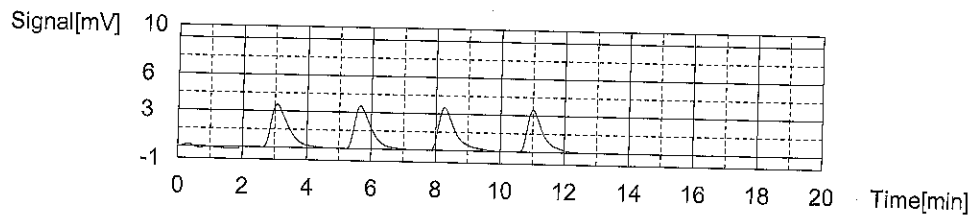
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:3.147mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2947 | 0.8311mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:20:24 AM |
| 2 | 12.68 | 3.218mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:23:09 AM |
| 3 | 12.47 | 3.177mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:25:54 AM |
| 4 | 12.37 | 3.158mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:28:47 AM |
| 5 | 11.72 | 3.033mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:31:39 AM |

Mean Area 12.31
Mean Conc. 3.147mg/L




Sample

Sample Name: 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

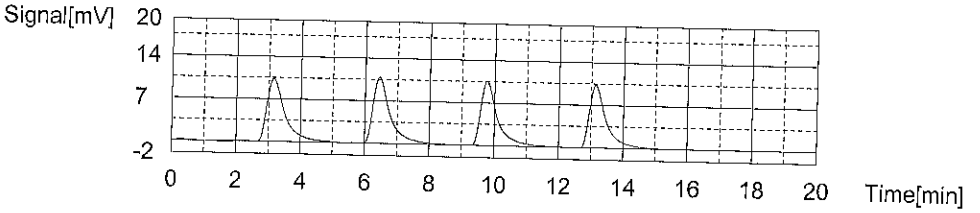
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:8.187mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3127 | 0.8346mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:43:00 AM |
| 2 | 39.70 | 8.425mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:46:25 AM |
| 3 | 39.92 | 8.467mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:49:56 AM |
| 4 | 37.66 | 8.032mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:53:27 AM |
| 5 | 36.59 | 7.826mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 2:56:47 AM |

Mean Area 38.47
Mean Conc. 8.187mg/L




Sample

Sample Name: MS 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

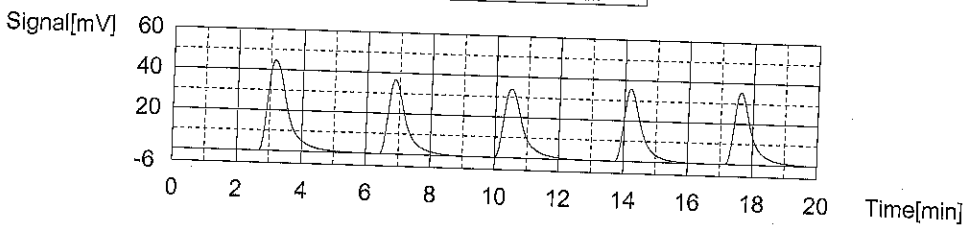
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:26.85mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3496 | 0.8417mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:08:08 AM |
| 2 | 188.1 | 37.02mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:12:03 AM |
| 3 | 138.6 | 27.48mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:15:46 AM |
| 4 | 139.0 | 27.56mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:19:42 AM |
| 5 | 132.5 | 26.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:23:17 AM |
| 6 | 131.1 | 26.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:26:53 AM |

Mean Area 135.3
Mean Conc. 26.85mg/L




Sample

Sample Name: MSD 490-173121-h-3
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

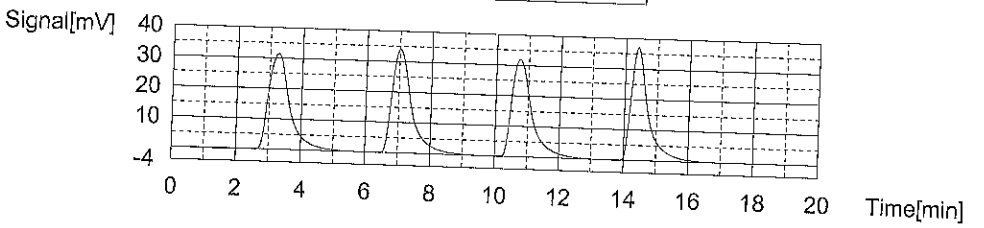
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:27.61mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3683 | 0.8453mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:38:10 AM |
| 2 | 142.2 | 28.18mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:42:09 AM |
| 3 | 142.0 | 28.14mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:46:01 AM |
| 4 | 138.1 | 27.39mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:49:55 AM |
| 5 | 134.7 | 26.73mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 3:53:38 AM |

Mean Area 139.3
Mean Conc. 27.61mg/L




Sample

Sample Name: CCV
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

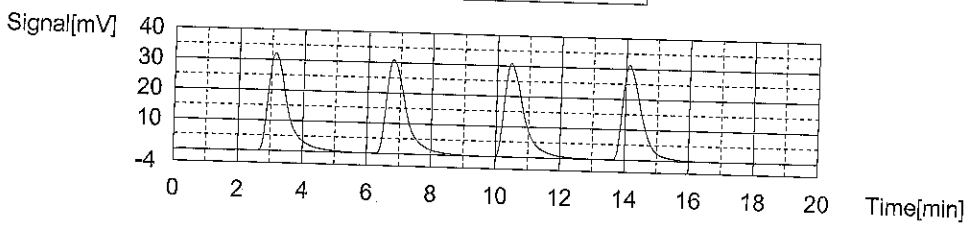
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:25.60mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3417 | 0.8402mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:04:59 AM |
| 2 | 130.9 | 26.00mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:08:47 AM |
| 3 | 130.6 | 25.94mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:12:37 AM |
| 4 | 127.9 | 25.42mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:16:27 AM |
| 5 | 125.9 | 25.04mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:20:13 AM |

Mean Area 128.8
Mean Conc. 25.60mg/L




Sample

Sample Name: CCB
Sample ID: Untitled
Origin: 9060A NPOC.met
Status Completed
Chk. Result

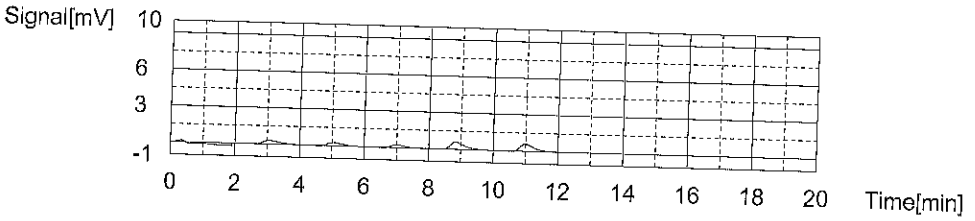
| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9067mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.2679 | 0.8260mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:31:33 AM |
| 2 | 0.9242 | 0.9524mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:33:39 AM |
| 3 | 0.8676 | 0.9415mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:35:46 AM |
| 4 | 0.6876 | 0.9069mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:37:49 AM |
| 5 | 1.863 | 1.133mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:40:03 AM |
| 6 | 1.816 | 1.124mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/11/2019 4:42:21 AM |

Mean Area 0.6868
Mean Conc. 0.9067mg/L



REM



Instr.Information

| | |
|---|---|
| System | TOC V |
| Instrument Options | TOC/ASI/ |
| Catalyst | Regular Sensitivity |

TOC 7
Calibration Curve
9060A SM5310B
of 5.3.19

Cal. Curve

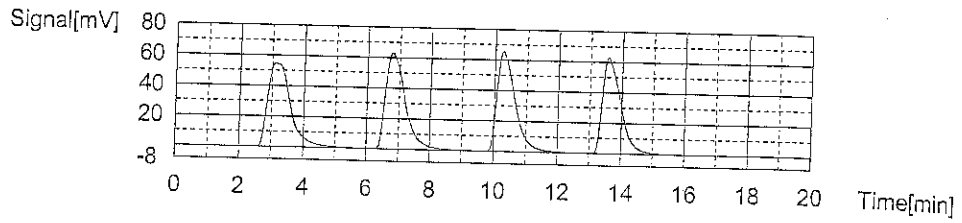
| | |
|---|---|
| Sample Name: | CCV 50PPM 4728624 |
| Sample ID: | 50PPM |
| Cal. Curve: | NPOC.2019_05_03_08_16_51.cal |
| Status | Completed |

| Type | Anal. |
|---|---|
| Standard | NPOC |

Conc: 50.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 0.4406 | 50uL | 1 | ******* | E | 5/3/2019 8:27:14 AM |
| 2 | 263.4 | 50uL | 1 | ******* | | 5/3/2019 8:31:04 AM |
| 3 | 267.0 | 50uL | 1 | ******* | | 5/3/2019 8:34:47 AM |
| 4 | 254.6 | 50uL | 1 | ******* | | 5/3/2019 8:38:14 AM |
| 5 | 248.7 | 50uL | 1 | ******* | | 5/3/2019 8:41:40 AM |

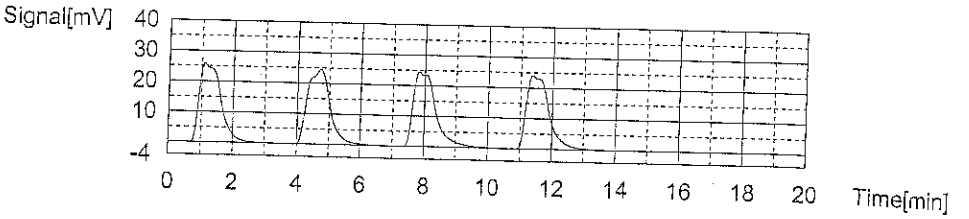
Acid Add. 0.000%
Sp. Time 180.0sec
Mean Area 258.4




Conc: 25.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 123.4 | 50uL | 2 | ******* | | 5/3/2019 8:52:57 AM |
| 2 | 120.1 | 50uL | 2 | ******* | | 5/3/2019 8:56:31 AM |
| 3 | 120.4 | 50uL | 2 | ******* | | 5/3/2019 9:00:12 AM |
| 4 | 117.1 | 50uL | 2 | ******* | | 5/3/2019 9:03:50 AM |

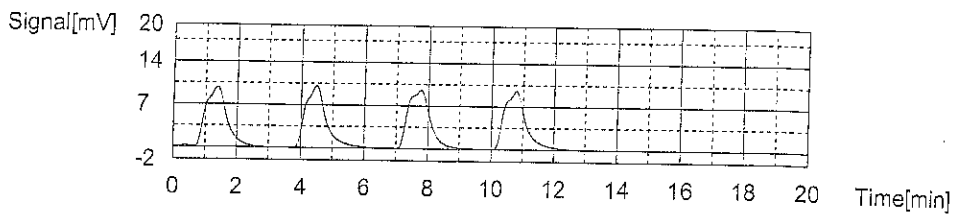
Acid Add. 0.000%
Sp. Time 180.0sec
Mean Area 120.3




Conc: 10.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 45.61 | 50uL | 5 | ******* | | 5/3/2019 9:14:59 AM |
| 2 | 45.73 | 50uL | 5 | ******* | | 5/3/2019 9:18:21 AM |
| 3 | 46.25 | 50uL | 5 | ******* | | 5/3/2019 9:21:33 AM |
| 4 | 45.42 | 50uL | 5 | ******* | | 5/3/2019 9:25:07 AM |

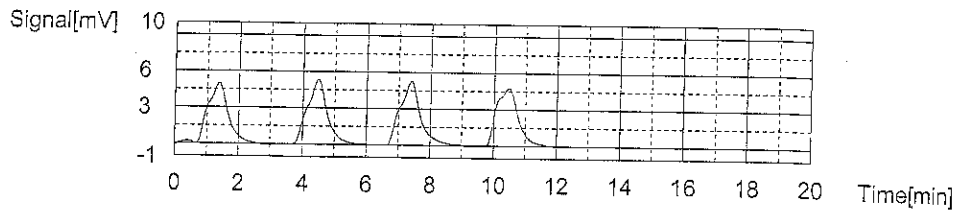
| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 45.75 |




Conc: 5.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 22.75 | 50uL | 10 | ******* | | 5/3/2019 9:36:08 AM |
| 2 | 23.09 | 50uL | 10 | ******* | | 5/3/2019 9:39:14 AM |
| 3 | 23.14 | 50uL | 10 | ******* | | 5/3/2019 9:42:29 AM |
| 4 | 22.45 | 50uL | 10 | ******* | | 5/3/2019 9:45:28 AM |

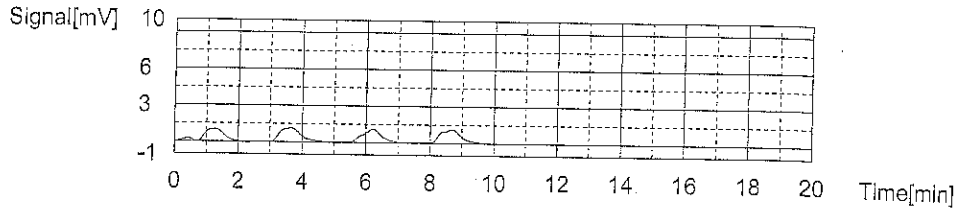
| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 22.86 |



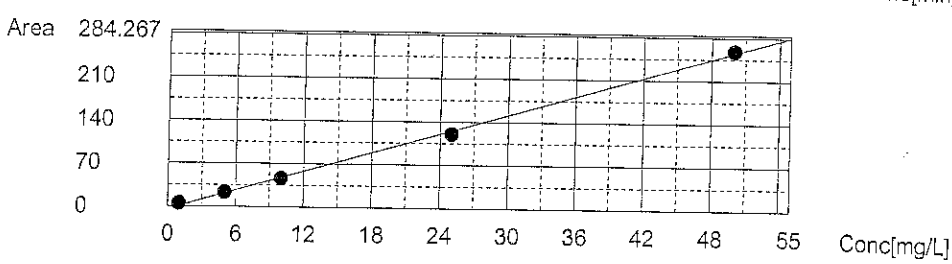

Conc: 1.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 4.880 | 50uL | 50 | ******* | | 5/3/2019 9:55:48 AM |
| 2 | 5.019 | 50uL | 50 | ******* | | 5/3/2019 9:58:21 AM |
| 3 | 4.542 | 50uL | 50 | ******* | | 5/3/2019 10:01:05 AM |
| 4 | 4.892 | 50uL | 50 | ******* | | 5/3/2019 10:03:37 AM |

| | |
|---|---|
| Acid Add. | 0.000% |
| Sp. Time | 180.0sec |
| Mean Area | 4.833 |




| | |
|---|---|
| Slope: | 5.189 |
| Intercept | -4.018 |
| r^2 | 0.9987 |
| r | 0.9993 |
| Zero Shift | No |




Sample

| | |
|---|---|
| Sample Name: | ICV 4728655 |
| Sample ID: | Untitled |
| Origin: | 9060A NPOC.met |
| Status | Completed |
| Chk. Result | |

| Type | Anal. | Manual Dilution | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:10.57mg/L |

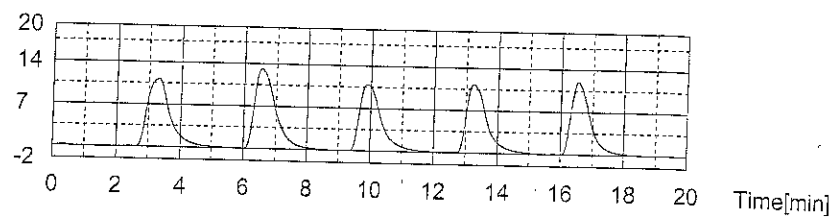
1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.3175 | 0.8355mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:14:58 AM |
| 2 | 53.74 | 11.13mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:18:32 AM |
| 3 | 59.52 | 12.24mg/L | 50uL | 1 | E | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:22:01 AM |
| 4 | 51.02 | 10.61mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:25:32 AM |
| 5 | 49.46 | 10.31mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:29:00 AM |
| 6 | 49.10 | 10.24mg/L | 50uL | 1 | | NPOC.2019_05_03_08_16_51.cal | 5/3/2019 10:32:14 AM |

Mean Area 50.83
Mean Conc. 10.57mg/L

1062.



# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| 240-112111-G-2 | MRC-MW-81B-050619 | 240-4156145 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-3 | MRC-NMW-1I-050619 | 240-4156156 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-4 | MRC-NMW-3I-050619 | 240-4156167 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112111-G-5 | MRC-NMW-2I-050619 | 240-4156178 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | JWM | MD | TOC5 | Unconfirmed |
| 240-112234-H-2 | MRC-NMW-2S-050719 | 240-4159352 | 9060A | 9060A | 06/04 23:59 | 05/20/19 | JWM | MD | TOC5 | Unconfirmed |
| 490-173086-D-5 | THAND-SA19-TW03-010 | 490-4961736 | 9060A | 9060A | 05/27 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-10 | THAND-SA19-MW10-010 | 490-4961752 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-11 | THAND-SA19-MW17-010 | 490-4961756 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-G-12 | THAND-SA19-MW20-010 | 490-4961763 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| 490-173086-D-13 | THAND-SA19-MW20-011 | 490-4961767 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |

# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| **490-173086-D-24** | THAND-SA19 -MW23-010 | 490-4961802 | 9060A | 9060A | 05/28 23:59 | 05/13/19 | GAL | TX | TOC4 | Unconfirmed |
| **490-173121-H-2** | SL-2A | 490-4962799 | 9060A | 9060A | 05/28 23:59 | 05/14/19 | LRK | WY | W332 | Unconfirmed |
| M MS/MSD Required | | | | | | | | | | |
| **490-173121-H-3** | SL-3A | 490-4962813 | 9060A | 9060A | 05/28 23:59 | 05/14/19 | LRK | WY | W332 | Unconfirmed |
| M MS/MSD Required | | | | | | | | | | |
| **490-173307-D-7** | THAND-SA19-MW 12-010 | 490-4967773 | 9060A | 9060A | 05/30 23:59 | 05/15/19 | GAL | TX | TOC4 | Unconfirmed |
| **490-173364-J-1** | WG-2660-PZ03D(3 00419) | 490-4969350 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-2** | WG-2660-PZ02D(3 00419) | 490-4969360 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-3** | WG-2660-PZ04S(3 00419) | 490-4969370 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173364-J-4** | WG-2660-PZ04D(3 00419) | 490-4969380 | 9060A | 9060A | 05/28 23:59 | 05/16/19 | RLC | KS | TOC4 | Unconfirmed |
| **490-173408-I-1** | Z1-120 | 490-4971072 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | TWW | KY | TOC4 | Unconfirmed |

# Sample Request Form: 315603



Wet Chemistry 5/10/2019 1:07:08 PM Assigned to:Patel, Viren R

| Sample | Client Sample ID | Container | Method | Analytical Method | Hold Time | Due | PM | State Code | Storage | Hazard Level |
|---|---|---|---|---|---|---|---|---|---|---|
| 490-173408-G-2 | Z1-121 | 490-4971044 | 9060A | 9060A | 06/03 23:59 | 05/17/19 | TWW | KY | TOC4 | Unconfirmed |

# Subcontract Data

# Shipping and Receiving Documents

Baltimore #201

2.2/2.0

# Chain of Custody Record

321365

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

| Client Contact | Project Manager: Tony Aparnavage | Site Contact: Walt Ayron | Date: 5/7/19 | COC No: |
|---|---|---|---|---|
| Company Name: Tetra Tech INC | Tel/Fax: 301 528-3521 | Lab Contact: John McFadden | Carrier: Fed Ex | 1 of 1 COCs |
| Address: 20251 Century Blvd. | Analysis Turnaround Time | | | Sampler: Walt Ayron |
| City/State/Zip: Germantown, MD 20874 | ☐ CALENDAR DAYS ☐ WORKING DAYS | | | For Lab Use Only: |
| Phone: 301 528-3521 | TAT if different from Below | | | Walk-in Client: |
| Fax: 3000 | ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day — Standard | | | Lab Sampling: |
| Project Name: Middle River Center | | | | Job / SDG No.: |
| Site: Block I GW Sampling | | | | |
| PO # | | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS / MSD (Y/N) | VOCs | MEE | TOC | Cations | Anions | Alkalinity | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-050719 | 5/7/19 | — | G | QC | 2 | | | 2 | - | - | - | - | - | |
| MRC-NMW-2S-050719 | ↓ | 1200 | ↓ | GW | 11 | | | 3 | 3 | 2 | 1 | 1 | 1 | |

5/7/19

240-112234 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

2 2 3 4 1 1

**Possible Hazard Identification:**
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

**Special Instructions/QC Requirements & Comments:**

| Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____ |
|---|---|---|---|

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| Walt Ayron | TT INC | 5/7/19 | | TA | 5/7/19 1430 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | TA 5/7/19 | 1700 | | ETA | 5-8-19 920 |
| Relinquished by: | Company: | Date/Time: | Received in Laboratory by: | Company: | Date/Time: |

**TestAmerica Canton Sample Receipt Form/Narrative** **Login # : 112234**
**Canton Facility**

Client Tetra Tech Site Name _____ Cooler unpacked by: Ryan Cribler

Cooler Received on 5-8-19 Opened on 5-8-19 920

FedEx: 1st Grd (Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

**Receipt After-hours**: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 2.2 °C Corrected Cooler Temp. 2.0 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

| | | |
|---|---|---|
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 | (Yes) | No |
| -Were the seals on the outside of the cooler(s) signed & dated? | (Yes) | No NA |
| -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? | Yes | (No) |
| -Were tamper/custody seals intact and uncompromised? | (Yes) | No NA |
| 3. Shippers' packing slip attached to the cooler(s)? | (Yes) | No |
| 4. Did custody papers accompany the sample(s)? | (Yes) | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | (Yes) | No |
| 6. Was/were the person(s) who collected the samples clearly identified on the COC? | (Yes) | No |
| 7. Did all bottles arrive in good condition (Unbroken)? | (Yes) | No |
| 8. Could all bottle labels be reconciled with the COC? | Yes | (No) |
| 9. Were correct bottle(s) used for the test(s) indicated? | (Yes) | No |
| 10. Sufficient quantity received to perform indicated analyses? | (Yes) | No |
| 11. Are these work share samples? | Yes | (No) |
| If yes, Questions 12-16 have been checked at the originating laboratory. | | |
| 12. Were all preserved sample(s) at the correct pH upon receipt? | (Yes) | No NA pH Strip Lot# **HC984738** |
| 13. Were VOAs on the COC? | (Yes) | No |
| 14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. | Yes | (No) NA |
| 15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B902601VB | (Yes) | No |
| 16. Was a LL Hg or Me Hg trip blank present? _____ | Yes | (No) |

**Tests that are not checked for pH by Receiving:**
**VOAs**
**Oil and Grease**
**TOC**

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by: RL

2 CoC in cooler state each set of samples have 2 trip blanks (total 4) when only 2 trip blanks were sent. will use 1 trip blank for each CoC.

**18. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**19. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

**Client:** Tony Apanavage
Tetra Tech , Inc.
20251 Century Blvd.
Suite 200
Germantown, MD 20874

**Phone:** 301.528.3021

**Fax:** 301.528.3000

**Identifier:** 017QE **Date Rec:** 05/07/2019 **Report Date:** 05/14/2019

**Client Project #:** 112IC07896 **Client Project Name:** Middle River Complex Block I GW

**Purchase Order #:**

**Analysis Requested:** CENSUS

**Reviewed By:**



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**MICROBIAL INSIGHTS, INC.**

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

**CENSUS**

**Client:** **Tetra Tech , Inc.**
Project: Middle River Complex Block I GW

**MI Project Number:** **017QE**
Date Received: 05/07/2019

**Sample Information**

| **Client Sample ID:** | | **MRC-MW-81B-050619** | **MRC-NMW-3I-050619** |
|---|---|---|---|
| Sample Date: | | 05/06/2019 | 05/06/2019 |
| Units: | | cells/mL | cells/mL |
| Analyst/Reviewer: | | HT | HT |
| **Dechlorinating Bacteria** | | | |
| *Dehalococcoides* | *DHC* | **8.19E+02** | **7.20E+02** |
| tceA Reductase | TCE | **3.60E+00** | <4.00E-01 |
| BAV1 Vinyl Chloride Reductase | BVC | **1.27E+01** | **1.00E+02** |
| Vinyl Chloride Reductase | VCR | **5.62E+02** | **1.40E+02** |

**Legend:**
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

## Quality Assurance/Quality Control Data

**Samples Received** **5/7/2019**

| Component | Date Prepared | Date Analyzed | Arrival Temperature | Positive Control | Extraction Blank | Negative Control |
|---|---|---|---|---|---|---|
| DHC | 05/07/2019 | 05/14/2019 | 0 °C | 117% | non-detect | non-detect |
| BVC | 05/07/2019 | 05/14/2019 | 0 °C | 102% | non-detect | non-detect |
| TCE | 05/07/2019 | 05/14/2019 | 0 °C | 108% | non-detect | non-detect |
| VCR | 05/07/2019 | 05/14/2019 | 0 °C | 103% | non-detect | non-detect |

# APPENDIX B—FIELD DATA (5TH MONITORING EVENT)

Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Middle River Center
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MRC-NMW-3I-050619
Sample Location: NMW-3I
Sampled By: WP
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Time: 1332 | | | | | | | | |
| Method: Peristaltic pump | Clear | 6.41 | 0.534 | 24.12 | 2.27 | 0.22 | 0.3 | -58 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Method: Peristaltic pump | | | | | | | | |
| Monitor Reading (ppm): 0.0 | | | | | | | | |
| Well Casing Diameter & Material Type: 2" PVC | | See | low | flow | purge | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): 7.47 | | | Data | sheet | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1241 | | | | | | | | |
| End Purge (hrs): 1327 | | | | | | | | |
| Total Purge Time (min): 46 | | | | | | | | |
| Total Vol. Purged (gal/L): 1.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 3 - 40 ml VOA | YES |
| MEE | HCl | 3 - 40 ml VOA | |
| TOC | H2SO4 | 2 - 40 ml VOA | |
| Cations | HNO3 | 1 - 500 ml Poly | |
| Anions | — | 1 - 500 ml Poly | |
| Alkalinity | — | 1 - 250 ml Poly | |
| DHC | — | 1 - 1L Poly | |

**OBSERVATIONS/NOTES:**

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature]

# LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Middle River Center
PROJECT NUMBER:

WELL ID.: MRC-NMW-3I-050615
DATE: 5/6/15

| Time (Hrs.) | Water Level (Ft. below TOC) | Flow (mL/Min.) | pH (S.U.) | S. Cond. (mS/cm) | Turb. (NTU) | DO (mg/L) | Temp. (Celcius) | ORP mV | Salinity % or ppt | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1241 | 7.47 | — | — | — | — | — | — | — | — | Initial, no color |
| 1242 | 8.09 | 300 | 6.52 | 0.204 | 38.2 | 2.87 | 26.35 | 8 | 0.1 | Slightly Cloudy |
| 1247 | 8.25 | 300 | 6.48 | 0.208 | 27.8 | 1.82 | 26.01 | -16 | 0.1 | ↓ |
| 1252 | 8.33 | 250 | 6.44 | 0.311 | 11.3 | 0.68 | 25.26 | -48 | 0.2 | ↓ |
| 1302 | 8.39 | 250 | 6.39 | 0.511 | 3.76 | 0.24 | 24.27 | -58 | 0.2 | Clear Water |
| 1312 | 8.42 | 200 | 6.40 | 0.534 | 2.65 | 0.23 | 24.35 | -60 | 0.3 | ↓ |
| 1317 | 8.42 | 200 | 6.41 | 0.540 | 2.28 | 0.21 | 24.33 | -60 | 0.3 | ↓ |
| 1322 | 8.42 | 200 | 6.41 | 0.542 | 2.30 | 0.21 | 24.23 | -60 | 0.3 | ↓ |
| 1327 | 8.42 | 200 | 6.41 | 0.534 | 2.27 | 0.22 | 24.12 | -58 | 0.3 | ↓ |
| | | | Well parameters Stabilized | | | | | | | |
| | | | Sampling Begins | | | | | | | |

SIGNATURE(S): Wade

Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Middle River Center
Project No.:

Sample ID No.: MRC-NMW-2I-050619
Sample Location: NMW-2I
Sampled By: MP
C.O.C. No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| Date: 5/6/19 | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other ORP |
|---|---|---|---|---|---|---|---|---|
| Time: 1457 | | | | | | | | |
| Method: Peristaltic pump | clear | 5.79 | 0.186 | 24.53 | 2.76 | 0.13 | 0.1 | 56 |

**PURGE DATA:**

| Date: 5/6/19 | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Method: Peristaltic pump | | | | | | | | |
| Monitor Reading (ppm): 0.0 | | | | | | | | |
| Well Casing Diameter & Material Type: 2" PVC | | | See low flow purge Data Sheet | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): 9.65 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1406 | | | | | | | | |
| End Purge (hrs): 1452 | | | | | | | | |
| Total Purge Time (min): 46 | | | | | | | | |
| Total Vol. Purged (gal): 1.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 3 - 40 ml VOA | Yes |
| MEE | HCl | 3 - 40 ml VOA | |
| TOC | $H_2SO_4$ | 2 - 40 ml VOA | |
| Cations | $HNO_3$ | 1 - 500 ml Poly | |
| Anions | — | 1 - 500 ml Poly | |
| Alkalinity | — | 1 - 250 ml Poly | |

**OBSERVATIONS / NOTES:**

Duplicate Sample Collected:
[] MS/MSD | Duplicate ID No.:

Signature(s):
Wade Pa

# LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Middle River Center
PROJECT NUMBER:
WELL ID.: MRC-NMW-2I-052619
DATE: 5/6/19

| Time (Hrs.) | Water Level (Ft. below TOC) | Flow (mL/Min.) | pH (S.U.) | S. Cond. (mS/cm) | Turb. (NTU) | DO (mg/L) | Temp. (Celcius) | ORP mV | Salinity % or ppt | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1406 | 9.65 | — | — | — | — | — | — | — | — | Initial, Muddy |
| 1407 | 10.25 | 300 | 5.95 | 0.207 | 20.1 | 0.56 | 24.83 | 66 | 0.1 | clear water |
| 1412 | 10.65 | 250 | 5.83 | 0.206 | 15.8 | 0.41 | 24.22 | 62 | 0.1 | |
| 1417 | 10.80 | 200 | 5.82 | 0.204 | 13.0 | 0.28 | 23.72 | 60 | 0.1 | |
| 1422 | 10.95 | 150 | 5.81 | 0.201 | 11.5 | 0.19 | 24.06 | 56 | 0.1 | |
| 1437 | 10.99 | 100 | 5.81 | 0.193 | 4.96 | 0.18 | 24.85 | 56 | 0.1 | |
| 1442 | 11.00 | 100 | 5.81 | 0.190 | 2.99 | 0.14 | 25.11 | 56 | 0.1 | |
| 1447 | 11.01 | 100 | 5.80 | 0.186 | 2.85 | 0.14 | 24.98 | 56 | 0.1 | |
| 1452 | 11.02 | 100 | 5.79 | 0.186 | 2.70 | 0.13 | 24.93 | 56 | 0.1 | |
| | | | | | Parameters | | Stabilized | | | |
| | | | | Well | ~~Parameters~~ | | | | | |
| | | | | | Sampling | | Begins | | | |

SIGNATURE(S): Nate R

Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Middle River Center
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MRC-NMW-2S-050619
Sample Location: NMW-2S
Sampled By: WP
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/7/19 | | | | | | | | |
| Time: 1200 | | | | | | | | |
| Method: Peristaltic pump | Slightly | 6.51 | 0.515 | 22.60 | 28.9 | 0.10 | 0.2 | ORP -28 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Method: Peristaltic pump | | | | | | | | |
| Monitor Reading (ppm): 0.0 | | | | | | | | |
| Well Casing Diameter & Material Type: 2" PVC | See low flow purge | | | | | | | |
| Total Well Depth (TD): | | | | | | | | |
| Static Water Level (WL): 9.55 | Data Sheet | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1531 | | | | | | | | |
| End Purge (hrs): 1613 | | | | | | | | |
| Total Purge Time (min): 30 | | | | | | | | |
| Total Vol. Purged (gal/L): 0.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 3 - 40 ml VOA | yes |
| MBE | HCl | 3 - 40 ml VOA | |
| TOC | HCl SO4 | 2 - 40 ml VOA | |
| Anions | — | 1 - 500 ml Poly | |
| Cations | HNO3 | 1 - 500 ml Poly | |
| Alkalinity | — | 1 - 250 ml Poly | |

5/7/19

**OBSERVATIONS / NOTES:**

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): [signature]

# LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Middle River Complex
PROJECT NUMBER:

WELL ID.: MRC-MMW-2s-052619
DATE: 5/6/19

| Time (Hrs.) | Water Level (Ft. below TOC) | Flow (mL/Min.) | pH (S.U.) | S. Cond. (mS/cm) | Turb. (NTU) | DO (mg/L) | Temp. (Celcius) | ORP mV | Salinity % or ppt | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1537 | 9.55 | — | — | — | — | — | — | — | — | Initial, no odor |
| 1538 | 10.35 | 300 | 6.47 | 0.527 | 675 | 0.38 | 26.71 | -54 | 0.3 | Cloudy, later |
| 1543 | 10.70 | 200 | 6.54 | 0.560 | 446 | 0.22 | 25.70 | -76 | 0.3 | |
| 1548 | 11.10 | 100 | 6.55 | 0.577 | 286 | 0.18 | 25.02 | -82 | 0.3 | |
| 1553 | 12.10 | 100 | 6.52 | 0.536 | 104 | 0.17 | 23.64 | -91 | 0.3 | |
| 1608 | 13.00 | 100 | 6.51 | 0.515 | 28.9 | 0.10 | 22.66 | -78 | 0.2 | |
| 1613 | | | | | DRY | | | | | |
| 16 | | | | | | | | | | |

Let Recharge 90% of Original Volume before Sampling

SIGNATURE(S): Wade

Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Middle River Center
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MRC-MW-81B-050619
Sample Location: MW-81B
Sampled By: WP
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Time: 0929 | | | | | | | | |
| Method: Peristal | Clear | 6.74 | 0.384 | 18.53 | 0.0 | 0.23 | 0.2 | ORP -70 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Method: Peristaltic pump | | | | | | | | |
| Monitor Reading (ppm): 0.0 | | | | | | | | |
| Well Casing Diameter & Material Type: 2" PVC | | | See low flow purge | | | | | |
| Total Well Depth (TD): | | | Data Sheet | | | | | |
| Static Water Level (WL): 9.53 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 0839 | | | | | | | | |
| End Purge (hrs): 0924 | | | | | | | | |
| Total Purge Time (min): 46 | | | | | | | | |
| Total Vol. Purged (gal/L): 1.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 3 - 40 ml VOA | yes |
| TOC | H2SO4 | 2 - 40 ml VOA | |
| MFF | HCl | 3 - 40 ml VOA | |
| Anions | — | 1 - 500 ml Poly | |
| Cations | HNO3 | 1 - 500 ml Poly | |
| Alkalinity | — | 1 - 250 ml Poly | |
| DHC | — | 1 - 16 Poly | |

**OBSERVATIONS/NOTES:**

**Signature(s):** Walt P[illegible]

**Quality Applicable:**

| [illegible] | Duplicate ID No.: |
|---|---|
| | |

# LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Middle River Center
PROJECT NUMBER:

WELL ID.: MRC-MW-81B-050619
DATE: 5/6/19

| Time (Hrs.) | Water Level (Ft. below TOC) | Flow (mL/Min.) | pH (S.U.) | S. Cond. (mS/cm) | Turb. (NTU) | DO (mg/L) | Temp. (Celcius) | ORP mV | Salinity % or ppt | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 0838 | 9.53 | — | — | — | — | — | — | — | — | Initial, no odor |
| 0837 | 10.15 | 300 | 6.43 | 0.429 | 0.0 | 1.18 | 17.69 | -35 | 0.2 | Clear Water |
| 0844 | 10.55 | 300 | 6.66 | 0.422 | 0.0 | 0.79 | 17.55 | -63 | 0.2 | |
| 0849 | 10.80 | 200 | 6.78 | 0.418 | 0.0 | 0.58 | 17.66 | -75 | 0.2 | |
| 0859 | 11.11 | 200 | 6.81 | 0.410 | 0.0 | 0.36 | 18.04 | -77 | 0.2 | |
| 0909 | 11.30 | 150 | 6.78 | 0.395 | 0.0 | 0.26 | 18.39 | -73 | 0.2 | |
| 0914 | 11.50 | 100 | 6.77 | 0.390 | 0.0 | 0.24 | 18.45 | -72 | 0.2 | |
| 0919 | 11.55 | 100 | 6.75 | 0.386 | 0.0 | 0.23 | 18.50 | -71 | 0.2 | |
| 0924 | 11.57 | 100 | 6.74 | 0.384 | 0.0 | 0.23 | 18.53 | -70 | 0.2 | |

Well parameters stabilize

Sampling Begins

SIGNATURE(S): Wolf R

Tetra Tech

# GROUNDWATER SAMPLE LOG SHEET



Project Site Name: Middle River Center
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MRC-NMW-1I-050619
Sample Location: NMW-1I
Sampled By: WP
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

**SAMPLING DATA:**

| | Color (Visual) | pH (S.U.) | S.C. (mS/cm) | Temp. (°C) | Turbidity (NTU) | DO (mg/l) | Salinity (%) | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Time: 1053 | | | | | | | | |
| Method: Peristaltic pump | Clear | 6.26 | 0.463 | 23.41 | 0.0 | 0.15 | 0.2 | 10 |

**PURGE DATA:**

| | Volume | pH | S.C. | Temp. | Turbidity | DO | Salinity | Other |
|---|---|---|---|---|---|---|---|---|
| Date: 5/6/19 | | | | | | | | |
| Method: Peristaltic pump | | | | | | | | |
| Monitor Reading (ppm): 0.0 | | | | | | | | |
| Well Casing Diameter & Material | | See low flow purge | | | | | | |
| Type: 2" PVC | | | | | | | | |
| Total Well Depth (TD): | | | Data Sheet | | | | | |
| Static Water Level (WL): 9.60 | | | | | | | | |
| One Casing Volume(gal/L): | | | | | | | | |
| Start Purge (hrs): 1002 | | | | | | | | |
| End Purge (hrs): 1048 | | | | | | | | |
| Total Purge Time (min): 46 | | | | | | | | |
| Total Vol. Purged (gal/L): 1.5 | | | | | | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Preservative | Container Requirements | Collected |
|---|---|---|---|
| VOCs | HCl | 3 - 40 ml VOA | YES |
| MEE | HCl | 3 - 40 ml VOA | ↓ |
| TOC | $H_2SO_4$ | 2 - 40 ml VOA | ↓ |
| Cations | $HNO_3$ | 1 - 500 ml Poly | ↓ |
| Anions | — | 1 - 500 ml Poly | ↓ |
| Alkalinity | — | 1 - 750 ml Poly | ↓ |

**OBSERVATIONS / NOTES:**

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s): [signature]

# LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Middle River Center
PROJECT NUMBER: 112

WELL ID.: MRC-NMW-IE-050619
DATE: 5/6/19

| Time (Hrs.) | Water Level (Ft. below TOC) | Flow (mL/Min.) | pH (S.U.) | S. Cond. (mS/cm) | Turb. (NTU) | DO (mg/L) | Temp. (Celcius) | ORP mV | Salinity % or ppb | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 1002 | ~~9.21~~ 9.60 | — | — | — | — | — | — | — | — | Initial, no odor |
| 1003 | 10.21 | 300 | 6.21 | 0.466 | 10.4 | 0.49 | 22.85 | 27 | 0.2 | Clear water |
| 1008 | 10.41 | 300 | 6.21 | 0.466 | 8.9 | 0.41 | 22.80 | 26 | 0.2 | |
| 1013 | 10.42 | 200 | 6.21 | 0.467 | 7.1 | 0.30 | 22.74 | 23 | 0.2 | |
| 1023 | 10.46 | 200 | 6.22 | 0.464 | 0.0 | 0.23 | 23.01 | 19 | 0.2 | |
| 1033 | 10.50 | 150 | 6.25 | 0.461 | 0.0 | 0.18 | 23.15 | 14 | 0.2 | |
| 1038 | 10.52 | 150 | 6.26 | 0.460 | 0.0 | 0.16 | 23.11 | 12 | 0.2 | |
| 1043 | 10.50 | 150 | 6.27 | 0.462 | 0.0 | 0.15 | 23.02 | 10 | 0.2 | |
| 1048 | 10.50 | 150 | 6.26 | 0.463 | 0.0 | 0.15 | 22.91 | 10 | 0.2 | |
| | | | Well parameters Stabilized | | | | | | | |
| | | | Sampling Begins | | | | | | | |

SIGNATURE(S): Walter R