284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Cover Page

**Order ID :** P5068

**Project ID :** Industrial Wastewater Discharge Permit - Fall 2024

**Client :** New York City DEP of Environmental Protection/BWS

| Lab Sample Number | Client Sample Number |
|---|---|
| P5068-01 | 14B-1 |
| P5068-02 | 14B-2 |
| P5068-03 | 14B-3 |
| P5068-04 | 14B-4 |
| P5068-05 | P5068-04MS |
| P5068-06 | P5068-04MSD |
| P5068-07 | 14B-(1-4)-COMP |

I certify that the data package is in compliance with the terms and conditions of the contract,both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 12/10/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

# DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

| | |
|---|---|
| **J** | Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL). |
| **U** | Indicates the analyte was analyzed for, but not detected. |
| **ND** | Indicates the analyte was analyzed for, but not detected |
| **E** | Indicates the reported value is estimated because of the presence of interference |
| **M** | Indicates Duplicate injection precision not met. |
| **N** | Indicates the spiked sample recovery is not within control limits. |
| **S** | Indicates the reported value was determined by the Method of Standard Addition (MSA). |
| * | Indicates that the duplicate analysis is not within control limits. |
| + | Indicates the correlation coefficient for the MSA is less than 0.995. |
| **D** | Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range. |
| **M** | Method qualifiers<br>**"P"** for ICP instrument<br>**"PM"** for ICP when Microwave Digestion is used<br>**"CV"** for Manual Cold Vapor AA<br>**"AV"** for automated Cold Vapor AA<br>**"CA"** for MIDI-Distillation Spectrophotometric<br>**"AS"** for Semi –Automated Spectrophotometric<br>**"C"** for Manual Spectrophotometric<br>**"T"** for Titrimetric<br>**"NR"** for analyte not required to be analyzed |
| **OR** | Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **Q** | Indicates the LCS did not meet the control limits requirements |
| H | Sample Analysis Out Of Hold Time |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

## APPENDIX A

## QA REVIEW GENERAL DOCUMENTATION

**Project #:** **P5068**

| | Completed |
|---|---|
| **For thorough review, the report must have the following:** | |
| **GENERAL:** | |
| **Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)** | ✓ |
| **Check chain-of-custody for proper relinquish/return of samples** | ✓ |
| **Is the chain of custody signed and complete** | ✓ |
| **Check internal chain-of-custody for proper relinquish/return of samples /sample extracts** | ✓ |
| **Collect information for each project id from server. Were all requirements followed** | ✓ |
| **COVER PAGE:** | |
| **Do numbers of samples correspond to the number of samples in the Chain of Custody on login page** | ✓ |
| **Do lab numbers and client Ids on cover page agree with the Chain of Custody** | ✓ |
| **CHAIN OF CUSTODY:** | |
| **Do requested analyses on Chain of Custody agree with form I results** | ✓ |
| **Do requested analyses on Chain of Custody agree with the log-in page** | ✓ |
| **Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody** | ✓ |
| **Were the samples received within hold time** | ✓ |
| **Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle** | ✓ |
| **ANALYTICAL:** | |
| **Was method requirement followed?** | ✓ |
| **Was client requirement followed?** | ✓ |
| **Does the case narrative summarize all QC failure?** | ✓ |
| **All runlogs and manual integration are reviewed for requirements** | ✓ |
| **All manual calculations and /or hand notations verified** | ✓ |

**QA Review Signature:** **PATEL VAISHALI** **Date:** **12/10/2024**

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | P5068 | **OrderDate:** | 12/3/2024 11:32:00 AM |
| **Client:** | New York City DEP of Environmental Protection/BWS | **Project:** | Industrial Wastewater Discharge Permit - Fall 2024 |
| **Contact:** | Nicholas Prokopowicz | **Location:** | L61,VOA Ref. #3 Water |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **P5068-07** | **14B-(1-4)-COMP** | **Water** | | | **12/03/24** | | | **12/03/24** |
| | | | Mercury | 245.1 | | 12/10/24 | 12/10/24 | |
| | | | Metals ICP-Group1 | 200.7 | | 12/04/24 | 12/06/24 | |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Hit Summary Sheet
**SW-846**

**SDG No.:** P5068 **Order ID:** P5068

**Client:** New York City DEP of Environmental Protection/BW **Project ID:** Industrial Wastewater Discharge Permit - Fa

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|---|---|---|---|---|---|---|---|---|
| **Client ID : 14B-(1-4)-COMP** | | | | | | | | |
| P5068-07 | 14B-(1-4)-COMP | Water | Aluminum | 849000 | | 10.6 | 50.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Arsenic | 81.0 | | 2.84 | 10.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Barium | 658 | | 11.3 | 50.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Cadmium | 3.07 | | 0.21 | 3.00 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Calcium | 37900 | | 51.8 | 1000 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Chromium | 21.8 | | 0.52 | 5.00 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Cobalt | 8.61 | J | 0.88 | 15.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Copper | 562 | | 1.52 | 10.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Iron | 36100 | | 12.4 | 50.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Lead | 22.6 | | 1.57 | 6.00 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Magnesium | 8490 | | 61.2 | 1000 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Manganese | 25900 | D | 4.35 | 50.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Mercury | 0.87 | | 0.022 | 0.20 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Nickel | 25.3 | | 1.28 | 20.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Potassium | 3350 | | 281 | 1000 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Selenium | 10.1 | | 3.07 | 10.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Silver | 3.01 | J | 0.83 | 5.00 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Sodium | 34400 | | 448 | 1000 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Vanadium | 36.5 | | 2.40 | 20.0 | ug/L |
| P5068-07 | 14B-(1-4)-COMP | Water | Zinc | 142 | | 1.44 | 20.0 | ug/L |

Alliance
TECHNICAL GROUP

# SAMPLE DATA

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | New York City DEP of Environmental Protection/BWS | Date Collected: | 12/03/24 |
| Project: | Industrial Wastewater Discharge Permit - Fall 2024 | Date Received: | 12/03/24 |
| Client Sample ID: | 14B-(1-4)-COMP | SDG No.: | P5068 |
| Lab Sample ID: | P5068-07 | Matrix: | Water |
| Level (low/med): | low | % Solid: | 0 |

| Cas | Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | Prep Met. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 849000 | | 1 | 10.6 | 50.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-36-0 | Antimony | 2.96 | UN | 1 | 2.96 | 25.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-38-2 | Arsenic | 81.0 | | 1 | 2.84 | 10.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-39-3 | Barium | 658 | | 1 | 11.3 | 50.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-41-7 | Beryllium | 0.19 | U | 1 | 0.19 | 3.00 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-43-9 | Cadmium | 3.07 | | 1 | 0.21 | 3.00 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-70-2 | Calcium | 37900 | | 1 | 51.8 | 1000 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-47-3 | Chromium | 21.8 | | 1 | 0.52 | 5.00 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-48-4 | Cobalt | 8.61 | J | 1 | 0.88 | 15.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-50-8 | Copper | 562 | | 1 | 1.52 | 10.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7439-89-6 | Iron | 36100 | | 1 | 12.4 | 50.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7439-92-1 | Lead | 22.6 | | 1 | 1.57 | 6.00 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7439-95-4 | Magnesium | 8490 | | 1 | 61.2 | 1000 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7439-96-5 | Manganese | 25900 | D | 5 | 4.35 | 50.0 | ug/L | 12/04/24 11:35 | 12/06/24 16:52 | EPA 200.7 | |
| 7439-97-6 | Mercury | 0.87 | | 1 | 0.022 | 0.20 | ug/L | 12/10/24 08:00 | 12/10/24 11:19 | E245.1 | |
| 7440-02-0 | Nickel | 25.3 | | 1 | 1.28 | 20.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-09-7 | Potassium | 3350 | | 1 | 281 | 1000 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7782-49-2 | Selenium | 10.1 | | 1 | 3.07 | 10.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-22-4 | Silver | 3.01 | J | 1 | 0.83 | 5.00 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-23-5 | Sodium | 34400 | | 1 | 448 | 1000 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-28-0 | Thallium | 2.21 | U | 1 | 2.21 | 20.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-62-2 | Vanadium | 36.5 | | 1 | 2.40 | 20.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |
| 7440-66-6 | Zinc | 142 | | 1 | 1.44 | 20.0 | ug/L | 12/04/24 11:35 | 12/06/24 14:29 | EPA 200.7 | |

| | | | | | |
|---|---|---|---|---|---|
| Color Before: | Brown | Clarity Before: | Clear | Texture: | |
| Color After: | Yellow | Clarity After: | Clear | Artifacts: | |
| Comments: | Metals Group1 | | | | |

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

# METAL CALIBRATION DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** PLASMA-PURE

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICV14 | Mercury | 4.03 | 4.0 | 101 | 95 - 105 | CV | 12/10/2024 | 10:09 | LB133852 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** PLASMA-PURE

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV10 | Mercury | 5.46 | 5.0 | 109 | 90 - 110 | CV | 12/10/2024 | 10:29 | LB133852 |
| CCV11 | Mercury | 4.69 | 5.0 | 94 | 90 - 110 | CV | 12/10/2024 | 11:26 | LB133852 |
| CCV12 | Mercury | 5.35 | 5.0 | 107 | 90 - 110 | CV | 12/10/2024 | 11:44 | LB133852 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICV01 | Aluminum | 2530 | 2500 | 101 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Antimony | 982 | 1000 | 98 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Arsenic | 965 | 1000 | 96 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Barium | 519 | 520 | 100 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Beryllium | 520 | 510 | 102 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Cadmium | 500 | 510 | 98 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Calcium | 9900 | 10000 | 99 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Chromium | 523 | 520 | 101 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Cobalt | 505 | 520 | 97 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Copper | 512 | 510 | 100 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Iron | 9730 | 10000 | 97 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Lead | 986 | 1000 | 99 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Magnesium | 5850 | 6000 | 98 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Manganese | 519 | 520 | 100 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Nickel | 508 | 530 | 96 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Potassium | 9590 | 9900 | 97 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Selenium | 999 | 1000 | 100 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Silver | 250 | 250 | 100 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Sodium | 9810 | 10000 | 98 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Thallium | 1010 | 1000 | 101 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Vanadium | 508 | 500 | 102 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |
| | Zinc | 1020 | 1000 | 102 | 95 - 105 | P | 12/05/2024 | 13:53 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| LLICV01 | Aluminum | 99.5 | 100 | 100 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Antimony | 47.1 | 50.0 | 94 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Arsenic | 20.4 | 20.0 | 102 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Barium | 102 | 100 | 102 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Beryllium | 6.14 | 6.0 | 102 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Cadmium | 5.99 | 6.0 | 100 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Calcium | 2050 | 2000 | 102 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Chromium | 9.91 | 10.0 | 99 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Cobalt | 29.7 | 30.0 | 99 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Copper | 21.8 | 20.0 | 109 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Iron | 98.7 | 100 | 99 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Lead | 11.8 | 12.0 | 98 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Magnesium | 2150 | 2000 | 108 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Manganese | 21.1 | 20.0 | 105 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Nickel | 39.7 | 40.0 | 99 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Potassium | 1950 | 2000 | 97 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Selenium | 18.9 | 20.0 | 94 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Silver | 10.1 | 10.0 | 101 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Sodium | 1970 | 2000 | 98 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Thallium | 41.8 | 40.0 | 105 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Vanadium | 42.0 | 40.0 | 105 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |
| | Zinc | 42.9 | 40.0 | 107 | 80 - 120 | P | 12/05/2024 | 14:05 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV01 | Aluminum | 9910 | 10000 | 99 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Antimony | 4930 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Arsenic | 4940 | 5000 | 99 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Barium | 9980 | 10000 | 100 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Beryllium | 247 | 250 | 99 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Cadmium | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Calcium | 24500 | 25000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Chromium | 996 | 1000 | 100 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Cobalt | 2440 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Copper | 1250 | 1250 | 100 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Iron | 4910 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Lead | 4910 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Magnesium | 24400 | 25000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Manganese | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Nickel | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Potassium | 24900 | 25000 | 100 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Selenium | 4970 | 5000 | 99 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Silver | 1230 | 1250 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Sodium | 25500 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Thallium | 4890 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Vanadium | 2470 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| | Zinc | 2510 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 14:45 | LB133769 |
| CCV02 | Aluminum | 9550 | 10000 | 96 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Antimony | 4740 | 5000 | 95 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Arsenic | 4770 | 5000 | 95 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Barium | 9480 | 10000 | 95 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Beryllium | 256 | 250 | 102 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Cadmium | 2500 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Calcium | 25500 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Chromium | 1010 | 1000 | 102 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Cobalt | 2480 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Copper | 1200 | 1250 | 96 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Iron | 4950 | 5000 | 99 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Lead | 4970 | 5000 | 99 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV02 | Magnesium | 24900 | 25000 | 100 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Manganese | 2510 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Nickel | 2480 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Potassium | 22600 | 25000 | 90 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Selenium | 4780 | 5000 | 96 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Silver | 1230 | 1250 | 98 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Sodium | 22800 | 25000 | 91 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Thallium | 4980 | 5000 | 100 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Vanadium | 2490 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| | Zinc | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 15:34 | LB133769 |
| CCV03 | Aluminum | 9830 | 10000 | 98 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Antimony | 4840 | 5000 | 97 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Arsenic | 4860 | 5000 | 97 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Barium | 9790 | 10000 | 98 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Beryllium | 256 | 250 | 102 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Cadmium | 2520 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Calcium | 25300 | 25000 | 101 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Chromium | 1020 | 1000 | 102 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Cobalt | 2500 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Copper | 1220 | 1250 | 98 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Iron | 4940 | 5000 | 99 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Lead | 5020 | 5000 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Magnesium | 25000 | 25000 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Manganese | 2500 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Nickel | 2500 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Potassium | 23700 | 25000 | 95 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Selenium | 4890 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Silver | 1240 | 1250 | 99 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Sodium | 24100 | 25000 | 96 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Thallium | 5160 | 5000 | 103 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Vanadium | 2500 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| | Zinc | 2520 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 16:42 | LB133769 |
| CCV04 | Aluminum | 9350 | 10000 | 94 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Antimony | 4630 | 5000 | 93 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV04 | Arsenic | 4670 | 5000 | 94 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Barium | 9340 | 10000 | 93 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Beryllium | 255 | 250 | 102 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Cadmium | 2480 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Calcium | 25000 | 25000 | 100 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Chromium | 997 | 1000 | 100 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Cobalt | 2440 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Copper | 1170 | 1250 | 94 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Iron | 4760 | 5000 | 95 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Lead | 4910 | 5000 | 98 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Magnesium | 24300 | 25000 | 97 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Manganese | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Nickel | 2450 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Potassium | 26100 | 25000 | 104 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Selenium | 4700 | 5000 | 94 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Silver | 1200 | 1250 | 96 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Sodium | 25600 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Thallium | 5020 | 5000 | 100 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Vanadium | 2440 | 2500 | 97 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| | Zinc | 2380 | 2500 | 95 | 90 - 110 | P | 12/05/2024 | 17:41 | LB133769 |
| CCV05 | Aluminum | 9350 | 10000 | 94 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Antimony | 4500 | 5000 | 90 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Arsenic | 4580 | 5000 | 92 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Barium | 9210 | 10000 | 92 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Beryllium | 266 | 250 | 106 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Cadmium | 2540 | 2500 | 102 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Calcium | 25500 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Chromium | 1030 | 1000 | 103 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Cobalt | 2490 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Copper | 1140 | 1250 | 91 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Iron | 4770 | 5000 | 95 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Lead | 5000 | 5000 | 100 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Magnesium | 24800 | 25000 | 99 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Manganese | 2470 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV05 | Nickel | 2490 | 2500 | 99 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Potassium | 25400 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Selenium | 4560 | 5000 | 91 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Silver | 1210 | 1250 | 97 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Sodium | 24800 | 25000 | 99 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Thallium | 5080 | 5000 | 102 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Vanadium | 2460 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| | Zinc | 2390 | 2500 | 96 | 90 - 110 | P | 12/05/2024 | 18:39 | LB133769 |
| CCV06 | Aluminum | 9230 | 10000 | 92 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Antimony | 4550 | 5000 | 91 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Arsenic | 4640 | 5000 | 93 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Barium | 9070 | 10000 | 91 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Beryllium | 270 | 250 | 108 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Cadmium | 2590 | 2500 | 104 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Calcium | 25600 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Chromium | 1030 | 1000 | 103 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Cobalt | 2530 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Copper | 1160 | 1250 | 92 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Iron | 4750 | 5000 | 95 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Lead | 5080 | 5000 | 102 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Magnesium | 24800 | 25000 | 99 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Manganese | 2490 | 2500 | 100 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Nickel | 2530 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Potassium | 24800 | 25000 | 99 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Selenium | 4610 | 5000 | 92 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Silver | 1210 | 1250 | 97 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Sodium | 23900 | 25000 | 96 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Thallium | 5080 | 5000 | 102 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Vanadium | 2460 | 2500 | 98 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| | Zinc | 2360 | 2500 | 95 | 90 - 110 | P | 12/05/2024 | 19:45 | LB133769 |
| CCV07 | Aluminum | 9400 | 10000 | 94 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Antimony | 4510 | 5000 | 90 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Arsenic | 4600 | 5000 | 92 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Barium | 9140 | 10000 | 91 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV07 | Beryllium | 264 | 250 | 106 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Cadmium | 2600 | 2500 | 104 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Calcium | 26300 | 25000 | 105 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Chromium | 1050 | 1000 | 105 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Cobalt | 2530 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Copper | 1150 | 1250 | 92 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Iron | 4830 | 5000 | 97 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Lead | 5080 | 5000 | 102 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Magnesium | 25600 | 25000 | 102 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Manganese | 2540 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Nickel | 2540 | 2500 | 102 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Potassium | 25200 | 25000 | 101 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Selenium | 4550 | 5000 | 91 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Silver | 1230 | 1250 | 98 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Sodium | 24900 | 25000 | 100 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Thallium | 5080 | 5000 | 102 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Vanadium | 2510 | 2500 | 101 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |
| | Zinc | 2430 | 2500 | 97 | 90 - 110 | P | 12/05/2024 | 20:23 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICV01 | Aluminum | 2570 | 2500 | 103 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Antimony | 1020 | 1000 | 102 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Arsenic | 995 | 1000 | 100 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Barium | 516 | 520 | 99 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Beryllium | 518 | 510 | 102 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Cadmium | 503 | 510 | 99 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Calcium | 10100 | 10000 | 101 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Chromium | 526 | 520 | 101 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Cobalt | 512 | 520 | 98 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Copper | 528 | 510 | 104 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Iron | 9870 | 10000 | 99 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Lead | 1000 | 1000 | 100 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Magnesium | 5930 | 6000 | 99 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Manganese | 521 | 520 | 100 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Nickel | 514 | 530 | 97 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Potassium | 9770 | 9900 | 99 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Selenium | 1030 | 1000 | 103 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Silver | 253 | 250 | 101 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Sodium | 9550 | 10000 | 96 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Thallium | 1040 | 1000 | 104 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Vanadium | 513 | 500 | 102 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |
| | Zinc | 1030 | 1000 | 103 | 95 - 105 | P | 12/06/2024 | 12:14 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| LLICV01 | Aluminum | 105 | 100 | 105 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Antimony | 51.1 | 50.0 | 102 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Arsenic | 19.8 | 20.0 | 99 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Barium | 96.9 | 100 | 97 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Beryllium | 6.20 | 6.0 | 103 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Cadmium | 5.98 | 6.0 | 100 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Calcium | 2050 | 2000 | 102 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Chromium | 10.0 | 10.0 | 100 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Cobalt | 29.5 | 30.0 | 98 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Copper | 22.1 | 20.0 | 111 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Iron | 98.1 | 100 | 98 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Lead | 10.5 | 12.0 | 88 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Magnesium | 2140 | 2000 | 107 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Manganese | 20.6 | 20.0 | 103 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Nickel | 39.5 | 40.0 | 99 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Potassium | 1890 | 2000 | 95 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Selenium | 18.0 | 20.0 | 90 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Silver | 10.6 | 10.0 | 106 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Sodium | 1810 | 2000 | 90 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Thallium | 40.1 | 40.0 | 100 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Vanadium | 39.8 | 40.0 | 100 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |
| | Zinc | 42.2 | 40.0 | 105 | 80 - 120 | P | 12/06/2024 | 12:20 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV01 | Aluminum | 10000 | 10000 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Antimony | 4950 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Arsenic | 5010 | 5000 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Barium | 9800 | 10000 | 98 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Beryllium | 249 | 250 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Cadmium | 2520 | 2500 | 101 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Calcium | 24700 | 25000 | 99 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Chromium | 1020 | 1000 | 102 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Cobalt | 2510 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Copper | 1280 | 1250 | 102 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Iron | 4940 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Lead | 5020 | 5000 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Magnesium | 24800 | 25000 | 99 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Manganese | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Nickel | 2510 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Potassium | 24700 | 25000 | 99 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Selenium | 5060 | 5000 | 101 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Silver | 1250 | 1250 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Sodium | 24300 | 25000 | 97 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Thallium | 5050 | 5000 | 101 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Vanadium | 2500 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| | Zinc | 2550 | 2500 | 102 | 90 - 110 | P | 12/06/2024 | 13:09 | LB133790 |
| CCV02 | Aluminum | 9810 | 10000 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Antimony | 4850 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Arsenic | 4880 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Barium | 9400 | 10000 | 94 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Beryllium | 244 | 250 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Cadmium | 2460 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Calcium | 24200 | 25000 | 97 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Chromium | 1010 | 1000 | 101 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Cobalt | 2450 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Copper | 1250 | 1250 | 100 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Iron | 4810 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Lead | 4900 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV02 | Magnesium | 24400 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Manganese | 2360 | 2500 | 95 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Nickel | 2450 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Potassium | 23900 | 25000 | 96 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Selenium | 4940 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Silver | 1230 | 1250 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Sodium | 23500 | 25000 | 94 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Thallium | 4910 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Vanadium | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| | Zinc | 2500 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 13:38 | LB133790 |
| CCV03 | Aluminum | 9820 | 10000 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Antimony | 4780 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Arsenic | 4820 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Barium | 9370 | 10000 | 94 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Beryllium | 245 | 250 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Cadmium | 2450 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Calcium | 24200 | 25000 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Chromium | 1000 | 1000 | 100 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Cobalt | 2430 | 2500 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Copper | 1230 | 1250 | 99 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Iron | 4770 | 5000 | 95 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Lead | 4880 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Magnesium | 24300 | 25000 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Manganese | 2360 | 2500 | 94 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Nickel | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Potassium | 23300 | 25000 | 93 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Selenium | 4870 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Silver | 1210 | 1250 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Sodium | 24900 | 25000 | 100 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Thallium | 4850 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Vanadium | 2450 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| | Zinc | 2470 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 14:42 | LB133790 |
| CCV04 | Aluminum | 9820 | 10000 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Antimony | 4780 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV04 | Arsenic | 4870 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Barium | 9560 | 10000 | 96 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Beryllium | 250 | 250 | 100 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Cadmium | 2500 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Calcium | 24600 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Chromium | 1020 | 1000 | 102 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Cobalt | 2480 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Copper | 1240 | 1250 | 100 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Iron | 4880 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Lead | 4960 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Magnesium | 24800 | 25000 | 99 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Manganese | 2420 | 2500 | 97 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Nickel | 2480 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Potassium | 23500 | 25000 | 94 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Selenium | 4910 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Silver | 1230 | 1250 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Sodium | 25600 | 25000 | 102 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Thallium | 4910 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Vanadium | 2480 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| | Zinc | 2430 | 2500 | 97 | 90 - 110 | P | 12/06/2024 | 15:40 | LB133790 |
| CCV05 | Aluminum | 9800 | 10000 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Antimony | 4730 | 5000 | 95 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Arsenic | 4810 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Barium | 9510 | 10000 | 95 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Beryllium | 250 | 250 | 100 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Cadmium | 2460 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Calcium | 24500 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Chromium | 1010 | 1000 | 100 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Cobalt | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Copper | 1230 | 1250 | 99 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Iron | 4850 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Lead | 4890 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Magnesium | 24500 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Manganese | 2420 | 2500 | 97 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -
## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV05 | Nickel | 2450 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Potassium | 23200 | 25000 | 93 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Selenium | 4850 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Silver | 1220 | 1250 | 98 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Sodium | 25300 | 25000 | 101 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Thallium | 4820 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Vanadium | 2470 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| | Zinc | 2380 | 2500 | 95 | 90 - 110 | P | 12/06/2024 | 16:35 | LB133790 |
| CCV06 | Aluminum | 9980 | 10000 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Antimony | 4840 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Arsenic | 4950 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Barium | 9680 | 10000 | 97 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Beryllium | 253 | 250 | 101 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Cadmium | 2540 | 2500 | 102 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Calcium | 24900 | 25000 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Chromium | 1030 | 1000 | 103 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Cobalt | 2510 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Copper | 1260 | 1250 | 101 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Iron | 4910 | 5000 | 98 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Lead | 5020 | 5000 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Magnesium | 25000 | 25000 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Manganese | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Nickel | 2520 | 2500 | 101 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Potassium | 23700 | 25000 | 95 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Selenium | 5000 | 5000 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Silver | 1250 | 1250 | 100 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Sodium | 22500 | 25000 | 90 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Thallium | 4930 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Vanadium | 2520 | 2500 | 101 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| | Zinc | 2480 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 17:27 | LB133790 |
| CCV07 | Aluminum | 9730 | 10000 | 97 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Antimony | 4710 | 5000 | 94 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Arsenic | 4810 | 5000 | 96 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Barium | 9300 | 10000 | 93 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** New York City DEP of Environmental Protection/ **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** Inorganic Ventures

| Sample ID | Analyte | Result ug/L | True Value | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCV07 | Beryllium | 251 | 250 | 101 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Cadmium | 2490 | 2500 | 100 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Calcium | 24400 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Chromium | 1010 | 1000 | 101 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Cobalt | 2470 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Copper | 1230 | 1250 | 99 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Iron | 4760 | 5000 | 95 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Lead | 4930 | 5000 | 99 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Magnesium | 24500 | 25000 | 98 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Manganese | 2400 | 2500 | 96 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Nickel | 2470 | 2500 | 99 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Potassium | 22800 | 25000 | 91 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Selenium | 4860 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Silver | 1220 | 1250 | 98 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Sodium | 26000 | 25000 | 104 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Thallium | 4870 | 5000 | 97 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Vanadium | 2460 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |
| | Zinc | 2440 | 2500 | 98 | 90 - 110 | P | 12/06/2024 | 18:21 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2b -
## CRDL STANDARD FOR AA & ICP

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:**

**Continuing Calibration Source:**

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CRI01 | Aluminum | 99.1 | 100 | 99 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Antimony | 45.8 | 50.0 | 92 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Arsenic | 20.0 | 20.0 | 100 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Barium | 102 | 100 | 102 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Beryllium | 6.35 | 6.0 | 106 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Cadmium | 6.02 | 6.0 | 100 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Calcium | 2110 | 2000 | 105 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Chromium | 9.82 | 10.0 | 98 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Cobalt | 30.3 | 30.0 | 101 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Copper | 21.6 | 20.0 | 108 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Iron | 99.2 | 100 | 99 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Lead | 11.8 | 12.0 | 98 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Magnesium | 2190 | 2000 | 110 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Manganese | 21.7 | 20.0 | 108 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Nickel | 40.2 | 40.0 | 100 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Potassium | 1880 | 2000 | 94 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Selenium | 18.9 | 20.0 | 95 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Silver | 10.0 | 10.0 | 100 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Sodium | 1940 | 2000 | 97 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Thallium | 43.9 | 40.0 | 110 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Vanadium | 43.1 | 40.0 | 108 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| | Zinc | 42.8 | 40.0 | 107 | 40 - 160 | P | 12/05/2024 | 14:14 | LB133769 |
| CRI01 | Aluminum | 105 | 100 | 104 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Antimony | 50.1 | 50.0 | 100 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Arsenic | 20.2 | 20.0 | 101 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Barium | 97.5 | 100 | 98 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Beryllium | 6.20 | 6.0 | 103 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Cadmium | 5.89 | 6.0 | 98 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Calcium | 2060 | 2000 | 103 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Chromium | 10.0 | 10.0 | 100 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Cobalt | 29.5 | 30.0 | 98 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Copper | 22.0 | 20.0 | 110 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Iron | 96.6 | 100 | 97 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Lead | 11.1 | 12.0 | 93 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Magnesium | 2160 | 2000 | 108 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Manganese | 21.0 | 20.0 | 105 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 2b -

## CRDL STANDARD FOR AA & ICP

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Initial Calibration Source:**

**Continuing Calibration Source:**

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Acceptance Window (%R) | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CRI01 | Nickel | 40.0 | 40.0 | 100 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Potassium | 1910 | 2000 | 96 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Selenium | 19.8 | 20.0 | 99 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Silver | 10.3 | 10.0 | 103 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Sodium | 1810 | 2000 | 90 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Thallium | 41.4 | 40.0 | 104 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Vanadium | 40.3 | 40.0 | 101 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| | Zinc | 42.4 | 40.0 | 106 | 40 - 160 | P | 12/06/2024 | 12:28 | LB133790 |
| CRA | Mercury | 0.038 | 0.05 | 76 | 40 - 160 | CV | 12/10/2024 | 10:39 | LB133852 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **ICB14** | Mercury | 0.20 | +/-0.20 | U | 0.20 | CV | 12/10/2024 | 10:17 | LB133852 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB10** | Mercury | 0.20 | +/-0.20 | U | 0.20 | CV | 12/10/2024 | 10:34 | LB133852 |
| **CCB11** | Mercury | 0.20 | +/-0.20 | U | 0.20 | CV | 12/10/2024 | 11:31 | LB133852 |
| **CCB12** | Mercury | 0.20 | +/-0.20 | U | 0.20 | CV | 12/10/2024 | 11:49 | LB133852 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICB01 | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:10 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:10 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 14:10 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 14:10 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:10 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:10 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:10 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:10 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:10 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:10 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:10 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCB01 | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:50 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:50 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 14:50 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 14:50 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:50 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 14:50 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:50 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:50 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 14:50 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:50 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 14:50 | LB133769 |
| CCB02 | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 15:41 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 15:41 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 15:41 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 15:41 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 15:41 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 15:41 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 15:41 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 15:41 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 15:41 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB02** | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 15:41 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 15:41 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 15:41 | LB133769 |
| **CCB03** | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 16:46 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 16:46 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 16:46 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 16:46 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 16:46 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 16:46 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 16:46 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 16:46 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 16:46 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 16:46 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 16:46 | LB133769 |
| **CCB04** | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 17:47 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 17:47 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 17:47 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 17:47 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 17:47 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 17:47 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 17:47 | LB133769 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB04** | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 17:47 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 17:47 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 17:47 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 17:47 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 17:47 | LB133769 |
| **CCB05** | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 18:43 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 18:43 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 18:43 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 18:43 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 18:43 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 18:43 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 18:43 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 18:43 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 18:43 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 18:43 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 18:43 | LB133769 |
| **CCB06** | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 19:50 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 19:50 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 19:50 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 19:50 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 19:50 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB06** | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 19:50 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 19:50 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 19:50 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 19:50 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 19:50 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 19:50 | LB133769 |
| **CCB07** | Aluminum | 100 | +/-100 | U | 100 | P | 12/05/2024 | 20:27 | LB133769 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/05/2024 | 20:27 | LB133769 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 20:27 | LB133769 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/05/2024 | 20:27 | LB133769 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 20:27 | LB133769 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/05/2024 | 20:27 | LB133769 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 20:27 | LB133769 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 20:27 | LB133769 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/05/2024 | 20:27 | LB133769 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 20:27 | LB133769 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/05/2024 | 20:27 | LB133769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICB01 | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 12:24 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 12:24 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 12:24 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 12:24 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 12:24 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 12:24 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 12:24 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 12:24 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 12:24 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 12:24 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 12:24 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| CCB01 | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:13 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:13 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 13:13 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 13:13 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:13 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:13 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:13 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:13 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:13 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:13 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:13 | LB133790 |
| CCB02 | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:42 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:42 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 13:42 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 13:42 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:42 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 13:42 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:42 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:42 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 13:42 | LB133790 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB02** | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 13:42 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:42 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 13:42 | LB133790 |
| **CCB03** | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 14:46 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 14:46 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 14:46 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 14:46 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 14:46 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 14:46 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 14:46 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 14:46 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 14:46 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 14:46 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 14:46 | LB133790 |
| **CCB04** | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 15:44 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 15:44 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 15:44 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 15:44 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 15:44 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 15:44 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 15:44 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB04** | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 15:44 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 15:44 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 15:44 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 15:44 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 15:44 | LB133790 |
| **CCB05** | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 16:39 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 16:39 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 16:39 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 16:39 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 16:39 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 16:39 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 16:39 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 16:39 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 16:39 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 16:39 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 16:39 | LB133790 |
| **CCB06** | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 17:31 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 17:31 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 17:31 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 17:31 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 17:31 | LB133790 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Sample ID | Analyte | Result ug/L | Acceptance Limit | Conc Qual | CRQL | M | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **CCB06** | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 17:31 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 17:31 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 17:31 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 17:31 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 17:31 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 17:31 | LB133790 |
| **CCB07** | Aluminum | 100 | +/-100 | U | 100 | P | 12/06/2024 | 18:27 | LB133790 |
| | Antimony | 50.0 | +/-50.0 | U | 50.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Arsenic | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Barium | 100 | +/-100 | U | 100 | P | 12/06/2024 | 18:27 | LB133790 |
| | Beryllium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 18:27 | LB133790 |
| | Cadmium | 6.00 | +/-6.00 | U | 6.00 | P | 12/06/2024 | 18:27 | LB133790 |
| | Calcium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 18:27 | LB133790 |
| | Chromium | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Cobalt | 30.0 | +/-30.0 | U | 30.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Copper | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Iron | 100 | +/-100 | U | 100 | P | 12/06/2024 | 18:27 | LB133790 |
| | Lead | 12.0 | +/-12.0 | U | 12.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Magnesium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 18:27 | LB133790 |
| | Manganese | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Nickel | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Potassium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 18:27 | LB133790 |
| | Selenium | 20.0 | +/-20.0 | U | 20.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Silver | 10.0 | +/-10.0 | U | 10.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Sodium | 2000 | +/-2000 | U | 2000 | P | 12/06/2024 | 18:27 | LB133790 |
| | Thallium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Vanadium | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 18:27 | LB133790 |
| | Zinc | 40.0 | +/-40.0 | U | 40.0 | P | 12/06/2024 | 18:27 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 3b -
## PREPARATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protecti **SDG No.:** P5068

**Instrument:** CV1

| Sample ID | Analyte | Result (ug/L) | Acceptance Limit | Conc Qual | CRQL ug/L | M | Analysis Date | Analysis Time | Run |
|---|---|---|---|---|---|---|---|---|---|
| **PB165519BL** | | **WATER** | | **Batch Number:** | **PB165519** | | **Prep Date:** | **12/10/2024** | |
| | Mercury | 0.20 | <0.20 | U | 0.20 | CV | 12/10/2024 | 10:53 | LB133852 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 3b -
## PREPARATION BLANK SUMMARY

**Client:** New York City DEP of Environmental Protecti **SDG No.:** P5068

**Instrument:** P4

| Sample ID | Analyte | Result (ug/L) | Acceptance Limit | Conc Qual | CRQL ug/L | M | Analysis Date | Analysis Time | Run |
|---|---|---|---|---|---|---|---|---|---|
| **PB165365BL** | | **WATER** | | **Batch Number:** | **PB165365** | | **Prep Date:** | **12/04/2024** | |
| | Aluminum | 50.0 | <50.0 | U | 50.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Antimony | 25.0 | <25.0 | U | 25.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Arsenic | 10.0 | <10.0 | U | 10.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Barium | 50.0 | <50.0 | U | 50.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Beryllium | 3.00 | <3.00 | U | 3.00 | P | 12/05/2024 | 19:04 | LB133769 |
| | Cadmium | 3.00 | <3.00 | U | 3.00 | P | 12/05/2024 | 19:04 | LB133769 |
| | Calcium | 1000 | <1000 | U | 1000 | P | 12/05/2024 | 19:04 | LB133769 |
| | Chromium | 5.00 | <5.00 | U | 5.00 | P | 12/05/2024 | 19:04 | LB133769 |
| | Cobalt | 15.0 | <15.0 | U | 15.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Copper | 10.0 | <10.0 | U | 10.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Iron | 50.0 | <50.0 | U | 50.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Lead | 6.00 | <6.00 | U | 6.00 | P | 12/05/2024 | 19:04 | LB133769 |
| | Magnesium | 1000 | <1000 | U | 1000 | P | 12/05/2024 | 19:04 | LB133769 |
| | Manganese | 10.0 | <10.0 | U | 10.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Nickel | 20.0 | <20.0 | U | 20.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Potassium | 1000 | <1000 | U | 1000 | P | 12/05/2024 | 19:04 | LB133769 |
| | Selenium | 10.0 | <10.0 | U | 10.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Silver | 5.00 | <5.00 | U | 5.00 | P | 12/05/2024 | 19:04 | LB133769 |
| | Sodium | 1000 | <1000 | U | 1000 | P | 12/05/2024 | 19:04 | LB133769 |
| | Thallium | 20.0 | <20.0 | U | 20.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Vanadium | 20.0 | <20.0 | U | 20.0 | P | 12/05/2024 | 19:04 | LB133769 |
| | Zinc | 20.0 | <20.0 | U | 20.0 | P | 12/05/2024 | 19:04 | LB133769 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 4 -
## INTERFERENCE CHECK SAMPLE

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**ICS Source:** EPA **Instrument ID:** P4

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Low Limit (ug/L) | High Limit (ug/L) | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICSA01 | Aluminum | 272000 | 255000 | 107 | 216000 | 294000 | 12/05/2024 | 14:18 | LB133769 |
| | Antimony | -2.09 | | | -50 | 50 | 12/05/2024 | 14:18 | LB133769 |
| | Arsenic | 6.49 | | | -20 | 20 | 12/05/2024 | 14:18 | LB133769 |
| | Barium | 5.08 | 6.0 | 85 | -94 | 106 | 12/05/2024 | 14:18 | LB133769 |
| | Beryllium | 1.48 | | | -6 | 6 | 12/05/2024 | 14:18 | LB133769 |
| | Cadmium | 6.34 | 1.0 | 634 | -5 | 7 | 12/05/2024 | 14:18 | LB133769 |
| | Calcium | 261000 | 245000 | 106 | 208000 | 282000 | 12/05/2024 | 14:18 | LB133769 |
| | Chromium | 57.9 | 52.0 | 111 | 42 | 62 | 12/05/2024 | 14:18 | LB133769 |
| | Cobalt | 2.71 | | | -30 | 30 | 12/05/2024 | 14:18 | LB133769 |
| | Copper | 4.69 | 2.0 | 234 | -18 | 22 | 12/05/2024 | 14:18 | LB133769 |
| | Iron | 101000 | 101000 | 100 | 85600 | 116500 | 12/05/2024 | 14:18 | LB133769 |
| | Lead | 7.21 | | | -12 | 12 | 12/05/2024 | 14:18 | LB133769 |
| | Magnesium | 283000 | 255000 | 111 | 216000 | 294000 | 12/05/2024 | 14:18 | LB133769 |
| | Manganese | 1.73 | 7.0 | 25 | -13 | 27 | 12/05/2024 | 14:18 | LB133769 |
| | Nickel | 0.60 | 2.0 | 30 | -38 | 42 | 12/05/2024 | 14:18 | LB133769 |
| | Potassium | 41.3 | | | 0 | 0 | 12/05/2024 | 14:18 | LB133769 |
| | Selenium | -19.1 | | | -20 | 20 | 12/05/2024 | 14:18 | LB133769 |
| | Silver | -5.85 | | | -10 | 10 | 12/05/2024 | 14:18 | LB133769 |
| | Sodium | 78.0 | | | 0 | 0 | 12/05/2024 | 14:18 | LB133769 |
| | Thallium | 13.8 | | | -40 | 40 | 12/05/2024 | 14:18 | LB133769 |
| | Vanadium | 11.4 | | | -40 | 40 | 12/05/2024 | 14:18 | LB133769 |
| | Zinc | 8.24 | | | -40 | 40 | 12/05/2024 | 14:18 | LB133769 |
| ICSAB01 | Aluminum | 253000 | 247000 | 102 | 209000 | 285000 | 12/05/2024 | 14:33 | LB133769 |
| | Antimony | 590 | 618 | 96 | 525 | 711 | 12/05/2024 | 14:33 | LB133769 |
| | Arsenic | 108 | 104 | 104 | 88.4 | 120 | 12/05/2024 | 14:33 | LB133769 |
| | Barium | 515 | 537 | 96 | 437 | 637 | 12/05/2024 | 14:33 | LB133769 |
| | Beryllium | 512 | 495 | 103 | 420 | 570 | 12/05/2024 | 14:33 | LB133769 |
| | Cadmium | 991 | 972 | 102 | 826 | 1120 | 12/05/2024 | 14:33 | LB133769 |
| | Calcium | 238000 | 235000 | 101 | 199000 | 271000 | 12/05/2024 | 14:33 | LB133769 |
| | Chromium | 545 | 542 | 101 | 460 | 624 | 12/05/2024 | 14:33 | LB133769 |
| | Cobalt | 499 | 476 | 105 | 404 | 548 | 12/05/2024 | 14:33 | LB133769 |
| | Copper | 462 | 511 | 90 | 434 | 588 | 12/05/2024 | 14:33 | LB133769 |
| | Iron | 93900 | 99300 | 95 | 84400 | 114500 | 12/05/2024 | 14:33 | LB133769 |
| | Lead | 59.3 | 49.0 | 121 | 37 | 61 | 12/05/2024 | 14:33 | LB133769 |
| | Magnesium | 259000 | 248000 | 104 | 210000 | 286000 | 12/05/2024 | 14:33 | LB133769 |
| | Manganese | 496 | 507 | 98 | 430 | 584 | 12/05/2024 | 14:33 | LB133769 |
| | Nickel | 1020 | 954 | 107 | 810 | 1100 | 12/05/2024 | 14:33 | LB133769 |
| | Potassium | 28.1 | | | 0 | 0 | 12/05/2024 | 14:33 | LB133769 |
| | Selenium | 32.5 | 46.0 | 71 | 26 | 66 | 12/05/2024 | 14:33 | LB133769 |
| | Silver | 190 | 201 | 94 | 170 | 232 | 12/05/2024 | 14:33 | LB133769 |
| | Sodium | 93.7 | | | 0 | 0 | 12/05/2024 | 14:33 | LB133769 |
| | Thallium | 92.2 | 108 | 85 | 68 | 148 | 12/05/2024 | 14:33 | LB133769 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 4 -
## INTERFERENCE CHECK SAMPLE

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**ICS Source:** EPA **Instrument ID:** P4

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Low Limit (ug/L) | High Limit (ug/L) | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **ICSAB01** | Vanadium | 498 | 491 | 101 | 417 | 565 | 12/05/2024 | 14:33 | LB133769 |
| | Zinc | 953 | 952 | 100 | 809 | 1095 | 12/05/2024 | 14:33 | LB133769 |
| **ICSA** | Aluminum | 258000 | 255000 | 101 | 216000 | 294000 | 12/05/2024 | 14:37 | LB133769 |
| | Antimony | -47.6 | | | -50 | 50 | 12/05/2024 | 14:37 | LB133769 |
| | Arsenic | -11.5 | | | -20 | 20 | 12/05/2024 | 14:37 | LB133769 |
| | Barium | -19.2 | 6.0 | 320 | -94 | 106 | 12/05/2024 | 14:37 | LB133769 |
| | Beryllium | 2.10 | | | -6 | 6 | 12/05/2024 | 14:37 | LB133769 |
| | Cadmium | 1.10 | 1.0 | 110 | -5 | 7 | 12/05/2024 | 14:37 | LB133769 |
| | Calcium | 257000 | 245000 | 105 | 208000 | 282000 | 12/05/2024 | 14:37 | LB133769 |
| | Chromium | 51.3 | 52.0 | 99 | 42 | 62 | 12/05/2024 | 14:37 | LB133769 |
| | Cobalt | 3.32 | | | -30 | 30 | 12/05/2024 | 14:37 | LB133769 |
| | Copper | -1.04 | 2.0 | 52 | -18 | 22 | 12/05/2024 | 14:37 | LB133769 |
| | Iron | 101000 | 101000 | 100 | 85600 | 116500 | 12/05/2024 | 14:37 | LB133769 |
| | Lead | 12.2 | | | -12 | 12 | 12/05/2024 | 14:37 | LB133769 |
| | Magnesium | 262000 | 255000 | 103 | 216000 | 294000 | 12/05/2024 | 14:37 | LB133769 |
| | Manganese | 3.37 | 7.0 | 48 | -13 | 27 | 12/05/2024 | 14:37 | LB133769 |
| | Nickel | -2.58 | 2.0 | 129 | -38 | 42 | 12/05/2024 | 14:37 | LB133769 |
| | Potassium | -671 | | | 0 | 0 | 12/05/2024 | 14:37 | LB133769 |
| | Selenium | -22.5 | | | -20 | 20 | 12/05/2024 | 14:37 | LB133769 |
| | Silver | 3.21 | | | -10 | 10 | 12/05/2024 | 14:37 | LB133769 |
| | Sodium | 423 | | | 0 | 0 | 12/05/2024 | 14:37 | LB133769 |
| | Thallium | -14.7 | | | -40 | 40 | 12/05/2024 | 14:37 | LB133769 |
| | Vanadium | 37.2 | | | -40 | 40 | 12/05/2024 | 14:37 | LB133769 |
| | Zinc | 9.03 | | | -40 | 40 | 12/05/2024 | 14:37 | LB133769 |
| **ICSAB** | Aluminum | 257000 | 247000 | 104 | 209000 | 285000 | 12/05/2024 | 14:41 | LB133769 |
| | Antimony | 558 | 618 | 90 | 525 | 711 | 12/05/2024 | 14:41 | LB133769 |
| | Arsenic | 69.6 | 104 | 67 | 88.4 | 120 | 12/05/2024 | 14:41 | LB133769 |
| | Barium | 522 | 537 | 97 | 437 | 637 | 12/05/2024 | 14:41 | LB133769 |
| | Beryllium | 545 | 495 | 110 | 420 | 570 | 12/05/2024 | 14:41 | LB133769 |
| | Cadmium | 1030 | 972 | 106 | 826 | 1120 | 12/05/2024 | 14:41 | LB133769 |
| | Calcium | 256000 | 235000 | 109 | 199000 | 271000 | 12/05/2024 | 14:41 | LB133769 |
| | Chromium | 597 | 542 | 110 | 460 | 624 | 12/05/2024 | 14:41 | LB133769 |
| | Cobalt | 511 | 476 | 107 | 404 | 548 | 12/05/2024 | 14:41 | LB133769 |
| | Copper | 518 | 511 | 101 | 434 | 588 | 12/05/2024 | 14:41 | LB133769 |
| | Iron | 99800 | 99300 | 100 | 84400 | 114500 | 12/05/2024 | 14:41 | LB133769 |
| | Lead | 44.7 | 49.0 | 91 | 37 | 61 | 12/05/2024 | 14:41 | LB133769 |
| | Magnesium | 261000 | 248000 | 105 | 210000 | 286000 | 12/05/2024 | 14:41 | LB133769 |
| | Manganese | 538 | 507 | 106 | 430 | 584 | 12/05/2024 | 14:41 | LB133769 |
| | Nickel | 1030 | 954 | 108 | 810 | 1100 | 12/05/2024 | 14:41 | LB133769 |
| | Potassium | -884 | | | 0 | 0 | 12/05/2024 | 14:41 | LB133769 |
| | Selenium | 23.2 | 46.0 | 50 | 26 | 66 | 12/05/2024 | 14:41 | LB133769 |
| | Silver | 192 | 201 | 96 | 170 | 232 | 12/05/2024 | 14:41 | LB133769 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 4 -
## INTERFERENCE CHECK SAMPLE

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**ICS Source:** EPA **Instrument ID:** P4

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Low Limit (ug/L) | High Limit (ug/L) | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **ICSAB** | Sodium | 156 | | | 0 | 0 | 12/05/2024 | 14:41 | LB133769 |
| | Thallium | 101 | 108 | 94 | 68 | 148 | 12/05/2024 | 14:41 | LB133769 |
| | Vanadium | 521 | 491 | 106 | 417 | 565 | 12/05/2024 | 14:41 | LB133769 |
| | Zinc | 1090 | 952 | 114 | 809 | 1095 | 12/05/2024 | 14:41 | LB133769 |
| **ICSA01** | Aluminum | 267000 | 255000 | 105 | 216000 | 294000 | 12/06/2024 | 12:50 | LB133790 |
| | Antimony | -2.00 | | | -50 | 50 | 12/06/2024 | 12:50 | LB133790 |
| | Arsenic | 6.39 | | | -20 | 20 | 12/06/2024 | 12:50 | LB133790 |
| | Barium | 1.82 | 6.0 | 30 | -94 | 106 | 12/06/2024 | 12:50 | LB133790 |
| | Beryllium | 1.48 | | | -6 | 6 | 12/06/2024 | 12:50 | LB133790 |
| | Cadmium | 4.33 | 1.0 | 433 | -5 | 7 | 12/06/2024 | 12:50 | LB133790 |
| | Calcium | 250000 | 245000 | 102 | 208000 | 282000 | 12/06/2024 | 12:50 | LB133790 |
| | Chromium | 58.3 | 52.0 | 112 | 42 | 62 | 12/06/2024 | 12:50 | LB133790 |
| | Cobalt | 2.43 | | | -30 | 30 | 12/06/2024 | 12:50 | LB133790 |
| | Copper | -0.59 | 2.0 | 30 | -18 | 22 | 12/06/2024 | 12:50 | LB133790 |
| | Iron | 101000 | 101000 | 100 | 85600 | 116500 | 12/06/2024 | 12:50 | LB133790 |
| | Lead | 11.9 | | | -12 | 12 | 12/06/2024 | 12:50 | LB133790 |
| | Magnesium | 273000 | 255000 | 107 | 216000 | 294000 | 12/06/2024 | 12:50 | LB133790 |
| | Manganese | 4.87 | 7.0 | 70 | -13 | 27 | 12/06/2024 | 12:50 | LB133790 |
| | Nickel | 32.9 | 2.0 | 1645 | -38 | 42 | 12/06/2024 | 12:50 | LB133790 |
| | Potassium | 14.1 | | | 0 | 0 | 12/06/2024 | 12:50 | LB133790 |
| | Selenium | -18.6 | | | -20 | 20 | 12/06/2024 | 12:50 | LB133790 |
| | Silver | -1.23 | | | -10 | 10 | 12/06/2024 | 12:50 | LB133790 |
| | Sodium | 120 | | | 0 | 0 | 12/06/2024 | 12:50 | LB133790 |
| | Thallium | -2.74 | | | -40 | 40 | 12/06/2024 | 12:50 | LB133790 |
| | Vanadium | 8.34 | | | -40 | 40 | 12/06/2024 | 12:50 | LB133790 |
| | Zinc | -6.25 | | | -40 | 40 | 12/06/2024 | 12:50 | LB133790 |
| **ICSAB01** | Aluminum | 264000 | 247000 | 107 | 209000 | 285000 | 12/06/2024 | 12:55 | LB133790 |
| | Antimony | 608 | 618 | 98 | 525 | 711 | 12/06/2024 | 12:55 | LB133790 |
| | Arsenic | 106 | 104 | 102 | 88.4 | 120 | 12/06/2024 | 12:55 | LB133790 |
| | Barium | 501 | 537 | 93 | 437 | 637 | 12/06/2024 | 12:55 | LB133790 |
| | Beryllium | 507 | 495 | 102 | 420 | 570 | 12/06/2024 | 12:55 | LB133790 |
| | Cadmium | 1010 | 972 | 104 | 826 | 1120 | 12/06/2024 | 12:55 | LB133790 |
| | Calcium | 246000 | 235000 | 105 | 199000 | 271000 | 12/06/2024 | 12:55 | LB133790 |
| | Chromium | 561 | 542 | 104 | 460 | 624 | 12/06/2024 | 12:55 | LB133790 |
| | Cobalt | 508 | 476 | 107 | 404 | 548 | 12/06/2024 | 12:55 | LB133790 |
| | Copper | 486 | 511 | 95 | 434 | 588 | 12/06/2024 | 12:55 | LB133790 |
| | Iron | 99200 | 99300 | 100 | 84400 | 114500 | 12/06/2024 | 12:55 | LB133790 |
| | Lead | 60.5 | 49.0 | 124 | 37 | 61 | 12/06/2024 | 12:55 | LB133790 |
| | Magnesium | 268000 | 248000 | 108 | 210000 | 286000 | 12/06/2024 | 12:55 | LB133790 |
| | Manganese | 495 | 507 | 98 | 430 | 584 | 12/06/2024 | 12:55 | LB133790 |
| | Nickel | 1030 | 954 | 108 | 810 | 1100 | 12/06/2024 | 12:55 | LB133790 |
| | Potassium | -35.5 | | | 0 | 0 | 12/06/2024 | 12:55 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 4 -
## INTERFERENCE CHECK SAMPLE

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**ICS Source:** EPA **Instrument ID:** P4

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Low Limit (ug/L) | High Limit (ug/L) | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| **ICSAB01** | Selenium | 33.1 | 46.0 | 72 | 26 | 66 | 12/06/2024 | 12:55 | LB133790 |
| | Silver | 196 | 201 | 98 | 170 | 232 | 12/06/2024 | 12:55 | LB133790 |
| | Sodium | 104 | | | 0 | 0 | 12/06/2024 | 12:55 | LB133790 |
| | Thallium | 81.4 | 108 | 75 | 68 | 148 | 12/06/2024 | 12:55 | LB133790 |
| | Vanadium | 501 | 491 | 102 | 417 | 565 | 12/06/2024 | 12:55 | LB133790 |
| | Zinc | 942 | 952 | 99 | 809 | 1095 | 12/06/2024 | 12:55 | LB133790 |
| **ICSA** | Aluminum | 249000 | 255000 | 98 | 216000 | 294000 | 12/06/2024 | 13:00 | LB133790 |
| | Antimony | -7.98 | | | -50 | 50 | 12/06/2024 | 13:00 | LB133790 |
| | Arsenic | -32.4 | | | -20 | 20 | 12/06/2024 | 13:00 | LB133790 |
| | Barium | -61.5 | 6.0 | 1025 | -94 | 106 | 12/06/2024 | 13:00 | LB133790 |
| | Beryllium | 3.42 | | | -6 | 6 | 12/06/2024 | 13:00 | LB133790 |
| | Cadmium | 2.74 | 1.0 | 274 | -5 | 7 | 12/06/2024 | 13:00 | LB133790 |
| | Calcium | 246000 | 245000 | 100 | 208000 | 282000 | 12/06/2024 | 13:00 | LB133790 |
| | Chromium | 58.9 | 52.0 | 113 | 42 | 62 | 12/06/2024 | 13:00 | LB133790 |
| | Cobalt | 3.44 | | | -30 | 30 | 12/06/2024 | 13:00 | LB133790 |
| | Copper | 0.47 | 2.0 | 23 | -18 | 22 | 12/06/2024 | 13:00 | LB133790 |
| | Iron | 96500 | 101000 | 96 | 85600 | 116500 | 12/06/2024 | 13:00 | LB133790 |
| | Lead | -15.2 | | | -12 | 12 | 12/06/2024 | 13:00 | LB133790 |
| | Magnesium | 252000 | 255000 | 99 | 216000 | 294000 | 12/06/2024 | 13:00 | LB133790 |
| | Manganese | 2.53 | 7.0 | 36 | -13 | 27 | 12/06/2024 | 13:00 | LB133790 |
| | Nickel | 31.5 | 2.0 | 1575 | -38 | 42 | 12/06/2024 | 13:00 | LB133790 |
| | Potassium | -1660 | | | 0 | 0 | 12/06/2024 | 13:00 | LB133790 |
| | Selenium | -11.4 | | | -20 | 20 | 12/06/2024 | 13:00 | LB133790 |
| | Silver | 9.42 | | | -10 | 10 | 12/06/2024 | 13:00 | LB133790 |
| | Sodium | 475 | | | 0 | 0 | 12/06/2024 | 13:00 | LB133790 |
| | Thallium | -11.5 | | | -40 | 40 | 12/06/2024 | 13:00 | LB133790 |
| | Vanadium | 3.28 | | | -40 | 40 | 12/06/2024 | 13:00 | LB133790 |
| | Zinc | 132 | | | -40 | 40 | 12/06/2024 | 13:00 | LB133790 |
| **ICSAB** | Aluminum | 254000 | 247000 | 103 | 209000 | 285000 | 12/06/2024 | 13:04 | LB133790 |
| | Antimony | 579 | 618 | 94 | 525 | 711 | 12/06/2024 | 13:04 | LB133790 |
| | Arsenic | 107 | 104 | 103 | 88.4 | 120 | 12/06/2024 | 13:04 | LB133790 |
| | Barium | 440 | 537 | 82 | 437 | 637 | 12/06/2024 | 13:04 | LB133790 |
| | Beryllium | 526 | 495 | 106 | 420 | 570 | 12/06/2024 | 13:04 | LB133790 |
| | Cadmium | 1010 | 972 | 104 | 826 | 1120 | 12/06/2024 | 13:04 | LB133790 |
| | Calcium | 250000 | 235000 | 106 | 199000 | 271000 | 12/06/2024 | 13:04 | LB133790 |
| | Chromium | 585 | 542 | 108 | 460 | 624 | 12/06/2024 | 13:04 | LB133790 |
| | Cobalt | 504 | 476 | 106 | 404 | 548 | 12/06/2024 | 13:04 | LB133790 |
| | Copper | 522 | 511 | 102 | 434 | 588 | 12/06/2024 | 13:04 | LB133790 |
| | Iron | 97400 | 99300 | 98 | 84400 | 114500 | 12/06/2024 | 13:04 | LB133790 |
| | Lead | 50.0 | 49.0 | 102 | 37 | 61 | 12/06/2024 | 13:04 | LB133790 |
| | Magnesium | 257000 | 248000 | 104 | 210000 | 286000 | 12/06/2024 | 13:04 | LB133790 |
| | Manganese | 511 | 507 | 101 | 430 | 584 | 12/06/2024 | 13:04 | LB133790 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 4 -
## INTERFERENCE CHECK SAMPLE

**Client:** New York City DEP of Environmental Protection/B **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**ICS Source:** EPA **Instrument ID:** P4

| Sample ID | Analyte | Result ug/L | True Value ug/L | % Recovery | Low Limit (ug/L) | High Limit (ug/L) | Analysis Date | Analysis Time | Run Number |
|---|---|---|---|---|---|---|---|---|---|
| ICSAB | Nickel | 1050 | 954 | 110 | 810 | 1100 | 12/06/2024 | 13:04 | LB133790 |
| | Potassium | -1380 | | | 0 | 0 | 12/06/2024 | 13:04 | LB133790 |
| | Selenium | 59.2 | 46.0 | 129 | 26 | 66 | 12/06/2024 | 13:04 | LB133790 |
| | Silver | 193 | 201 | 96 | 170 | 232 | 12/06/2024 | 13:04 | LB133790 |
| | Sodium | 520 | | | 0 | 0 | 12/06/2024 | 13:04 | LB133790 |
| | Thallium | 80.1 | 108 | 74 | 68 | 148 | 12/06/2024 | 13:04 | LB133790 |
| | Vanadium | 512 | 491 | 104 | 417 | 565 | 12/06/2024 | 13:04 | LB133790 |
| | Zinc | 1200 | 952 | 126 | 809 | 1095 | 12/06/2024 | 13:04 | LB133790 |

# METAL QC DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# metals
## - 5a -
## MATRIX SPIKE SUMMARY

**client:** New York City DEP of Environmental Prot **level:** low **sdg no.:** P5068

**contract:** NEWY17 **lab code:** CHEM **case no.:** P5068 **sas no.:** P5068

**matrix:** Water **sample id:** P5068-07 **client id:** 14B-(1-4)-COMPMS

**Percent Solids for Sample:** NA **Spiked ID:** P5068-07MS **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit %R | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75 - 125 | 908000 | | 849000 | | 1000 | 5916 | | P |
| Antimony | ug/L | 75 - 125 | 287 | | 25.0 | U | 400 | 72 | N | P |
| Arsenic | ug/L | 75 - 125 | 492 | | 81.0 | | 400 | 103 | | P |
| Barium | ug/L | 75 - 125 | 816 | | 658 | | 100 | 157 | | P |
| Beryllium | ug/L | 75 - 125 | 108 | | 3.00 | U | 100 | 108 | | P |
| Cadmium | ug/L | 75 - 125 | 103 | | 3.07 | | 100 | 100 | | P |
| Calcium | ug/L | 75 - 125 | 41000 | | 37900 | | 500 | 625 | | P |
| Chromium | ug/L | 75 - 125 | 219 | | 21.8 | | 200 | 99 | | P |
| Cobalt | ug/L | 75 - 125 | 109 | | 8.61 | J | 100 | 101 | | P |
| Copper | ug/L | 75 - 125 | 720 | | 562 | | 150 | 106 | | P |
| Iron | ug/L | 75 - 125 | 39500 | | 36100 | | 1500 | 228 | | P |
| Lead | ug/L | 75 - 125 | 470 | | 22.6 | | 500 | 90 | | P |
| Magnesium | ug/L | 75 - 125 | 10000 | | 8490 | | 1000 | 155 | | P |
| Manganese | ug/L | 75 - 125 | 26600 | D | 25900 | D | 100 | 660 | | P |
| Nickel | ug/L | 75 - 125 | 272 | | 25.3 | | 250 | 99 | | P |
| Potassium | ug/L | 75 - 125 | 9450 | | 3350 | | 5000 | 122 | | P |
| Selenium | ug/L | 75 - 125 | 1040 | | 10.1 | | 1000 | 103 | | P |
| Silver | ug/L | 75 - 125 | 47.3 | | 3.01 | J | 37.5 | 118 | | P |
| Sodium | ug/L | 75 - 125 | 38100 | | 34400 | | 1500 | 246 | | P |
| Thallium | ug/L | 75 - 125 | 822 | | 20.0 | U | 1000 | 82 | | P |
| Vanadium | ug/L | 75 - 125 | 191 | | 36.5 | | 150 | 103 | | P |
| Zinc | ug/L | 75 - 125 | 260 | | 142 | | 100 | 119 | | P |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# metals
## - 5a -
## MATRIX SPIKE DUPLICATE SUMMARY

**client:** New York City DEP of Environmental Prot **level:** low **sdg no.:** P5068

**contract:** NEWY17 **lab code:** CHEM **case no.:** P5068 **sas no.:** P5068

**matrix:** Water **sample id:** P5068-07 **client id:** 14B-(1-4)-COMPMSD

**Percent Solids for Sample:** NA **Spiked ID:** P5068-07MSD **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit %R | MSD Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75 - 125 | 911000 | | 849000 | | 1000 | 6245 | | P |
| Antimony | ug/L | 75 - 125 | 283 | | 25.0 | U | 400 | 71 | N | P |
| Arsenic | ug/L | 75 - 125 | 492 | | 81.0 | | 400 | 103 | | P |
| Barium | ug/L | 75 - 125 | 802 | | 658 | | 100 | 143 | | P |
| Beryllium | ug/L | 75 - 125 | 107 | | 3.00 | U | 100 | 107 | | P |
| Cadmium | ug/L | 75 - 125 | 102 | | 3.07 | | 100 | 99 | | P |
| Calcium | ug/L | 75 - 125 | 40600 | | 37900 | | 500 | 558 | | P |
| Chromium | ug/L | 75 - 125 | 216 | | 21.8 | | 200 | 97 | | P |
| Cobalt | ug/L | 75 - 125 | 107 | | 8.61 | J | 100 | 99 | | P |
| Copper | ug/L | 75 - 125 | 713 | | 562 | | 150 | 101 | | P |
| Iron | ug/L | 75 - 125 | 39000 | | 36100 | | 1500 | 194 | | P |
| Lead | ug/L | 75 - 125 | 467 | | 22.6 | | 500 | 89 | | P |
| Magnesium | ug/L | 75 - 125 | 9950 | | 8490 | | 1000 | 147 | | P |
| Manganese | ug/L | 75 - 125 | 26800 | D | 25900 | D | 100 | 866 | | P |
| Nickel | ug/L | 75 - 125 | 267 | | 25.3 | | 250 | 97 | | P |
| Potassium | ug/L | 75 - 125 | 9280 | | 3350 | | 5000 | 119 | | P |
| Selenium | ug/L | 75 - 125 | 1030 | | 10.1 | | 1000 | 102 | | P |
| Silver | ug/L | 75 - 125 | 46.9 | | 3.01 | J | 37.5 | 117 | | P |
| Sodium | ug/L | 75 - 125 | 37400 | | 34400 | | 1500 | 198 | | P |
| Thallium | ug/L | 75 - 125 | 817 | | 20.0 | U | 1000 | 82 | | P |
| Vanadium | ug/L | 75 - 125 | 189 | | 36.5 | | 150 | 102 | | P |
| Zinc | ug/L | 75 - 125 | 257 | | 142 | | 100 | 115 | | P |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# metals
## - 5a -
## MATRIX SPIKE SUMMARY

**client:** New York City DEP of Environmental Prot **level:** low **sdg no.:** P5068

**contract:** NEWY17 **lab code:** CHEM **case no.:** P5068 **sas no.:** P5068

**matrix:** Water **sample id:** P5192-02 **client id:** EFF-WASTE WATERMS

**Percent Solids for Sample:** NA **Spiked ID:** P5192-02MS **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit %R | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75 - 125 | 3.62 | | 0.20 | U | 4.0 | 90 | | CV |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# metals
## - 5a -
## MATRIX SPIKE DUPLICATE SUMMARY

**client:** New York City DEP of Environmental Prot **level:** low **sdg no.:** P5068

**contract:** NEWY17 **lab code:** CHEM **case no.:** P5068 **sas no.:** P5068

**matrix:** Water **sample id:** P5192-02 **client id:** EFF-WASTE WATERMSD

**Percent Solids for Sample:** NA **Spiked ID:** P5192-02MSD **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit %R | MSD Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75 - 125 | 3.93 | | 0.20 | U | 4.0 | 98 | | CV |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 5b -
## POST DIGEST SPIKE SUMMARY

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Case No.:** P5068  **SAS No.:** P5068

**Matrix:** Water  **Level:** LOW  **Client ID:** 14B-(1-4)-COMPA

**Sample ID:** P5068-07  **Spiked ID:** P5068-07A

| Analyte | Units | Acceptance Limit %R | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | 85 - 115 | 284 | | 25.0 | U | 400 | 71 | | P |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **Level:** LOW **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Matrix:** Water **Sample ID:** P5068-07 **Client ID:** 14B-(1-4)-COMPDUP

**Percent Solids for Sample:** NA **Duplicate ID** P5068-07DUP **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 20 | 849000 | | 863000 | | 2 | | P |
| Antimony | ug/L | 20 | 25.0 | U | 25.0 | U | | | P |
| Arsenic | ug/L | 20 | 81.0 | | 81.9 | | 1 | | P |
| Barium | ug/L | 20 | 658 | | 655 | | 0 | | P |
| Beryllium | ug/L | 20 | 3.00 | U | 3.00 | U | | | P |
| Cadmium | ug/L | 20 | 3.07 | | 3.33 | | 8 | | P |
| Calcium | ug/L | 20 | 37900 | | 38000 | | 0 | | P |
| Chromium | ug/L | 20 | 21.8 | | 22.1 | | 1 | | P |
| Cobalt | ug/L | 20 | 8.61 | J | 8.69 | J | 1 | | P |
| Copper | ug/L | 20 | 562 | | 571 | | 2 | | P |
| Iron | ug/L | 20 | 36100 | | 36100 | | 0 | | P |
| Lead | ug/L | 20 | 22.6 | | 21.9 | | 3 | | P |
| Magnesium | ug/L | 20 | 8490 | | 8540 | | 1 | | P |
| Manganese | ug/L | 20 | 25900 | D | 27000 | D | 4 | | P |
| Nickel | ug/L | 20 | 25.3 | | 25.6 | | 1 | | P |
| Potassium | ug/L | 20 | 3350 | | 3380 | | 1 | | P |
| Selenium | ug/L | 20 | 10.1 | | 10.8 | | 7 | | P |
| Silver | ug/L | 20 | 3.01 | J | 3.04 | J | 1 | | P |
| Sodium | ug/L | 20 | 34400 | | 34200 | | 1 | | P |
| Thallium | ug/L | 20 | 20.0 | U | 20.0 | U | | | P |
| Vanadium | ug/L | 20 | 36.5 | | 36.6 | | 0 | | P |
| Zinc | ug/L | 20 | 142 | | 144 | | 1 | | P |

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **Level:** LOW **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Matrix:** Water **Sample ID:** P5068-07MS **Client ID:** 14B-(1-4)-COMPMSD

**Percent Solids for Sample:** NA **Duplicate ID** P5068-07MSD **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 20 | 908000 | | 911000 | | 0 | | P |
| Antimony | ug/L | 20 | 287 | | 283 | | 1 | | P |
| Arsenic | ug/L | 20 | 492 | | 492 | | 0 | | P |
| Barium | ug/L | 20 | 816 | | 802 | | 2 | | P |
| Beryllium | ug/L | 20 | 108 | | 107 | | 1 | | P |
| Cadmium | ug/L | 20 | 103 | | 102 | | 1 | | P |
| Calcium | ug/L | 20 | 41000 | | 40600 | | 1 | | P |
| Chromium | ug/L | 20 | 219 | | 216 | | 1 | | P |
| Cobalt | ug/L | 20 | 109 | | 107 | | 2 | | P |
| Copper | ug/L | 20 | 720 | | 713 | | 1 | | P |
| Iron | ug/L | 20 | 39500 | | 39000 | | 1 | | P |
| Lead | ug/L | 20 | 470 | | 467 | | 1 | | P |
| Magnesium | ug/L | 20 | 10000 | | 9950 | | 1 | | P |
| Manganese | ug/L | 20 | 26600 | D | 26800 | D | 1 | | P |
| Nickel | ug/L | 20 | 272 | | 267 | | 2 | | P |
| Potassium | ug/L | 20 | 9450 | | 9280 | | 2 | | P |
| Selenium | ug/L | 20 | 1040 | | 1030 | | 1 | | P |
| Silver | ug/L | 20 | 47.3 | | 46.9 | | 1 | | P |
| Sodium | ug/L | 20 | 38100 | | 37400 | | 2 | | P |
| Thallium | ug/L | 20 | 822 | | 817 | | 1 | | P |
| Vanadium | ug/L | 20 | 191 | | 189 | | 1 | | P |
| Zinc | ug/L | 20 | 260 | | 257 | | 1 | | P |

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **Level:** LOW **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Matrix:** Water **Sample ID:** P5192-02 **Client ID:** EFF-WASTE WATERDUP

**Percent Solids for Sample:** NA **Duplicate ID** P5192-02DUP **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 20 | 0.20 | U | 0.20 | U | | | CV |

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## - 6 -

## DUPLICATE SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **Level:** LOW **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Matrix:** Water **Sample ID:** P5192-02MS **Client ID:** EFF-WASTE WATERMSD

**Percent Solids for Sample:** NA **Duplicate ID** P5192-02MSD **Percent Solids for Spike Sample:** NA

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 20 | 3.62 | | 3.93 | | 8 | | CV |

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922



## LABORATORY CONTROL SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limits | M |
|---|---|---|---|---|---|---|---|
| PB165365BS | | | | | | | |
| Aluminum | ug/L | 1000 | 962 | | 96 | 85 - 115 | P |
| Antimony | ug/L | 400 | 358 | | 90 | 85 - 115 | P |
| Arsenic | ug/L | 400 | 360 | | 90 | 85 - 115 | P |
| Barium | ug/L | 100 | 96.2 | | 96 | 85 - 115 | P |
| Beryllium | ug/L | 100 | 93.4 | | 93 | 85 - 115 | P |
| Cadmium | ug/L | 100 | 102 | | 102 | 85 - 115 | P |
| Calcium | ug/L | 500 | 557 | J | 111 | 85 - 115 | P |
| Chromium | ug/L | 200 | 214 | | 107 | 85 - 115 | P |
| Cobalt | ug/L | 100 | 102 | | 102 | 85 - 115 | P |
| Copper | ug/L | 150 | 145 | | 97 | 85 - 115 | P |
| Iron | ug/L | 1500 | 1450 | | 97 | 85 - 115 | P |
| Lead | ug/L | 500 | 501 | | 100 | 85 - 115 | P |
| Magnesium | ug/L | 1000 | 1050 | | 105 | 85 - 115 | P |
| Manganese | ug/L | 100 | 108 | | 108 | 85 - 115 | P |
| Nickel | ug/L | 250 | 255 | | 102 | 85 - 115 | P |
| Potassium | ug/L | 5000 | 4900 | | 98 | 85 - 115 | P |
| Selenium | ug/L | 1000 | 901 | | 90 | 85 - 115 | P |
| Silver | ug/L | 37.5 | 37.1 | | 99 | 85 - 115 | P |
| Sodium | ug/L | 1500 | 1280 | | 85 | 85 - 115 | P |
| Thallium | ug/L | 1000 | 1020 | | 102 | 85 - 115 | P |
| Vanadium | ug/L | 150 | 157 | | 105 | 85 - 115 | P |
| Zinc | ug/L | 100 | 101 | | 101 | 85 - 115 | P |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922



## LABORATORY CONTROL SAMPLE SUMMARY

**Client:** New York City DEP of Environmental Prot **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

| Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limits | M |
|---|---|---|---|---|---|---|---|
| PB165519BS | | | | | | | |
| Mercury | ug/L | 4.0 | 3.96 | | 99 | 85 - 115 | CV |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## -9 -

## ICP SERIAL DILUTIONS

SAMPLE NO.

14B-(1-4)-COMPL

**Lab Name:** Chemtech Consulting Group **Contract:** NEWY17

**Lab Code:** CHEM **Lb No.:** lb133790 **Lab Sample ID :** P5068-07L **SDG No.:** P5068

**Matrix (soil/water):** Water **Level (low/med):** LOW

**Concentration Units:** ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Aluminum | 849000 | | 895000 | | 6 | | P |
| Antimony | 25.0 | U | 125 | U | | | P |
| Arsenic | 81.0 | | 74.3 | | 8 | | P |
| Barium | 658 | | 645 | | 2 | | P |
| Beryllium | 3.00 | U | 15.0 | U | | | P |
| Cadmium | 3.07 | | 2.23 | J | 27 | | P |
| Calcium | 37900 | | 39000 | | 3 | | P |
| Chromium | 21.8 | | 22.9 | J | 5 | | P |
| Cobalt | 8.61 | J | 8.80 | J | 2 | | P |
| Copper | 562 | | 642 | | 14 | | P |
| Iron | 36100 | | 35300 | | 2 | | P |
| Lead | 22.6 | | 35.2 | | 55 | | P |
| Magnesium | 8490 | | 8720 | | 3 | | P |
| Manganese | 24200 | OR | 25800 | | 6 | | P |
| Nickel | 25.3 | | 26.4 | J | 5 | | P |
| Potassium | 3350 | | 2790 | J | 17 | | P |
| Selenium | 10.1 | | 50.0 | U | 100.0 | | P |
| Silver | 3.01 | J | 4.28 | J | 42 | | P |
| Sodium | 34400 | | 29800 | | 13 | | P |
| Thallium | 20.0 | U | 100 | U | | | P |
| Vanadium | 36.5 | | 37.8 | J | 4 | | P |
| Zinc | 142 | | 136 | | 4 | | P |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals

## -9 -

## ICP SERIAL DILUTIONS

SAMPLE NO.

EFF-WASTE WATERL

**Lab Name:** Chemtech Consulting Group **Contract:** NEWY17

**Lab Code:** CHEM **Lb No.:** lb133852 **Lab Sample ID :** P5192-02L **SDG No.:** P5068

**Matrix (soil/water):** Water **Level (low/med):** LOW

**Concentration Units:** ug/L

| Analyte | Initial Sample Result (I) | C | Serial Dilution Result (S) | C | % Difference | Q | M |
|---|---|---|---|---|---|---|---|
| Mercury | 0.20 | U | 1.00 | U | | | CV |

# METAL PREPARATION & INSTRUMENT DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Metals
## - 11 -
## ICP INTERELEMENT CORRECTION FACTORS

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Case No.:** P5068  **SAS No.:** P5068

**Instrument ID:**  **Date:**

**Interelement Correction Factors (apparent ppb analyte/ppm interferent )**

| Analyte | Wave-Length (nm) | ICP Interelement Correction Factors For: Al | Ca | Fe | Mg | Ag |
|---|---|---|---|---|---|---|
| Aluminum | 396.100 | 0.0000000 | -0.0002060 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.833 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 193.759 | 0.0000000 | 0.0000000 | -0.0000440 | 0.0000000 | 0.0000000 |
| Barium | 493.409 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 226.502 | 0.0000000 | 0.0000000 | 0.0000930 | 0.0000000 | 0.0000000 |
| Calcium | 373.690 | 0.0000000 | 0.0000000 | -0.0075970 | 0.0000000 | 0.0000000 |
| Chromium | 267.716 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.616 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 224.700 | 0.0000000 | 0.0000000 | 0.0007850 | 0.0000000 | 0.0000000 |
| Iron | 240.488 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.353 | -0.0000920 | 0.0000000 | 0.0000380 | 0.0000000 | 0.0000000 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Nickel | 231.604 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.490 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.090 | 0.0000000 | 0.0000000 | -0.0001440 | 0.0000000 | 0.0000000 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | -0.0001490 | 0.0000000 | 0.0000000 |
| Sodium | 589.592 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.856 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.402 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 213.800 | 0.0000000 | 0.0000000 | 0.0001050 | 0.0000000 | 0.0000000 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Metals
## - 11 -
## ICP INTERELEMENT CORRECTION FACTORS

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Case No.:** P5068  **SAS No.:** P5068

**Instrument ID:**  **Date:**

**Interelement Correction Factors (apparent ppb analyte/ppm interferent )**

| Analyte | Wave-Length (nm) | ICP Interelement Correction Factors For: As | Ba | Be | Cd | Co |
|---|---|---|---|---|---|---|
| Aluminum | 396.100 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.833 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 193.759 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 493.409 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 226.502 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0002870 |
| Calcium | 373.690 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.716 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.616 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 224.700 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0009530 |
| Iron | 240.488 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0039600 |
| Lead | 220.353 | 0.0000000 | 0.0003170 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Nickel | 231.604 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.490 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0003570 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.592 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.856 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0054900 |
| Vanadium | 292.402 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 213.800 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Metals
## - 11 -
## ICP INTERELEMENT CORRECTION FACTORS

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Case No.:** P5068  **SAS No.:** P5068

**Instrument ID:**  **Date:**

**Interelement Correction Factors (apparent ppb analyte/ppm interferent )**

| Analyte | Wave-Length (nm) | ICP Interelement Correction Factors For: Cr | Cu | K | Mn | Mo |
|---|---|---|---|---|---|---|
| Aluminum | 396.100 | 0.0000000 | 0.0000000 | 0.0000590 | 0.0000000 | 0.0396900 |
| Antimony | 206.833 | 0.0122000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 193.759 | -0.0029000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0004900 |
| Barium | 493.409 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000710 | -0.0003400 |
| Cadmium | 226.502 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 373.690 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.716 | 0.0000000 | 0.0000000 | 0.0000070 | 0.0002200 | 0.0000000 |
| Cobalt | 228.616 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0007860 |
| Copper | 224.700 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0006510 | 0.0020500 |
| Iron | 240.488 | 0.0000000 | 0.0000000 | 0.0000730 | 0.0000000 | -0.0015250 |
| Lead | 220.353 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0001400 | -0.0008600 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Nickel | 231.604 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.490 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0007460 | 0.0000000 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000120 |
| Sodium | 589.592 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.856 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0017400 | -0.0100400 |
| Vanadium | 292.402 | -0.0025100 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0072000 |
| Zinc | 213.800 | 0.0000000 | 0.0009010 | 0.0000000 | 0.0000000 | 0.0000000 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Metals
## - 11 -
## ICP INTERELEMENT CORRECTION FACTORS

**Client:** New York City DEP of Environmental Prot **SDG No.:** P5068

**Contract:** NEWY17 **Lab Code:** CHEM **Case No.:** P5068 **SAS No.:** P5068

**Instrument ID:** **Date:**

**Interelement Correction Factors (apparent ppb analyte/ppm interferent )**

| Analyte | Wave-Length (nm) | ICP Interelement Correction Factors For: Na | Ni | Pb | Sb | Se |
|---|---|---|---|---|---|---|
| Aluminum | 396.100 | 0.0000000 | 0.0000000 | 0.0012800 | 0.0000000 | 0.0000000 |
| Antimony | 206.833 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Arsenic | 193.759 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 493.409 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 226.502 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 373.690 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.716 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cobalt | 228.616 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 224.700 | 0.0000000 | -0.0047000 | 0.0036100 | 0.0000000 | 0.0000000 |
| Iron | 240.488 | 0.0000000 | -0.0017000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.353 | 0.0000000 | 0.0006580 | 0.0000000 | 0.0000000 | 0.0001290 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Nickel | 231.604 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.490 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.090 | 0.0000000 | 0.0000000 | 0.0003330 | 0.0000000 | 0.0000000 |
| Silver | 328.068 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.592 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.856 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Vanadium | 292.402 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 213.800 | 0.0000000 | 0.0067600 | 0.0000000 | 0.0000000 | 0.0000000 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Metals
## - 11 -
## ICP INTERELEMENT CORRECTION FACTORS

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Case No.:** P5068  **SAS No.:** P5068

**Instrument ID:**  **Date:**

**Interelement Correction Factors (apparent ppb analyte/ppm interferent )**

| Analyte | Wave-Length (nm) | ICP Interelement Correction Factors For: Sn | Ti | Tl | V | Zn |
|---|---|---|---|---|---|---|
| Aluminum | 396.100 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Antimony | 206.833 | -0.0035600 | -0.0007970 | 0.0000000 | -0.0018900 | 0.0000000 |
| Arsenic | 193.759 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Barium | 493.409 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Beryllium | 234.861 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Cadmium | 226.502 | 0.0000000 | 0.0000630 | 0.0001280 | 0.0000000 | 0.0000000 |
| Calcium | 373.690 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Chromium | 267.716 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0001110 | 0.0000000 |
| Cobalt | 228.616 | 0.0000000 | 0.0018800 | 0.0000000 | 0.0000000 | 0.0000000 |
| Copper | 224.700 | 0.0000000 | 0.0003840 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 240.488 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.353 | 0.0000000 | -0.0003610 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.079 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.610 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Nickel | 231.604 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.490 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Selenium | 196.090 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Silver | 328.068 | 0.0000000 | -0.0007420 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 589.592 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Thallium | 190.856 | 0.0000000 | -0.0039700 | 0.0000000 | -0.0115600 | 0.0000000 |
| Vanadium | 292.402 | 0.0000000 | 0.0005320 | 0.0000000 | 0.0000000 | 0.0000000 |
| Zinc | 213.800 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

# METAL PREPARATION & ANALYICAL SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 13 -
## SAMPLE PREPARATION SUMMARY

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Method:**

**Case No.:** P5068  **SAS No.:** P5068

| Sample ID | Client ID | Sample Type | Matrix | Prep Date | Initial Sample Size(mL) | Final Sample Volume (mL) | Percent Solids |
|---|---|---|---|---|---|---|---|
| **Batch Number:** | **PB165365** | | | | | | |
| P5068-07 | 14B-(1-4)-COMP | SAM | WATER | 12/04/2024 | 50.0 | 25.0 | |
| P5068-07DUP | 14B-(1-4)-COMPDUP | DUP | WATER | 12/04/2024 | 50.0 | 25.0 | |
| P5068-07MS | 14B-(1-4)-COMPMS | MS | WATER | 12/04/2024 | 50.0 | 25.0 | |
| P5068-07MSD | 14B-(1-4)-COMPMSD | MSD | WATER | 12/04/2024 | 50.0 | 25.0 | |
| PB165365BL | PB165365BL | MB | WATER | 12/04/2024 | 50.0 | 25.0 | |
| PB165365BS | PB165365BS | LCS | WATER | 12/04/2024 | 50.0 | 25.0 | |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals
## - 13 -
## SAMPLE PREPARATION SUMMARY

**Client:** New York City DEP of Environmental Prot  **SDG No.:** P5068

**Contract:** NEWY17  **Lab Code:** CHEM  **Method:**

**Case No.:** P5068  **SAS No.:** P5068

| Sample ID | Client ID | Sample Type | Matrix | Prep Date | Initial Sample Size(mL) | Final Sample Volume (mL) | Percent Solids |
|---|---|---|---|---|---|---|---|
| **Batch Number:** | **PB165519** | | | | | | |
| P5068-07 | 14B-(1-4)-COMP | SAM | WATER | 12/10/2024 | 30.0 | 30.0 | |
| P5192-02DUP | EFF-WASTE WATERDUP | DUP | WATER | 12/10/2024 | 30.0 | 30.0 | |
| P5192-02MS | EFF-WASTE WATERMS | MS | WATER | 12/10/2024 | 30.0 | 30.0 | |
| P5192-02MSD | EFF-WASTE WATERMSD | MSD | WATER | 12/10/2024 | 30.0 | 30.0 | |
| PB165519BL | PB165519BL | MB | WATER | 12/10/2024 | 30.0 | 30.0 | |
| PB165519BS | PB165519BS | LCS | WATER | 12/10/2024 | 30.0 | 30.0 | |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

**metals**
**- 14 -**
**ANALYSIS RUN LOG**

**Client:** New York City DEP of Environmental Prot **Contract:** NEWY17

**Lab code:** CHEM **Case no.:** P5068 **Sas no.:** P5068 **Sdg no.:** P5068

**Instrument id number:** **Method:** **Run number:** LB133769

**Start date:** 12/05/2024 **End date:** 12/05/2024

| Lab sample id. | Client Sample Id | d/f | Time | Parameter list |
|---|---|---|---|---|
| S0 | S0 | 1 | 1321 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S1 | S1 | 1 | 1325 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S2 | S2 | 1 | 1330 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S3 | S3 | 1 | 1334 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S4 | S4 | 1 | 1338 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S5 | S5 | 1 | 1342 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICV01 | ICV01 | 1 | 1353 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| LLICV01 | LLICV01 | 1 | 1405 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICB01 | ICB01 | 1 | 1410 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CRI01 | CRI01 | 1 | 1414 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSA01 | ICSA01 | 1 | 1418 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSAB01 | ICSAB01 | 1 | 1433 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSA | ICSA | 20 | 1437 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSAB | ICSAB | 20 | 1441 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV01 | CCV01 | 1 | 1445 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB01 | CCB01 | 1 | 1450 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV02 | CCV02 | 1 | 1534 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB02 | CCB02 | 1 | 1541 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV03 | CCV03 | 1 | 1642 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB03 | CCB03 | 1 | 1646 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV04 | CCV04 | 1 | 1741 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB04 | CCB04 | 1 | 1747 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV05 | CCV05 | 1 | 1839 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB05 | CCB05 | 1 | 1843 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| PB165365BL | PB165365BL | 1 | 1904 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| PB165365BS | PB165365BS | 1 | 1908 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV06 | CCV06 | 1 | 1945 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB06 | CCB06 | 1 | 1950 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV07 | CCV07 | 1 | 2023 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB07 | CCB07 | 1 | 2027 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

**metals**
**- 14 -**
**ANALYSIS RUN LOG**

**Client:** New York City DEP of Environmental Prot **Contract:** NEWY17

**Lab code:** CHEM **Case no.:** P5068 **Sas no.:** P5068 **Sdg no.:** P5068

**Instrument id number:** **Method:** **Run number:** LB133790

**Start date:** 12/06/2024 **End date:** 12/06/2024

| Lab sample id. | Client Sample Id | d/f | Time | Parameter list |
|---|---|---|---|---|
| S0 | S0 | 1 | 1148 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S1 | S1 | 1 | 1152 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S2 | S2 | 1 | 1157 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S3 | S3 | 1 | 1201 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S4 | S4 | 1 | 1205 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| S5 | S5 | 1 | 1210 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICV01 | ICV01 | 1 | 1214 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| LLICV01 | LLICV01 | 1 | 1220 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICB01 | ICB01 | 1 | 1224 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CRI01 | CRI01 | 1 | 1228 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSA01 | ICSA01 | 1 | 1250 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSAB01 | ICSAB01 | 1 | 1255 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSA | ICSA | 20 | 1300 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSAB | ICSAB | 20 | 1304 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV01 | CCV01 | 1 | 1309 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB01 | CCB01 | 1 | 1313 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV02 | CCV02 | 1 | 1338 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB02 | CCB02 | 1 | 1342 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07 | 14B-(1-4)-COMP | 1 | 1429 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07DUP | 14B-(1-4)-COMPDUP | 1 | 1434 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV03 | CCV03 | 1 | 1442 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB03 | CCB03 | 1 | 1446 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07L | 14B-(1-4)-COMPL | 5 | 1450 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07MS | 14B-(1-4)-COMPMS | 1 | 1455 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07MSD | 14B-(1-4)-COMPMSD | 1 | 1459 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07A | 14B-(1-4)-COMPA | 1 | 1503 | Sb |
| CCV04 | CCV04 | 1 | 1540 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB04 | CCB04 | 1 | 1544 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV05 | CCV05 | 1 | 1635 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB05 | CCB05 | 1 | 1639 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| P5068-07 | 14B-(1-4)-COMP | 5 | 1652 | Mn |
| P5068-07DUP | 14B-(1-4)-COMPDUP | 5 | 1657 | Mn |
| P5068-07MS | 14B-(1-4)-COMPMS | 5 | 1705 | Mn |
| P5068-07MSD | 14B-(1-4)-COMPMSD | 5 | 1709 | Mn |
| CCV06 | CCV06 | 1 | 1727 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB06 | CCB06 | 1 | 1731 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV07 | CCV07 | 1 | 1821 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB07 | CCB07 | 1 | 1827 | Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Na,Ni,Pb,Sb,Se,Tl,V,Zn |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

**metals**
**- 14 -**
**ANALYSIS RUN LOG**

**Client:** New York City DEP of Environmental Prot **Contract:** NEWY17

**Lab code:** CHEM **Case no.:** P5068 **Sas no.:** P5068 **Sdg no.:** P5068

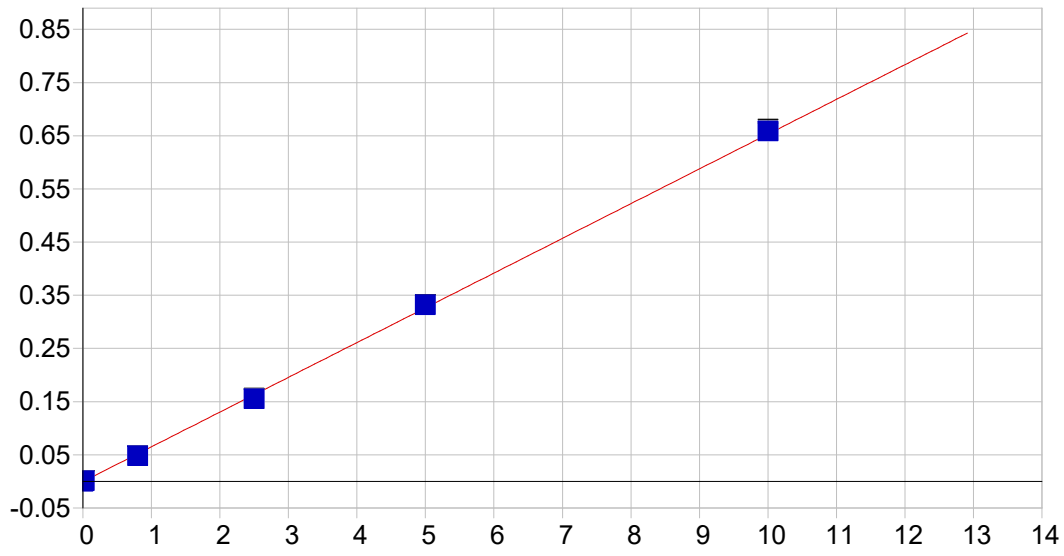
**Instrument id number:** **Method:** **Run number:** LB133852

**Start date:** 12/10/2024 **End date:** 12/10/2024

| Lab sample id. | Client Sample Id | d/f | Time | Parameter list |
|---|---|---|---|---|
| S0 | S0 | 1 | 0937 | HG |
| S0.05 | S0.05 | 1 | 0942 | HG |
| S0.2 | S0.2 | 1 | 0944 | HG |
| S2.5 | S2.5 | 1 | 0947 | HG |
| S5 | S5 | 1 | 0949 | HG |
| S7.5 | S7.5 | 1 | 0951 | HG |
| S10 | S10 | 1 | 0959 | HG |
| ICV14 | ICV14 | 1 | 1009 | HG |
| ICB14 | ICB14 | 1 | 1017 | HG |
| CCV10 | CCV10 | 1 | 1029 | HG |
| CCB10 | CCB10 | 1 | 1034 | HG |
| CRA | CRA | 1 | 1039 | HG |
| PB165519BL | PB165519BL | 1 | 1053 | HG |
| PB165519BS | PB165519BS | 1 | 1102 | HG |
| P5068-07 | 14B-(1-4)-COMP | 1 | 1119 | HG |
| CCV11 | CCV11 | 1 | 1126 | HG |
| CCB11 | CCB11 | 1 | 1131 | HG |
| P5192-02DUP | EFF-WASTE WATERDUP | 1 | 1133 | HG |
| P5192-02MS | EFF-WASTE WATERMS | 1 | 1135 | HG |
| P5192-02MSD | EFF-WASTE WATERMSD | 1 | 1137 | HG |
| P5192-02L | EFF-WASTE WATERL | 5 | 1140 | HG |
| CCV12 | CCV12 | 1 | 1144 | HG |
| CCB12 | CCB12 | 1 | 1149 | HG |

# METAL
# RAW DATA

Reviewed By:
On:
Inst Id :P4
LB :LB133769



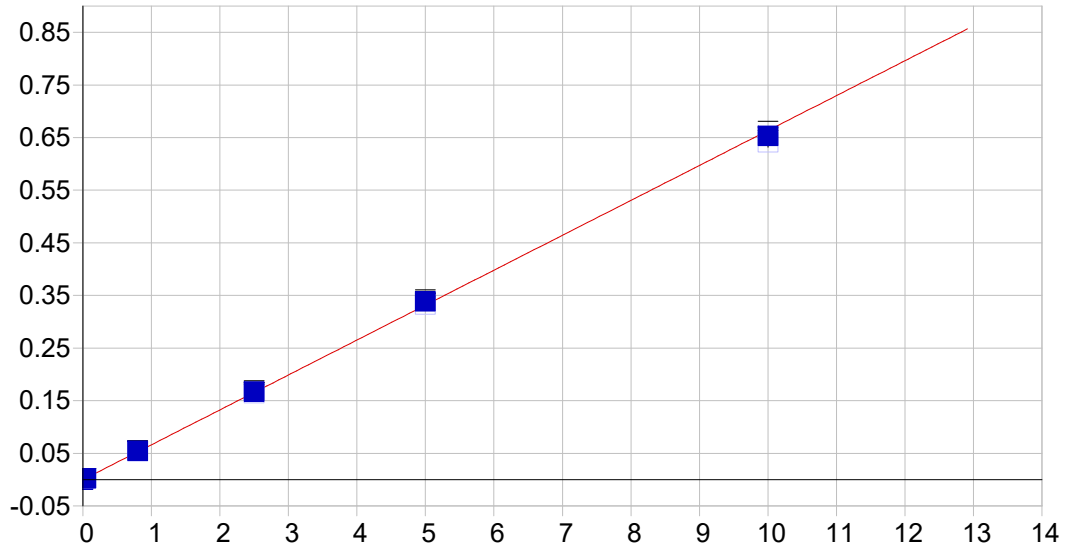

**As 189.042 {479}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000289 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.065332 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999658 | Status: | OK. |
| Std Error of Est: | 0.000040 | | |
| Predicted MDL: | 0.002514 | | |
| Predicted MQL: | 0.008381 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | -.00029 | .000 | 1 |
| S1 | .02000 | .02063 | .001 | 3.15 | .00105 | .000 | 1 |
| S3 | 2.5000 | 2.3842 | -.116 | -4.63 | .15530 | .001 | 1 |
| S4 | 5.0000 | 5.0862 | .086 | 1.72 | .33165 | .001 | 1 |
| S5 | 10.000 | 10.091 | .091 | .911 | .65828 | .003 | 1 |
| S2 | .80000 | .73790 | -.062 | -7.76 | .04786 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



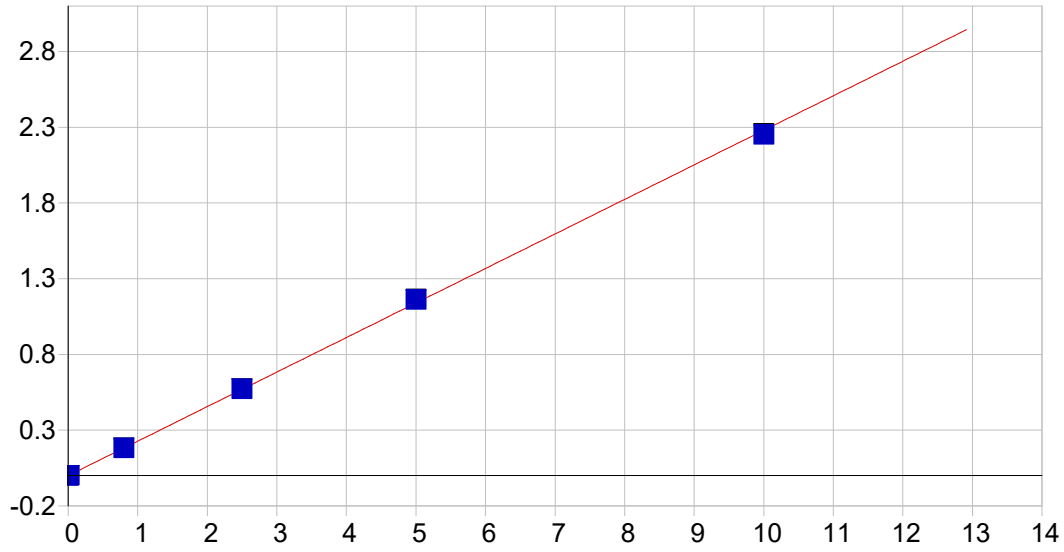

**Tl 190.856 {477}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000223 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.066362 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999841 | Status: | OK. |
| Std Error of Est: | 0.000038 | | |
| Predicted MDL: | 0.001934 | | |
| Predicted MQL: | 0.006448 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00022 | .000 | 1 |
| S1 | .04000 | .04086 | .001 | 2.15 | .00232 | .000 | 1 |
| S3 | 2.5000 | 2.5209 | .021 | .837 | .16401 | .002 | 1 |
| S4 | 5.0000 | 5.1067 | .107 | 2.13 | .33255 | .003 | 1 |
| S5 | 10.000 | 9.8465 | -.154 | -1.54 | .64099 | .009 | 1 |
| S2 | .80000 | .82510 | .025 | 3.14 | .05355 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



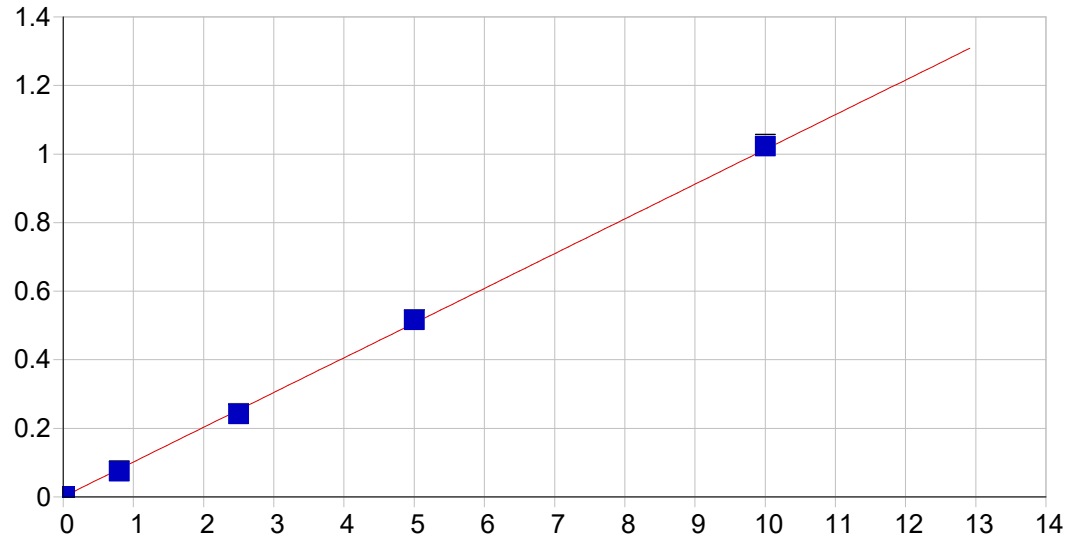

**Pb 220.353 {453}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000469 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.228010 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999903 | Status: | OK. |
| Std Error of Est: | 0.000057 | | |
| Predicted MDL: | 0.001139 | | |
| Predicted MQL: | 0.003797 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00047 | .000 | 1 |
| S1 | .01200 | .01283 | .001 | 6.90 | .00240 | .000 | 1 |
| S3 | 2.5000 | 2.5137 | .014 | .549 | .57206 | .001 | 1 |
| S4 | 5.0000 | 5.0998 | .100 | 2.00 | 1.1611 | .003 | 1 |
| S5 | 10.000 | 9.8821 | -.118 | -1.18 | 2.2502 | .005 | 1 |
| S2 | .80000 | .80360 | .004 | .450 | .18256 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



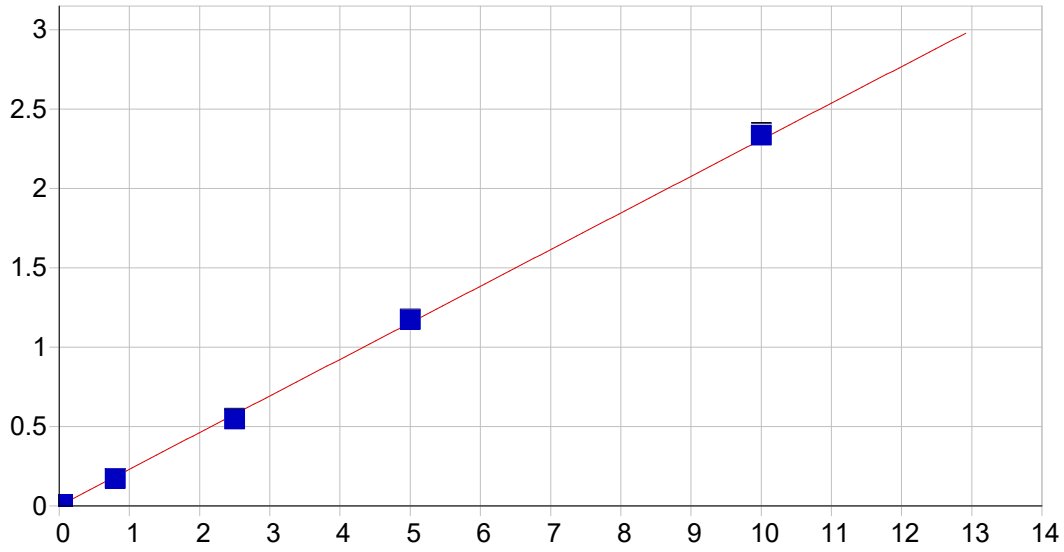

**Se 196.090 {472}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000483 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.101288 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999624 | Status: | OK. |
| Std Error of Est: | 0.000065 | | |
| Predicted MDL: | 0.002109 | | |
| Predicted MQL: | 0.007029 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00048 | .000 | 1 |
| S1 | .02000 | .01845 | -.002 | -7.77 | .00235 | .000 | 1 |
| S3 | 2.5000 | 2.3809 | -.119 | -4.77 | .24157 | .002 | 1 |
| S4 | 5.0000 | 5.0932 | .093 | 1.86 | .51623 | .000 | 1 |
| S5 | 10.000 | 10.093 | .093 | .932 | 1.0225 | .006 | 1 |
| S2 | .80000 | .73434 | -.066 | -8.21 | .07484 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



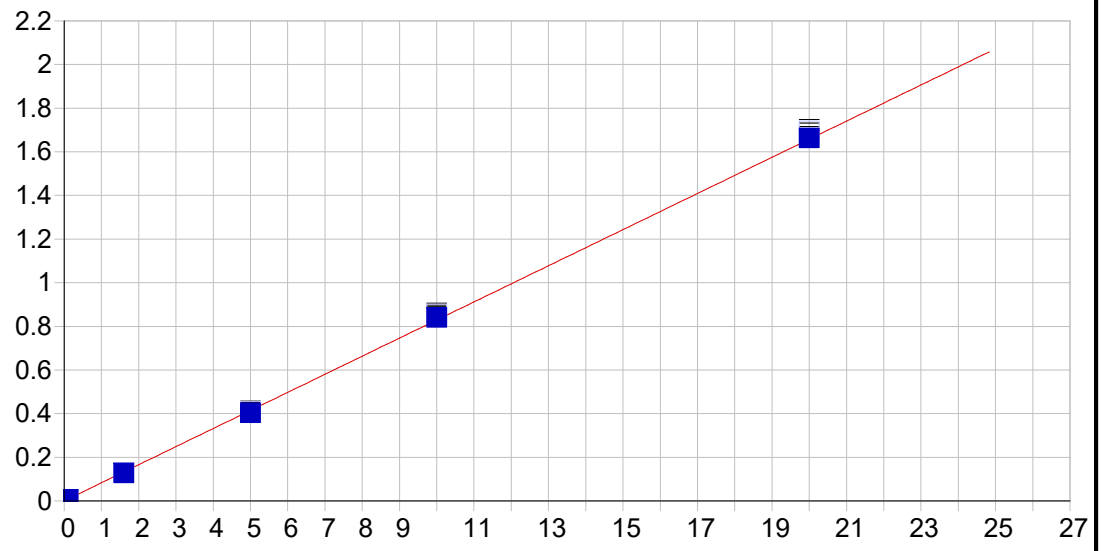

**Sb 206.833 {463}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000727 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.230666 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999565 | Status: | OK. |
| Std Error of Est: | 0.000253 | | |
| Predicted MDL: | 0.001123 | | |
| Predicted MQL: | 0.003742 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00001 | .000 | .000 | .00073 | .000 | 1 |
| S1 | .05000 | .04477 | -.005 | -10.5 | .01108 | .000 | 1 |
| S3 | 2.5000 | 2.3622 | -.138 | -5.51 | .54717 | .004 | 1 |
| S4 | 5.0000 | 5.0818 | .082 | 1.64 | 1.1761 | .003 | 1 |
| S5 | 10.000 | 10.125 | .125 | 1.25 | 2.3424 | .011 | 1 |
| S2 | .80000 | .73654 | -.063 | -7.93 | .17112 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



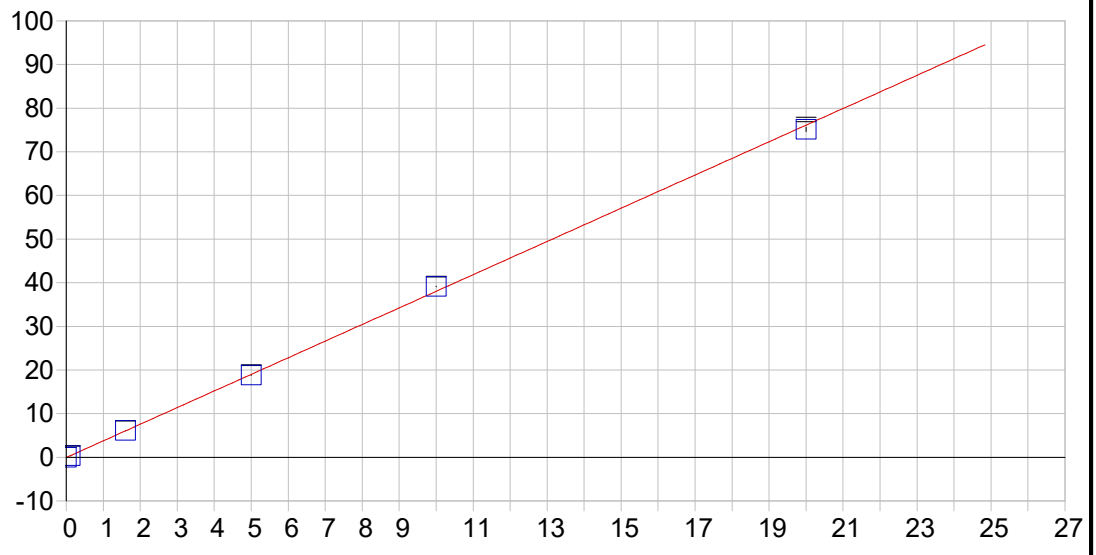

**Al 396.152 { 85}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000318 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.082873 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999889 | Status: | OK. |
| Std Error of Est: | 0.000093 | | |
| Predicted MDL: | 0.004478 | | |
| Predicted MQL: | 0.014925 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00001 | .000 | .000 | .00032 | .000 | 1 |
| S1 | .10000 | .09679 | -.003 | -3.21 | .00898 | .000 | 1 |
| S3 | 5.0000 | 4.8580 | -.142 | -2.84 | .41096 | .001 | 1 |
| S4 | 10.000 | 10.140 | .140 | 1.40 | .85670 | .004 | 1 |
| S5 | 20.000 | 20.064 | .064 | .322 | 1.6953 | .008 | 1 |
| S2 | 1.6000 | 1.5413 | -.059 | -3.67 | .13062 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



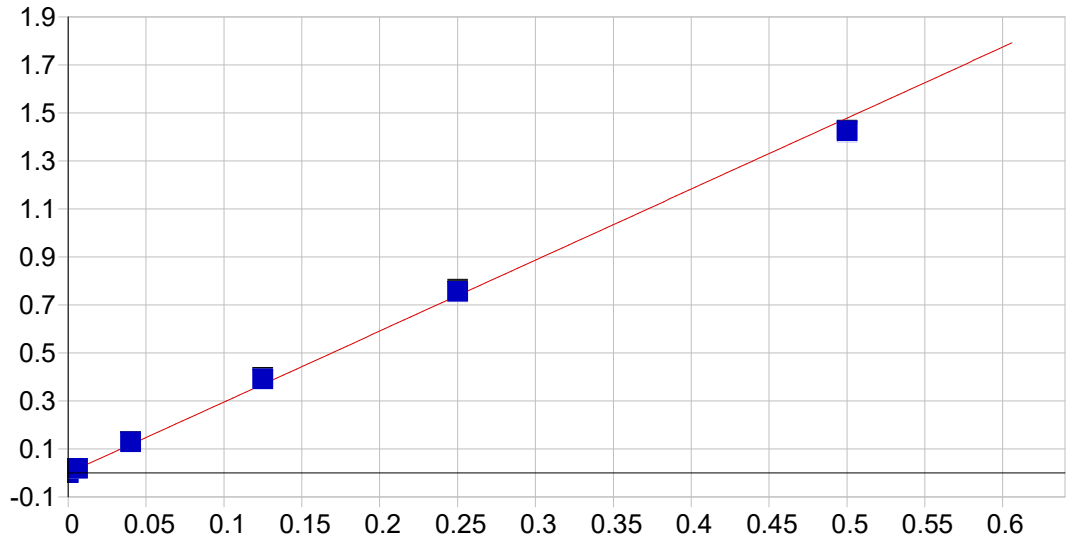

**Ba 493.409 { 68}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.039219 | Re-Slope: | 1.000000 |
| A1 (Gain): | 3.807540 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999833 | Status: | OK. |
| Std Error of Est: | 0.005161 | | |
| Predicted MDL: | 0.000389 | | |
| Predicted MQL: | 0.001296 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.03924 | .002 | 1 |
| S1 | .10000 | .10304 | .003 | 3.04 | .35312 | .002 | 1 |
| S3 | 5.0000 | 4.9561 | -.044 | -.878 | 18.831 | .065 | 1 |
| S4 | 10.000 | 10.286 | .286 | 2.86 | 39.126 | .086 | 1 |
| S5 | 20.000 | 19.738 | -.262 | -1.31 | 75.115 | .516 | 1 |
| S2 | 1.6000 | 1.6164 | .016 | 1.03 | 6.1154 | .020 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



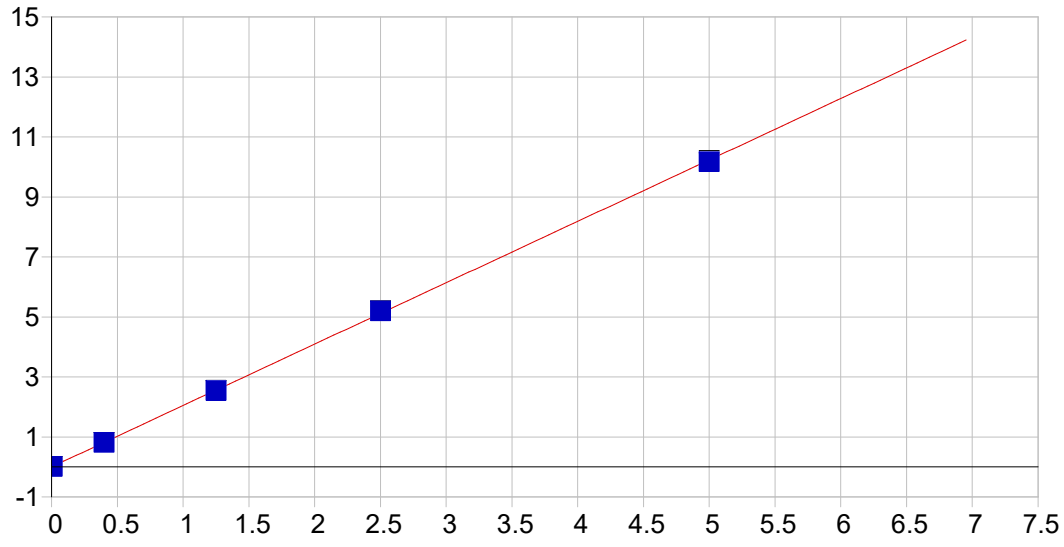

**Be 234.861 {144}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000661 | Re-Slope: | 1.000000 |
| A1 (Gain): | 2.957728 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999093 | Status: | OK. |
| Std Error of Est: | 0.000361 | | |
| Predicted MDL: | 0.000065 | | |
| Predicted MQL: | 0.000216 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00066 | .000 | 1 |
| S1 | .00600 | .00662 | .001 | 10.4 | .01880 | .000 | 1 |
| S3 | .12500 | .13263 | .008 | 6.10 | .38997 | .005 | 1 |
| S4 | .25000 | .25587 | .006 | 2.35 | .75282 | .009 | 1 |
| S5 | .50000 | .48214 | -.018 | -3.57 | 1.4187 | .003 | 1 |
| S2 | .04000 | .04374 | .004 | 9.35 | .12818 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



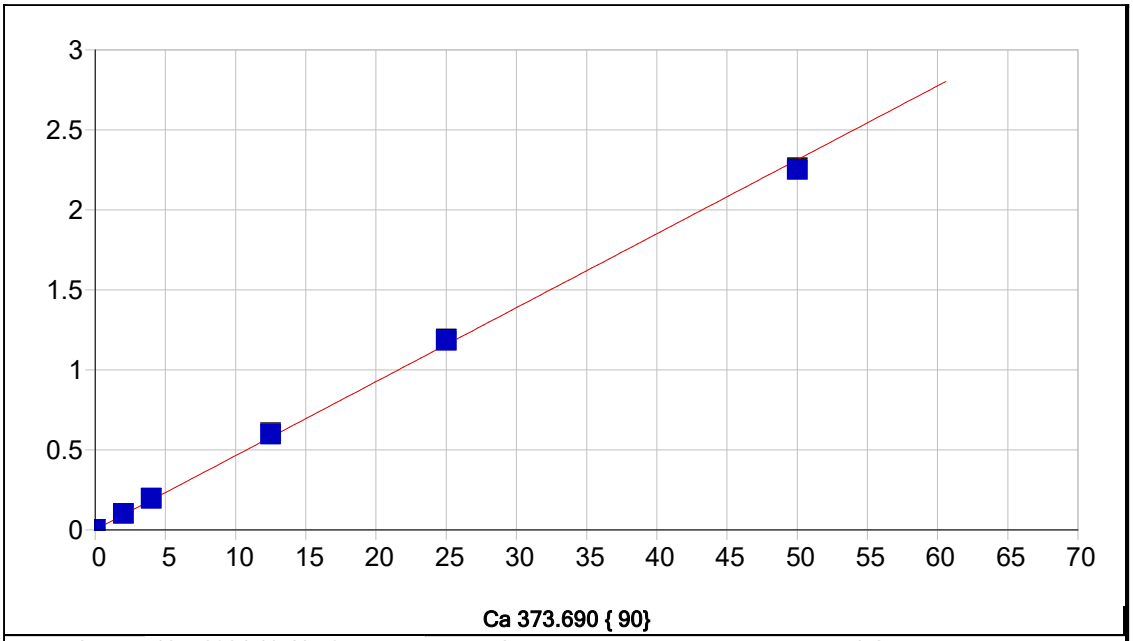

**Cd 226.502 {449}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000232 | Re-Slope: | 1.000000 |
| A1 (Gain): | 2.046327 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999954 | Status: | OK. |
| Std Error of Est: | 0.000178 | | |
| Predicted MDL: | 0.000097 | | |
| Predicted MQL: | 0.000324 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00023 | .000 | 1 |
| S1 | .00600 | .00601 | .000 | .106 | .01212 | .000 | 1 |
| S3 | 1.2500 | 1.2436 | -.006 | -.512 | 2.5467 | .007 | 1 |
| S4 | 2.5000 | 2.5390 | .039 | 1.56 | 5.1996 | .011 | 1 |
| S5 | 5.0000 | 4.9687 | -.031 | -.625 | 10.176 | .035 | 1 |
| S2 | .40000 | .39866 | -.001 | -.334 | .81623 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



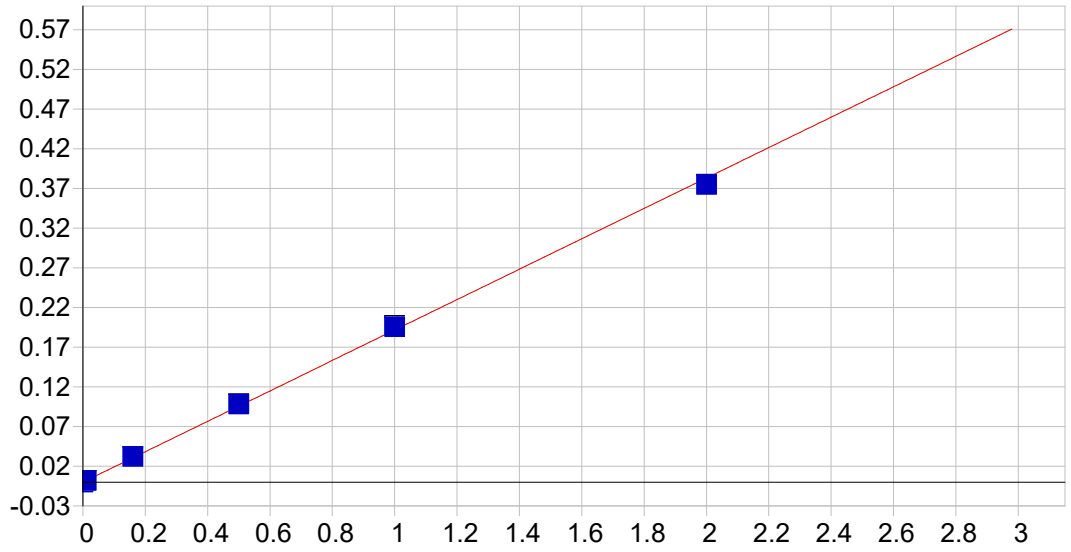

**Ca 373.690 { 90}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002289 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.046215 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999557 | Status: | OK. |
| Std Error of Est: | 0.000728 | | |
| Predicted MDL: | 0.007612 | | |
| Predicted MQL: | 0.025375 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00032 | -.000 | .000 | .00227 | .000 | 1 |
| S2 | 4.0000 | 4.2074 | .207 | 5.19 | .19673 | .001 | 1 |
| S3 | 12.500 | 12.887 | .387 | 3.10 | .59786 | .008 | 1 |
| S4 | 25.000 | 25.559 | .559 | 2.23 | 1.1835 | .009 | 1 |
| S5 | 50.000 | 48.686 | -1.31 | -2.63 | 2.2523 | .010 | 1 |
| S1 | 2.0000 | 2.1614 | .161 | 8.07 | .10218 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



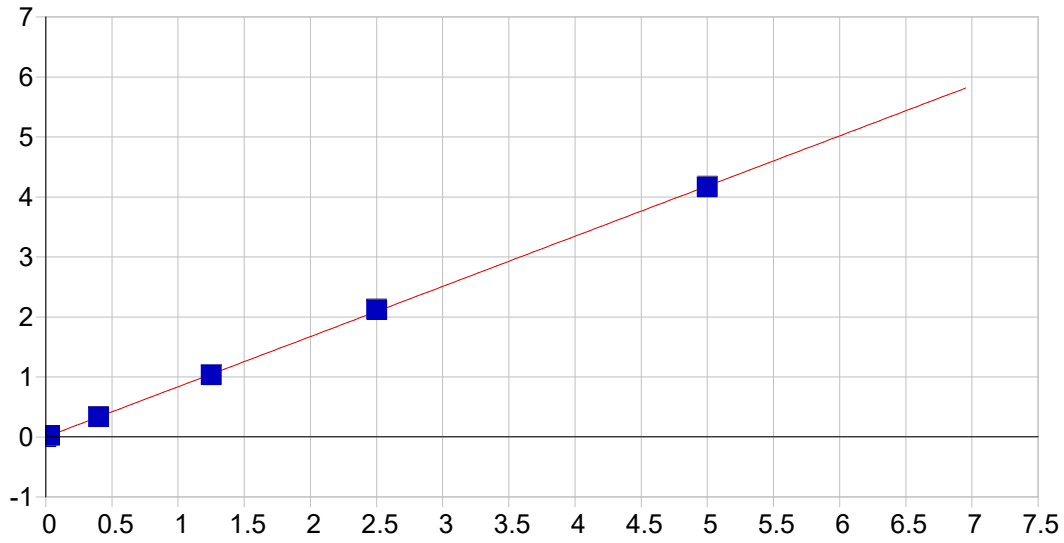

**Cr 267.716 {126}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000004 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.191637 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999722 | Status: | OK. |
| Std Error of Est: | 0.000034 | | |
| Predicted MDL: | 0.000395 | | |
| Predicted MQL: | 0.001315 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00000 | .000 | 1 |
| S1 | .01000 | .00998 | -.000 | -.162 | .00192 | .000 | 1 |
| S3 | .50000 | .51256 | .013 | 2.51 | .09826 | .000 | 1 |
| S4 | 1.0000 | 1.0231 | .023 | 2.31 | .19612 | .001 | 1 |
| S5 | 2.0000 | 1.9575 | -.042 | -2.12 | .37525 | .000 | 1 |
| S2 | .16000 | .16684 | .007 | 4.28 | .03199 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



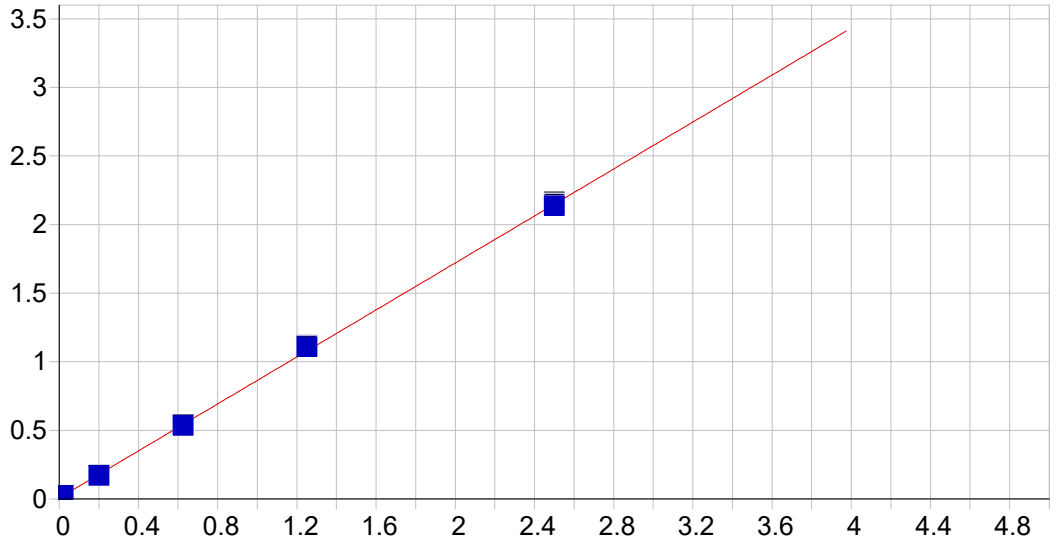

**Co 228.616 {448}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000113 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.836279 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999957 | Status: | OK. |
| Std Error of Est: | 0.000157 | | |
| Predicted MDL: | 0.000212 | | |
| Predicted MQL: | 0.000708 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00011 | .000 | 1 |
| S1 | .03000 | .03011 | .000 | .356 | .02496 | .000 | 1 |
| S3 | 1.2500 | 1.2361 | -.014 | -1.11 | 1.0354 | .001 | 1 |
| S4 | 2.5000 | 2.5364 | .036 | 1.46 | 2.1246 | .004 | 1 |
| S5 | 5.0000 | 4.9781 | -.022 | -.438 | 4.1701 | .011 | 1 |
| S2 | .40000 | .39924 | -.001 | -.191 | .33433 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



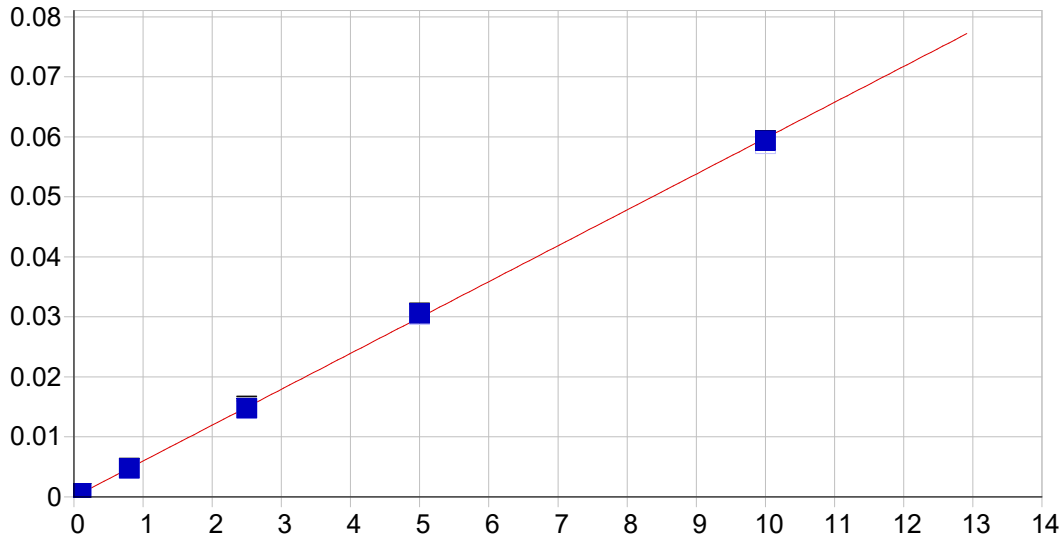

**Cu 224.700 {450}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.007670 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.856381 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999793 | Status: | OK. |
| Std Error of Est: | 0.000206 | | |
| Predicted MDL: | 0.000376 | | |
| Predicted MQL: | 0.001254 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00767 | .000 | 1 |
| S1 | .02000 | .02022 | .000 | 1.09 | .02520 | .000 | 1 |
| S3 | .62500 | .61435 | -.011 | -1.70 | .53889 | .003 | 1 |
| S4 | 1.2500 | 1.2859 | .036 | 2.87 | 1.1191 | .001 | 1 |
| S5 | 2.5000 | 2.4859 | -.014 | -.565 | 2.1569 | .009 | 1 |
| S2 | .20000 | .18865 | -.011 | -5.67 | .17086 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



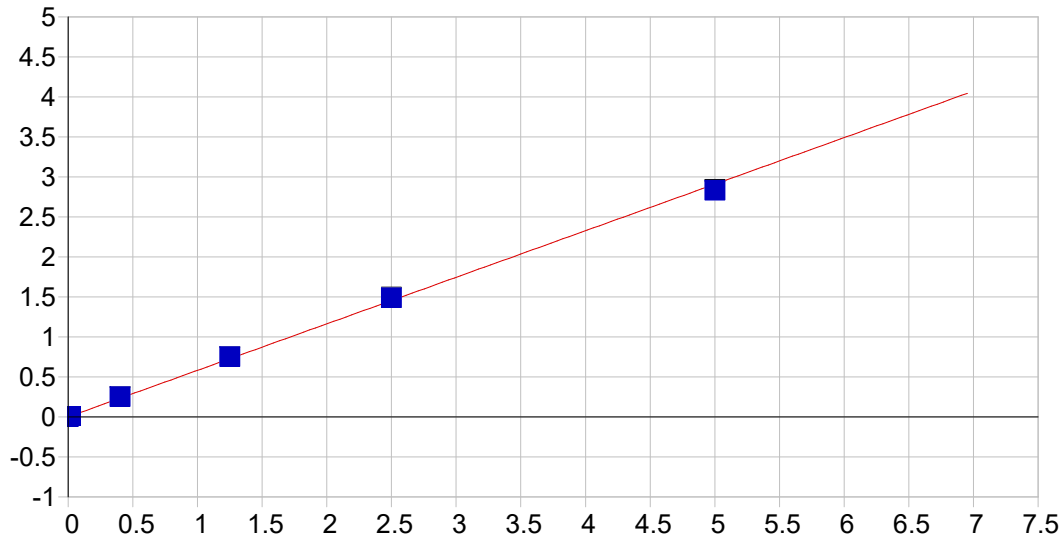

**Fe 240.488 {140}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000011 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.005977 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999900 | Status: | OK. |
| Std Error of Est: | 0.000004 | | |
| Predicted MDL: | 0.004074 | | |
| Predicted MQL: | 0.013581 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00001 | .000 | 1 |
| S1 | .10000 | .09746 | -.003 | -2.54 | .00059 | .000 | 1 |
| S3 | 2.5000 | 2.4715 | -.029 | -1.14 | .01465 | .000 | 1 |
| S4 | 5.0000 | 5.1137 | .114 | 2.27 | .03032 | .000 | 1 |
| S5 | 10.000 | 9.9248 | -.075 | -.752 | .05882 | .000 | 1 |
| S2 | .80000 | .79257 | -.007 | -.929 | .00471 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



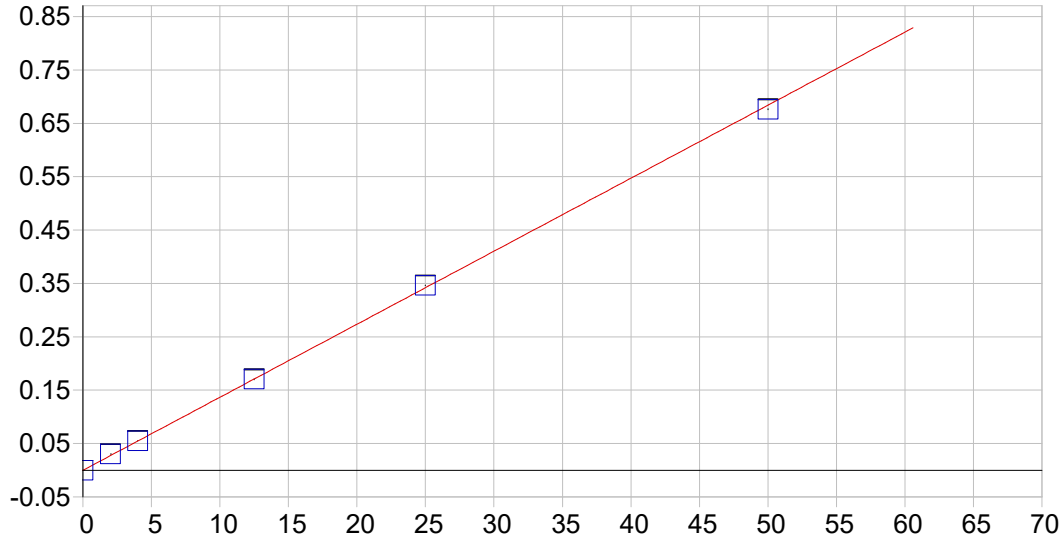

**Mn 257.610 {131}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000025 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.581803 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999513 | Status: | OK. |
| Std Error of Est: | 0.000301 | | |
| Predicted MDL: | 0.000263 | | |
| Predicted MQL: | 0.000876 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00003 | .000 | 1 |
| S1 | .02000 | .02228 | .002 | 11.4 | .01294 | .000 | 1 |
| S3 | 1.2500 | 1.2913 | .041 | 3.30 | .75140 | .006 | 1 |
| S4 | 2.5000 | 2.5601 | .060 | 2.40 | 1.4897 | .006 | 1 |
| S5 | 5.0000 | 4.8661 | -.134 | -2.68 | 2.8317 | .010 | 1 |
| S2 | .40000 | .43029 | .030 | 7.57 | .25036 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



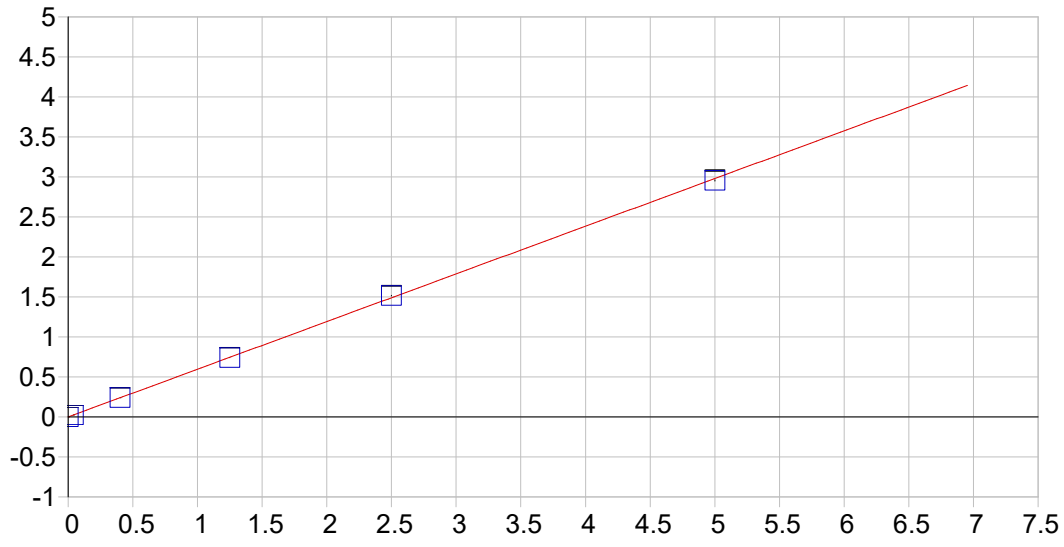

**Mg 279.079 {121}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000139 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.013684 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999809 | Status: | OK. |
| Std Error of Est: | 0.000141 | | |
| Predicted MDL: | 0.011854 | | |
| Predicted MQL: | 0.039515 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00024 | -.000 | .000 | -.00014 | .000 | 1 |
| S2 | 4.0000 | 4.0373 | .037 | .933 | .05511 | .000 | 1 |
| S3 | 12.500 | 12.461 | -.039 | -.311 | .17037 | .001 | 1 |
| S4 | 25.000 | 25.334 | .334 | 1.34 | .34652 | .001 | 1 |
| S5 | 50.000 | 49.446 | -.554 | -1.11 | .67646 | .001 | 1 |
| S1 | 2.0000 | 2.2217 | .222 | 11.1 | .03026 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



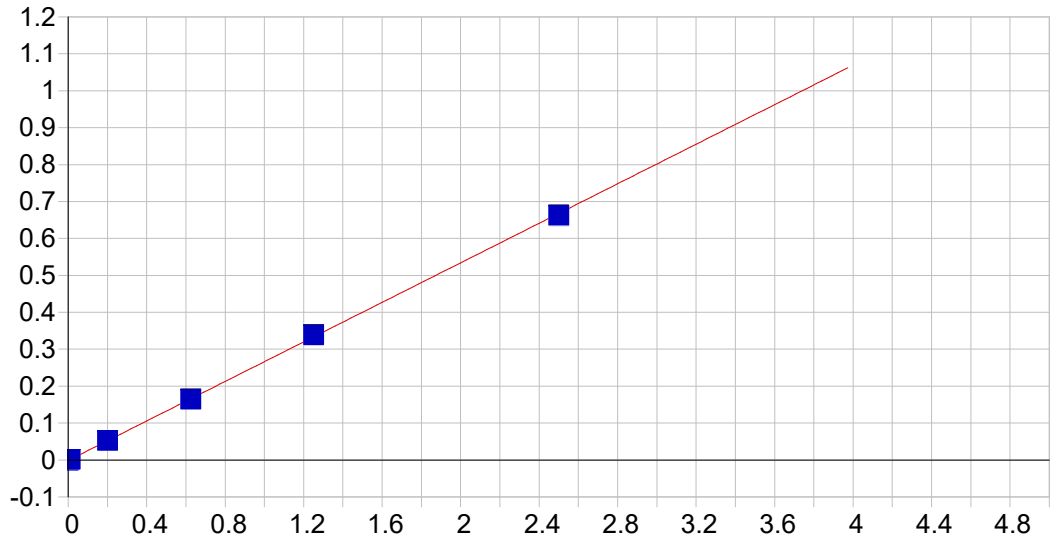

**Ni 231.604 {446}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000077 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.595855 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999943 | Status: | OK. |
| Std Error of Est: | 0.000150 | | |
| Predicted MDL: | 0.000333 | | |
| Predicted MQL: | 0.001111 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00008 | .000 | 1 |
| S1 | .04000 | .03967 | -.000 | -.835 | .02371 | .000 | 1 |
| S3 | 1.2500 | 1.2440 | -.006 | -.477 | .74134 | .002 | 1 |
| S4 | 2.5000 | 2.5424 | .042 | 1.69 | 1.5149 | .003 | 1 |
| S5 | 5.0000 | 4.9618 | -.038 | -.763 | 2.9566 | .008 | 1 |
| S2 | .40000 | .40212 | .002 | .529 | .23968 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



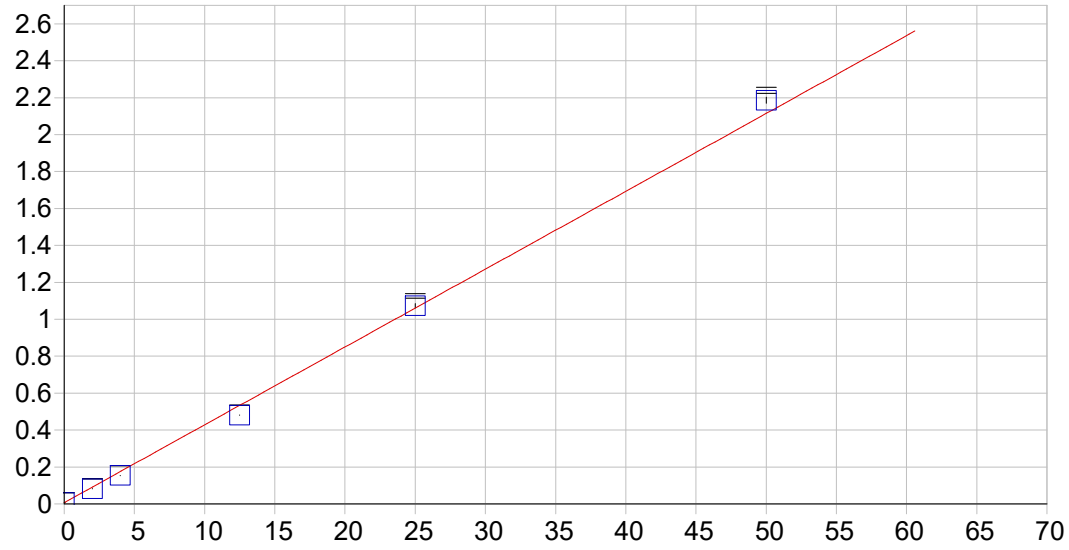

**Ag 328.068 {103}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.001427 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.267696 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999943 | Status: | OK. |
| Std Error of Est: | 0.000024 | | |
| Predicted MDL: | 0.000360 | | |
| Predicted MQL: | 0.001201 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00143 | .000 | 1 |
| S1 | .01000 | .00997 | -.000 | -.319 | .00122 | .000 | 1 |
| S3 | .62500 | .62046 | -.005 | -.726 | .16400 | .000 | 1 |
| S4 | 1.2500 | 1.2708 | .021 | 1.66 | .33744 | .000 | 1 |
| S5 | 2.5000 | 2.4821 | -.018 | -.717 | .66036 | .001 | 1 |
| S2 | .20000 | .20168 | .002 | .840 | .05235 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



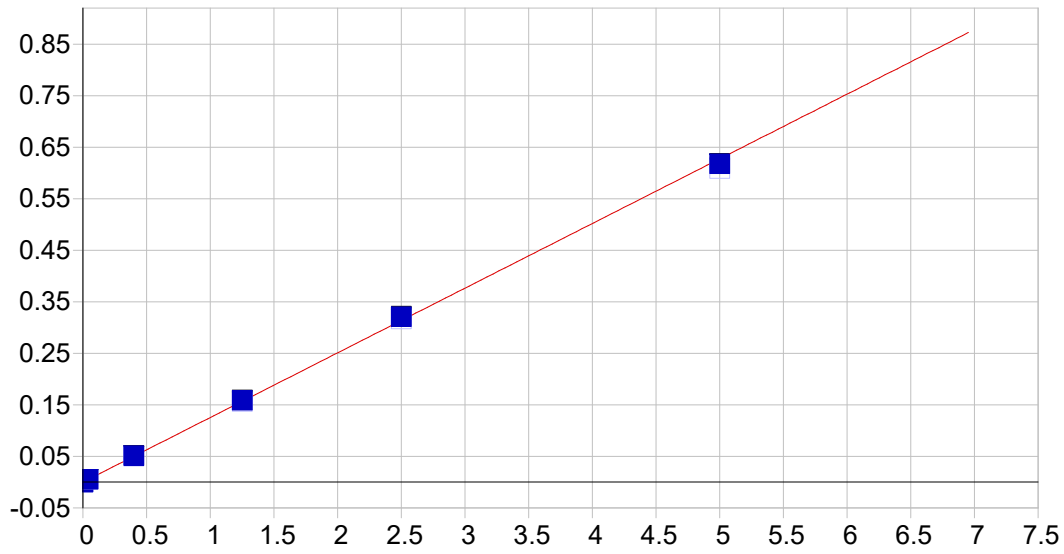

**Na 589.592 { 57}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.006820 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.042149 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.998513 | Status: | OK. |
| Std Error of Est: | 0.001217 | | |
| Predicted MDL: | 0.003807 | | |
| Predicted MQL: | 0.012690 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00058 | .001 | .000 | .00684 | .000 | 1 |
| S2 | 4.0000 | 3.4784 | -.522 | -13.0 | .15343 | .001 | 1 |
| S3 | 12.500 | 11.245 | -1.25 | -10.0 | .48080 | .001 | 1 |
| S4 | 25.000 | 25.287 | .287 | 1.15 | 1.0726 | .012 | 1 |
| S5 | 50.000 | 51.704 | 1.70 | 3.41 | 2.1861 | .016 | 1 |
| S1 | 2.0000 | 1.7856 | -.214 | -10.7 | .08208 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



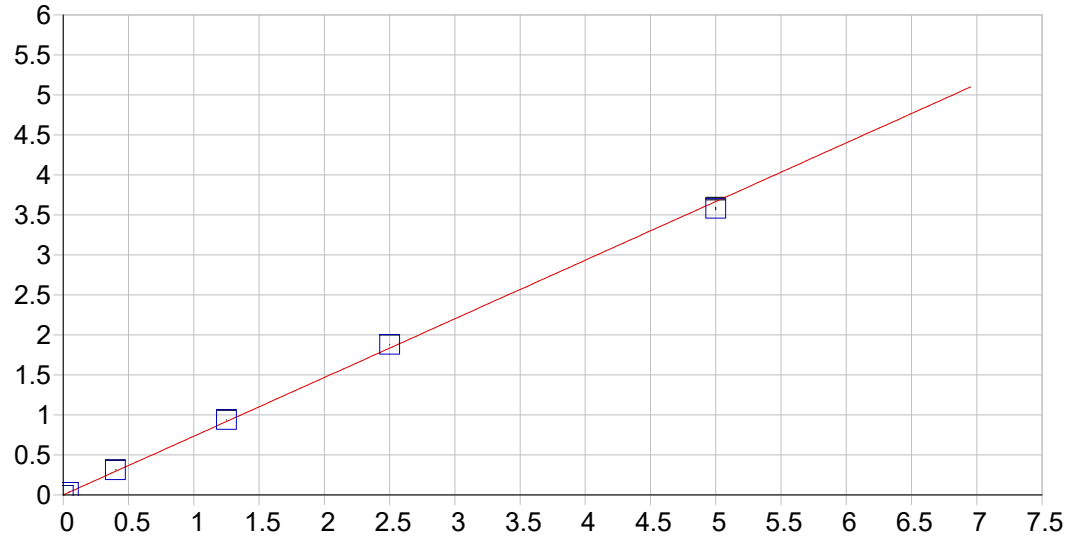

**V 292.402 {115}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000068 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.125498 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999838 | Status: | OK. |
| Std Error of Est: | 0.000052 | | |
| Predicted MDL: | 0.001317 | | |
| Predicted MQL: | 0.004388 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00007 | .000 | 1 |
| S1 | .04000 | .04170 | .002 | 4.25 | .00498 | .000 | 1 |
| S3 | 1.2500 | 1.2628 | .013 | 1.02 | .15612 | .001 | 1 |
| S4 | 2.5000 | 2.5581 | .058 | 2.33 | .31640 | .001 | 1 |
| S5 | 5.0000 | 4.9212 | -.079 | -1.58 | .60838 | .001 | 1 |
| S2 | .40000 | .40625 | .006 | 1.56 | .05018 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



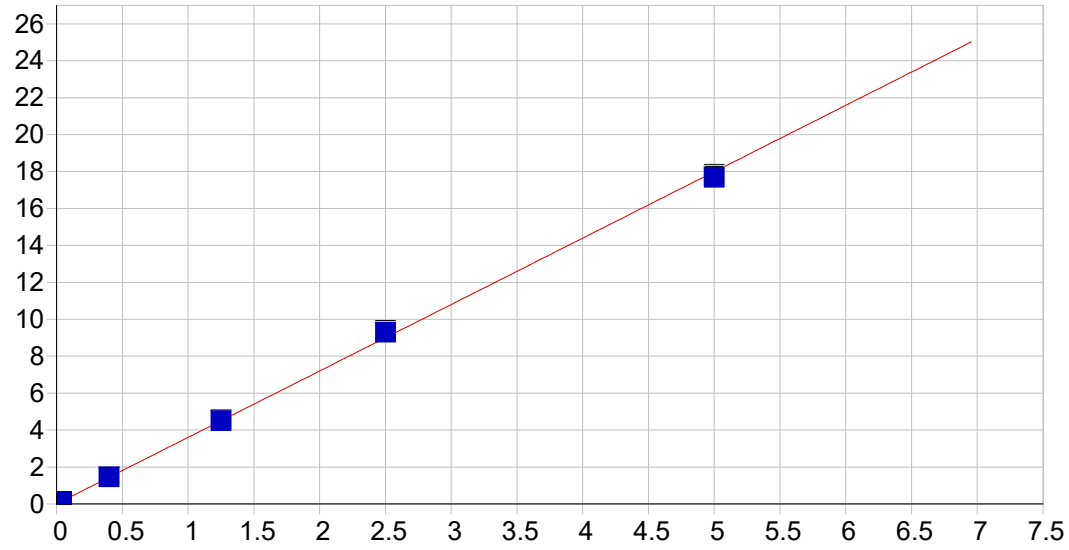

**Zn 206.200 {464}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000452 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.733437 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999621 | Status: | OK. |
| Std Error of Est: | 0.000474 | | |
| Predicted MDL: | 0.000281 | | |
| Predicted MQL: | 0.000936 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00001 | -.000 | .000 | .00045 | .000 | 1 |
| S1 | .04000 | .04326 | .003 | 8.14 | .03218 | .000 | 1 |
| S3 | 1.2500 | 1.2793 | .029 | 2.34 | .93873 | .002 | 1 |
| S4 | 2.5000 | 2.5615 | .061 | 2.46 | 1.8791 | .001 | 1 |
| S5 | 5.0000 | 4.8803 | -.120 | -2.39 | 3.5798 | .014 | 1 |
| S2 | .40000 | .42566 | .026 | 6.41 | .31265 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



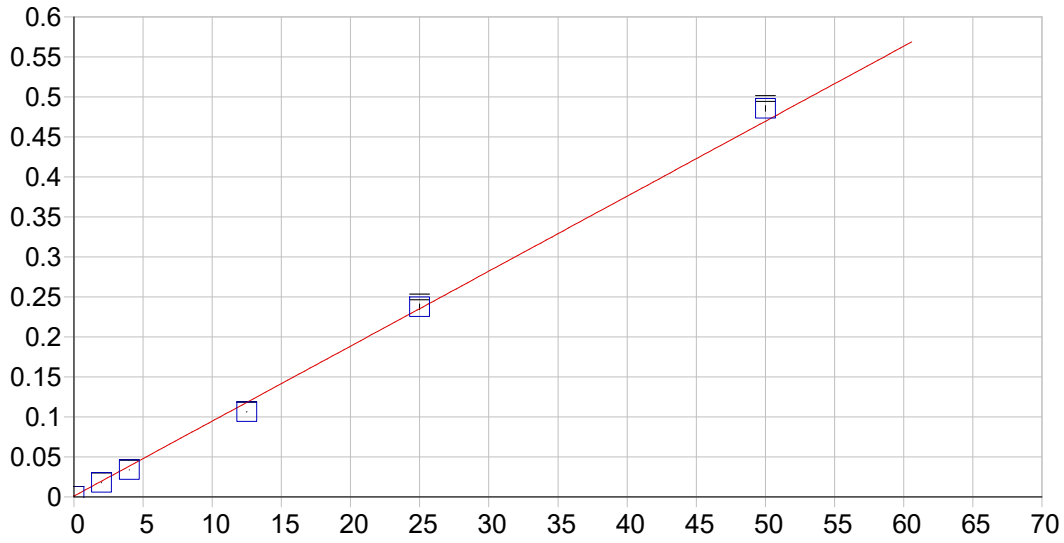

**Zn 213.856 {158}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.004824 | Re-Slope: | 1.000000 |
| A1 (Gain): | 3.597170 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999769 | Status: | OK. |
| Std Error of Est: | 0.001827 | | |
| Predicted MDL: | 0.000269 | | |
| Predicted MQL: | 0.000896 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00481 | .001 | 1 |
| S1 | .04000 | .04155 | .002 | 3.87 | .15529 | .002 | 1 |
| S3 | 1.2500 | 1.2523 | .002 | .180 | 4.5407 | .011 | 1 |
| S4 | 2.5000 | 2.5804 | .080 | 3.22 | 9.3495 | .038 | 1 |
| S5 | 5.0000 | 4.9108 | -.089 | -1.78 | 17.795 | .047 | 1 |
| S2 | .40000 | .40501 | .005 | 1.25 | 1.4717 | .004 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



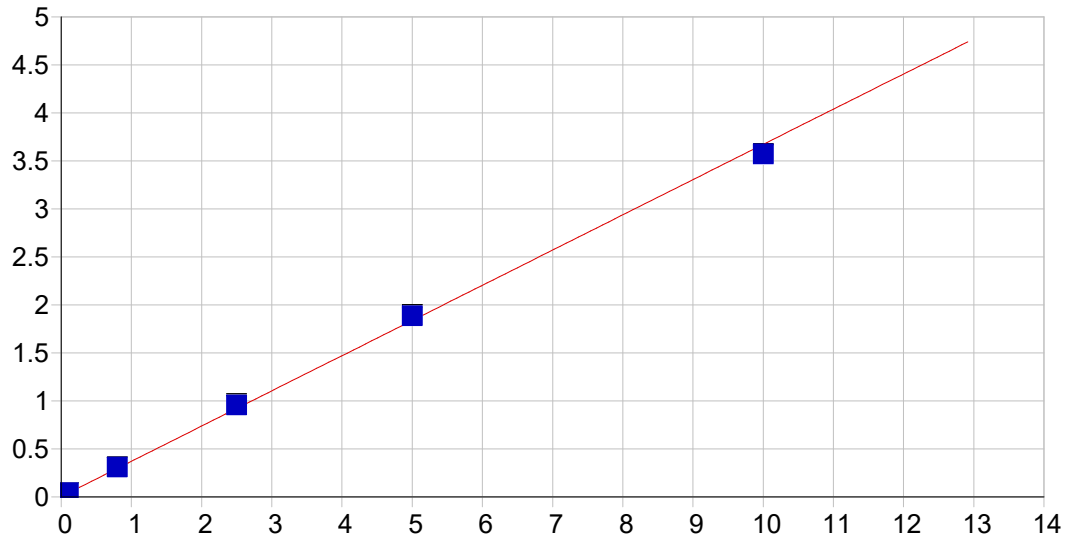

**K 766.490 { 44}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.001045 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.009371 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.998543 | Status: | OK. |
| Std Error of Est: | 0.000268 | | |
| Predicted MDL: | 0.018875 | | |
| Predicted MQL: | 0.062917 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00057 | .001 | .000 | .00105 | .000 | 1 |
| S2 | 4.0000 | 3.4974 | -.503 | -12.6 | .03382 | .000 | 1 |
| S3 | 12.500 | 11.240 | -1.26 | -10.1 | .10637 | .001 | 1 |
| S4 | 25.000 | 25.252 | .252 | 1.01 | .23767 | .004 | 1 |
| S5 | 50.000 | 51.716 | 1.72 | 3.43 | .48566 | .004 | 1 |
| S1 | 2.0000 | 1.7947 | -.205 | -10.3 | .01786 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



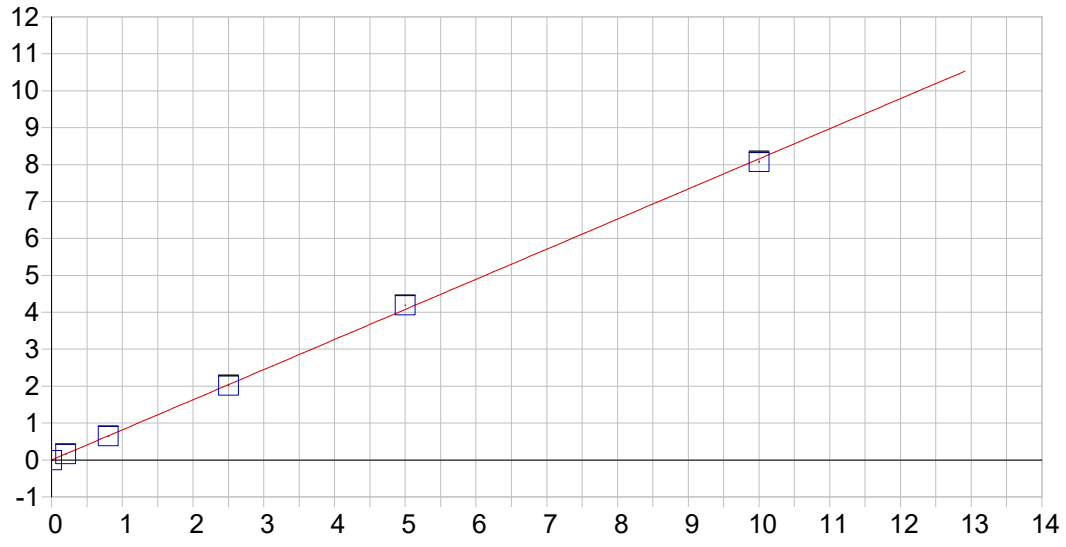

**B 249.678 {135}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.004118 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.366758 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999541 | Status: | OK. |
| Std Error of Est: | 0.000582 | | |
| Predicted MDL: | 0.000623 | | |
| Predicted MQL: | 0.002078 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00002 | -.000 | .000 | .00411 | .000 | 1 |
| S1 | .10000 | .10707 | .007 | 7.07 | .04323 | .000 | 1 |
| S3 | 2.5000 | 2.5983 | .098 | 3.93 | .95528 | .014 | 1 |
| S4 | 5.0000 | 5.1300 | .130 | 2.60 | 1.8820 | .016 | 1 |
| S5 | 10.000 | 9.7279 | -.272 | -2.72 | 3.5647 | .004 | 1 |
| S2 | .80000 | .83667 | .037 | 4.58 | .31040 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



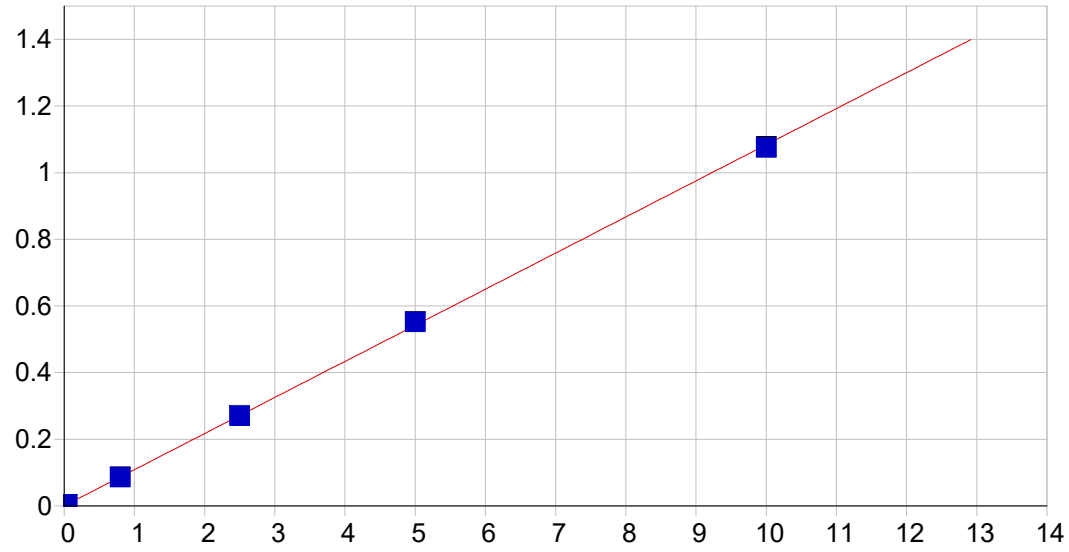

**Mo 202.030 {467}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000082 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.815600 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999866 | Status: | OK. |
| Std Error of Est: | 0.000995 | | |
| Predicted MDL: | 0.000270 | | |
| Predicted MQL: | 0.000900 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00009 | .000 | 1 |
| S1 | .20000 | .19777 | -.002 | -1.11 | .16138 | .002 | 1 |
| S3 | 2.5000 | 2.4753 | -.025 | -.989 | 2.0189 | .010 | 1 |
| S4 | 5.0000 | 5.1345 | .134 | 2.69 | 4.1878 | .009 | 1 |
| S5 | 10.000 | 9.9030 | -.097 | -.970 | 8.0770 | .021 | 1 |
| S2 | .80000 | .78948 | -.011 | -1.32 | .64398 | .002 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



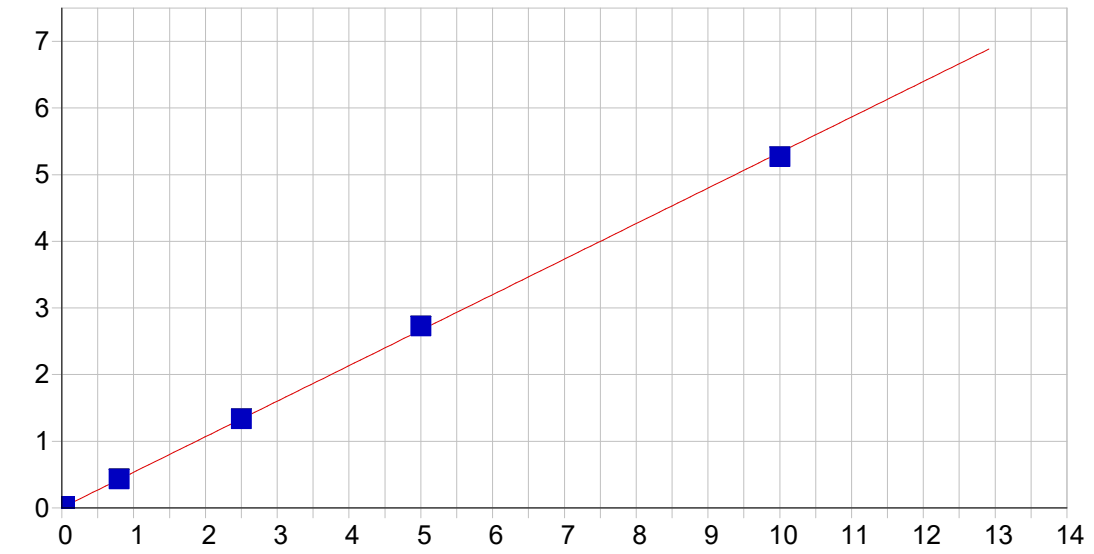

**Sn 189.989 {478}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000265 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.108344 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999937 | Status: | OK. |
| Std Error of Est: | 0.000040 | | |
| Predicted MDL: | 0.000890 | | |
| Predicted MQL: | 0.002967 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00027 | .000 | 1 |
| S1 | .04000 | .03931 | -.001 | -1.72 | .00452 | .000 | 1 |
| S3 | 2.5000 | 2.4958 | -.004 | -.168 | .27039 | .001 | 1 |
| S4 | 5.0000 | 5.0899 | .090 | 1.80 | .55117 | .001 | 1 |
| S5 | 10.000 | 9.9236 | -.076 | -.764 | 1.0743 | .003 | 1 |
| S2 | .80000 | .79134 | -.009 | -1.08 | .08591 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



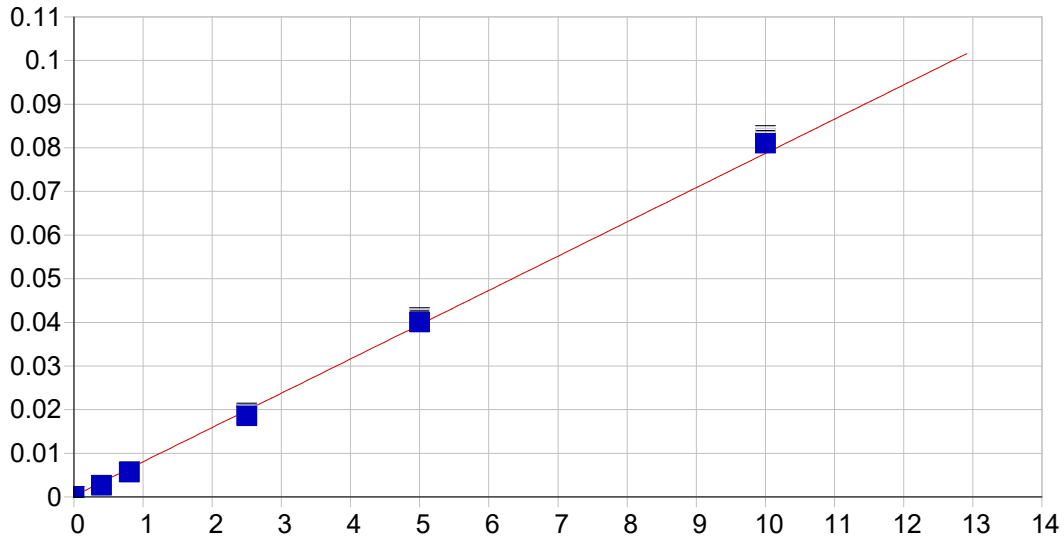

**Ti 336.121 {100}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002111 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.532996 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999891 | Status: | OK. |
| Std Error of Est: | 0.000261 | | |
| Predicted MDL: | 0.000454 | | |
| Predicted MQL: | 0.001513 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00211 | .000 | 1 |
| S1 | .04000 | .04019 | .000 | .468 | .02352 | .000 | 1 |
| S3 | 2.5000 | 2.5017 | .002 | .068 | 1.3350 | .002 | 1 |
| S4 | 5.0000 | 5.1122 | .112 | 2.24 | 2.7259 | .003 | 1 |
| S5 | 10.000 | 9.8800 | -.120 | -1.20 | 5.2662 | .003 | 1 |
| S2 | .80000 | .80594 | .006 | .742 | .43152 | .001 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



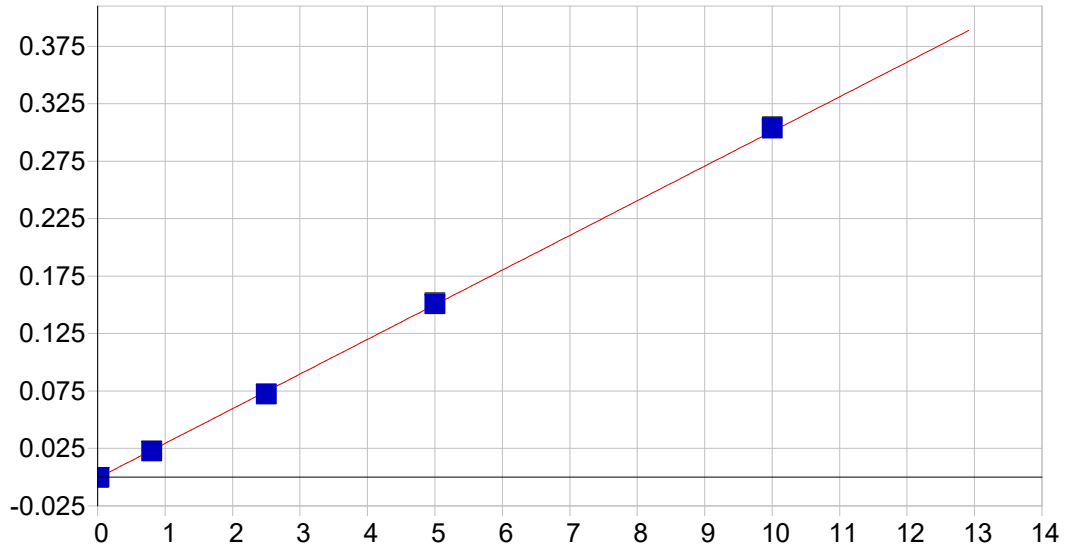

**Si 288.158 {117}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000213 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.007851 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.998518 | Status: | OK. |
| Std Error of Est: | 0.000046 | | |
| Predicted MDL: | 0.005222 | | |
| Predicted MQL: | 0.017407 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00016 | .000 | .000 | .00021 | .000 | 1 |
| S1 | .40000 | .30864 | -.091 | -22.8 | .00264 | .000 | 1 |
| S3 | 2.5000 | 2.3331 | -.167 | -6.67 | .01883 | .000 | 1 |
| S4 | 5.0000 | 5.0698 | .070 | 1.40 | .04061 | .000 | 1 |
| S5 | 10.000 | 10.298 | .298 | 2.98 | .08224 | .001 | 1 |
| S2 | .80000 | .68946 | -.111 | -13.8 | .00572 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



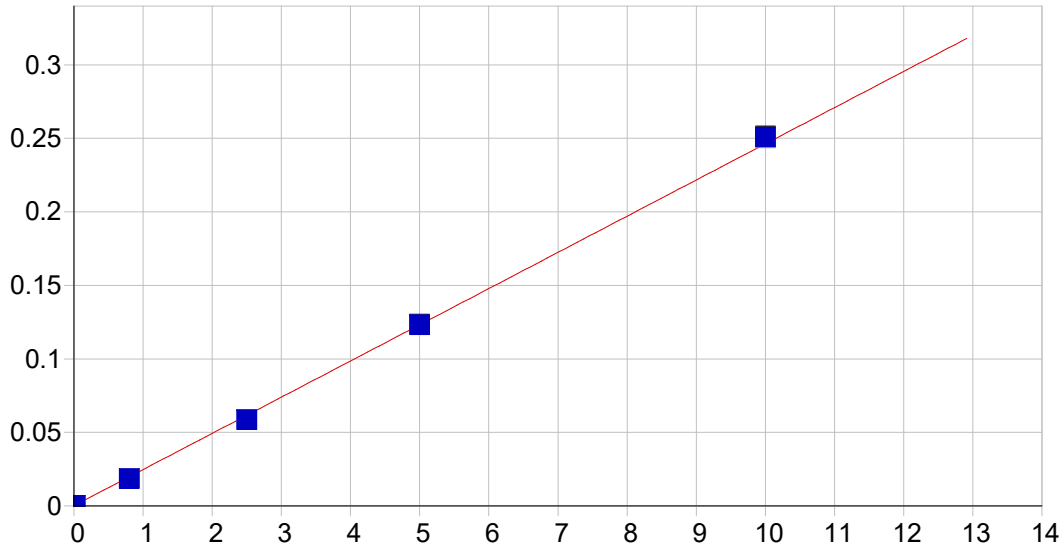

**P 177.495 {490}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000734 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.030161 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999865 | Status: | OK. |
| Std Error of Est: | 0.000012 | | |
| Predicted MDL: | 0.002903 | | |
| Predicted MQL: | 0.009676 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | -.00073 | .000 | 1 |
| S1 | .02000 | .01685 | -.003 | -15.7 | -.00023 | .000 | 1 |
| S3 | 2.5000 | 2.4193 | -.081 | -3.23 | .07222 | .000 | 1 |
| S4 | 5.0000 | 5.0213 | .021 | .426 | .15069 | .001 | 1 |
| S5 | 10.000 | 10.090 | .090 | .902 | .30355 | .001 | 1 |
| S2 | .80000 | .77243 | -.028 | -3.45 | .02256 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



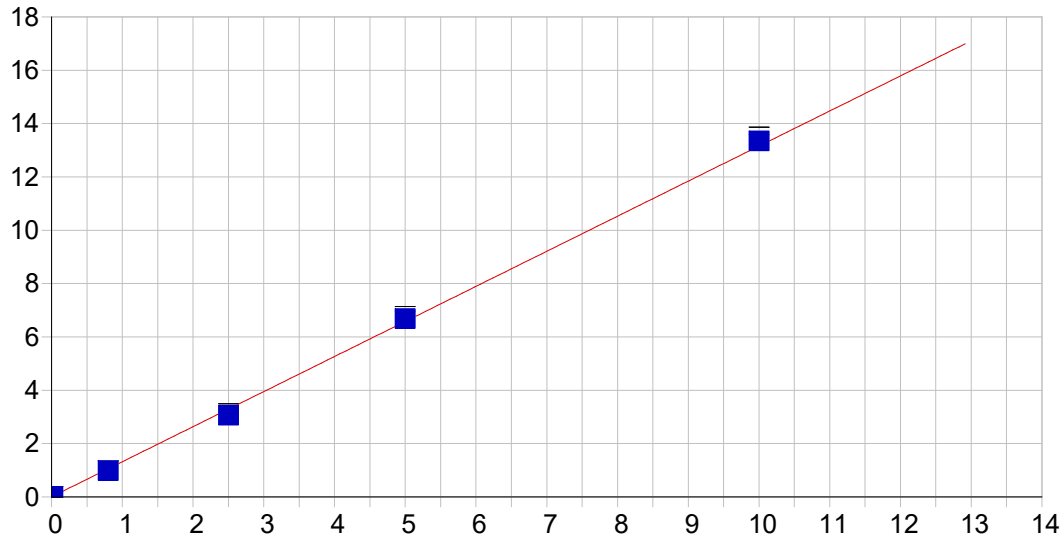

**S 182.034 {485}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000133 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.024616 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999645 | Status: | OK. |
| Std Error of Est: | 0.000015 | | |
| Predicted MDL: | 0.003661 | | |
| Predicted MQL: | 0.012202 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00013 | .000 | 1 |
| S1 | .02000 | .01862 | -.001 | -6.88 | .00057 | .000 | 1 |
| S3 | 2.5000 | 2.3760 | -.124 | -4.96 | .05846 | .000 | 1 |
| S4 | 5.0000 | 5.0009 | .001 | .018 | .12292 | .000 | 1 |
| S5 | 10.000 | 10.178 | .178 | 1.78 | .25003 | .001 | 1 |
| S2 | .80000 | .74671 | -.053 | -6.66 | .01846 | .000 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



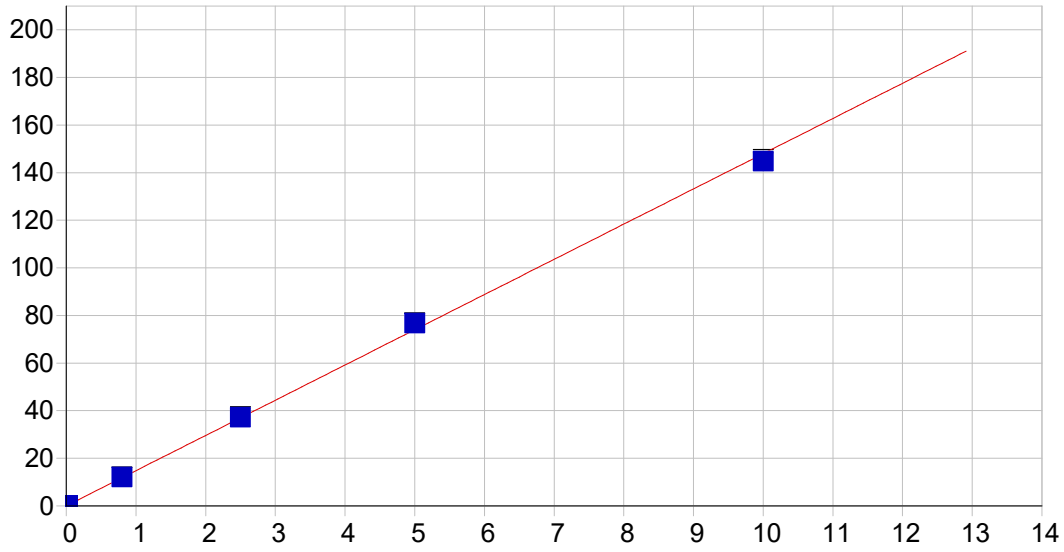

**Li 670.784 { 50}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.001373 | Re-Slope: | 1.000000 |
| A1 (Gain): | 1.315465 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999485 | Status: | OK. |
| Std Error of Est: | 0.000991 | | |
| Predicted MDL: | 0.000535 | | |
| Predicted MQL: | 0.001782 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00138 | .001 | 1 |
| S5 | 10.000 | 10.147 | .147 | 1.47 | 13.361 | .143 | 1 |
| S4 | 5.0000 | 5.0796 | .080 | 1.59 | 6.6893 | .084 | 1 |
| S3 | 2.5000 | 2.3259 | -.174 | -6.96 | 3.0640 | .053 | 1 |
| S1 | .02000 | .01876 | -.001 | -6.21 | .02652 | .000 | 1 |
| S2 | .80000 | .74871 | -.051 | -6.41 | .98722 | .003 | 1 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769



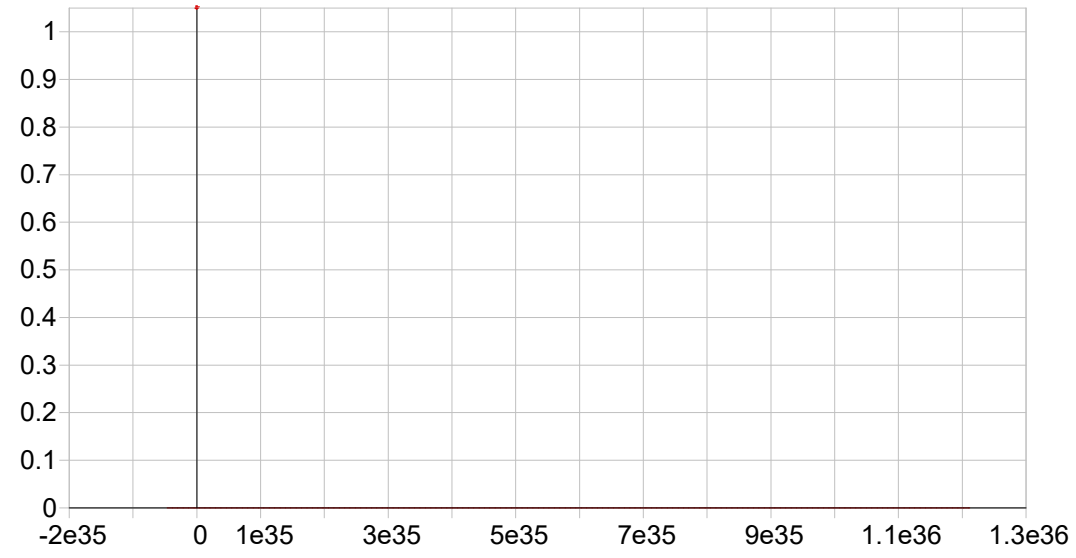

**Sr 407.771 { 83}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:46:59 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002482 | Re-Slope: | 1.000000 |
| A1 (Gain): | 14.797457 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999671 | Status: | OK. |
| Std Error of Est: | 0.008901 | | |
| Predicted MDL: | 0.000028 | | |
| Predicted MQL: | 0.000093 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00246 | .000 | 1 |
| S1 | .02000 | .02069 | .001 | 3.45 | .31012 | .001 | 1 |
| S3 | 2.5000 | 2.5142 | .014 | .569 | 37.244 | .322 | 1 |
| S4 | 5.0000 | 5.1845 | .185 | 3.69 | 76.794 | .132 | 1 |
| S5 | 10.000 | 9.7823 | -.218 | -2.18 | 144.90 | .671 | 1 |
| S2 | .80000 | .81827 | .018 | 2.28 | 12.123 | .019 | 1 |

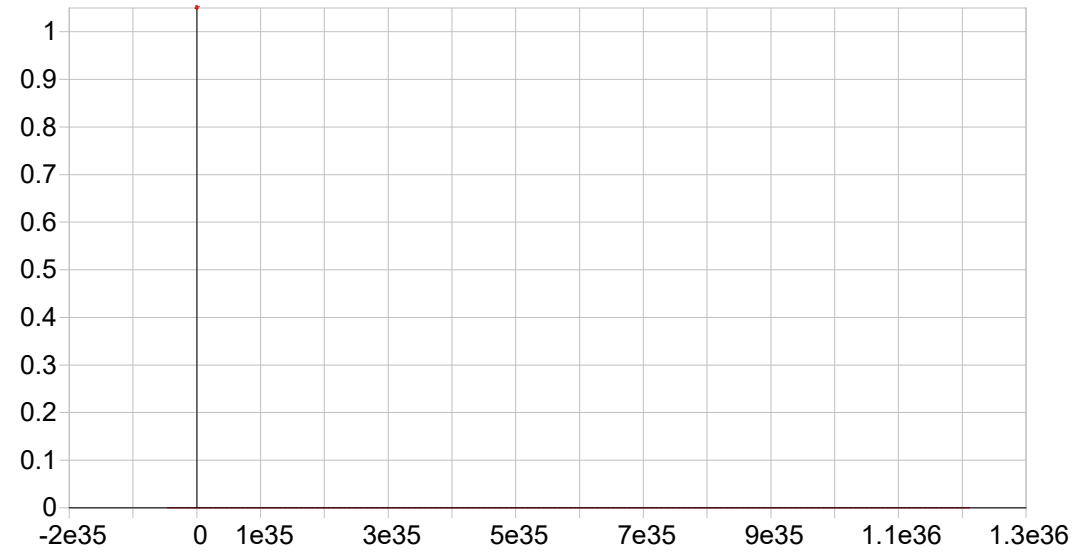
Reviewed By:
On:
Inst Id :P4
LB :LB133769




**Y 224.306 {450}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/5/2024 13:20:53 | Type of Fit: | Linear | Weighting: | 1/Conc |
| A0 (Offset): | 0.000000 | | Re-Slope: | 1.000000 | |
| A1 (Gain): | 0.000000 | | Y-int: | 0.000000 | |
| A2 (Curvature): | 0.000000 | | | | |
| n (Exponent): | 1.000000 | | | | |
| Correlation: | 0.000000 | | Status: | Warning | Zero Gain |
| Std Error of Est: | 0.000000 | | | | |
| Predicted MDL: | n/a | | | | |
| Predicted MQL: | n/a | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|



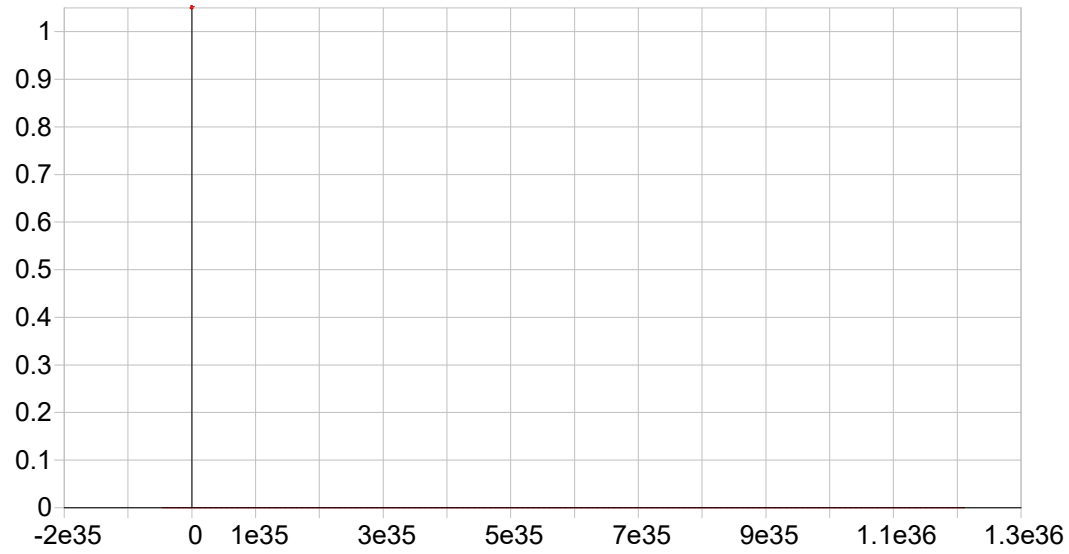

**Y 360.073 { 94}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |
| A0 (Offset): | 0.000000 | | Re-Slope: | 1.000000 | |
| A1 (Gain): | 0.000000 | | Y-int: | 0.000000 | |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

| | | | | | | |
|---|---|---|---|---|---|---|
| A2 (Curvature): | 0.000000 | | | | | |
| n (Exponent): | 1.000000 | | | | | |
| Correlation: | 0.000000 | | Status: | Warning | Zero Gain | |
| Std Error of Est: | 0.000000 | | | | | |
| Predicted MDL: | n/a | | | | | |
| Predicted MQL: | n/a | | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|

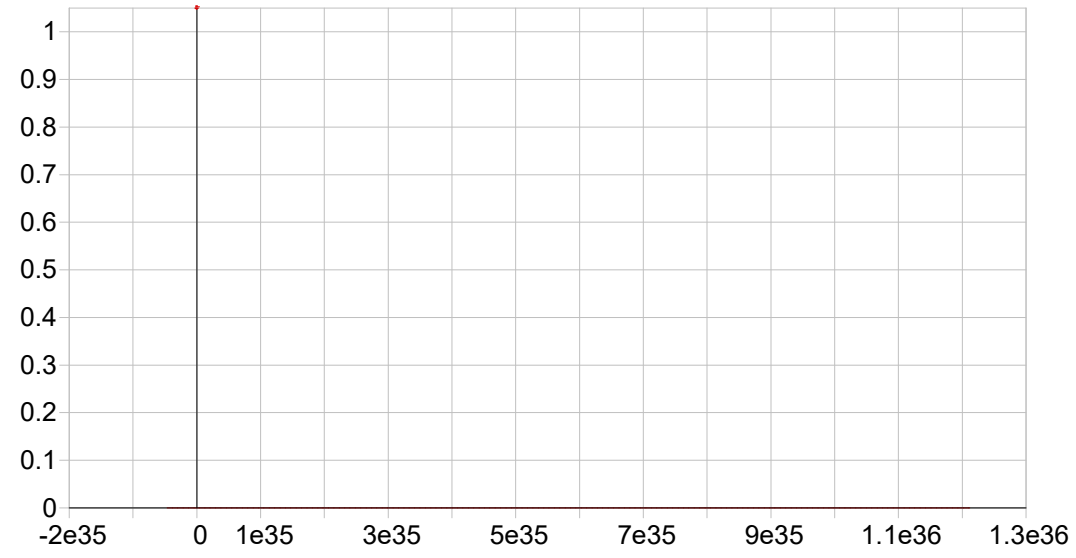



**Y 371.030 { 91}***

| | | | | | | |
|---|---|---|---|---|---|---|
| Date of Fit: | <not fit> | | Type of Fit: | Linear | Weighting: | 1/Conc |
| A0 (Offset): | | 0.000000 | | Re-Slope: | 1.000000 | |
| A1 (Gain): | | 0.000000 | | Y-int: | 0.000000 | |
| A2 (Curvature): | | 0.000000 | | | | |
| n (Exponent): | | 1.000000 | | | | |
| Correlation: | | 0.000000 | | Status: | Warning | Zero Gain |
| Std Error of Est: | | 0.000000 | | | | |
| Predicted MDL: | | n/a | | | | |
| Predicted MQL: | | n/a | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|

Reviewed By:
On:
Inst Id :P4
LB :LB133769

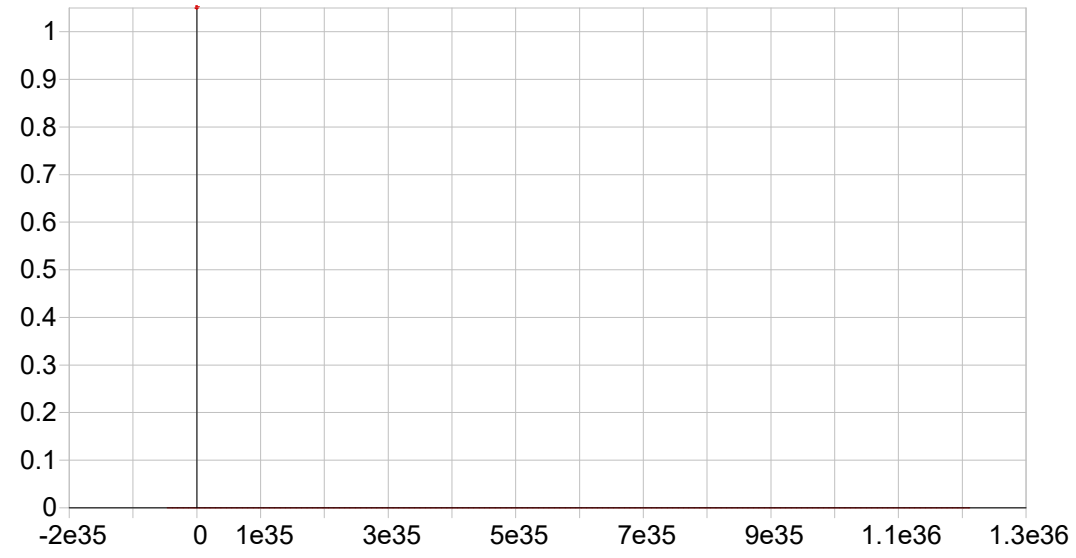



**Y 224.306 {150}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000000 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.000000 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.000000 | Status: | Warning Zero Gain |
| Std Error of Est: | 0.000000 | | |
| Predicted MDL: | n/a | | |
| Predicted MQL: | n/a | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|




**In 230.606 {446}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000000 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.000000 | Y-int: | 0.000000 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A2 (Curvature): | | 0.000000 | | | | | |
| n (Exponent): | | 1.000000 | | | | | |
| Correlation: | | 0.000000 | | Status: | Warning | Zero Gain | |
| Std Error of Est: | | 0.000000 | | | | | |
| Predicted MDL: | | n/a | | | | | |
| Predicted MQL: | | n/a | | | | | |
| **Std. Name** | **Stated Conc.** | **Found Conc.** | **Difference** | **% Diff.** | **(S)IR** | **Std Dev** | **Emphasis** |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S0 Acquired: 12/5/2024 13:21:30 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00029 | -.00022 | -.00047 | .00048 | .00073 | .00032 | -.03924 | -.00066 |
| Stddev | .00014 | .00007 | .00043 | .00012 | .00049 | .00011 | .00152 | .00015 |
| %RSD | 50.096 | 32.022 | 91.650 | 23.957 | 66.611 | 33.845 | 3.8664 | 22.578 |
| #1 | -.00024 | -.00019 | -.00002 | .00057 | .00081 | .00043 | -.04098 | -.00065 |
| #2 | -.00017 | -.00030 | -.00051 | .00035 | .00021 | .00032 | -.03851 | -.00053 |
| #3 | -.00045 | -.00017 | -.00088 | .00053 | .00117 | .00021 | -.03822 | -.00082 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | -.00023 | .00227 | .00000 | -.00011 | .00767 | .00001 | -.00003 | -.00014 |
| Stddev | .00027 | .00025 | .00003 | .00015 | .00021 | .00001 | .00003 | .00014 |
| %RSD | 118.63 | 11.037 | 742.22 | 132.04 | 2.7347 | 65.999 | 107.13 | 101.47 |
| #1 | .00008 | .00199 | .00003 | -.00025 | .00748 | .00000 | -.00006 | -.00026 |
| #2 | -.00033 | .00247 | -.00003 | .00005 | .00790 | .00002 | -.00001 | .00002 |
| #3 | -.00045 | .00236 | .00001 | -.00013 | .00763 | .00001 | -.00002 | -.00019 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .00008 | -.00143 | .00684 | -.00007 | .00481 | .00105 | .00411 | .00009 |
| Stddev | .00026 | .00004 | .00024 | .00006 | .00105 | .00010 | .00022 | .00011 |
| %RSD | 338.07 | 2.9123 | 3.4409 | 87.590 | 21.800 | 9.8054 | 5.3406 | 134.26 |
| #1 | -.00022 | -.00140 | .00657 | .00000 | .00377 | .00093 | .00433 | .00012 |
| #2 | .00021 | -.00140 | .00695 | -.00009 | .00587 | .00112 | .00389 | -.00004 |
| #3 | .00024 | -.00148 | .00701 | -.00011 | .00481 | .00110 | .00411 | .00018 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .00027 | .00211 | .00021 | -.00073 | .00013 | .00138 | .00246 |
| Stddev | .00005 | .00017 | .00002 | .00004 | .00001 | .00095 | .00038 |
| %RSD | 17.772 | 7.9496 | 7.1816 | 4.9104 | 10.676 | 69.055 | 15.628 |
| #1 | .00031 | .00225 | .00023 | -.00076 | .00012 | .00105 | .00212 |
| #2 | .00027 | .00215 | .00021 | -.00075 | .00015 | .00063 | .00237 |
| #3 | .00021 | .00193 | .00020 | -.00069 | .00013 | .00245 | .00288 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S0 Acquired: 12/5/2024 13:21:30 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2238.0 | 55509. | 13302. | 1519.1 | 3902.4 |
| Stddev | 9.2 | 148. | 45. | 5.2 | 8.5 |
| %RSD | .40922 | .26704 | .33782 | .34388 | .21753 |
| | | | | | |
| #1 | 2228.1 | 55426. | 13285. | 1515.7 | 3893.2 |
| #2 | 2239.8 | 55420. | 13268. | 1516.4 | 3903.8 |
| #3 | 2246.1 | 55680. | 13353. | 1525.1 | 3910.0 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S1 Acquired: 12/5/2024 13:25:55 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .00105 | .00232 | .00240 | .00235 | .01108 | .00898 | .35312 | .01880 |
| Stddev | .00007 | .00009 | .00012 | .00016 | .00017 | .00023 | .00178 | .00014 |
| %RSD | 6.9451 | 3.7113 | 4.9600 | 6.8727 | 1.5420 | 2.5723 | .50396 | .76746 |
| #1 | .00105 | .00230 | .00250 | .00225 | .01115 | .00897 | .35515 | .01877 |
| #2 | .00113 | .00241 | .00243 | .00226 | .01120 | .00922 | .35182 | .01868 |
| #3 | .00098 | .00224 | .00227 | .00254 | .01088 | .00876 | .35238 | .01896 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .01212 | .10218 | .00192 | .02496 | .02520 | .00059 | .01294 | .03026 |
| Stddev | .00009 | .00030 | .00001 | .00026 | .00023 | .00000 | .00020 | .00019 |
| %RSD | .70403 | .29450 | .51549 | 1.0429 | .90638 | .42934 | 1.5207 | .62857 |
| #1 | .01202 | .10187 | .00191 | .02510 | .02546 | .00059 | .01292 | .03010 |
| #2 | .01215 | .10219 | .00193 | .02512 | .02510 | .00059 | .01276 | .03021 |
| #3 | .01218 | .10247 | .00192 | .02466 | .02504 | .00058 | .01315 | .03047 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .02371 | .00122 | .08208 | .00498 | .15529 | .01786 | .04323 | .16138 |
| Stddev | .00020 | .00008 | .00032 | .00002 | .00187 | .00007 | .00029 | .00172 |
| %RSD | .85843 | 6.7946 | .38691 | .45484 | 1.2065 | .38737 | .67797 | 1.0684 |
| #1 | .02392 | .00132 | .08237 | .00497 | .15580 | .01794 | .04333 | .16334 |
| #2 | .02352 | .00117 | .08214 | .00496 | .15685 | .01782 | .04290 | .16074 |
| #3 | .02370 | .00118 | .08174 | .00500 | .15321 | .01783 | .04346 | .16007 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .00452 | .02352 | .00264 | -.00023 | .00057 | .02652 | .31012 |
| Stddev | .00005 | .00022 | .00001 | .00004 | .00002 | .00050 | .00077 |
| %RSD | 1.0415 | .94982 | .50050 | 18.604 | 4.0227 | 1.8820 | .24745 |
| #1 | .00455 | .02366 | .00266 | -.00026 | .00055 | .02709 | .31024 |
| #2 | .00454 | .02326 | .00263 | -.00018 | .00060 | .02614 | .30929 |
| #3 | .00447 | .02363 | .00264 | -.00024 | .00056 | .02634 | .31081 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S1 Acquired: 12/5/2024 13:25:55 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2407.9 | 57855. | 13720. | 1602.2 | 4088.1 |
| Stddev | 21.4 | 167. | 16. | 16.6 | 33.1 |
| %RSD | .88783 | .28950 | .11720 | 1.0336 | .80902 |
| #1 | 2383.6 | 57867. | 13706. | 1603.9 | 4050.1 |
| #2 | 2416.5 | 57682. | 13737. | 1584.8 | 4103.5 |
| #3 | 2423.7 | 58016. | 13716. | 1617.8 | 4110.6 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S2 Acquired: 12/5/2024 13:30:16 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .04786 | .05355 | .18256 | .07484 | .17112 | .13062 | 6.1154 | .12818 |
| Stddev | .00016 | .00005 | .00049 | .00033 | .00024 | .00045 | .0199 | .00065 |
| %RSD | .33429 | .10134 | .26742 | .44365 | .14206 | .34828 | .32595 | .50754 |
| #1 | .04771 | .05350 | .18201 | .07449 | .17087 | .13010 | 6.0930 | .12892 |
| #2 | .04803 | .05356 | .18274 | .07516 | .17115 | .13080 | 6.1219 | .12774 |
| #3 | .04785 | .05361 | .18293 | .07487 | .17135 | .13095 | 6.1312 | .12787 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .81623 | .19673 | .03199 | .33433 | .17086 | .00471 | .25036 | .05511 |
| Stddev | .00094 | .00082 | .00011 | .00047 | .00063 | .00004 | .00119 | .00016 |
| %RSD | .11479 | .41442 | .34695 | .14045 | .37056 | .79793 | .47492 | .28607 |
| #1 | .81671 | .19637 | .03211 | .33382 | .17017 | .00466 | .24899 | .05499 |
| #2 | .81515 | .19767 | .03196 | .33440 | .17102 | .00473 | .25104 | .05529 |
| #3 | .81684 | .19616 | .03189 | .33475 | .17140 | .00473 | .25107 | .05505 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .23968 | .05235 | .15343 | .05018 | 1.4717 | .03382 | .31040 | .64398 |
| Stddev | .00050 | .00005 | .00062 | .00012 | .0038 | .00026 | .00117 | .00151 |
| %RSD | .20718 | .09977 | .40259 | .23333 | .25656 | .75880 | .37808 | .23484 |
| #1 | .23983 | .05229 | .15278 | .05005 | 1.4697 | .03359 | .31171 | .64237 |
| #2 | .23912 | .05240 | .15401 | .05022 | 1.4694 | .03409 | .30944 | .64421 |
| #3 | .24008 | .05236 | .15350 | .05028 | 1.4761 | .03377 | .31005 | .64537 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .08591 | .43152 | .00572 | .02256 | .01846 | .98722 | 12.123 |
| Stddev | .00013 | .00117 | .00007 | .00011 | .00006 | .00252 | .019 |
| %RSD | .14644 | .27199 | 1.1674 | .49111 | .34617 | .25515 | .16070 |
| #1 | .08603 | .43035 | .00565 | .02262 | .01847 | .98449 | 12.100 |
| #2 | .08593 | .43269 | .00578 | .02262 | .01840 | .98773 | 12.135 |
| #3 | .08578 | .43152 | .00573 | .02243 | .01852 | .98945 | 12.133 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S2 Acquired: 12/5/2024 13:30:16 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2408.4 | 58319. | 13891. | 1623.5 | 4027.9 |
| Stddev | 8.1 | 357. | 30. | 16.5 | 6.7 |
| %RSD | .33768 | .61213 | .21385 | 1.0167 | .16615 |
| | | | | | |
| #1 | 2417.4 | 58625. | 13907. | 1639.6 | 4035.0 |
| #2 | 2406.3 | 57927. | 13857. | 1606.6 | 4026.9 |
| #3 | 2401.5 | 58405. | 13909. | 1624.2 | 4021.7 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S3 Acquired: 12/5/2024 13:34:19 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .15530 | .16401 | .57206 | .24157 | .54717 | .41096 | 18.831 | .38997 |
| Stddev | .00090 | .00182 | .00139 | .00233 | .00447 | .00129 | .065 | .00550 |
| %RSD | .57921 | 1.1098 | .24305 | .96298 | .81754 | .31345 | .34309 | 1.4097 |
| | | | | | | | | |
| #1 | .15428 | .16197 | .57136 | .23889 | .54204 | .41185 | 18.903 | .39617 |
| #2 | .15560 | .16545 | .57115 | .24280 | .54919 | .41154 | 18.814 | .38803 |
| #3 | .15601 | .16462 | .57366 | .24302 | .55028 | .40948 | 18.777 | .38570 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.5467 | .59786 | .09826 | 1.0354 | .53889 | .01465 | .75140 | .17037 |
| Stddev | .0068 | .00763 | .00038 | .0013 | .00279 | .00037 | .00644 | .00114 |
| %RSD | .26779 | 1.2758 | .38840 | .12789 | .51857 | 2.5085 | .85711 | .66644 |
| | | | | | | | | |
| #1 | 2.5512 | .58978 | .09864 | 1.0365 | .53569 | .01426 | .74439 | .16915 |
| #2 | 2.5388 | .59886 | .09788 | 1.0339 | .54014 | .01472 | .75277 | .17059 |
| #3 | 2.5500 | .60493 | .09825 | 1.0357 | .54084 | .01498 | .75705 | .17139 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .74134 | .16400 | .48080 | .15612 | 4.5407 | .10637 | .95528 | 2.0189 |
| Stddev | .00192 | .00027 | .00130 | .00104 | .0109 | .00054 | .01356 | .0101 |
| %RSD | .25875 | .16591 | .26943 | .66424 | .24004 | .50418 | 1.4197 | .50124 |
| | | | | | | | | |
| #1 | .74011 | .16429 | .48226 | .15498 | 4.5457 | .10581 | .96972 | 2.0074 |
| #2 | .74036 | .16375 | .48038 | .15637 | 4.5482 | .10644 | .95332 | 2.0229 |
| #3 | .74355 | .16396 | .47977 | .15701 | 4.5282 | .10687 | .94281 | 2.0265 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .27039 | 1.3350 | .01883 | .07222 | .05846 | 3.0640 | 37.244 |
| Stddev | .00063 | .0022 | .00038 | .00009 | .00023 | .0534 | .322 |
| %RSD | .23293 | .16311 | 2.0323 | .12538 | .38893 | 1.7437 | .86423 |
| | | | | | | | |
| #1 | .26998 | 1.3326 | .01842 | .07216 | .05844 | 3.1218 | 37.615 |
| #2 | .27008 | 1.3368 | .01887 | .07233 | .05825 | 3.0537 | 37.048 |
| #3 | .27112 | 1.3356 | .01918 | .07218 | .05870 | 3.0164 | 37.068 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S3 Acquired: 12/5/2024 13:34:19 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2235.9 | 55922. | 13771. | 1528.8 | 3705.9 |
| Stddev | 20.1 | 258. | 111. | 12.7 | 21.0 |
| %RSD | .89691 | .46197 | .80623 | .82937 | .56671 |
| | | | | | |
| #1 | 2258.9 | 56216. | 13664. | 1543.0 | 3730.2 |
| #2 | 2222.6 | 55818. | 13762. | 1524.8 | 3693.8 |
| #3 | 2226.1 | 55732. | 13886. | 1518.6 | 3693.8 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S4 Acquired: 12/5/2024 13:38:34 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .33165 | .33255 | 1.1611 | .51623 | 1.1761 | .85670 | 39.126 | .75282 |
| Stddev | .00088 | .00319 | .0029 | .00047 | .0027 | .00384 | .086 | .00905 |
| %RSD | .26629 | .95958 | .24826 | .09187 | .22636 | .44790 | .21864 | 1.2025 |
| | | | | | | | | |
| #1 | .33074 | .33573 | 1.1577 | .51581 | 1.1741 | .85314 | 39.172 | .76163 |
| #2 | .33170 | .32935 | 1.1628 | .51614 | 1.1750 | .85619 | 39.178 | .75330 |
| #3 | .33250 | .33257 | 1.1627 | .51674 | 1.1791 | .86076 | 39.027 | .74354 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 5.1996 | 1.1835 | .19612 | 2.1246 | 1.1191 | .03032 | 1.4897 | .34652 |
| Stddev | .0108 | .0088 | .00118 | .0039 | .0011 | .00010 | .0063 | .00074 |
| %RSD | .20735 | .73933 | .60077 | .18274 | .10082 | .32026 | .42502 | .21377 |
| | | | | | | | | |
| #1 | 5.1890 | 1.1893 | .19726 | 2.1203 | 1.1178 | .03021 | 1.4943 | .34706 |
| #2 | 5.1992 | 1.1877 | .19619 | 2.1257 | 1.1196 | .03040 | 1.4923 | .34682 |
| #3 | 5.2105 | 1.1734 | .19491 | 2.1278 | 1.1199 | .03034 | 1.4825 | .34568 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.5149 | .33744 | 1.0726 | .31640 | 9.3495 | .23767 | 1.8820 | 4.1878 |
| Stddev | .0031 | .00047 | .0122 | .00085 | .0381 | .00368 | .0157 | .0090 |
| %RSD | .20730 | .13877 | 1.1408 | .26925 | .40737 | 1.5499 | .83289 | .21551 |
| | | | | | | | | |
| #1 | 1.5114 | .33772 | 1.0634 | .31737 | 9.3056 | .23452 | 1.8968 | 4.1838 |
| #2 | 1.5162 | .33769 | 1.0680 | .31603 | 9.3742 | .23678 | 1.8837 | 4.1814 |
| #3 | 1.5173 | .33689 | 1.0865 | .31579 | 9.3685 | .24172 | 1.8656 | 4.1981 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .55117 | 2.7259 | .04061 | .15069 | .12292 | 6.6893 | 76.794 |
| Stddev | .00144 | .0026 | .00049 | .00091 | .00047 | .0837 | .132 |
| %RSD | .26044 | .09635 | 1.2162 | .60549 | .38233 | 1.2516 | .17202 |
| | | | | | | | |
| #1 | .54985 | 2.7231 | .04009 | .15160 | .12309 | 6.6243 | 76.810 |
| #2 | .55097 | 2.7282 | .04065 | .14977 | .12238 | 6.6599 | 76.655 |
| #3 | .55270 | 2.7265 | .04108 | .15070 | .12327 | 6.7838 | 76.918 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S4 Acquired: 12/5/2024 13:38:34 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2007.3 | 51655. | 13374. | 1340.9 | 3333.6 |
| Stddev | 5.1 | 211. | 49. | 18.4 | 6.8 |
| %RSD | .25392 | .40845 | .36612 | 1.3687 | .20326 |
| | | | | | |
| #1 | 2009.9 | 51865. | 13324. | 1359.9 | 3336.5 |
| #2 | 2010.6 | 51657. | 13375. | 1339.6 | 3338.5 |
| #3 | 2001.5 | 51443. | 13422. | 1323.3 | 3325.9 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S5 Acquired: 12/5/2024 13:42:46 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | .65828 | .64099 | 2.2502 | 1.0225 | 2.3424 | 1.6953 | 75.115 | 1.4187 |
| Stddev | .00328 | .00891 | .0055 | .0057 | .0110 | .0080 | .516 | .0032 |
| %RSD | .49805 | 1.3895 | .24372 | .55975 | .47015 | .47108 | .68698 | .22931 |
| #1 | .66075 | .65009 | 2.2479 | 1.0272 | 2.3478 | 1.6861 | 74.835 | 1.4209 |
| #2 | .65456 | .64057 | 2.2565 | 1.0161 | 2.3297 | 1.7009 | 74.800 | 1.4150 |
| #3 | .65953 | .63229 | 2.2463 | 1.0243 | 2.3497 | 1.6988 | 75.711 | 1.4203 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 10.176 | 2.2523 | .37525 | 4.1701 | 2.1569 | .05882 | 2.8317 | .67646 |
| Stddev | .035 | .0104 | .00019 | .0109 | .0091 | .00005 | .0105 | .00068 |
| %RSD | .34615 | .46093 | .05026 | .26080 | .42149 | .08628 | .37011 | .10094 |
| #1 | 10.172 | 2.2638 | .37530 | 4.1678 | 2.1608 | .05887 | 2.8431 | .67591 |
| #2 | 10.213 | 2.2437 | .37541 | 4.1819 | 2.1465 | .05877 | 2.8226 | .67624 |
| #3 | 10.143 | 2.2493 | .37504 | 4.1605 | 2.1634 | .05882 | 2.8292 | .67722 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2.9566 | .66036 | 2.1861 | .60838 | 17.795 | .48566 | 3.5647 | 8.0770 |
| Stddev | .0076 | .00060 | .0159 | .00086 | .047 | .00364 | .0045 | .0206 |
| %RSD | .25666 | .09134 | .72623 | .14179 | .26204 | .74871 | .12486 | .25453 |
| #1 | 2.9559 | .66048 | 2.1735 | .60899 | 17.773 | .48173 | 3.5665 | 8.1001 |
| #2 | 2.9645 | .66089 | 2.2039 | .60740 | 17.848 | .48891 | 3.5597 | 8.0608 |
| #3 | 2.9494 | .65970 | 2.1809 | .60876 | 17.763 | .48633 | 3.5681 | 8.0700 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1.0743 | 5.2662 | .08224 | .30355 | .25003 | 13.361 | 144.90 |
| Stddev | .0033 | .0033 | .00058 | .00126 | .00093 | .143 | .67 |
| %RSD | .30812 | .06350 | .70968 | .41646 | .37193 | 1.0672 | .46280 |
| #1 | 1.0744 | 5.2631 | .08157 | .30500 | .25094 | 13.200 | 144.29 |
| #2 | 1.0776 | 5.2656 | .08255 | .30299 | .25008 | 13.470 | 144.80 |
| #3 | 1.0710 | 5.2698 | .08260 | .30266 | .24908 | 13.415 | 145.62 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: S5 Acquired: 12/5/2024 13:42:46 Type: Cal
Method: NON EPA-6010-200.7(v2491) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1952.1 | 51113. | 13576. | 1286.4 | 3179.9 |
| Stddev | 16.0 | 136. | 24. | 5.5 | 14.6 |
| %RSD | .82136 | .26539 | .17551 | .43008 | .45779 |
| | | | | | |
| #1 | 1944.8 | 51109. | 13549. | 1282.3 | 3173.1 |
| #2 | 1970.5 | 50980. | 13585. | 1284.3 | 3196.6 |
| #3 | 1941.1 | 51251. | 13595. | 1292.7 | 3169.9 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICV01 Acquired: 12/5/2024 13:53:03 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .9654477 | 1.007813 | .9860530 | .9991795 | .9815731 | 2.529636 |
| Stddev | .0037499 | .015256 | .0019761 | .0043905 | .0011817 | .008781 |
| %RSD | .3884072 | 1.513790 | .2004021 | .4394081 | .1203912 | .3471366 |
| #1 | .9617446 | .992744 | .9881468 | .9961820 | .9812932 | 2.527683 |
| #2 | .9692426 | 1.023249 | .9857914 | .9971373 | .9805564 | 2.521995 |
| #3 | .9653558 | 1.007446 | .9842207 | 1.004219 | .9828696 | 2.539229 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5188427 | .5199378 | .4995165 | 9.904493 | .5229099 | .5048899 |
| Stddev | .0007353 | .0040215 | .0013631 | .044591 | .0011826 | .0007455 |
| %RSD | .1417204 | .7734606 | .2728892 | .4502112 | .2261486 | .1476467 |
| #1 | .5192210 | .5222041 | .5000453 | 9.853055 | .5238433 | .5050695 |
| #2 | .5179953 | .5152946 | .4979683 | 9.932206 | .5215801 | .5040710 |
| #3 | .5193119 | .5223147 | .5005361 | 9.928219 | .5233063 | .5055291 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5123582 | 9.730086 | .5187501 | 5.849678 | .5076683 | .2502780 |
| Stddev | .0017939 | .082896 | .0019980 | .018584 | .0006451 | .0004794 |
| %RSD | .3501206 | .8519545 | .3851493 | .3176896 | .1270724 | .1915632 |
| #1 | .5132392 | 9.651277 | .5164431 | 5.828240 | .5081075 | .2497247 |
| #2 | .5102942 | 9.816539 | .5199250 | 5.861210 | .5069277 | .2505372 |
| #3 | .5135412 | 9.722442 | .5198821 | 5.859584 | .5079698 | .2505720 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.809864 | .5078506 | 1.023250 | 9.586480 | F .0050197 | F -.000506 |
| Stddev | .015206 | .0034206 | .005247 | .032107 | .0001551 | .000153 |
| %RSD | .1550051 | .6735488 | .5127734 | .3349181 | 3.089105 | 30.26917 |
| #1 | 9.822213 | .5040771 | 1.019282 | 9.551162 | .0048739 | -.000608 |
| #2 | 9.814497 | .5087267 | 1.029199 | 9.613902 | .0051826 | -.000330 |
| #3 | 9.792880 | .5107480 | 1.021269 | 9.594378 | .0050026 | -.000580 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICV01 Acquired: 12/5/2024 13:53:03 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F -.000714 | F -.001362 | F -.009701 | F .0076961 | F -.000697 | F -.001693 |
| Stddev | .000333 | .000159 | .001759 | .0021862 | .001951 | .000574 |
| %RSD | 46.71407 | 11.67566 | 18.12885 | 28.40702 | 279.7850 | 33.89956 |
| #1 | -.000335 | -.001189 | -.011556 | .0052400 | -.002943 | -.001102 |
| #2 | -.000965 | -.001396 | -.008058 | .0084188 | .000578 | -.001729 |
| #3 | -.000841 | -.001501 | -.009488 | .0094295 | .000273 | -.002249 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | F -.008542 |
| Stddev | .000087 |
| %RSD | 1.015560 |
| #1 | -.008466 |
| #2 | -.008637 |
| #3 | -.008522 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2161.117 | 54758.01 | 13847.33 | 1445.236 | 3703.877 |
| Stddev | 5.511 | 280.87 | 4.27 | 23.183 | 8.156 |
| %RSD | .2550224 | .5129229 | .0308546 | 1.604119 | .2201952 |
| #1 | 2155.475 | 54950.36 | 13850.41 | 1459.418 | 3694.544 |
| #2 | 2161.388 | 54435.70 | 13849.12 | 1418.483 | 3707.453 |
| #3 | 2166.488 | 54887.97 | 13842.45 | 1457.809 | 3709.634 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LLICV01 Acquired: 12/5/2024 14:05:50 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0203871 | .0418258 | .0117869 | .0188963 | .0470617 | .0995084 | .1015630 |
| Stddev | .0019280 | .0007337 | .0008830 | .0004016 | .0005552 | .0036636 | .0002241 |
| %RSD | 9.457124 | 1.754151 | 7.491701 | 2.125153 | 1.179626 | 3.681659 | .2206900 |
| | | | | | | | |
| #1 | .0190773 | .0426489 | .0107780 | .0184630 | .0465060 | .1032923 | .1013697 |
| #2 | .0226010 | .0412403 | .0121639 | .0192560 | .0470628 | .0959784 | .1018087 |
| #3 | .0194829 | .0415884 | .0124190 | .0189700 | .0476163 | .0992545 | .1015105 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0061398 | .0059868 | 2.049435 | .0099060 | .0297354 | .0217803 | .0986795 |
| Stddev | .0000264 | .0000687 | .007729 | .0000885 | .0002673 | .0000995 | .0044232 |
| %RSD | .4303510 | 1.147182 | .3771422 | .8931073 | .8987600 | .4569525 | 4.482419 |
| | | | | | | | |
| #1 | .0061127 | .0059963 | 2.042564 | .0098743 | .0294576 | .0218389 | .0961408 |
| #2 | .0061655 | .0059139 | 2.057803 | .0100059 | .0297581 | .0218367 | .0961107 |
| #3 | .0061411 | .0060503 | 2.047939 | .0098377 | .0299906 | .0216654 | .1037870 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0210882 | 2.150548 | .0396507 | .0101373 | 1.967833 | .0419860 | .0429047 |
| Stddev | .0001669 | .010502 | .0003047 | .0001467 | .007085 | .0004109 | .0002835 |
| %RSD | .7915254 | .4883402 | .7684720 | 1.446820 | .3600485 | .9786156 | .6608747 |
| | | | | | | | |
| #1 | .0212810 | 2.144718 | .0397734 | .0099680 | 1.963472 | .0424585 | .0427403 |
| #2 | .0209902 | 2.162671 | .0393037 | .0102268 | 1.964020 | .0417122 | .0427416 |
| #3 | .0209936 | 2.144254 | .0398749 | .0102171 | 1.976008 | .0417874 | .0432321 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.948159 | .0997815 | .2057025 | .0385189 | .0400920 | .3252196 | .0164414 |
| Stddev | .012831 | .0010381 | .0008228 | .0000186 | .0001035 | .0094390 | .0024027 |
| %RSD | .6586304 | 1.040370 | .3999791 | .0483901 | .2582435 | 2.902351 | 14.61407 |
| | | | | | | | |
| #1 | 1.933346 | .0998988 | .2047631 | .0385025 | .0400848 | .3157095 | .0184571 |
| #2 | 1.955849 | .1007559 | .2062949 | .0385150 | .0399922 | .3253635 | .0170846 |
| #3 | 1.955282 | .0986897 | .2060496 | .0385392 | .0401989 | .3345859 | .0137825 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LLICV01 Acquired: 12/5/2024 14:05:50 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0190263 | .0200831 | .0214074 |
| Stddev | .0019268 | .0003038 | .0000203 |
| %RSD | 10.12726 | 1.512849 | .0948993 |
| | | | |
| #1 | .0194249 | .0197349 | .0214194 |
| #2 | .0169314 | .0202204 | .0214189 |
| #3 | .0207227 | .0202940 | .0213840 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2204.500 | 55676.75 | 13873.46 | 1467.022 | 3847.392 |
| Stddev | 3.455 | 173.00 | 46.18 | 3.615 | 5.378 |
| %RSD | .1567303 | .3107221 | .3328401 | .2464248 | .1397820 |
| | | | | | |
| #1 | 2204.851 | 55709.13 | 13825.59 | 1468.118 | 3841.509 |
| #2 | 2200.883 | 55489.85 | 13877.04 | 1462.986 | 3848.611 |
| #3 | 2207.767 | 55831.28 | 13917.73 | 1469.963 | 3852.056 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICB01 Acquired: 12/5/2024 14:10:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000176 | .0001465 | -.000140 | -.000074 | -.002277 | -.000796 | -.001669 |
| Stddev | .002978 | .0009539 | .000844 | .002033 | .001073 | .005549 | .000332 |
| %RSD | 1693.572 | 651.0797 | 604.1080 | 2752.625 | 47.10638 | 696.8893 | 19.90844 |
| #1 | .001393 | -.000826 | -.001101 | -.002419 | -.001928 | -.001789 | -.002040 |
| #2 | -.003610 | .001080 | .000204 | .001176 | -.001423 | -.005782 | -.001569 |
| #3 | .001690 | .000186 | .000478 | .001022 | -.003481 | .005182 | -.001399 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000692 | -.000025 | -.016842 | -.000013 | .0000207 | -.000445 | -.000842 |
| Stddev | .0000340 | .000053 | .004180 | .000367 | .0001614 | .000318 | .000919 |
| %RSD | 49.16841 | 207.6586 | 24.82191 | 2905.774 | 779.3713 | 71.45951 | 109.1770 |
| #1 | .0000651 | -.000051 | -.012471 | .000080 | .0001624 | -.000406 | -.000846 |
| #2 | .0000374 | .000035 | -.020801 | .000299 | .0000545 | -.000780 | .000079 |
| #3 | .0001051 | -.000061 | -.017254 | -.000417 | -.000155 | -.000148 | -.001759 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000137 | -.005792 | -.000393 | -.000029 | .0040281 | .0003427 | -.000329 |
| Stddev | .000313 | .011639 | .000263 | .000227 | .0080929 | .0008715 | .000184 |
| %RSD | 229.3134 | 200.9640 | 67.03628 | 770.2184 | 200.9134 | 254.3222 | 56.06623 |
| #1 | -.000167 | -.007135 | -.000604 | .000232 | -.005082 | .0005551 | -.000287 |
| #2 | -.000434 | -.016702 | -.000098 | -.000177 | .006782 | .0010884 | -.000531 |
| #3 | .000191 | .006461 | -.000477 | -.000144 | .010385 | -.000615 | -.000169 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.032038 | -.006178 | -.000455 | -.000592 | -.000201 | .0004597 | .0002242 |
| Stddev | .024789 | .000040 | .000161 | .000604 | .000246 | .0016926 | .0029453 |
| %RSD | 77.37528 | .6464751 | 35.25982 | 102.1021 | 122.5172 | 368.2161 | 1313.863 |
| #1 | -.060588 | -.006172 | -.000365 | .000049 | -.000169 | .0018645 | .0035900 |
| #2 | -.019540 | -.006220 | -.000361 | -.001151 | -.000461 | .0009339 | -.001036 |
| #3 | -.015985 | -.006141 | -.000641 | -.000672 | .000028 | -.001419 | -.001881 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICB01 Acquired: 12/5/2024 14:10:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000860 | -.000534 | -.000126 |
| Stddev | .001812 | .000392 | .000003 |
| %RSD | 210.6011 | 73.49541 | 1.980151 |
| | | | |
| #1 | -.002050 | -.000872 | -.000124 |
| #2 | .001225 | -.000104 | -.000129 |
| #3 | -.001756 | -.000625 | -.000126 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2253.547 | 56771.16 | 14155.85 | 1489.626 | 3983.416 |
| Stddev | 24.981 | 192.98 | 26.01 | 7.275 | 23.020 |
| %RSD | 1.108533 | .3399189 | .1837733 | .4884016 | .5778843 |
| | | | | | |
| #1 | 2258.639 | 56679.76 | 14128.32 | 1486.056 | 3991.191 |
| #2 | 2226.412 | 56640.86 | 14180.02 | 1484.824 | 3957.515 |
| #3 | 2275.590 | 56992.85 | 14159.21 | 1497.996 | 4001.541 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CRI01 Acquired: 12/5/2024 14:14:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0200452 | .0438813 | .0117570 | .0189188 | .0458360 | .0991206 | .1022543 |
| Stddev | .0012077 | .0013273 | .0013228 | .0015375 | .0007898 | .0012851 | .0005050 |
| %RSD | 6.024852 | 3.024874 | 11.25151 | 8.127038 | 1.723080 | 1.296449 | .4938816 |
| #1 | .0213047 | .0453231 | .0132737 | .0206829 | .0450081 | .0977033 | .1016721 |
| #2 | .0188970 | .0427100 | .0108422 | .0178635 | .0465812 | .0994489 | .1025738 |
| #3 | .0199338 | .0436108 | .0111550 | .0182101 | .0459187 | .1002097 | .1025171 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0063499 | .0060229 | 2.105784 | .0098161 | .0303088 | .0216189 | .0992278 |
| Stddev | .0000365 | .0000084 | .009810 | .0004683 | .0002555 | .0004224 | .0046301 |
| %RSD | .5751101 | .1400815 | .4658719 | 4.770264 | .8428663 | 1.953685 | 4.666152 |
| #1 | .0063859 | .0060132 | 2.094965 | .0092762 | .0302367 | .0219429 | .0945765 |
| #2 | .0063510 | .0060267 | 2.114099 | .0101103 | .0300971 | .0211412 | .0992706 |
| #3 | .0063128 | .0060288 | 2.108289 | .0100619 | .0305925 | .0217727 | .1038364 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0216577 | 2.194640 | .0402156 | .0100283 | 1.939225 | .0431381 | .0427763 |
| Stddev | .0000430 | .011689 | .0001154 | .0002495 | .006503 | .0005240 | .0003433 |
| %RSD | .1984220 | .5326277 | .2868324 | 2.488250 | .3353628 | 1.214737 | .8024486 |
| #1 | .0216889 | 2.189644 | .0403175 | .0102316 | 1.938646 | .0429784 | .0428440 |
| #2 | .0216755 | 2.207998 | .0402391 | .0097498 | 1.945999 | .0427125 | .0424042 |
| #3 | .0216087 | 2.186280 | .0400904 | .0101035 | 1.933031 | .0437234 | .0430806 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.880580 | .1002583 | .2066498 | .0389400 | .0400699 | .3215209 | .0167605 |
| Stddev | .004044 | .0003607 | .0003899 | .0006370 | .0002654 | .0016700 | .0034692 |
| %RSD | .2150359 | .3597800 | .1886794 | 1.635895 | .6622470 | .5193940 | 20.69892 |
| #1 | 1.884206 | .1000332 | .2070022 | .0394718 | .0403368 | .3228378 | .0205775 |
| #2 | 1.881314 | .1000673 | .2067163 | .0382340 | .0398061 | .3196426 | .0137991 |
| #3 | 1.876219 | .1006744 | .2062309 | .0391143 | .0400667 | .3220823 | .0159049 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CRI01 Acquired: 12/5/2024 14:14:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0182572 | .0198912 | .0214220 |
| Stddev | .0025643 | .0005929 | .0000102 |
| %RSD | 14.04548 | 2.980597 | .0476407 |
| | | | |
| #1 | .0157652 | .0192200 | .0214156 |
| #2 | .0181182 | .0201098 | .0214338 |
| #3 | .0208881 | .0203437 | .0214166 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2245.150 | 55779.59 | 13772.92 | 1491.820 | 3888.976 |
| Stddev | 2.992 | 219.80 | 33.59 | 17.338 | 6.374 |
| %RSD | .1332662 | .3940524 | .2438762 | 1.162202 | .1639044 |
| | | | | | |
| #1 | 2246.765 | 55564.51 | 13752.32 | 1472.960 | 3895.821 |
| #2 | 2241.697 | 55770.45 | 13754.75 | 1495.432 | 3883.210 |
| #3 | 2246.987 | 56003.82 | 13811.68 | 1507.067 | 3887.898 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSA01 Acquired: 12/5/2024 14:18:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0064900 | .0137736 | .0072060 | -.019115 | -.002093 | 272.4921 |
| Stddev | .0026038 | .0010531 | .0022413 | .002242 | .001932 | 1.0221 |
| %RSD | 40.11976 | 7.645623 | 31.10265 | 11.73103 | 92.30546 | .3751084 |
| #1 | .0090819 | .0149367 | .0061190 | -.018658 | -.001425 | 272.7012 |
| #2 | .0065136 | .0128849 | .0057155 | -.017136 | -.004271 | 273.3935 |
| #3 | .0038745 | .0134992 | .0097834 | -.021550 | -.000584 | 271.3816 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0050784 | .0014789 | .0063357 | 260.9891 | .0579326 | .0027129 |
| Stddev | .0001920 | .0000712 | .0001804 | .8983 | .0003551 | .0002435 |
| %RSD | 3.781211 | 4.814346 | 2.847312 | .3441938 | .6130162 | 8.976535 |
| #1 | .0048585 | .0014084 | .0062826 | 261.4692 | .0575232 | .0024542 |
| #2 | .0052127 | .0014775 | .0065367 | 259.9528 | .0581155 | .0027466 |
| #3 | .0051641 | .0015508 | .0061878 | 261.5453 | .0581590 | .0029377 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0046943 | 101.1066 | .0017315 | 283.0066 | .0005990 | -.005849 |
| Stddev | .0002764 | .5288 | .0001071 | .8183 | .0002451 | .000039 |
| %RSD | 5.888715 | .5230464 | 6.183901 | .2891606 | 40.91706 | .6586295 |
| #1 | .0045415 | 101.2367 | .0018546 | 283.1476 | .0006130 | -.005893 |
| #2 | .0050134 | 100.5248 | .0016802 | 282.1268 | .0003472 | -.005832 |
| #3 | .0045280 | 101.5581 | .0016598 | 283.7452 | .0008367 | -.005822 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0779820 | .0113845 | .0082357 | .0413161 | .0436524 | .0001651 |
| Stddev | .0158044 | .0014997 | .0007110 | .0072991 | .0012292 | .0002632 |
| %RSD | 20.26675 | 13.17317 | 8.632831 | 17.66640 | 2.815965 | 159.4253 |
| #1 | .0618935 | .0099723 | .0086391 | .0343962 | .0449845 | .0003538 |
| #2 | .0785664 | .0129586 | .0086532 | .0406092 | .0425618 | -.000136 |
| #3 | .0934862 | .0112227 | .0074147 | .0489429 | .0434108 | .000277 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSA01 Acquired: 12/5/2024 14:18:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.002654 | -.000918 | .0193891 | -.004102 | -.011423 | F -.043568 |
| Stddev | .001795 | .000379 | .0036276 | .003511 | .004407 | .000412 |
| %RSD | 67.62490 | 41.24294 | 18.70943 | 85.59554 | 38.58163 | .9460448 |
| | | | | | | |
| #1 | -.004604 | -.000554 | .0210160 | -.005183 | -.008638 | -.043880 |
| #2 | -.002285 | -.000891 | .0152328 | -.000178 | -.016504 | -.043101 |
| #3 | -.001072 | -.001310 | .0219184 | -.006945 | -.009126 | -.043724 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0087728 |
| Stddev | .0003283 |
| %RSD | 3.742599 |
| | |
| #1 | .0087227 |
| #2 | .0091233 |
| #3 | .0084724 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1953.939 | 49165.75 | 12807.57 | 1313.792 | 3011.265 |
| Stddev | 8.390 | 109.26 | 33.86 | 7.089 | 4.049 |
| %RSD | .4293915 | .2222281 | .2643400 | .5395737 | .1344466 |
| | | | | | |
| #1 | 1944.864 | 49097.60 | 12769.97 | 1312.228 | 3010.137 |
| #2 | 1955.538 | 49291.78 | 12817.13 | 1321.532 | 3007.900 |
| #3 | 1961.414 | 49107.89 | 12835.62 | 1307.615 | 3015.758 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSAB01 Acquired: 12/5/2024 14:33:21 Type: Unk
Method: NON EPA-6010-200.7(v2492) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1084693 | .0922039 | .0592624 | .0324877 | .5896681 | 253.1286 |
| Stddev | .0007404 | .0028795 | .0016569 | .0033474 | .0011796 | .5275 |
| %RSD | .6825792 | 3.122940 | 2.795808 | 10.30352 | .2000507 | .2083831 |
| #1 | .1090312 | .0944999 | .0575447 | .0328709 | .5899793 | 252.8286 |
| #2 | .1076303 | .0889732 | .0608508 | .0289652 | .5906610 | 253.7376 |
| #3 | .1087463 | .0931385 | .0593916 | .0356269 | .5883641 | 252.8194 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5146874 | .5123817 | .9912296 | 238.0906 | .5447677 | .4990576 |
| Stddev | .0011372 | .0044493 | .0028607 | .2928 | .0020599 | .0012347 |
| %RSD | .2209397 | .8683645 | .2886010 | .1229923 | .3781205 | .2473990 |
| #1 | .5159380 | .5175086 | .9897689 | 238.2805 | .5468563 | .4981085 |
| #2 | .5137156 | .5095303 | .9893942 | 238.2380 | .5427378 | .4986108 |
| #3 | .5144085 | .5101064 | .9945258 | 237.7534 | .5447091 | .5004534 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4622727 | 93.88290 | .4956517 | 258.8030 | 1.020951 | .1895280 |
| Stddev | .0003686 | .45552 | .0012426 | .5109 | .002808 | .0008230 |
| %RSD | .0797286 | .4852037 | .2506986 | .1973947 | .2750370 | .4342323 |
| #1 | .4620812 | 93.37847 | .4942208 | 259.0089 | 1.020333 | .1904765 |
| #2 | .4620393 | 94.26421 | .4964594 | 259.1787 | 1.018503 | .1890029 |
| #3 | .4626976 | 94.00603 | .4962749 | 258.2213 | 1.024016 | .1891045 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0937192 | .4984620 | .9527444 | .0280515 | F .0384463 | F .0002958 |
| Stddev | .0150262 | .0010988 | .0017739 | .0091160 | .0011556 | .0002127 |
| %RSD | 16.03323 | .2204466 | .1861893 | 32.49734 | 3.005745 | 71.90772 |
| #1 | .0765892 | .4996940 | .9521264 | .0230490 | .0371413 | .0003980 |
| #2 | .0998942 | .4975830 | .9547447 | .0225319 | .0388577 | .0000513 |
| #3 | .1046740 | .4981091 | .9513622 | .0385735 | .0393399 | .0004381 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSAB01 Acquired: 12/5/2024 14:33:21 Type: Unk
Method: NON EPA-6010-200.7(v2492) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F -.002724 | F -.001296 | F .0027312 | F .0238169 | F -.003239 | F -.040259 |
| Stddev | .001440 | .000486 | .0028039 | .0019180 | .007791 | .000652 |
| %RSD | 52.88076 | 37.48933 | 102.6631 | 8.053233 | 240.5350 | 1.618939 |
| #1 | -.001614 | -.000738 | .0012267 | .0259926 | .003720 | -.039798 |
| #2 | -.002205 | -.001625 | .0010006 | .0230878 | -.001782 | -.039974 |
| #3 | -.004351 | -.001524 | .0059663 | .0223704 | -.011656 | -.041005 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | F .0099384 |
| Stddev | .0005326 |
| %RSD | 5.359312 |
| #1 | .0105414 |
| #2 | .0097414 |
| #3 | .0095322 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1926.234 | 48698.18 | 13038.96 | 1264.699 | 3020.191 |
| Stddev | 3.126 | 109.72 | 39.38 | 9.117 | 11.096 |
| %RSD | .1622866 | .2253005 | .3020044 | .7208576 | .3673796 |
| #1 | 1927.859 | 48798.89 | 12994.13 | 1273.127 | 3024.154 |
| #2 | 1928.213 | 48581.26 | 13054.78 | 1255.022 | 3028.761 |
| #3 | 1922.630 | 48714.40 | 13067.96 | 1265.948 | 3007.658 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSADLX20 Acquired: 12/5/2024 14:37:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000573 | -.000736 | .0006082 | -.001123 | -.002379 | 12.91552 | -.000959 |
| Stddev | .003024 | .001768 | .0003656 | .000840 | .000107 | .01157 | .000242 |
| %RSD | 528.0130 | 240.1911 | 60.10712 | 74.79368 | 4.509443 | .0896194 | 25.22775 |
| #1 | -.000289 | -.001829 | .0005599 | -.001893 | -.002497 | 12.90345 | -.001138 |
| #2 | -.003728 | -.001682 | .0009956 | -.000227 | -.002351 | 12.91656 | -.000684 |
| #3 | .002299 | .001303 | .0002692 | -.001249 | -.002288 | 12.92653 | -.001055 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001052 | .0000552 | 12.85929 | .0025669 | .0001658 | -.000052 | 5.025038 |
| Stddev | .0000606 | .0000671 | .02107 | .0006120 | .0002500 | .000302 | .015941 |
| %RSD | 57.66696 | 121.5928 | .1638340 | 23.84200 | 150.7373 | 579.2540 | .3172229 |
| #1 | .0000424 | .0000365 | 12.83604 | .0018882 | -.000120 | .000235 | 5.015528 |
| #2 | .0001097 | .0001296 | 12.87710 | .0030767 | .000343 | -.000023 | 5.016146 |
| #3 | .0001634 | -.000001 | 12.86474 | .0027358 | .000274 | -.000368 | 5.043441 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001683 | 13.12302 | -.000129 | .0001603 | .0211369 | .0018613 | .0004513 |
| Stddev | .0002591 | .03280 | .000120 | .0001562 | .0084923 | .0005789 | .0001309 |
| %RSD | 153.9016 | .2499568 | 92.62809 | 97.43027 | 40.17788 | 31.10154 | 29.00762 |
| #1 | .0003591 | 13.08517 | -.000258 | .0002630 | .0117185 | .0023744 | .0004022 |
| #2 | .0002726 | 13.14072 | -.000107 | -.000019 | .0234816 | .0019757 | .0005997 |
| #3 | -.000127 | 13.14317 | -.000022 | .000238 | .0282105 | .0012337 | .0003521 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.033527 | -.006303 | -.000270 | -.001438 | -.000538 | -.000899 | -.002693 |
| Stddev | .014573 | .000400 | .000043 | .000495 | .000334 | .004086 | .002290 |
| %RSD | 43.46719 | 6.351377 | 15.82160 | 34.39549 | 62.04357 | 454.7239 | 85.01661 |
| #1 | -.033954 | -.005850 | -.000318 | -.001962 | -.000250 | .002196 | -.000049 |
| #2 | -.047882 | -.006608 | -.000235 | -.000980 | -.000459 | .000638 | -.004007 |
| #3 | -.018745 | -.006452 | -.000259 | -.001372 | -.000904 | -.005530 | -.004024 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSADLX20 Acquired: 12/5/2024 14:37:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000590 | -.002981 | .0003692 |
| Stddev | .001626 | .000415 | .0000274 |
| %RSD | 275.4915 | 13.93562 | 7.429237 |
| | | | |
| #1 | .000985 | -.002827 | .0003655 |
| #2 | -.000494 | -.003452 | .0003983 |
| #3 | -.002263 | -.002665 | .0003438 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2220.799 | 55759.71 | 13937.99 | 1487.924 | 3794.494 |
| Stddev | 4.610 | 9.44 | 18.67 | 4.659 | 5.538 |
| %RSD | .2075840 | .0169278 | .1339667 | .3131206 | .1459550 |
| | | | | | |
| #1 | 2225.381 | 55759.87 | 13917.05 | 1491.535 | 3797.552 |
| #2 | 2216.162 | 55769.08 | 13952.90 | 1489.572 | 3788.101 |
| #3 | 2220.854 | 55750.20 | 13944.02 | 1482.665 | 3797.828 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSABDLX20 Acquired: 12/5/2024 14:41:31 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0034806 | .0050738 | .0022371 | .0011596 | .0278792 | 12.82916 | .0261088 |
| Stddev | .0014405 | .0011554 | .0010397 | .0027385 | .0005604 | .05306 | .0001628 |
| %RSD | 41.38639 | 22.77271 | 46.47339 | 236.1652 | 2.010016 | .4135944 | .6236880 |
| #1 | .0051267 | .0037426 | .0025652 | -.001600 | .0273798 | 12.76795 | .0262335 |
| #2 | .0028646 | .0058160 | .0010730 | .003877 | .0284852 | 12.86209 | .0261683 |
| #3 | .0024505 | .0056630 | .0030731 | .001201 | .0277726 | 12.85745 | .0259246 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0272706 | .0515589 | 12.78756 | .0298566 | .0255685 | .0258912 | 4.991406 |
| Stddev | .0001774 | .0001373 | .00907 | .0001954 | .0002056 | .0000945 | .011314 |
| %RSD | .6503706 | .2663048 | .0709383 | .6543773 | .8040925 | .3648281 | .2266745 |
| #1 | .0270843 | .0514023 | 12.79557 | .0297218 | .0253349 | .0259884 | 4.986669 |
| #2 | .0274374 | .0516156 | 12.78940 | .0300807 | .0257221 | .0257997 | 4.983231 |
| #3 | .0272902 | .0516588 | 12.77771 | .0297674 | .0256484 | .0258854 | 5.004319 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0269208 | 13.07458 | .0516742 | .0095976 | .0078102 | .0260395 | .0545934 |
| Stddev | .0002208 | .08374 | .0001283 | .0004087 | .0071492 | .0003181 | .0003525 |
| %RSD | .8200313 | .6404788 | .2482579 | 4.257908 | 91.53660 | 1.221746 | .6457285 |
| #1 | .0266739 | 13.01417 | .0515371 | .0091720 | -.000441 | .0261829 | .0549865 |
| #2 | .0269894 | 13.17017 | .0516944 | .0099868 | .012161 | .0256749 | .0543052 |
| #3 | .0270991 | 13.03941 | .0517913 | .0096340 | .011711 | .0262607 | .0544885 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.044217 | -.006426 | -.000360 | -.001730 | -.000458 | .0005425 | -.002936 |
| Stddev | .003326 | .000658 | .000089 | .000258 | .000172 | .0029317 | .002556 |
| %RSD | 7.521098 | 10.23533 | 24.60293 | 14.94186 | 37.44959 | 540.4090 | 87.03390 |
| #1 | -.046392 | -.007164 | -.000327 | -.002027 | -.000579 | -.000468 | -.003171 |
| #2 | -.040389 | -.005902 | -.000461 | -.001598 | -.000534 | -.001750 | -.000271 |
| #3 | -.045872 | -.006211 | -.000293 | -.001564 | -.000262 | .003846 | -.005366 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: ICSABDLX20 Acquired: 12/5/2024 14:41:31 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.002154 | -.002923 | .0003878 |
| Stddev | .001567 | .000182 | .0000463 |
| %RSD | 72.75406 | 6.224819 | 11.94858 |
| | | | |
| #1 | -.003832 | -.002820 | .0003635 |
| #2 | -.000727 | -.003133 | .0004413 |
| #3 | -.001904 | -.002815 | .0003587 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2218.093 | 55638.84 | 13928.21 | 1472.968 | 3794.036 |
| Stddev | 6.709 | 85.52 | 21.65 | 4.788 | 5.894 |
| %RSD | .3024847 | .1537028 | .1554489 | .3250438 | .1553460 |
| | | | | | |
| #1 | 2225.828 | 55547.62 | 13917.17 | 1470.348 | 3800.341 |
| #2 | 2214.615 | 55651.69 | 13914.30 | 1478.494 | 3793.103 |
| #3 | 2213.837 | 55717.20 | 13953.16 | 1470.062 | 3788.664 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV01 Acquired: 12/5/2024 14:45:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.935976 | 4.889179 | 4.912576 | 4.966723 | 4.927352 | 9.914991 | 9.982019 |
| Stddev | .015835 | .023806 | .024145 | .011658 | .011622 | .008340 | .095688 |
| %RSD | .3207991 | .4869079 | .4914844 | .2347289 | .2358638 | .0841156 | .9586043 |
| #1 | 4.945821 | 4.904321 | 4.935239 | 4.975130 | 4.935051 | 9.922519 | 10.08350 |
| #2 | 4.917711 | 4.861739 | 4.915307 | 4.953414 | 4.913984 | 9.916427 | 9.89344 |
| #3 | 4.944398 | 4.901476 | 4.887183 | 4.971624 | 4.933022 | 9.906026 | 9.96911 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2468113 | 2.449250 | 24.47657 | .9957044 | 2.442983 | 1.250102 | 4.909548 |
| Stddev | .0020140 | .012062 | .13270 | .0014091 | .009183 | .001589 | .040685 |
| %RSD | .8160205 | .4924900 | .5421707 | .1415153 | .3758973 | .1271206 | .8286840 |
| #1 | .2487253 | 2.459920 | 24.49916 | .9964072 | 2.452171 | 1.251627 | 4.867009 |
| #2 | .2469984 | 2.451668 | 24.59653 | .9966238 | 2.442975 | 1.248456 | 4.948082 |
| #3 | .2447103 | 2.436162 | 24.33402 | .9940821 | 2.433805 | 1.250222 | 4.913553 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.449067 | 24.39352 | 2.449816 | 1.230657 | 25.51871 | 2.473373 | 2.513331 |
| Stddev | .009823 | .04660 | .010825 | .002605 | .06110 | .001551 | .008990 |
| %RSD | .4010741 | .1910542 | .4418650 | .2116364 | .2394424 | .0627052 | .3577078 |
| #1 | 2.445566 | 24.38353 | 2.459031 | 1.229740 | 25.52662 | 2.472634 | 2.503430 |
| #2 | 2.460161 | 24.44431 | 2.452522 | 1.233596 | 25.45403 | 2.475155 | 2.515578 |
| #3 | 2.441475 | 24.35273 | 2.437895 | 1.228635 | 25.57547 | 2.472330 | 2.520985 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 24.87187 | 4.916829 | 4.964379 | 4.888508 | 4.933355 | 4.939964 | 4.978493 |
| Stddev | .13042 | .023409 | .010319 | .020315 | .007272 | .026278 | .023236 |
| %RSD | .5243779 | .4761053 | .2078670 | .4155663 | .1473991 | .5319493 | .4667246 |
| #1 | 24.79156 | 4.941581 | 4.974236 | 4.908164 | 4.931614 | 4.910493 | 5.001332 |
| #2 | 24.80170 | 4.913860 | 4.953653 | 4.889769 | 4.941340 | 4.948444 | 4.979268 |
| #3 | 25.02236 | 4.895046 | 4.965247 | 4.867592 | 4.927112 | 4.960955 | 4.954880 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV01 Acquired: 12/5/2024 14:45:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 4.841233 | 4.982732 | 5.097346 |
| Stddev | .019541 | .011750 | .003281 |
| %RSD | .4036407 | .2358133 | .0643734 |
| | | | |
| #1 | 4.860235 | 4.985392 | 5.100327 |
| #2 | 4.842270 | 4.969880 | 5.097882 |
| #3 | 4.821193 | 4.992923 | 5.093830 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2029.728 | 52467.32 | 13716.13 | 1354.622 | 3382.766 |
| Stddev | 6.602 | 62.69 | 54.97 | 9.559 | 6.796 |
| %RSD | .3252521 | .1194874 | .4007676 | .7056372 | .2009050 |
| | | | | | |
| #1 | 2028.196 | 52538.85 | 13664.72 | 1365.656 | 3375.255 |
| #2 | 2036.961 | 52421.92 | 13709.59 | 1349.316 | 3388.490 |
| #3 | 2024.027 | 52441.21 | 13774.07 | 1348.892 | 3384.554 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB01 Acquired: 12/5/2024 14:50:00 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0015220 | .0004112 | .0006092 | .0005500 | -.000045 | .0027503 | -.000875 |
| Stddev | .0006771 | .0012457 | .0002136 | .0011320 | .000613 | .0013550 | .000292 |
| %RSD | 44.48705 | 302.9605 | 35.06311 | 205.8218 | 1375.369 | 49.26765 | 33.40590 |
| #1 | .0021120 | -.000348 | .0004481 | .0012664 | .000549 | .0038669 | -.000966 |
| #2 | .0007827 | .001849 | .0005281 | .0011387 | -.000675 | .0012428 | -.001111 |
| #3 | .0016712 | -.000267 | .0008515 | -.000755 | -.000007 | .0031412 | -.000548 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000014 | .0000068 | -.002787 | -.000003 | .0001192 | -.000331 | .0011596 |
| Stddev | .000057 | .0000685 | .004847 | .000355 | .0000419 | .000208 | .0012575 |
| %RSD | 409.3259 | 1002.508 | 173.9417 | 13024.10 | 35.15402 | 62.85559 | 108.4452 |
| #1 | -.000039 | .0000172 | -.008374 | -.000410 | .0000718 | -.000341 | -.000262 |
| #2 | -.000054 | .0000696 | .000290 | .000165 | .0001343 | -.000118 | .001613 |
| #3 | .000051 | -.000066 | -.000276 | .000237 | .0001514 | -.000534 | .002128 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000150 | .0006911 | -.000181 | .0000375 | -.014507 | .0002970 | -.000135 |
| Stddev | .000104 | .0154969 | .000270 | .0000148 | .009125 | .0003866 | .000271 |
| %RSD | 69.66491 | 2242.485 | 149.0595 | 39.54431 | 62.89960 | 130.1819 | 200.7701 |
| #1 | -.000059 | -.013808 | .000066 | .0000233 | -.024525 | .0000188 | -.000434 |
| #2 | -.000264 | -.001142 | -.000140 | .0000529 | -.012326 | .0007385 | .000096 |
| #3 | -.000127 | .017023 | -.000469 | .0000363 | -.006670 | .0001337 | -.000067 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.053837 | -.003294 | .0001221 | -.000497 | -.000462 | -.000625 | -.001637 |
| Stddev | .006279 | .000473 | .0001112 | .000100 | .000188 | .001411 | .001565 |
| %RSD | 11.66309 | 14.35016 | 91.12277 | 20.07141 | 40.72300 | 225.7370 | 95.60464 |
| #1 | -.056726 | -.002760 | .0002241 | -.000399 | -.000398 | -.002118 | -.002895 |
| #2 | -.046633 | -.003464 | .0001387 | -.000598 | -.000314 | -.000443 | .000115 |
| #3 | -.058151 | -.003658 | .0000035 | -.000493 | -.000674 | .000686 | -.002130 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB01 Acquired: 12/5/2024 14:50:00 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.003604 | -.000245 | -.000077 |
| Stddev | .002286 | .000461 | .000005 |
| %RSD | 63.41815 | 188.2205 | 6.394718 |
| | | | |
| #1 | -.003641 | -.000727 | -.000071 |
| #2 | -.001300 | .000193 | -.000080 |
| #3 | -.005871 | -.000201 | -.000080 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2296.941 | 58152.93 | 14425.98 | 1543.121 | 4063.960 |
| Stddev | 9.985 | 144.83 | 55.16 | 6.737 | 7.513 |
| %RSD | .4347101 | .2490524 | .3823686 | .4365952 | .1848768 |
| | | | | | |
| #1 | 2293.750 | 58054.34 | 14386.84 | 1535.629 | 4064.038 |
| #2 | 2288.941 | 58085.22 | 14402.04 | 1545.053 | 4056.408 |
| #3 | 2308.131 | 58319.21 | 14489.07 | 1548.681 | 4071.434 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-02 Acquired: 12/5/2024 14:54:20 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.008077 | -.014390 | -.000020 | .0057761 | -.000300 | .2523834 | .1568871 |
| Stddev | .002525 | .000898 | .001004 | .0028861 | .000876 | .0023305 | .0005221 |
| %RSD | 31.26182 | 6.237717 | 5022.114 | 49.96650 | 291.6476 | .9233769 | .3327837 |
| #1 | -.005216 | -.015128 | -.001175 | .0039943 | .000550 | .2504232 | .1573404 |
| #2 | -.009022 | -.013391 | .000639 | .0042281 | -.000250 | .2549601 | .1570046 |
| #3 | -.009994 | -.014651 | .000476 | .0091060 | -.001200 | .2517668 | .1563162 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000152 | -.000340 | 16.76097 | .0027204 | .0044554 | .0066851 | .8261514 |
| Stddev | .000021 | .000027 | .01665 | .0002232 | .0001443 | .0001603 | .0019808 |
| %RSD | 14.11939 | 8.070461 | .0993595 | 8.204297 | 3.237825 | 2.397645 | .2397604 |
| #1 | -.000152 | -.000317 | 16.74205 | .0024873 | .0043088 | .0066048 | .8238898 |
| #2 | -.000173 | -.000371 | 16.77342 | .0027417 | .0045972 | .0065808 | .8275779 |
| #3 | -.000130 | -.000332 | 16.76743 | .0029322 | .0044602 | .0068696 | .8269865 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4890178 | 1.048300 | .0052771 | .0002541 | 375.0303 | .0003368 | .0551229 |
| Stddev | .0004365 | .016504 | .0001803 | .0001596 | 4.2956 | .0006499 | .0006328 |
| %RSD | .0892690 | 1.574372 | 3.417679 | 62.80726 | 1.145404 | 192.9504 | 1.147938 |
| #1 | .4890982 | 1.032925 | .0052155 | .0001667 | 371.3136 | -.000413 | .0551400 |
| #2 | .4885467 | 1.046236 | .0051356 | .0004383 | 379.7333 | .000697 | .0544818 |
| #3 | .4894086 | 1.065739 | .0054802 | .0001573 | 374.0441 | .000727 | .0557470 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.215632 | .0049759 | -.000106 | .0001837 | .0013207 | .5818021 | .0088104 |
| Stddev | .018557 | .0000892 | .000330 | .0010482 | .0004607 | .0064241 | .0029622 |
| %RSD | .8375289 | 1.793451 | 311.5781 | 570.6887 | 34.87979 | 1.104171 | 33.62114 |
| #1 | 2.214501 | .0050385 | .000275 | .0011327 | .0014712 | .5854155 | .0101749 |
| #2 | 2.197667 | .0050155 | -.000285 | -.000941 | .0008036 | .5856057 | .0108445 |
| #3 | 2.234728 | .0048737 | -.000308 | .000360 | .0016873 | .5743850 | .0054119 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-02 Acquired: 12/5/2024 14:54:20 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .5566101 | -.002842 | .0335734 |
| Stddev | .0020950 | .000158 | .0000586 |
| %RSD | .3763829 | 5.569219 | .1745973 |
| | | | |
| #1 | .5543377 | -.002910 | .0335260 |
| #2 | .5584647 | -.002661 | .0335552 |
| #3 | .5570279 | -.002954 | .0336389 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1833.838 | 48207.81 | 13248.46 | 1248.281 | 3057.038 |
| Stddev | 9.241 | 83.35 | 22.29 | 8.193 | 8.705 |
| %RSD | .5039049 | .1728886 | .1682647 | .6563485 | .2847393 |
| | | | | | |
| #1 | 1836.424 | 48296.40 | 13223.47 | 1257.460 | 3057.453 |
| #2 | 1841.511 | 48196.09 | 13266.29 | 1245.671 | 3065.528 |
| #3 | 1823.580 | 48130.95 | 13255.62 | 1241.710 | 3048.134 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-08 Acquired: 12/5/2024 14:58:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.006632 | -.013428 | -.000466 | .0089190 | -.001454 | .2542737 | .2490748 |
| Stddev | .002379 | .001240 | .000163 | .0012247 | .001630 | .0023921 | .0003842 |
| %RSD | 35.87352 | 9.235453 | 34.95550 | 13.73139 | 112.1370 | .9407443 | .1542717 |
| #1 | -.005738 | -.014845 | -.000509 | .0081963 | -.001650 | .2523011 | .2494740 |
| #2 | -.009328 | -.012895 | -.000603 | .0082276 | -.002977 | .2569344 | .2490429 |
| #3 | -.004829 | -.012543 | -.000286 | .0103330 | .000266 | .2535854 | .2487075 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000047 | -.000217 | 8.207186 | .0052095 | .0039708 | .0017900 | .9036081 |
| Stddev | .000033 | .000010 | .057793 | .0002045 | .0001144 | .0001838 | .0087656 |
| %RSD | 70.18502 | 4.452460 | .7041724 | 3.926288 | 2.881903 | 10.26943 | .9700625 |
| #1 | -.000012 | -.000224 | 8.186833 | .0052665 | .0039146 | .0017458 | .8965147 |
| #2 | -.000077 | -.000221 | 8.162323 | .0053794 | .0041025 | .0016322 | .9009019 |
| #3 | -.000052 | -.000206 | 8.272401 | .0049825 | .0038954 | .0019918 | .9134076 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .9196725 | 1.054668 | .0051037 | .0002637 | 344.5887 | .0006055 | .0534272 |
| Stddev | .0051242 | .005335 | .0003088 | .0003297 | 3.3505 | .0007618 | .0004383 |
| %RSD | .5571787 | .5058885 | 6.049681 | 125.0003 | .9723135 | 125.8100 | .8203915 |
| #1 | .9170272 | 1.056356 | .0050753 | .0006443 | 347.8908 | .0011505 | .0533901 |
| #2 | .9164115 | 1.048693 | .0048101 | .0000664 | 344.6836 | -.000265 | .0530086 |
| #3 | .9255788 | 1.058956 | .0054256 | .0000805 | 341.1918 | .000931 | .0538829 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.562253 | .0045457 | -.000300 | .0002074 | .0011011 | .5363627 | .0069828 |
| Stddev | .020065 | .0000826 | .000109 | .0006509 | .0001947 | .0007315 | .0015773 |
| %RSD | 1.284362 | 1.816742 | 36.25639 | 313.8522 | 17.68219 | .1363848 | 22.58807 |
| #1 | 1.578841 | .0044640 | -.000388 | -.000508 | .0009212 | .5371145 | .0068570 |
| #2 | 1.567968 | .0045439 | -.000178 | .000365 | .0013078 | .5356534 | .0054722 |
| #3 | 1.539951 | .0046292 | -.000333 | .000765 | .0010744 | .5363202 | .0086192 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-08 Acquired: 12/5/2024 14:58:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3716103 | -.001916 | .0321511 |
| Stddev | .0020989 | .000510 | .0001596 |
| %RSD | .5648181 | 26.63586 | .4964949 |
| | | | |
| #1 | .3716633 | -.001355 | .0321675 |
| #2 | .3736822 | -.002041 | .0323019 |
| #3 | .3694854 | -.002352 | .0319839 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1792.843 | 48757.06 | 13629.78 | 1231.839 | 3055.763 |
| Stddev | 7.762 | 67.66 | 3.86 | 4.592 | 10.789 |
| %RSD | .4329219 | .1387725 | .0283289 | .3727598 | .3530677 |
| | | | | | |
| #1 | 1792.671 | 48831.99 | 13631.87 | 1235.622 | 3059.490 |
| #2 | 1800.690 | 48700.43 | 13625.32 | 1226.731 | 3064.194 |
| #3 | 1785.170 | 48738.76 | 13632.15 | 1233.165 | 3043.604 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-20 Acquired: 12/5/2024 15:17:07 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.010617 | -.016284 | .0002180 | .0051437 | -.001144 | .1503520 | .2057091 |
| Stddev | .002993 | .000884 | .0013381 | .0019773 | .000688 | .0003393 | .0016001 |
| %RSD | 28.18675 | 5.429764 | 613.8714 | 38.44086 | 60.10299 | .2256795 | .7778628 |
| #1 | -.014053 | -.015264 | -.000407 | .0029230 | -.000493 | .1503256 | .2040938 |
| #2 | -.008581 | -.016777 | .001754 | .0057945 | -.001076 | .1507038 | .2057398 |
| #3 | -.009217 | -.016813 | -.000694 | .0067135 | -.001863 | .1500267 | .2072937 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000859 | -.000261 | 5.563387 | .0018717 | .0043806 | .0014400 | 4.008662 |
| Stddev | .0000874 | .000091 | .039202 | .0002641 | .0000743 | .0004212 | .036238 |
| %RSD | 101.7594 | 34.73959 | .7046408 | 14.10972 | 1.695808 | 29.24697 | .9039968 |
| #1 | .0001694 | -.000310 | 5.607558 | .0019661 | .0044621 | .0012207 | 4.049247 |
| #2 | -.000005 | -.000317 | 5.549871 | .0015734 | .0043166 | .0019255 | 3.997191 |
| #3 | .000093 | -.000156 | 5.532731 | .0020756 | .0043631 | .0011737 | 3.979548 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.618711 | .6391099 | .0050095 | .0005891 | 332.8337 | .0003394 | .0420557 |
| Stddev | .016186 | .0142469 | .0001125 | .0001510 | 5.8799 | .0014787 | .0003614 |
| %RSD | .6180722 | 2.229170 | 2.245528 | 25.62541 | 1.766613 | 435.6887 | .8592399 |
| #1 | 2.636660 | .6287382 | .0051388 | .0007333 | 327.0496 | .0006622 | .0417155 |
| #2 | 2.614248 | .6553544 | .0049560 | .0004322 | 332.6465 | .0016300 | .0420167 |
| #3 | 2.605225 | .6332371 | .0049338 | .0006019 | 338.8049 | -.001274 | .0424351 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7233977 | .0032580 | -.000283 | .0014203 | -.000416 | .3595847 | .0071502 |
| Stddev | .0101152 | .0004517 | .000113 | .0005199 | .000175 | .0040523 | .0019293 |
| %RSD | 1.398294 | 13.86410 | 39.89948 | 36.60197 | 42.01584 | 1.126924 | 26.98242 |
| #1 | .7119280 | .0032047 | -.000374 | .0011349 | -.000616 | .3642593 | .0050617 |
| #2 | .7272214 | .0037339 | -.000320 | .0020204 | -.000295 | .3570688 | .0088659 |
| #3 | .7310436 | .0028353 | -.000157 | .0011058 | -.000336 | .3574261 | .0075230 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-20 Acquired: 12/5/2024 15:17:07 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .2418861 | -.002804 | .0389378 |
| Stddev | .0031046 | .000069 | .0004984 |
| %RSD | 1.283482 | 2.470098 | 1.279894 |
| | | | |
| #1 | .2452843 | -.002855 | .0383735 |
| #2 | .2391984 | -.002833 | .0391221 |
| #3 | .2411755 | -.002725 | .0393177 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1715.859 | 47745.40 | 13572.65 | 1174.238 | 2982.201 |
| Stddev | 14.975 | 60.28 | 40.13 | 2.031 | 13.611 |
| %RSD | .8727201 | .1262596 | .2956636 | .1729430 | .4563982 |
| | | | | | |
| #1 | 1731.139 | 47805.73 | 13618.84 | 1176.082 | 2996.350 |
| #2 | 1715.228 | 47685.16 | 13546.40 | 1172.062 | 2981.050 |
| #3 | 1701.210 | 47745.31 | 13552.71 | 1174.571 | 2969.202 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-14 Acquired: 12/5/2024 15:21:33 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.008270 | -.012430 | .0002423 | .0078644 | -.000908 | .2407969 | .2108905 |
| Stddev | .001889 | .001654 | .0011795 | .0012183 | .001007 | .0056188 | .0006147 |
| %RSD | 22.83953 | 13.30680 | 486.8198 | 15.49110 | 110.8616 | 2.333426 | .2914895 |
| #1 | -.009944 | -.014245 | .0005956 | .0067551 | -.002010 | .2370380 | .2102736 |
| #2 | -.006222 | -.012038 | .0012047 | .0091682 | -.000036 | .2380966 | .2108947 |
| #3 | -.008644 | -.011008 | -.001073 | .0076699 | -.000678 | .2472561 | .2115031 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000064 | -.000284 | 6.052750 | .0018392 | .0020460 | -.001562 | .4085969 |
| Stddev | .000017 | .000057 | .070689 | .0003578 | .0000825 | .000247 | .0035062 |
| %RSD | 26.10411 | 20.15984 | 1.167884 | 19.45616 | 4.031455 | 15.79272 | .8581071 |
| #1 | -.000079 | -.000263 | 6.099564 | .0014629 | .0021237 | -.001778 | .4123976 |
| #2 | -.000046 | -.000241 | 6.087251 | .0021752 | .0019595 | -.001616 | .4079045 |
| #3 | -.000066 | -.000349 | 5.971436 | .0018795 | .0020548 | -.001293 | .4054885 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.959459 | .5289785 | .0012630 | .0002599 | 316.9177 | -.000712 | .0258180 |
| Stddev | .014358 | .0114928 | .0005289 | .0000956 | 4.7281 | .000421 | .0002192 |
| %RSD | .7327710 | 2.172633 | 41.87833 | 36.77282 | 1.491908 | 59.15367 | .8490503 |
| #1 | 1.965919 | .5329197 | .0009812 | .0001699 | 317.0149 | -.000954 | .0256669 |
| #2 | 1.969453 | .5160337 | .0009346 | .0002495 | 312.1417 | -.000957 | .0257178 |
| #3 | 1.943006 | .5379822 | .0018731 | .0003602 | 321.5965 | -.000226 | .0260695 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5163068 | .0006537 | -.000439 | .0012108 | .0013374 | .2946064 | .0076958 |
| Stddev | .0107856 | .0002251 | .000108 | .0003063 | .0000674 | .0057793 | .0005689 |
| %RSD | 2.088981 | 34.43215 | 24.65482 | 25.29549 | 5.039402 | 1.961703 | 7.392627 |
| #1 | .5159072 | .0005624 | -.000467 | .0015593 | .0013897 | .3008101 | .0077056 |
| #2 | .5057266 | .0009101 | -.000530 | .0010888 | .0013611 | .2893748 | .0071220 |
| #3 | .5272866 | .0004886 | -.000319 | .0009843 | .0012613 | .2936341 | .0082597 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5052-14 Acquired: 12/5/2024 15:21:33 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .2861783 | -.002678 | .0424823 |
| Stddev | .0061330 | .000545 | .0001128 |
| %RSD | 2.143075 | 20.35167 | .2654227 |
| | | | |
| #1 | .2913536 | -.002352 | .0424426 |
| #2 | .2877772 | -.003307 | .0423948 |
| #3 | .2794042 | -.002374 | .0426096 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1783.179 | 48382.13 | 13393.73 | 1214.481 | 3054.553 |
| Stddev | 11.267 | 497.17 | 19.35 | 27.483 | 6.197 |
| %RSD | .6318321 | 1.027589 | .1444738 | 2.262922 | .2028907 |
| | | | | | |
| #1 | 1794.426 | 47868.09 | 13393.53 | 1189.044 | 3054.076 |
| #2 | 1783.218 | 48860.51 | 13374.48 | 1243.632 | 3060.976 |
| #3 | 1771.892 | 48417.77 | 13413.18 | 1210.768 | 3048.608 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV02 Acquired: 12/5/2024 15:34:32 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.766620 | 4.977236 | 4.967869 | 4.775961 | 4.736723 | 9.551975 | 9.478787 |
| Stddev | .011164 | .059507 | .007754 | .018217 | .023627 | .027641 | .033357 |
| %RSD | .2342220 | 1.195574 | .1560763 | .3814207 | .4987951 | .2893730 | .3519118 |
| #1 | 4.753747 | 5.013838 | 4.973101 | 4.756167 | 4.712438 | 9.530878 | 9.491570 |
| #2 | 4.772466 | 5.009296 | 4.971546 | 4.779696 | 4.738102 | 9.541783 | 9.503861 |
| #3 | 4.773648 | 4.908574 | 4.958961 | 4.792021 | 4.759631 | 9.583265 | 9.440929 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2558356 | 2.502794 | 25.52894 | 1.014655 | 2.475161 | 1.202152 | 4.950396 |
| Stddev | .0020205 | .003059 | .22942 | .004028 | .002799 | .004106 | .023434 |
| %RSD | .7897623 | .1222195 | .8986609 | .3969882 | .1131002 | .3415383 | .4733793 |
| #1 | .2581023 | 2.506323 | 25.77466 | 1.018186 | 2.478307 | 1.198058 | 4.977353 |
| #2 | .2551808 | 2.501137 | 25.49179 | 1.015511 | 2.472946 | 1.202129 | 4.938952 |
| #3 | .2542237 | 2.500920 | 25.32036 | 1.010267 | 2.474229 | 1.206270 | 4.934883 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.505064 | 24.90842 | 2.477435 | 1.225230 | 22.80222 | 2.492687 | 2.453736 |
| Stddev | .023737 | .17714 | .003349 | .002512 | .15316 | .010856 | .005619 |
| %RSD | .9475610 | .7111611 | .1351934 | .2050245 | .6717071 | .4354958 | .2290100 |
| #1 | 2.531973 | 25.09809 | 2.480737 | 1.227977 | 22.65705 | 2.504810 | 2.459658 |
| #2 | 2.496120 | 24.87990 | 2.477529 | 1.224662 | 22.78732 | 2.483867 | 2.448478 |
| #3 | 2.487097 | 24.74727 | 2.474040 | 1.223051 | 22.96229 | 2.489384 | 2.453073 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 22.59824 | 5.002486 | 4.864531 | 4.991476 | 4.885441 | 4.801394 | 5.078890 |
| Stddev | .18009 | .033458 | .008236 | .005627 | .017638 | .022495 | .014694 |
| %RSD | .7969422 | .6688298 | .1693051 | .1127248 | .3610346 | .4685131 | .2893161 |
| #1 | 22.43479 | 5.039220 | 4.855325 | 4.996472 | 4.905805 | 4.783608 | 5.077785 |
| #2 | 22.56861 | 4.994484 | 4.867068 | 4.992573 | 4.874963 | 4.793892 | 5.094106 |
| #3 | 22.79131 | 4.973755 | 4.871200 | 4.985381 | 4.875555 | 4.826681 | 5.064780 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV02 Acquired: 12/5/2024 15:34:32 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 4.876580 | 4.505396 | 4.944699 |
| Stddev | .025602 | .027248 | .011115 |
| %RSD | .5250058 | .6047883 | .2247858 |
| | | | |
| #1 | 4.897421 | 4.480702 | 4.932092 |
| #2 | 4.884317 | 4.500859 | 4.953085 |
| #3 | 4.848002 | 4.534629 | 4.948920 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2183.468 | 54412.44 | 13834.98 | 1463.883 | 3535.521 |
| Stddev | 10.271 | 9.35 | 68.64 | 1.786 | 7.907 |
| %RSD | .4703808 | .0171771 | .4961546 | .1219727 | .2236579 |
| | | | | | |
| #1 | 2193.669 | 54410.88 | 13760.20 | 1465.936 | 3542.759 |
| #2 | 2183.608 | 54422.47 | 13849.61 | 1463.020 | 3536.723 |
| #3 | 2173.129 | 54403.97 | 13895.13 | 1462.692 | 3527.082 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB02 Acquired: 12/5/2024 15:41:48 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0002652 | .0003782 | .0007926 | -.001777 | -.000777 | .0016224 | .0017608 |
| Stddev | .0007636 | .0010988 | .0009591 | .000188 | .000660 | .0011540 | .0002861 |
| %RSD | 287.9406 | 290.5207 | 121.0078 | 10.57007 | 84.92945 | 71.12906 | 16.24892 |
| #1 | .0000770 | .0016381 | .0015510 | -.001990 | -.000016 | .0012959 | .0014897 |
| #2 | .0011053 | -.000122 | -.000286 | -.001705 | -.001189 | .0006669 | .0017330 |
| #3 | -.000387 | -.000381 | .001112 | -.001636 | -.001127 | .0029045 | .0020598 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000650 | -.000053 | -.020327 | -.000066 | .0001534 | -.000802 | -.002174 |
| Stddev | .0000320 | .000016 | .005648 | .000130 | .0000975 | .000342 | .003908 |
| %RSD | 49.17854 | 30.68490 | 27.78781 | 196.6449 | 63.55800 | 42.63123 | 179.7310 |
| #1 | .0000697 | -.000037 | -.016010 | -.000126 | .0000602 | -.000852 | -.006344 |
| #2 | .0000944 | -.000069 | -.018250 | -.000155 | .0001454 | -.001116 | -.001583 |
| #3 | .0000310 | -.000051 | -.026719 | .000083 | .0002547 | -.000438 | .001404 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000676 | -.001498 | -.000234 | .0004082 | .0226742 | .0002511 | -.000452 |
| Stddev | .0001398 | .002074 | .000237 | .0001432 | .0122139 | .0006299 | .000136 |
| %RSD | 206.9829 | 138.4913 | 101.3700 | 35.07235 | 53.86682 | 250.8726 | 30.00106 |
| #1 | .0002247 | -.003373 | -.000066 | .0005448 | .0098175 | .0000193 | -.000389 |
| #2 | .0000208 | -.001850 | -.000131 | .0002592 | .0240818 | -.000230 | -.000607 |
| #3 | -.000043 | .000730 | -.000506 | .0004206 | .0341233 | .000964 | -.000359 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.013400 | -.002548 | -.000192 | -.000482 | -.000146 | -.003281 | -.004984 |
| Stddev | .007247 | .000313 | .000130 | .000287 | .000120 | .000951 | .001733 |
| %RSD | 54.08126 | 12.29680 | 67.89130 | 59.54778 | 82.10622 | 28.98250 | 34.77128 |
| #1 | -.020251 | -.002262 | -.000339 | -.000460 | -.000033 | -.002572 | -.003132 |
| #2 | -.014137 | -.002883 | -.000145 | -.000779 | -.000272 | -.004361 | -.006566 |
| #3 | -.005813 | -.002499 | -.000092 | -.000206 | -.000133 | -.002909 | -.005254 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB02 Acquired: 12/5/2024 15:41:48 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0008674 | .0007227 | -.000109 |
| Stddev | .0042978 | .0003865 | .000006 |
| %RSD | 495.4827 | 53.48440 | 5.918342 |
| | | | |
| #1 | -.002146 | .0003573 | -.000115 |
| #2 | .005789 | .0011273 | -.000109 |
| #3 | -.001041 | .0006833 | -.000102 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2422.960 | 58823.68 | 14136.51 | 1607.896 | 4185.275 |
| Stddev | 2.761 | 87.16 | 23.12 | 1.627 | 4.658 |
| %RSD | .1139437 | .1481664 | .1635800 | .1011832 | .1112998 |
| | | | | | |
| #1 | 2425.391 | 58856.17 | 14111.35 | 1606.972 | 4189.934 |
| #2 | 2419.959 | 58889.92 | 14156.84 | 1609.774 | 4180.618 |
| #3 | 2423.531 | 58724.94 | 14141.33 | 1606.941 | 4185.272 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165341TB Acquired: 12/5/2024 15:46:14 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.009841 | -.010599 | -.000599 | .0075675 | -.001107 | .0049194 |
| Stddev | .000370 | .000302 | .000964 | .0015542 | .000984 | .0026117 |
| %RSD | 3.763610 | 2.849883 | 160.9163 | 20.53816 | 88.90501 | 53.09038 |
| #1 | -.009482 | -.010447 | -.001713 | .0063407 | .000026 | .0052244 |
| #2 | -.010222 | -.010403 | -.000058 | .0070466 | -.001747 | .0073652 |
| #3 | -.009817 | -.010947 | -.000027 | .0093153 | -.001599 | .0021686 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001551 | -.000193 | -.000254 | -.016262 | .0012253 | -.000356 |
| Stddev | .000420 | .000058 | .000074 | .008551 | .0000516 | .000150 |
| %RSD | 27.11038 | 30.28277 | 29.26716 | 52.58249 | 4.214942 | 42.30542 |
| #1 | -.001086 | -.000225 | -.000204 | -.007214 | .0012259 | -.000216 |
| #2 | -.001662 | -.000125 | -.000218 | -.017363 | .0011733 | -.000515 |
| #3 | -.001905 | -.000228 | -.000340 | -.024209 | .0012765 | -.000336 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.008691 | .0105104 | .0014381 | .0027299 | .0011467 | .0003261 |
| Stddev | .000313 | .0048718 | .0001205 | .0092065 | .0002661 | .0003255 |
| %RSD | 3.597346 | 46.35196 | 8.376648 | 337.2451 | 23.20855 | 99.81296 |
| #1 | -.008901 | .0122762 | .0015695 | .0033740 | .0009838 | -.000002 |
| #2 | -.008332 | .0050019 | .0013329 | .0115974 | .0014538 | .000331 |
| #3 | -.008842 | .0142530 | .0014119 | -.006782 | .0010025 | .000649 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F 346.8312 | .0001815 | .0017796 | -.024916 | -.007055 | -.000100 |
| Stddev | 2.0318 | .0005110 | .0002218 | .010132 | .000678 | .000059 |
| %RSD | .5858216 | 281.4896 | 12.46045 | 40.66603 | 9.616062 | 59.26110 |
| #1 | 345.7045 | .0006653 | .0019834 | -.021660 | -.006565 | -.000131 |
| #2 | 345.6124 | -.000353 | .0018121 | -.036277 | -.006772 | -.000138 |
| #3 | 349.1767 | .000232 | .0015435 | -.016812 | -.007830 | -.000032 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165341TB Acquired: 12/5/2024 15:46:14 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0006426 | -.000559 | .0079721 | .0029202 | F .0256199 | -.002060 |
| Stddev | .0000755 | .000344 | .0018921 | .0044183 | .0011941 | .000097 |
| %RSD | 11.75560 | 61.51455 | 23.73391 | 151.2989 | 4.660989 | 4.714736 |
| #1 | .0007234 | -.000854 | .0067581 | .0001972 | .0262916 | -.002168 |
| #2 | .0006305 | -.000181 | .0070060 | .0005454 | .0263271 | -.002036 |
| #3 | .0005738 | -.000643 | .0101522 | .0080180 | .0242412 | -.001978 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.000176 |
| Stddev | .000017 |
| %RSD | 9.713646 |
| #1 | -.000196 |
| #2 | -.000163 |
| #3 | -.000169 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1892.383 | 48859.73 | 13292.22 | 1276.755 | 3167.265 |
| Stddev | 21.917 | 160.65 | 16.54 | 9.139 | 18.879 |
| %RSD | 1.158165 | .3287886 | .1244070 | .7158211 | .5960637 |
| #1 | 1912.168 | 48695.13 | 13300.64 | 1266.550 | 3178.393 |
| #2 | 1896.157 | 49016.11 | 13273.17 | 1284.186 | 3177.935 |
| #3 | 1868.824 | 48867.94 | 13302.84 | 1279.528 | 3145.467 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165363BL Acquired: 12/5/2024 15:50:47 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0011739 | -.001422 | -.000128 | .0005593 | -.002121 | -.000722 | -.000405 |
| Stddev | .0018629 | .000177 | .000681 | .0009340 | .000167 | .003072 | .000401 |
| %RSD | 158.6868 | 12.48505 | 531.5440 | 167.0017 | 7.850959 | 425.7553 | 98.98713 |
| #1 | .0002666 | -.001227 | .000444 | -.000460 | -.002289 | -.003404 | -.000647 |
| #2 | .0033166 | -.001463 | .000054 | .001374 | -.002117 | .002630 | -.000626 |
| #3 | -.000061 | -.001575 | -.000882 | .000764 | -.001956 | -.001391 | .000058 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000614 | .0000490 | -.003449 | -.000090 | -.000007 | -.000611 | -.000400 |
| Stddev | .0000407 | .0001027 | .002006 | .000151 | .000091 | .000285 | .002327 |
| %RSD | 66.26470 | 209.5460 | 58.14836 | 168.6178 | 1321.656 | 46.66241 | 581.7345 |
| #1 | .0000994 | -.000008 | -.001967 | -.000225 | -.000003 | -.000726 | -.002025 |
| #2 | .0000185 | -.000012 | -.002649 | -.000118 | .000082 | -.000286 | .002266 |
| #3 | .0000663 | .000168 | -.005731 | .000074 | -.000100 | -.000820 | -.001441 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001374 | -.004194 | -.000463 | .0003189 | .1168843 | .0006348 | -.000117 |
| Stddev | .0002326 | .009257 | .000259 | .0001353 | .0117386 | .0007729 | .000142 |
| %RSD | 169.3398 | 220.7431 | 55.89858 | 42.41215 | 10.04288 | 121.7603 | 121.1323 |
| #1 | .0003979 | -.012014 | -.000467 | .0002258 | .1034873 | .0012804 | -.000224 |
| #2 | -.000050 | .006027 | -.000203 | .0004741 | .1217988 | -.000222 | -.000172 |
| #3 | .000064 | -.006594 | -.000721 | .0002569 | .1253670 | .000846 | .000044 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0568447 | -.005843 | -.000260 | -.000753 | -.000542 | -.001900 | -.004081 |
| Stddev | .0141083 | .000281 | .000219 | .000364 | .000259 | .003437 | .001368 |
| %RSD | 24.81895 | 4.811698 | 84.10159 | 48.36093 | 47.80477 | 180.8768 | 33.51924 |
| #1 | .0483548 | -.005920 | -.000434 | -.000555 | -.000622 | .001726 | -.005661 |
| #2 | .0490487 | -.006078 | -.000014 | -.000530 | -.000752 | -.005109 | -.003303 |
| #3 | .0731306 | -.005532 | -.000333 | -.001173 | -.000253 | -.002318 | -.003280 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165363BL Acquired: 12/5/2024 15:50:47 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0030173 | .0014729 | -.000131 |
| Stddev | .0002687 | .0005318 | .000008 |
| %RSD | 8.904730 | 36.10491 | 5.992076 |
| | | | |
| #1 | .0027186 | .0018965 | -.000122 |
| #2 | .0032393 | .0016461 | -.000136 |
| #3 | .0030941 | .0008761 | -.000136 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2293.764 | 56418.72 | 13720.73 | 1531.387 | 3977.992 |
| Stddev | 9.248 | 130.55 | 31.21 | 12.434 | 3.792 |
| %RSD | .4031895 | .2314012 | .2274788 | .8119401 | .0953200 |
| | | | | | |
| #1 | 2302.052 | 56540.05 | 13685.98 | 1542.983 | 3980.007 |
| #2 | 2283.788 | 56280.57 | 13746.39 | 1518.258 | 3973.619 |
| #3 | 2295.452 | 56435.55 | 13729.81 | 1532.920 | 3980.352 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165363BS Acquired: 12/5/2024 15:55:11 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7465514 | 2.096947 | 1.016128 | 1.871008 | .7390510 | 1.989990 |
| Stddev | .0006217 | .028561 | .002220 | .005633 | .0033464 | .008735 |
| %RSD | .0832764 | 1.362033 | .2184953 | .3010505 | .4527949 | .4389564 |
| #1 | .7458377 | 2.129054 | 1.018605 | 1.876971 | .7405000 | 1.984558 |
| #2 | .7468413 | 2.074369 | 1.015464 | 1.870275 | .7414287 | 1.985346 |
| #3 | .7469753 | 2.087416 | 1.014316 | 1.865777 | .7352243 | 2.000067 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2029569 | .2295306 | .2066862 | 1.128234 | .4296139 | .2073237 |
| Stddev | .0002694 | .0011404 | .0003416 | .009510 | .0012590 | .0006031 |
| %RSD | .1327316 | .4968484 | .1652574 | .8428961 | .2930626 | .2908823 |
| #1 | .2026878 | .2292088 | .2070806 | 1.138844 | .4288300 | .2079985 |
| #2 | .2032266 | .2307973 | .2064865 | 1.125381 | .4310662 | .2068374 |
| #3 | .2029564 | .2285857 | .2064916 | 1.120478 | .4289455 | .2071352 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3034028 | 3.014765 | .2221873 | 2.118203 | .5205611 | .0760163 |
| Stddev | .0007208 | .011522 | .0008703 | .009847 | .0010601 | .0002300 |
| %RSD | .2375549 | .3821891 | .3917181 | .4648795 | .2036432 | .3025227 |
| #1 | .3041975 | 3.007835 | .2215009 | 2.111038 | .5217726 | .0757523 |
| #2 | .3032194 | 3.008394 | .2218949 | 2.114139 | .5198034 | .0761730 |
| #3 | .3027915 | 3.028066 | .2231662 | 2.129431 | .5201075 | .0761237 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.734265 | .3196699 | .2084805 | 8.787496 | .3178964 | .4027423 |
| Stddev | .005341 | .0005976 | .0001034 | .012095 | .0007898 | .0010910 |
| %RSD | .1953417 | .1869516 | .0495980 | .1376432 | .2484553 | .2708834 |
| #1 | 2.740290 | .3191802 | .2085867 | 8.800158 | .3174479 | .4040000 |
| #2 | 2.730109 | .3194936 | .2083801 | 8.786272 | .3188084 | .4020524 |
| #3 | 2.732396 | .3203358 | .2084748 | 8.776060 | .3174329 | .4021744 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165363BS Acquired: 12/5/2024 15:55:11 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7156680 | .2074933 | F .6820490 | 5.927535 | F -.010969 | .1983102 |
| Stddev | .0029553 | .0004678 | .0010495 | .001864 | .003351 | .0004880 |
| %RSD | .4129431 | .2254269 | .1538779 | .0314494 | 30.54709 | .2460705 |
| #1 | .7180128 | .2072836 | .6829037 | 5.929686 | -.013788 | .1985939 |
| #2 | .7166427 | .2080292 | .6808776 | 5.926540 | -.007264 | .1985900 |
| #3 | .7123484 | .2071670 | .6823658 | 5.926380 | -.011856 | .1977468 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2152272 |
| Stddev | .0004070 |
| %RSD | .1891175 |
| #1 | .2153027 |
| #2 | .2155911 |
| #3 | .2147876 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2329.192 | 56192.99 | 13227.75 | 1561.324 | 3881.788 |
| Stddev | 6.071 | 104.51 | 7.10 | 6.711 | 10.631 |
| %RSD | .2606561 | .1859833 | .0536515 | .4298465 | .2738655 |
| #1 | 2324.687 | 56143.77 | 13219.59 | 1554.633 | 3873.214 |
| #2 | 2326.794 | 56313.03 | 13231.27 | 1568.055 | 3878.467 |
| #3 | 2336.097 | 56122.18 | 13232.41 | 1561.284 | 3893.683 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165328BL Acquired: 12/5/2024 15:59:18 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0010602 | .0014278 | .0003242 | .0000000 | -.001698 | .0018880 | .0029685 |
| Stddev | .0007214 | .0017560 | .0003337 | .0007004 | .000510 | .0006303 | .0002217 |
| %RSD | 68.04606 | 122.9896 | 102.9300 | 1550742. | 30.01149 | 33.38337 | 7.469572 |
| #1 | .0010693 | .0020176 | .0003275 | -.000354 | -.001718 | .0013120 | .0031561 |
| #2 | .0017770 | .0028129 | -.000011 | -.000453 | -.001179 | .0017907 | .0027238 |
| #3 | .0003342 | -.000547 | .000656 | .000807 | -.002198 | .0025612 | .0030254 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000638 | .0000336 | -.008104 | -.000208 | .0001357 | -.000721 | -.001599 |
| Stddev | .0000502 | .0000417 | .005165 | .000320 | .0001996 | .000086 | .002313 |
| %RSD | 78.74019 | 124.1102 | 63.72883 | 153.5680 | 147.0511 | 11.90050 | 144.6574 |
| #1 | .0001128 | .0000463 | -.003819 | -.000398 | .0002432 | -.000789 | .000989 |
| #2 | .0000124 | .0000674 | -.006655 | -.000389 | .0002585 | -.000748 | -.002321 |
| #3 | .0000662 | -.000013 | -.013839 | .000161 | -.000095 | -.000625 | -.003465 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000082 | -.002876 | -.000199 | .0001477 | .0309397 | .0004531 | -.000614 |
| Stddev | .000067 | .009123 | .000359 | .0002717 | .0107746 | .0011763 | .000088 |
| %RSD | 81.52344 | 317.2612 | 180.7004 | 183.9307 | 34.82455 | 259.5881 | 14.36449 |
| #1 | -.000155 | -.010079 | .000206 | .0004488 | .0197305 | -.000331 | -.000516 |
| #2 | -.000063 | -.005931 | -.000479 | .0000736 | .0318690 | -.000115 | -.000687 |
| #3 | -.000026 | .007383 | -.000322 | -.000079 | .0412195 | .001806 | -.000640 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000706 | -.006150 | -.000304 | -.000982 | -.000773 | -.004870 | -.002938 |
| Stddev | .005540 | .000807 | .000109 | .000654 | .000207 | .002027 | .001086 |
| %RSD | 785.1923 | 13.11808 | 35.92345 | 66.63655 | 26.77668 | 41.62946 | 36.96800 |
| #1 | -.001203 | -.005438 | -.000301 | -.001354 | -.000535 | -.003424 | -.002705 |
| #2 | -.005980 | -.007027 | -.000197 | -.001365 | -.000911 | -.007187 | -.004121 |
| #3 | .005066 | -.005987 | -.000415 | -.000226 | -.000872 | -.003999 | -.001987 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165328BL Acquired: 12/5/2024 15:59:18 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000492 | -.000186 | -.000121 |
| Stddev | .000352 | .000551 | .000004 |
| %RSD | 71.50099 | 295.4959 | 3.211395 |
| | | | |
| #1 | -.000241 | -.000723 | -.000125 |
| #2 | -.000894 | .000377 | -.000121 |
| #3 | -.000341 | -.000214 | -.000117 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2487.332 | 60042.15 | 13883.31 | 1706.953 | 4231.150 |
| Stddev | 12.045 | 137.32 | 54.46 | 11.450 | 12.107 |
| %RSD | .4842444 | .2287124 | .3922610 | .6707731 | .2861446 |
| | | | | | |
| #1 | 2501.239 | 60127.12 | 13883.17 | 1716.263 | 4244.691 |
| #2 | 2480.454 | 60115.61 | 13937.84 | 1710.429 | 4227.390 |
| #3 | 2480.301 | 59883.72 | 13828.92 | 1694.169 | 4221.369 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165371BS Acquired: 12/5/2024 16:07:39 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7253309 | 2.057165 | .9920389 | 1.813512 | .7374560 | 1.920369 |
| Stddev | .0023748 | .006152 | .0009798 | .006115 | .0034381 | .010956 |
| %RSD | .3274100 | .2990726 | .0987640 | .3372102 | .4662082 | .5705049 |
| #1 | .7278836 | 2.063972 | .9931692 | 1.812772 | .7370261 | 1.933018 |
| #2 | .7249222 | 2.052001 | .9914325 | 1.819964 | .7410888 | 1.913868 |
| #3 | .7231870 | 2.055522 | .9915149 | 1.807801 | .7342531 | 1.914220 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1969841 | .2266663 | .2021342 | 1.092921 | .4209073 | .2016130 |
| Stddev | .0014841 | .0019351 | .0007535 | .011168 | .0011312 | .0003506 |
| %RSD | .7534180 | .8537223 | .3727939 | 1.021871 | .2687486 | .1738797 |
| #1 | .1986118 | .2288983 | .2030019 | 1.098409 | .4200078 | .2016560 |
| #2 | .1957061 | .2256413 | .2016437 | 1.080071 | .4221773 | .2012430 |
| #3 | .1966343 | .2254594 | .2017571 | 1.100284 | .4205368 | .2019401 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2921517 | 2.927181 | .2164708 | 2.068773 | .5060632 | .0742879 |
| Stddev | .0004512 | .027419 | .0018400 | .023064 | .0007990 | .0000959 |
| %RSD | .1544471 | .9366923 | .8500193 | 1.114873 | .1578937 | .1291061 |
| #1 | .2920181 | 2.921787 | .2175733 | 2.084957 | .5065668 | .0743401 |
| #2 | .2926546 | 2.902860 | .2143467 | 2.042364 | .5064810 | .0741772 |
| #3 | .2917823 | 2.956896 | .2174925 | 2.078998 | .5051419 | .0743463 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.570123 | .3126857 | .2026498 | 8.382845 | .3124833 | .4011446 |
| Stddev | .007588 | .0017588 | .0010432 | .034039 | .0044890 | .0004141 |
| %RSD | .2952228 | .5624717 | .5148017 | .4060538 | 1.436555 | .1032253 |
| #1 | 2.561531 | .3147029 | .2032447 | 8.344133 | .3176664 | .4009647 |
| #2 | 2.572937 | .3114736 | .2032596 | 8.408091 | .3099462 | .4016182 |
| #3 | 2.575903 | .3118806 | .2014452 | 8.396310 | .3098374 | .4008508 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165371BS Acquired: 12/5/2024 16:07:39 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7200295 | .2080094 | F .6788848 | 5.784837 | F -.011276 | .1906183 |
| Stddev | .0019943 | .0021627 | .0076987 | .009443 | .001497 | .0015489 |
| %RSD | .2769803 | 1.039707 | 1.134021 | .1632436 | 13.27626 | .8125936 |
| | | | | | | |
| #1 | .7218454 | .2100429 | .6843242 | 5.793482 | -.012707 | .1920998 |
| #2 | .7178951 | .2057373 | .6822544 | 5.786270 | -.011402 | .1890098 |
| #3 | .7203479 | .2082481 | .6700758 | 5.774759 | -.009721 | .1907454 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2079058 |
| Stddev | .0015090 |
| %RSD | .7258257 |
| | |
| #1 | .2096384 |
| #2 | .2068793 |
| #3 | .2071997 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2440.281 | 58605.01 | 13636.22 | 1638.206 | 4045.531 |
| Stddev | 7.210 | 94.76 | 130.98 | 4.132 | 6.097 |
| %RSD | .2954633 | .1616901 | .9605465 | .2522480 | .1507113 |
| | | | | | |
| #1 | 2441.448 | 58657.91 | 13488.67 | 1642.447 | 4041.505 |
| #2 | 2432.559 | 58661.52 | 13738.78 | 1637.978 | 4042.541 |
| #3 | 2446.837 | 58495.62 | 13681.20 | 1634.192 | 4052.545 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165328BS Acquired: 12/5/2024 16:12:44 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7259329 | 2.063475 | .9834310 | 1.823952 | .7187410 | 1.909198 |
| Stddev | .0023281 | .017805 | .0033709 | .005828 | .0028234 | .006576 |
| %RSD | .3206992 | .8628457 | .3427728 | .3195401 | .3928328 | .3444641 |
| #1 | .7232491 | 2.055325 | .9827275 | 1.820010 | .7204713 | 1.901674 |
| #2 | .7271411 | 2.051204 | .9804673 | 1.821199 | .7154829 | 1.912070 |
| #3 | .7274084 | 2.083896 | .9870981 | 1.830647 | .7202688 | 1.913851 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1942945 | .2194155 | .1994547 | 1.069632 | .4152426 | .1995887 |
| Stddev | .0001647 | .0007926 | .0001944 | .011470 | .0007787 | .0004215 |
| %RSD | .0847773 | .3612432 | .0974452 | 1.072364 | .1875228 | .2111843 |
| #1 | .1941044 | .2193311 | .1995357 | 1.072873 | .4160085 | .1993440 |
| #2 | .1943913 | .2186685 | .1992329 | 1.056890 | .4144517 | .1993466 |
| #3 | .1943880 | .2202470 | .1995954 | 1.079134 | .4152675 | .2000754 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2915094 | 2.927169 | .2126901 | 2.034711 | .5002063 | .0735471 |
| Stddev | .0008468 | .016999 | .0010668 | .017442 | .0009857 | .0000633 |
| %RSD | .2904813 | .5807417 | .5015750 | .8572408 | .1970624 | .0861350 |
| #1 | .2921006 | 2.908080 | .2114904 | 2.039831 | .5012518 | .0736202 |
| #2 | .2905393 | 2.932752 | .2130478 | 2.015282 | .5000733 | .0735138 |
| #3 | .2918883 | 2.940675 | .2135320 | 2.049021 | .4992939 | .0735074 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.601818 | .3081601 | .2018224 | F 8.457453 | .3013383 | .3881217 |
| Stddev | .013213 | .0011423 | .0005157 | .021047 | .0011175 | .0007188 |
| %RSD | .5078506 | .3706739 | .2555409 | .2488589 | .3708469 | .1851882 |
| #1 | 2.592771 | .3087861 | .2012619 | 8.447433 | .3020345 | .3877892 |
| #2 | 2.616981 | .3068416 | .2019282 | 8.443287 | .3019312 | .3876295 |
| #3 | 2.595700 | .3088525 | .2022770 | 8.481638 | .3000493 | .3889466 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165328BS Acquired: 12/5/2024 16:12:44 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6897586 | .1990719 | F .6611234 | 5.733579 | F -.011395 | .1898562 |
| Stddev | .0015242 | .0005653 | .0060954 | .019030 | .001760 | .0008341 |
| %RSD | .2209823 | .2839715 | .9219805 | .3319040 | 15.44960 | .4393497 |
| #1 | .6908286 | .1995168 | .6555219 | 5.720102 | -.012392 | .1892157 |
| #2 | .6880134 | .1984358 | .6676149 | 5.725287 | -.012430 | .1907994 |
| #3 | .6904339 | .1992632 | .6602334 | 5.755348 | -.009362 | .1895534 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2076384 |
| Stddev | .0001100 |
| %RSD | .0529627 |
| #1 | .2076179 |
| #2 | .2075401 |
| #3 | .2077571 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2405.737 | 57744.82 | 13698.83 | 1584.845 | 4016.037 |
| Stddev | 1.638 | 140.22 | 20.74 | 3.161 | 3.398 |
| %RSD | .0680730 | .2428324 | .1513635 | .1994238 | .0846230 |
| #1 | 2404.079 | 57658.45 | 13674.94 | 1581.920 | 4012.146 |
| #2 | 2407.354 | 57669.39 | 13709.37 | 1584.416 | 4017.539 |
| #3 | 2405.778 | 57906.61 | 13712.17 | 1588.198 | 4018.425 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165287BL Acquired: 12/5/2024 16:16:47 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0013293 | .0005499 | -.000112 | .0006154 | -.002110 | -.001176 | .0011443 |
| Stddev | .0007339 | .0004129 | .000778 | .0004094 | .000557 | .003030 | .0003812 |
| %RSD | 55.21210 | 75.09165 | 694.9923 | 66.52534 | 26.38271 | 257.7323 | 33.31035 |
| #1 | .0016593 | .0003245 | -.000988 | .0009973 | -.002694 | .000897 | .0014926 |
| #2 | .0018404 | .0002986 | .000500 | .0001832 | -.002049 | -.004653 | .0012033 |
| #3 | .0004883 | .0010264 | .000152 | .0006656 | -.001586 | .000229 | .0007371 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000221 | .0000305 | -.016397 | -.000259 | .0000170 | -.000838 | .0021431 |
| Stddev | .0000389 | .0000718 | .003778 | .000213 | .0000875 | .000099 | .0012001 |
| %RSD | 176.0603 | 235.5162 | 23.03933 | 82.26535 | 515.2105 | 11.76945 | 55.99689 |
| #1 | .0000455 | .0000351 | -.019314 | -.000324 | .0000962 | -.000799 | .0032317 |
| #2 | -.000023 | -.000043 | -.012130 | -.000432 | -.000077 | -.000766 | .0023413 |
| #3 | .000044 | .000100 | -.017747 | -.000021 | .000032 | -.000951 | .0008563 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000747 | .0011500 | -.000165 | .0000669 | -.001363 | .0006543 | -.000396 |
| Stddev | .0001979 | .0138745 | .000114 | .0001750 | .010812 | .0004924 | .000115 |
| %RSD | 264.9964 | 1206.513 | 68.77307 | 261.6132 | 793.1818 | 75.26064 | 28.95093 |
| #1 | .0002931 | -.009911 | -.000228 | .0000897 | -.013015 | .0004822 | -.000502 |
| #2 | -.000093 | .016718 | -.000235 | -.000118 | .000580 | .0012096 | -.000274 |
| #3 | .000024 | -.003357 | -.000034 | .000229 | .008345 | .0002710 | -.000412 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.042959 | -.007337 | -.000323 | -.000833 | -.000416 | -.001340 | -.005012 |
| Stddev | .015895 | .000564 | .000242 | .000450 | .000203 | .002436 | .002807 |
| %RSD | 37.00114 | 7.681268 | 74.85221 | 54.00097 | 48.86467 | 181.7801 | 56.00825 |
| #1 | -.061078 | -.006747 | -.000553 | -.001302 | -.000634 | .001463 | -.007913 |
| #2 | -.036436 | -.007870 | -.000071 | -.000405 | -.000383 | -.002538 | -.004813 |
| #3 | -.031363 | -.007394 | -.000346 | -.000792 | -.000231 | -.002944 | -.002309 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165287BL Acquired: 12/5/2024 16:16:47 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.001131 | -.000286 | -.000149 |
| Stddev | .001854 | .000415 | .000019 |
| %RSD | 163.9564 | 145.2807 | 12.86311 |
| | | | |
| #1 | -.001919 | -.000352 | -.000162 |
| #2 | .000987 | -.000664 | -.000157 |
| #3 | -.002461 | .000159 | -.000127 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2435.873 | 58702.97 | 13989.13 | 1631.775 | 4177.116 |
| Stddev | 4.357 | 197.87 | 12.73 | 23.748 | 6.809 |
| %RSD | .1788694 | .3370738 | .0910041 | 1.455324 | .1630039 |
| | | | | | |
| #1 | 2440.734 | 58565.49 | 13976.04 | 1617.609 | 4183.935 |
| #2 | 2434.566 | 58613.68 | 14001.47 | 1618.524 | 4170.318 |
| #3 | 2432.319 | 58929.76 | 13989.87 | 1659.191 | 4177.094 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165287BS Acquired: 12/5/2024 16:21:08 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7245646 | 2.048365 | .9781504 | 1.819304 | .7168055 | 1.904823 | .1951203 |
| Stddev | .0068502 | .024121 | .0024891 | .007313 | .0034104 | .001329 | .0007388 |
| %RSD | .9454207 | 1.177589 | .2544734 | .4019869 | .4757739 | .0697460 | .3786488 |
| #1 | .7298368 | 2.061277 | .9808761 | 1.827714 | .7191954 | 1.903299 | .1943784 |
| #2 | .7168218 | 2.063282 | .9759979 | 1.814441 | .7129001 | 1.905733 | .1958561 |
| #3 | .7270352 | 2.020537 | .9775770 | 1.815755 | .7183211 | 1.905438 | .1951265 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2179075 | .1985811 | 1.066849 | .4112511 | .1988497 | .2911779 | 2.920927 |
| Stddev | .0001434 | .0002227 | .011815 | .0015243 | .0003416 | .0010928 | .015184 |
| %RSD | .0658084 | .1121586 | 1.107511 | .3706586 | .1718046 | .3752930 | .5198453 |
| #1 | .2180340 | .1988103 | 1.055939 | .4128505 | .1991015 | .2920596 | 2.904275 |
| #2 | .2177517 | .1985675 | 1.065208 | .4110877 | .1989867 | .2899553 | 2.924500 |
| #3 | .2179369 | .1983655 | 1.079398 | .4098150 | .1984608 | .2915187 | 2.934006 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2130664 | 2.013968 | .4992747 | .0731963 | 2.587273 | .3084228 | .2013021 |
| Stddev | .0017181 | .017503 | .0006559 | .0004525 | .005892 | .0022988 | .0006524 |
| %RSD | .8063633 | .8690643 | .1313601 | .6181518 | .2277360 | .7453546 | .3240751 |
| #1 | .2112053 | 1.996455 | .4985931 | .0735490 | 2.593817 | .3064868 | .2005652 |
| #2 | .2134020 | 2.013988 | .4999013 | .0733538 | 2.585616 | .3078180 | .2015352 |
| #3 | .2145919 | 2.031460 | .4993296 | .0726862 | 2.582387 | .3109636 | .2018059 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 8.430256 | .3017378 | .3881593 | .6883191 | .1976366 | .6595099 | 5.692405 |
| Stddev | .029762 | .0011549 | .0011386 | .0003405 | .0003039 | .0054177 | .012837 |
| %RSD | .3530321 | .3827315 | .2933272 | .0494703 | .1537707 | .8214784 | .2255120 |
| #1 | 8.433722 | .3027071 | .3894663 | .6882580 | .1973576 | .6537896 | 5.706980 |
| #2 | 8.458134 | .3004601 | .3873822 | .6886860 | .1979604 | .6601770 | 5.687454 |
| #3 | 8.398914 | .3020463 | .3876294 | .6880132 | .1975917 | .6645632 | 5.682781 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165287BS Acquired: 12/5/2024 16:21:08 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.008875 | .1893041 | .2064632 |
| Stddev | .002334 | .0005065 | .0002673 |
| %RSD | 26.29821 | .2675426 | .1294709 |
| | | | |
| #1 | -.011269 | .1891392 | .2066047 |
| #2 | -.006606 | .1889007 | .2066300 |
| #3 | -.008751 | .1898725 | .2061549 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2391.333 | 57995.29 | 13730.71 | 1599.601 | 3994.506 |
| Stddev | 10.957 | 95.46 | 22.05 | 4.857 | 9.094 |
| %RSD | .4582028 | .1645912 | .1606024 | .3036630 | .2276693 |
| | | | | | |
| #1 | 2382.332 | 57956.33 | 13741.78 | 1601.430 | 3985.889 |
| #2 | 2403.534 | 57925.47 | 13705.32 | 1603.278 | 4004.012 |
| #3 | 2388.133 | 58104.06 | 13745.04 | 1594.094 | 3993.617 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165370BL Acquired: 12/5/2024 16:25:09 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0008343 | -.000129 | .0004367 | -.000844 | -.001760 | .0011732 | .0010233 |
| Stddev | .0010133 | .000589 | .0009317 | .000777 | .000563 | .0024153 | .0002702 |
| %RSD | 121.4551 | 457.4601 | 213.3538 | 92.08393 | 31.99501 | 205.8757 | 26.40170 |
| #1 | .0017720 | -.000022 | .0004597 | -.000447 | -.002103 | .0000771 | .0009432 |
| #2 | -.000241 | .000400 | .0013566 | -.000345 | -.002069 | .0039422 | .0013245 |
| #3 | .000972 | -.000763 | -.000506 | -.001739 | -.001110 | -.000500 | .0008022 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000953 | .0000274 | -.012015 | -.000152 | .0001477 | -.000787 | -.001895 |
| Stddev | .0000031 | .0000819 | .006070 | .000325 | .0000533 | .000011 | .001333 |
| %RSD | 3.279941 | 299.3736 | 50.51957 | 214.4358 | 36.09857 | 1.353982 | 70.36245 |
| #1 | .0000927 | .0001217 | -.010017 | -.000525 | .0002092 | -.000798 | -.002564 |
| #2 | .0000988 | -.000026 | -.007196 | -.000002 | .0001151 | -.000777 | -.000360 |
| #3 | .0000945 | -.000014 | -.018832 | .000072 | .0001187 | -.000785 | -.002761 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000064 | -.002747 | -.000262 | .0002843 | -.009967 | -.000432 | -.000455 |
| Stddev | .000150 | .002391 | .000286 | .0002058 | .010161 | .000495 | .000139 |
| %RSD | 234.3941 | 87.04890 | 109.3766 | 72.39112 | 101.9445 | 114.4388 | 30.51766 |
| #1 | .000013 | -.002058 | .000059 | .0004305 | -.021405 | .000070 | -.000341 |
| #2 | -.000237 | -.005406 | -.000492 | .0003734 | -.006513 | -.000447 | -.000415 |
| #3 | .000032 | -.000775 | -.000352 | .0000489 | -.001984 | -.000919 | -.000610 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.023208 | -.007886 | -.000293 | -.000158 | .0000353 | -.003668 | -.004088 |
| Stddev | .003718 | .000430 | .000082 | .000658 | .0000891 | .002025 | .000811 |
| %RSD | 16.02195 | 5.457230 | 27.96305 | 416.7287 | 252.3583 | 55.20264 | 19.84831 |
| #1 | -.025844 | -.008154 | -.000385 | -.000916 | .0000572 | -.003993 | -.004876 |
| #2 | -.024826 | -.008116 | -.000228 | .000174 | -.000063 | -.001500 | -.003255 |
| #3 | -.018955 | -.007390 | -.000265 | .000269 | .000112 | -.005509 | -.004132 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165370BL Acquired: 12/5/2024 16:25:09 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.001629 | -.000630 | -.000128 |
| Stddev | .001386 | .000258 | .000008 |
| %RSD | 85.06265 | 40.86586 | 5.951710 |
| | | | |
| #1 | -.003084 | -.000474 | -.000135 |
| #2 | -.000326 | -.000490 | -.000120 |
| #3 | -.001476 | -.000928 | -.000130 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2407.454 | 58221.43 | 13997.88 | 1604.754 | 4132.437 |
| Stddev | 1.473 | 56.18 | 49.12 | 8.770 | 5.208 |
| %RSD | .0611676 | .0964975 | .3509350 | .5464893 | .1260286 |
| | | | | | |
| #1 | 2409.142 | 58242.32 | 13944.51 | 1597.147 | 4137.342 |
| #2 | 2406.786 | 58264.17 | 14041.21 | 1614.346 | 4126.971 |
| #3 | 2406.434 | 58157.79 | 14007.90 | 1602.768 | 4132.998 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165370BS Acquired: 12/5/2024 16:29:30 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7205016 | 2.068362 | .9849666 | 1.794039 | .7063897 | 1.918875 |
| Stddev | .0019370 | .015025 | .0008337 | .003841 | .0014874 | .003730 |
| %RSD | .2688384 | .7264361 | .0846390 | .2140826 | .2105610 | .1943598 |
| #1 | .7226976 | 2.058656 | .9858635 | 1.797941 | .7078816 | 1.919475 |
| #2 | .7190359 | 2.060761 | .9848211 | 1.793912 | .7063807 | 1.922268 |
| #3 | .7197714 | 2.085669 | .9842153 | 1.790263 | .7049068 | 1.914881 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1960747 | .2232108 | .2005383 | 1.088406 | .4176857 | .2005849 |
| Stddev | .0006096 | .0008936 | .0004782 | .002349 | .0005415 | .0004119 |
| %RSD | .3109008 | .4003594 | .2384392 | .2158344 | .1296357 | .2053240 |
| #1 | .1961570 | .2240039 | .2010884 | 1.086117 | .4179646 | .2010461 |
| #2 | .1954282 | .2222425 | .2003033 | 1.088290 | .4180309 | .2004545 |
| #3 | .1966390 | .2233858 | .2002230 | 1.090811 | .4170616 | .2002539 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2894301 | 2.927702 | .2155626 | 2.063908 | .5030755 | .0737206 |
| Stddev | .0011028 | .009488 | .0003899 | .009506 | .0010129 | .0005769 |
| %RSD | .3810228 | .3240665 | .1808819 | .4605979 | .2013409 | .7825011 |
| #1 | .2902898 | 2.921921 | .2151215 | 2.074771 | .5038799 | .0739589 |
| #2 | .2898138 | 2.938651 | .2158613 | 2.059842 | .5034086 | .0741402 |
| #3 | .2881867 | 2.922532 | .2157052 | 2.057111 | .5019380 | .0730628 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.557592 | .3110550 | .2022271 | 8.376442 | .3062778 | .3860100 |
| Stddev | .012687 | .0017370 | .0008555 | .026927 | .0015301 | .0006880 |
| %RSD | .4960499 | .5584230 | .4230154 | .3214654 | .4995899 | .1782457 |
| #1 | 2.544473 | .3121187 | .2016303 | 8.349414 | .3080398 | .3867641 |
| #2 | 2.558506 | .3090505 | .2032071 | 8.403267 | .3055093 | .3858496 |
| #3 | 2.569798 | .3119957 | .2018438 | 8.376646 | .3052842 | .3854164 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165370BS Acquired: 12/5/2024 16:29:30 Type: Unk
Method: NON EPA-6010-200.7(v2493) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6937787 | .1997409 | F .6567605 | 5.778652 | F -.007481 | .1884914 |
| Stddev | .0009910 | .0003024 | .0054605 | .022478 | .003742 | .0002809 |
| %RSD | .1428456 | .1513705 | .8314331 | .3889890 | 50.02257 | .1490029 |
| #1 | .6944316 | .2000291 | .6570826 | 5.778036 | -.011764 | .1887250 |
| #2 | .6926383 | .1997674 | .6620529 | 5.756488 | -.005841 | .1881798 |
| #3 | .6942660 | .1994261 | .6511461 | 5.801432 | -.004839 | .1885696 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2067126 |
| Stddev | .0000252 |
| %RSD | .0122104 |
| #1 | .2067165 |
| #2 | .2066856 |
| #3 | .2067357 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2453.022 | 58374.87 | 13679.95 | 1617.660 | 4057.067 |
| Stddev | 11.436 | 101.28 | 51.07 | 6.396 | 19.586 |
| %RSD | .4662171 | .1734992 | .3733474 | .3953672 | .4827679 |
| #1 | 2441.461 | 58295.58 | 13621.04 | 1613.908 | 4036.389 |
| #2 | 2453.274 | 58340.08 | 13707.04 | 1614.028 | 4059.471 |
| #3 | 2464.330 | 58488.97 | 13711.77 | 1625.045 | 4075.340 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV03 Acquired: 12/5/2024 16:42:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.857435 | 5.160840 | 5.022560 | 4.893933 | 4.838480 | 9.825786 | 9.794788 |
| Stddev | .011225 | .029431 | .014486 | .013714 | .013903 | .020497 | .062521 |
| %RSD | .2310869 | .5702833 | .2884274 | .2802348 | .2873523 | .2085999 | .6383065 |
| | | | | | | | |
| #1 | 4.848613 | 5.177494 | 5.037033 | 4.880142 | 4.822566 | 9.816645 | 9.724494 |
| #2 | 4.853623 | 5.126858 | 5.022585 | 4.894087 | 4.844601 | 9.811449 | 9.844179 |
| #3 | 4.870070 | 5.178169 | 5.008061 | 4.907569 | 4.848272 | 9.849262 | 9.815691 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2559298 | 2.524314 | 25.27813 | 1.020015 | 2.500859 | 1.223873 | 4.939764 |
| Stddev | .0013624 | .008544 | .09305 | .001423 | .006370 | .001858 | .019456 |
| %RSD | .5323397 | .3384712 | .3680958 | .1395427 | .2547230 | .1517904 | .3938723 |
| | | | | | | | |
| #1 | .2568874 | 2.534179 | 25.29288 | 1.021356 | 2.507847 | 1.221823 | 4.920192 |
| #2 | .2565318 | 2.519494 | 25.36292 | 1.018522 | 2.499355 | 1.224349 | 4.959102 |
| #3 | .2543700 | 2.519269 | 25.17859 | 1.020169 | 2.495376 | 1.225445 | 4.939998 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.502338 | 24.98032 | 2.500386 | 1.239505 | 24.12715 | 2.503187 | 2.520400 |
| Stddev | .007637 | .02795 | .006697 | .002116 | .07326 | .009959 | .010651 |
| %RSD | .3051817 | .1118901 | .2678373 | .1707435 | .3036553 | .3978340 | .4225947 |
| | | | | | | | |
| #1 | 2.495409 | 24.95038 | 2.508092 | 1.241835 | 24.12333 | 2.502777 | 2.513778 |
| #2 | 2.510526 | 25.00572 | 2.495969 | 1.238979 | 24.05587 | 2.513344 | 2.514735 |
| #3 | 2.501079 | 24.98487 | 2.497098 | 1.237702 | 24.20224 | 2.493439 | 2.532686 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 23.73501 | 5.037136 | 4.961257 | 5.059260 | 4.963341 | 4.898071 | 5.134034 |
| Stddev | .09543 | .013096 | .007553 | .015069 | .005506 | .030708 | .020940 |
| %RSD | .4020720 | .2599957 | .1522429 | .2978554 | .1109254 | .6269396 | .4078611 |
| | | | | | | | |
| #1 | 23.66507 | 5.041922 | 4.964399 | 5.075956 | 4.959879 | 4.865136 | 5.158166 |
| #2 | 23.69622 | 5.047166 | 4.952641 | 5.046667 | 4.960455 | 4.903161 | 5.120659 |
| #3 | 23.84373 | 5.022320 | 4.966733 | 5.055158 | 4.969690 | 4.925916 | 5.123277 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV03 Acquired: 12/5/2024 16:42:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 4.964264 | 4.758960 | 5.069287 |
| Stddev | .006966 | .018702 | .007489 |
| %RSD | .1403147 | .3929821 | .1477346 |
| | | | |
| #1 | 4.967398 | 4.744162 | 5.061484 |
| #2 | 4.956282 | 4.752739 | 5.076417 |
| #3 | 4.969112 | 4.779980 | 5.069961 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2144.590 | 53153.72 | 13637.51 | 1409.998 | 3484.882 |
| Stddev | 7.983 | 40.94 | 42.52 | 7.826 | 6.374 |
| %RSD | .3722506 | .0770130 | .3117750 | .5550677 | .1829053 |
| | | | | | |
| #1 | 2153.805 | 53117.68 | 13607.08 | 1412.220 | 3491.254 |
| #2 | 2139.764 | 53198.23 | 13619.35 | 1416.472 | 3478.506 |
| #3 | 2140.201 | 53145.25 | 13686.09 | 1401.300 | 3484.885 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB03 Acquired: 12/5/2024 16:46:49 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0006569 | .0013591 | .0001370 | .0007864 | .0002738 | -.001663 | -.001924 |
| Stddev | .0008245 | .0002544 | .0007149 | .0005752 | .0007330 | .002956 | .000163 |
| %RSD | 125.5126 | 18.71956 | 521.6561 | 73.13824 | 267.6942 | 177.7799 | 8.492486 |
| #1 | .0001522 | .0012431 | -.000592 | .0001347 | .0009718 | -.000379 | -.002110 |
| #2 | .0016083 | .0016509 | .000166 | .0012230 | .0003394 | -.005043 | -.001805 |
| #3 | .0002102 | .0011834 | .000837 | .0010017 | -.000490 | .000434 | -.001856 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000643 | .0000770 | -.013637 | .0000843 | .0002085 | .0000360 | -.002742 |
| Stddev | .0000490 | .0000474 | .002526 | .0001506 | .0001157 | .0001998 | .001440 |
| %RSD | 76.19030 | 61.49109 | 18.52608 | 178.7339 | 55.52337 | 554.5839 | 52.49443 |
| #1 | .0001207 | .0000346 | -.013268 | .0000452 | .0001242 | .0001312 | -.003907 |
| #2 | .0000391 | .0001281 | -.016327 | -.000043 | .0001608 | -.000194 | -.001133 |
| #3 | .0000330 | .0000684 | -.011315 | .000251 | .0003405 | .000170 | -.003188 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000309 | -.002514 | -.000357 | .0005478 | -.005142 | .0004908 | -.000414 |
| Stddev | .0000681 | .003699 | .000405 | .0003078 | .011030 | .0008696 | .000312 |
| %RSD | 220.2619 | 147.1406 | 113.5095 | 56.18303 | 214.5199 | 177.1796 | 75.37790 |
| #1 | .0000662 | -.006125 | -.000080 | .0005562 | -.016842 | .0012732 | -.000654 |
| #2 | -.000048 | .001267 | -.000821 | .0008513 | -.003649 | -.000446 | -.000061 |
| #3 | .000074 | -.002684 | -.000169 | .0002359 | .005066 | .000645 | -.000526 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.031280 | -.002390 | .0002806 | -.001003 | -.000427 | .0020175 | -.003375 |
| Stddev | .010176 | .000245 | .0001268 | .000205 | .000235 | .0021360 | .000653 |
| %RSD | 32.53215 | 10.26490 | 45.19543 | 20.42171 | 54.98658 | 105.8751 | 19.33974 |
| #1 | -.034710 | -.002338 | .0003015 | -.001034 | -.000276 | .0034683 | -.003374 |
| #2 | -.039299 | -.002657 | .0003956 | -.001191 | -.000307 | -.000435 | -.004029 |
| #3 | -.019832 | -.002174 | .0001446 | -.000784 | -.000697 | .003019 | -.002723 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB03 Acquired: 12/5/2024 16:46:49 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000927 | -.000238 | -.000009 |
| Stddev | .001903 | .000071 | .000009 |
| %RSD | 205.3774 | 29.95907 | 96.83959 |
| | | | |
| #1 | -.002881 | -.000272 | -.000014 |
| #2 | .000920 | -.000156 | .000001 |
| #3 | -.000819 | -.000286 | -.000015 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2219.094 | 55744.33 | 14002.93 | 1458.028 | 3935.877 |
| Stddev | 21.223 | 83.77 | 36.42 | 9.751 | 20.996 |
| %RSD | .9563960 | .1502832 | .2600884 | .6687585 | .5334546 |
| | | | | | |
| #1 | 2197.486 | 55691.15 | 13960.96 | 1448.205 | 3913.820 |
| #2 | 2219.885 | 55840.90 | 14021.67 | 1467.704 | 3938.190 |
| #3 | 2239.911 | 55700.93 | 14026.16 | 1458.175 | 3955.621 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165371BL Acquired: 12/5/2024 16:51:09 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000570 | -.000398 | .0004864 | -.000461 | -.002094 | .0004316 | -.001245 |
| Stddev | .0008339 | .001613 | .0007396 | .000625 | .000714 | .0025209 | .000231 |
| %RSD | 1462.064 | 405.1638 | 152.0513 | 135.7454 | 34.08277 | 584.0381 | 18.57889 |
| #1 | .0009049 | -.001693 | .0008792 | -.000318 | -.002326 | .0031410 | -.001016 |
| #2 | -.000762 | .001408 | -.000367 | -.001145 | -.002664 | -.001845 | -.001478 |
| #3 | .000028 | -.000909 | .000947 | .000081 | -.001293 | -.000002 | -.001242 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000499 | .0000310 | -.007414 | -.000023 | .0001907 | -.000396 | -.001386 |
| Stddev | .0000166 | .0000680 | .003862 | .000412 | .0000859 | .000118 | .005108 |
| %RSD | 33.36438 | 219.4509 | 52.09352 | 1775.129 | 45.01409 | 29.71780 | 368.5081 |
| #1 | .0000307 | -.000040 | -.003486 | -.000499 | .0002568 | -.000477 | -.003103 |
| #2 | .0000607 | .000096 | -.007548 | .000198 | .0000937 | -.000261 | -.005414 |
| #3 | .0000582 | .000037 | -.011207 | .000231 | .0002217 | -.000452 | .004359 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000071 | .0065035 | -.000207 | .0007478 | -.010085 | .0004026 | -.000060 |
| Stddev | .000179 | .0014365 | .000239 | .0002944 | .009967 | .0010369 | .000133 |
| %RSD | 252.7814 | 22.08759 | 115.3592 | 39.37699 | 98.82432 | 257.5108 | 220.5577 |
| #1 | .000006 | .0050769 | -.000089 | .0010767 | -.021282 | -.000069 | -.000169 |
| #2 | -.000276 | .0079496 | -.000050 | .0006578 | -.006790 | -.000314 | .000088 |
| #3 | .000057 | .0064841 | -.000483 | .0005088 | -.002184 | .001592 | -.000099 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.017960 | -.004702 | -.000347 | -.000464 | -.000263 | -.000850 | -.001746 |
| Stddev | .009993 | .000284 | .000098 | .000449 | .000237 | .003496 | .001915 |
| %RSD | 55.64356 | 6.029382 | 28.25589 | 96.88116 | 89.91016 | 411.1302 | 109.6871 |
| #1 | -.018729 | -.004487 | -.000280 | -.000208 | -.000492 | -.002885 | -.000225 |
| #2 | -.027546 | -.005024 | -.000302 | -.000983 | -.000278 | .003186 | -.001116 |
| #3 | -.007604 | -.004596 | -.000460 | -.000201 | -.000020 | -.002852 | -.003896 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165371BL Acquired: 12/5/2024 16:51:09 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0019496 | -.000639 | -.000105 |
| Stddev | .0031317 | .000368 | .000021 |
| %RSD | 160.6351 | 57.59077 | 19.70642 |
| | | | |
| #1 | .0027880 | -.000479 | -.000087 |
| #2 | -.001516 | -.000379 | -.000099 |
| #3 | .004577 | -.001061 | -.000128 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2314.641 | 57795.07 | 14378.96 | 1533.869 | 4074.588 |
| Stddev | 8.444 | 12.06 | 16.61 | 9.292 | 14.177 |
| %RSD | .3648052 | .0208650 | .1154958 | .6058072 | .3479472 |
| | | | | | |
| #1 | 2306.610 | 57799.00 | 14359.96 | 1523.160 | 4063.266 |
| #2 | 2313.869 | 57781.53 | 14390.71 | 1538.652 | 4070.009 |
| #3 | 2323.445 | 57804.67 | 14386.21 | 1539.796 | 4090.489 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165344BL Acquired: 12/5/2024 16:55:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000150 | .0007949 | .0000446 | .0002441 | -.001909 | .0003190 | -.001089 |
| Stddev | .001463 | .0014523 | .0003385 | .0016125 | .000468 | .0024033 | .000224 |
| %RSD | 977.6078 | 182.7008 | 758.4042 | 660.5118 | 24.49890 | 753.3989 | 20.58354 |
| #1 | -.001828 | .0016375 | -.000341 | .0015523 | -.001460 | -.000611 | -.001290 |
| #2 | .000528 | -.000882 | .000184 | .0007375 | -.002393 | .003048 | -.000847 |
| #3 | .000851 | .001629 | .000291 | -.001557 | -.001875 | -.001480 | -.001129 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000169 | -.000012 | -.015153 | -.000145 | .0000165 | -.000566 | -.000071 |
| Stddev | .0000326 | .000033 | .003208 | .000286 | .0001428 | .000245 | .003066 |
| %RSD | 192.8674 | 267.7693 | 21.17287 | 197.2450 | 864.6017 | 43.22849 | 4310.992 |
| #1 | .0000422 | .000024 | -.018693 | -.000474 | .0001732 | -.000557 | .002422 |
| #2 | .0000285 | -.000041 | -.012437 | -.000003 | -.000017 | -.000326 | .000860 |
| #3 | -.000020 | -.000020 | -.014328 | .000042 | -.000106 | -.000815 | -.003495 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000066 | -.006151 | -.000091 | .0007349 | -.018706 | .0001606 | -.000463 |
| Stddev | .0001845 | .006440 | .000273 | .0000958 | .010502 | .0010320 | .000126 |
| %RSD | 2800.508 | 104.6983 | 300.1145 | 13.03025 | 56.14429 | 642.7439 | 27.23220 |
| #1 | .0000889 | -.011121 | -.000271 | .0008161 | -.029394 | -.000469 | -.000410 |
| #2 | -.000205 | -.008456 | -.000225 | .0007592 | -.018323 | -.000401 | -.000607 |
| #3 | .000136 | .001124 | .000223 | .0006293 | -.008400 | .001352 | -.000372 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.031055 | -.005558 | -.000361 | -.000924 | -.000517 | -.000676 | -.004188 |
| Stddev | .013186 | .000339 | .000209 | .000493 | .000263 | .002723 | .001614 |
| %RSD | 42.45999 | 6.099784 | 57.95294 | 53.31951 | 50.85240 | 402.7940 | 38.53063 |
| #1 | -.030690 | -.005487 | -.000120 | -.000361 | -.000450 | -.000516 | -.003015 |
| #2 | -.018056 | -.005927 | -.000466 | -.001276 | -.000806 | -.003475 | -.006029 |
| #3 | -.044421 | -.005261 | -.000498 | -.001136 | -.000293 | .001963 | -.003521 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165344BL Acquired: 12/5/2024 16:55:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000273 | -.000240 | -.000094 |
| Stddev | .003877 | .000080 | .000006 |
| %RSD | 1422.635 | 33.26875 | 6.652957 |
| | | | |
| #1 | .003084 | -.000217 | -.000089 |
| #2 | .000615 | -.000174 | -.000092 |
| #3 | -.004517 | -.000328 | -.000101 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2325.530 | 57852.62 | 14181.40 | 1546.100 | 4095.245 |
| Stddev | 7.055 | 80.95 | 26.61 | 2.654 | 6.985 |
| %RSD | .3033546 | .1399308 | .1876154 | .1716747 | .1705543 |
| | | | | | |
| #1 | 2321.647 | 57763.54 | 14178.21 | 1543.739 | 4096.106 |
| #2 | 2321.271 | 57872.63 | 14156.53 | 1548.973 | 4087.870 |
| #3 | 2333.673 | 57921.70 | 14209.46 | 1545.588 | 4101.759 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165344BS Acquired: 12/5/2024 16:59:49 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7367634 | 2.047711 | .9601040 | 1.863613 | .7460138 | 1.904273 |
| Stddev | .0022273 | .011818 | .0014637 | .010633 | .0030527 | .013619 |
| %RSD | .3023058 | .5771106 | .1524558 | .5705827 | .4092081 | .7151633 |
| #1 | .7366456 | 2.045413 | .9587627 | 1.863285 | .7450695 | 1.899029 |
| #2 | .7345974 | 2.037211 | .9598841 | 1.853147 | .7435448 | 1.919734 |
| #3 | .7390473 | 2.060508 | .9616653 | 1.874407 | .7494271 | 1.894056 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1930115 | .2057476 | .1930712 | 1.011938 | .3960557 | .1947257 |
| Stddev | .0008218 | .0007616 | .0004023 | .005325 | .0007359 | .0002790 |
| %RSD | .4257977 | .3701563 | .2083464 | .5262185 | .1857947 | .1432942 |
| #1 | .1920848 | .2049602 | .1926983 | 1.011762 | .3967206 | .1945011 |
| #2 | .1932978 | .2064804 | .1930179 | 1.006703 | .3952651 | .1946380 |
| #3 | .1936519 | .2058023 | .1934975 | 1.017349 | .3961814 | .1950381 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2947405 | 2.852343 | .2042096 | 1.937696 | .4876484 | .0715882 |
| Stddev | .0018208 | .013266 | .0015860 | .015523 | .0006872 | .0003159 |
| %RSD | .6177686 | .4651084 | .7766725 | .8011249 | .1409291 | .4412659 |
| #1 | .2949913 | 2.838513 | .2024561 | 1.953160 | .4869145 | .0714883 |
| #2 | .2928072 | 2.853551 | .2046288 | 1.922114 | .4877539 | .0713344 |
| #3 | .2964229 | 2.864963 | .2055440 | 1.937815 | .4882767 | .0719420 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.710793 | .2989526 | .2000935 | 8.810181 | .2910469 | .3948063 |
| Stddev | .013482 | .0009901 | .0002895 | .053758 | .0004366 | .0019224 |
| %RSD | .4973527 | .3311755 | .1446900 | .6101776 | .1500084 | .4869184 |
| #1 | 2.707170 | .2979286 | .2000708 | 8.779598 | .2910571 | .3943067 |
| #2 | 2.725717 | .2990244 | .2003937 | 8.872253 | .2906054 | .3931831 |
| #3 | 2.699493 | .2999049 | .1998161 | 8.778692 | .2914784 | .3969292 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165344BS Acquired: 12/5/2024 16:59:49 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6779068 | .1958612 | F .6674668 | 5.600942 | F -.011661 | .1972205 |
| Stddev | .0030756 | .0006050 | .0066915 | .020687 | .001147 | .0010680 |
| %RSD | .4536912 | .3088846 | 1.002527 | .3693403 | 9.840117 | .5415393 |
| #1 | .6757318 | .1954129 | .6597500 | 5.603219 | -.010337 | .1960599 |
| #2 | .6765628 | .1956213 | .6709870 | 5.579211 | -.012276 | .1981619 |
| #3 | .6814256 | .1965493 | .6716635 | 5.620396 | -.012370 | .1974397 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2063159 |
| Stddev | .0003398 |
| %RSD | .1647200 |
| #1 | .2059582 |
| #2 | .2063550 |
| #3 | .2066345 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2307.001 | 57552.71 | 14016.20 | 1540.516 | 3948.198 |
| Stddev | 13.875 | 61.24 | 10.33 | 2.738 | 11.673 |
| %RSD | .6014105 | .1064032 | .0737081 | .1777049 | .2956574 |
| #1 | 2300.490 | 57598.65 | 14025.10 | 1537.714 | 3942.576 |
| #2 | 2322.934 | 57576.30 | 14018.64 | 1540.649 | 3961.618 |
| #3 | 2297.579 | 57483.19 | 14004.87 | 1543.185 | 3940.399 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LR1 Acquired: 12/5/2024 17:03:26 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0696195 | .0833857 | .0242036 | -.273308 | -.007306 | F 2411.933 |
| Stddev | .0140639 | .0104717 | .0087928 | .012899 | .006116 | 8.117 |
| %RSD | 20.20105 | 12.55809 | 36.32838 | 4.719444 | 83.71895 | .3365532 |
| | | | | | | |
| #1 | .0641142 | .0800065 | .0238690 | -.270657 | -.013303 | 2420.023 |
| #2 | .0856033 | .0951297 | .0155829 | -.261940 | -.007535 | 2403.789 |
| #3 | .0591412 | .0750209 | .0331589 | -.287326 | -.001078 | 2411.988 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | ^ ***** | .0099599 | .1864130 | 1686.602 | -.000715 | .0550999 |
| Stddev | ----- | .0000728 | .0017738 | 12.935 | .000516 | .0002820 |
| %RSD | ----- | .7311337 | .9515254 | .7669095 | 72.19600 | .5117106 |
| | | | | | | |
| #1 | ^ ----- | .0100288 | .1880136 | 1695.789 | -.000849 | .0554089 |
| #2 | ^ ----- | .0099672 | .1845060 | 1692.208 | -.001151 | .0548565 |
| #3 | .0167233 | .0098837 | .1867194 | 1671.810 | -.000145 | .0550343 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.234813 | 974.6678 | -.149653 | 1661.881 | .0128303 | -.085739 |
| Stddev | .011057 | 11.4178 | .002373 | 12.015 | .0006927 | .001869 |
| %RSD | 4.708655 | 1.171460 | 1.585640 | .7229757 | 5.398688 | 2.180045 |
| | | | | | | |
| #1 | -.240177 | 979.0957 | -.152329 | 1674.750 | .0120375 | -.083880 |
| #2 | -.242164 | 983.2085 | -.147807 | 1659.934 | .0133183 | -.085718 |
| #3 | -.222097 | 961.6992 | -.148821 | 1650.957 | .0131351 | -.087618 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2012.601 | .0916942 | .1818596 | F 1650.157 | .2855359 | -.009575 |
| Stddev | 4.195 | .0023858 | .0032550 | 4.007 | .0137384 | .001404 |
| %RSD | .2084300 | 2.601883 | 1.789845 | .2428074 | 4.811444 | 14.65990 |
| | | | | | | |
| #1 | 2017.351 | .0943969 | .1795724 | 1645.664 | .2901601 | -.009933 |
| #2 | 2009.404 | .0908052 | .1804204 | 1653.360 | .2963656 | -.008027 |
| #3 | 2011.049 | .0898806 | .1855862 | 1651.447 | .2700820 | -.010766 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LR1 Acquired: 12/5/2024 17:03:26 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0257104 | -.033905 | .1719041 | .0757308 | -.195906 | -.270122 |
| Stddev | .0043362 | .000522 | .0112656 | .0090129 | .014359 | .002128 |
| %RSD | 16.86557 | 1.539667 | 6.553417 | 11.90118 | 7.329536 | .7878111 |
| | | | | | | |
| #1 | .0209521 | -.033306 | .1702240 | .0858647 | -.212154 | -.272006 |
| #2 | .0294392 | -.034262 | .1615729 | .0686121 | -.184919 | -.270547 |
| #3 | .0267398 | -.034147 | .1839154 | .0727156 | -.190646 | -.267814 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.962779 |
| Stddev | .011420 |
| %RSD | 1.186117 |
| | |
| #1 | -.967306 |
| #2 | -.971241 |
| #3 | -.949790 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1349.478 | 32963.67 | 10006.02 | 797.7804 | 1774.362 |
| Stddev | 9.412 | 60.74 | 7.49 | 5.3952 | 9.405 |
| %RSD | .6974711 | .1842704 | .0748080 | .6762803 | .5300429 |
| | | | | | |
| #1 | 1342.091 | 33033.69 | 9997.63 | 803.6893 | 1765.620 |
| #2 | 1346.267 | 32925.11 | 10008.43 | 796.5357 | 1773.153 |
| #3 | 1360.075 | 32932.21 | 10012.00 | 793.1164 | 1784.313 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LR2 Acquired: 12/5/2024 17:08:26 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0055224 | -.031367 | F 219.7245 | .0009049 | -.005190 | .0466096 |
| Stddev | .0019913 | .000284 | .5231 | .0019433 | .000784 | .0071655 |
| %RSD | 36.05840 | .9038166 | .2380562 | 214.7424 | 15.10165 | 15.37337 |
| #1 | .0047717 | -.031118 | 220.2740 | -.000980 | -.004293 | .0545105 |
| #2 | .0077800 | -.031308 | 219.2327 | .002902 | -.005744 | .0447866 |
| #3 | .0040156 | -.031675 | 219.6669 | .000793 | -.005532 | .0405317 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | ^F ***** | -.002723 | -.005541 | .3217433 | .0089703 | -.010163 |
| Stddev | ----- | .000049 | .000127 | .0071864 | .0001701 | .000125 |
| %RSD | ----- | 1.780819 | 2.289192 | 2.233571 | 1.896309 | 1.231957 |
| #1 | ^ ----- | -.002688 | -.005688 | .3191385 | .0087891 | -.010274 |
| #2 | ^ ----- | -.002779 | -.005464 | .3298688 | .0089954 | -.010027 |
| #3 | ^ ----- | -.002703 | -.005472 | .3162225 | .0091265 | -.010187 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F 294.2589 | -.000304 | 40.68276 | -.053252 | F 44.31193 | .0079987 |
| Stddev | 4.4900 | .002684 | .64451 | .014353 | .10354 | .0003595 |
| %RSD | 1.525858 | 882.3343 | 1.584230 | 26.95237 | .2336653 | 4.494814 |
| #1 | 291.4141 | -.003394 | 41.41905 | -.051757 | 44.42855 | .0083025 |
| #2 | 299.4350 | .001029 | 40.40839 | -.039705 | 44.23081 | .0076018 |
| #3 | 291.9276 | .001453 | 40.22083 | -.068293 | 44.27643 | .0080919 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6949822 | -.017030 | F 19.92922 | .5533331 | -.008094 | -.006476 |
| Stddev | .0366237 | .000893 | .12760 | .0548708 | .000548 | .000228 |
| %RSD | 5.269730 | 5.243311 | .6402464 | 9.916414 | 6.765528 | 3.514151 |
| #1 | .7308394 | -.017012 | 20.07633 | .6024593 | -.008112 | -.006314 |
| #2 | .6964698 | -.016147 | 19.84853 | .5634221 | -.008633 | -.006377 |
| #3 | .6576374 | -.017933 | 19.86281 | .4941179 | -.007538 | -.006736 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: LR2 Acquired: 12/5/2024 17:08:26 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.005790 | -.047881 | -.006179 | 3.563047 | -.012892 | .0020223 |
| Stddev | .000464 | .000962 | .001278 | .046315 | .006083 | .0005547 |
| %RSD | 8.021675 | 2.008362 | 20.68627 | 1.299859 | 47.18712 | 27.42832 |
| | | | | | | |
| #1 | -.005764 | -.047271 | -.007203 | 3.524626 | -.016452 | .0020607 |
| #2 | -.006267 | -.047383 | -.004746 | 3.550040 | -.016355 | .0025567 |
| #3 | -.005339 | -.048990 | -.006588 | 3.614474 | -.005868 | .0014494 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0020695 |
| Stddev | .0000159 |
| %RSD | .7704420 |
| | |
| #1 | .0020666 |
| #2 | .0020552 |
| #3 | .0020867 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1645.059 | 50637.80 | 13704.32 | 1164.475 | 3316.308 |
| Stddev | 15.853 | 155.98 | 76.05 | 20.987 | 17.952 |
| %RSD | .9636448 | .3080242 | .5549222 | 1.802281 | .5413252 |
| | | | | | |
| #1 | 1661.535 | 50492.27 | 13788.29 | 1140.644 | 3329.287 |
| #2 | 1629.914 | 50618.68 | 13684.56 | 1180.204 | 3295.821 |
| #3 | 1643.728 | 50802.46 | 13640.09 | 1172.575 | 3323.817 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5069-02 Acquired: 12/5/2024 17:12:33 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.006222 | -.011164 | .0062292 | .0069841 | -.002047 | -.006694 | .2676988 |
| Stddev | .001666 | .002385 | .0035841 | .0017304 | .000142 | .003027 | .0003581 |
| %RSD | 26.77632 | 21.36309 | 57.53641 | 24.77554 | 6.912838 | 45.22494 | .1337700 |
| #1 | -.004300 | -.010296 | .0090096 | .0053536 | -.001934 | -.009751 | .2672992 |
| #2 | -.007259 | -.009334 | .0074937 | .0067992 | -.002002 | -.003697 | .2679905 |
| #3 | -.007108 | -.013861 | .0021843 | .0087995 | -.002206 | -.006633 | .2678068 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000241 | -.000308 | 43.03025 | .0021149 | -.000366 | -.000012 | .0693337 |
| Stddev | .000100 | .000135 | .12312 | .0002392 | .000163 | .002566 | .0026807 |
| %RSD | 41.33176 | 43.88833 | .2861178 | 11.31020 | 44.49455 | 21378.38 | 3.866313 |
| #1 | -.000352 | -.000210 | 42.88812 | .0022009 | -.000190 | .002625 | .0666570 |
| #2 | -.000159 | -.000252 | 43.09867 | .0018446 | -.000512 | -.000161 | .0720183 |
| #3 | -.000212 | -.000463 | 43.10396 | .0022992 | -.000396 | -.002500 | .0693257 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3960424 | 64.78294 | .0038282 | .0001949 | 265.0895 | .0011462 | .0231202 |
| Stddev | .0024040 | .16033 | .0004859 | .0003722 | 3.6715 | .0003942 | .0002723 |
| %RSD | .6070109 | .2474834 | 12.69266 | 191.0168 | 1.384986 | 34.39412 | 1.177892 |
| #1 | .3933351 | 64.61842 | .0043019 | -.000234 | 261.5930 | .0011550 | .0234163 |
| #2 | .3979274 | 64.79169 | .0038516 | .000429 | 264.7615 | .0015359 | .0228804 |
| #3 | .3968647 | 64.93872 | .0033310 | .000390 | 268.9139 | .0007476 | .0230640 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.402851 | .0268406 | .0022954 | -.001307 | -.000966 | .2712383 | .0033205 |
| Stddev | .019715 | .0008012 | .0001728 | .000880 | .000312 | .0104034 | .0079881 |
| %RSD | .8204850 | 2.985098 | 7.526383 | 67.32710 | 32.31904 | 3.835511 | 240.5694 |
| #1 | 2.381613 | .0261663 | .0023946 | -.000716 | -.001298 | .2657258 | -.003895 |
| #2 | 2.406372 | .0277263 | .0023958 | -.000887 | -.000923 | .2832379 | .001953 |
| #3 | 2.420569 | .0266293 | .0020959 | -.002318 | -.000678 | .2647512 | .011904 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5069-02 Acquired: 12/5/2024 17:12:33 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 2.894067 | -.006504 | .3258788 |
| Stddev | .011737 | .000807 | .0015336 |
| %RSD | .4055577 | 12.40043 | .4705960 |
| | | | |
| #1 | 2.905118 | -.007376 | .3242707 |
| #2 | 2.881747 | -.006352 | .3260406 |
| #3 | 2.895336 | -.005785 | .3273251 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1824.767 | 48627.28 | 13128.67 | 1250.230 | 3083.559 |
| Stddev | 20.736 | 260.64 | 59.56 | 17.203 | 16.946 |
| %RSD | 1.136386 | .5359899 | .4536699 | 1.375970 | .5495681 |
| | | | | | |
| #1 | 1848.518 | 48920.72 | 13191.77 | 1269.159 | 3103.125 |
| #2 | 1810.262 | 48538.45 | 13120.81 | 1245.982 | 3073.552 |
| #3 | 1815.521 | 48422.67 | 13073.42 | 1235.549 | 3074.000 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-04 Acquired: 12/5/2024 17:17:00 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.004954 | -.012759 | .0039823 | .0062710 | -.001846 | .0628227 | .3346321 |
| Stddev | .000441 | .001721 | .0015295 | .0012611 | .000475 | .0012369 | .0012710 |
| %RSD | 8.895332 | 13.48767 | 38.40683 | 20.10919 | 25.71942 | 1.968960 | .3798215 |
| #1 | -.005102 | -.011380 | .0055311 | .0048623 | -.001324 | .0617439 | .3332974 |
| #2 | -.004459 | -.014688 | .0039431 | .0072945 | -.001962 | .0641728 | .3347708 |
| #3 | -.005302 | -.012210 | .0024729 | .0066562 | -.002252 | .0625513 | .3358281 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000928 | .0002501 | 31.15983 | .0030837 | .0075491 | .0005026 | .0285836 |
| Stddev | .0000170 | .0000280 | .26738 | .0003792 | .0002511 | .0002436 | .0023381 |
| %RSD | 18.31090 | 11.18083 | .8580877 | 12.29609 | 3.325895 | 48.47613 | 8.179870 |
| #1 | .0001125 | .0002188 | 31.45758 | .0035116 | .0077242 | .0003044 | .0282308 |
| #2 | .0000834 | .0002726 | 31.08167 | .0027892 | .0076615 | .0004287 | .0264420 |
| #3 | .0000826 | .0002589 | 30.94025 | .0029504 | .0072614 | .0007746 | .0310781 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.303822 | 3.689541 | .0069511 | .0004000 | 326.8199 | .0007571 | .0433744 |
| Stddev | .008228 | .010328 | .0003765 | .0003499 | 3.5796 | .0008948 | .0007387 |
| %RSD | .6310298 | .2799345 | 5.416647 | 87.47101 | 1.095269 | 118.1875 | 1.703172 |
| #1 | 1.312727 | 3.698083 | .0073838 | -.000004 | 324.8565 | .0004287 | .0433121 |
| #2 | 1.302238 | 3.692478 | .0066974 | .000591 | 324.6517 | .0017698 | .0426688 |
| #3 | 1.296502 | 3.678063 | .0067723 | .000613 | 330.9515 | .0000729 | .0441423 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.000713 | .0097764 | -.000225 | -.001066 | -.000799 | .7173080 | .0058723 |
| Stddev | .012206 | .0001300 | .000185 | .000855 | .000372 | .0089938 | .0022726 |
| %RSD | 1.219713 | 1.330008 | 82.02956 | 80.23338 | 46.61101 | 1.253830 | 38.69971 |
| #1 | .994003 | .0096928 | -.000437 | -.000090 | -.000477 | .7159771 | .0036041 |
| #2 | 1.014802 | .0097103 | -.000097 | -.001687 | -.000712 | .7090537 | .0081492 |
| #3 | .993333 | .0099262 | -.000142 | -.001421 | -.001206 | .7268931 | .0058637 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-04 Acquired: 12/5/2024 17:17:00 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .5568227 | -.006115 | .1226337 |
| Stddev | .0036117 | .000197 | .0004659 |
| %RSD | .6486303 | 3.223244 | .3799372 |
| | | | |
| #1 | .5609606 | -.005890 | .1221193 |
| #2 | .5552037 | -.006260 | .1227544 |
| #3 | .5543037 | -.006194 | .1230273 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1952.190 | 49735.66 | 13332.71 | 1322.302 | 3168.430 |
| Stddev | 16.955 | 212.92 | 14.26 | 14.425 | 24.722 |
| %RSD | .8685067 | .4281040 | .1069449 | 1.090895 | .7802546 |
| | | | | | |
| #1 | 1933.533 | 49916.47 | 13319.95 | 1334.909 | 3141.787 |
| #2 | 1966.658 | 49789.53 | 13348.10 | 1325.425 | 3190.627 |
| #3 | 1956.378 | 49500.97 | 13330.08 | 1306.571 | 3172.876 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08 Acquired: 12/5/2024 17:21:28 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.009675 | -.012094 | .0009738 | .0059656 | -.002264 | .0554361 | .2128929 |
| Stddev | .002411 | .001624 | .0001906 | .0004880 | .000936 | .0014159 | .0002253 |
| %RSD | 24.92256 | 13.42891 | 19.57610 | 8.180771 | 41.34682 | 2.554061 | .1058233 |
| #1 | -.011036 | -.010272 | .0008659 | .0054099 | -.002753 | .0555484 | .2128006 |
| #2 | -.011098 | -.013388 | .0011939 | .0063248 | -.001184 | .0567925 | .2131497 |
| #3 | -.006891 | -.012622 | .0008615 | .0061619 | -.002853 | .0539675 | .2127284 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000146 | -.000091 | 15.12626 | .0016720 | -.000270 | .0015677 | .0303189 |
| Stddev | .0000151 | .000041 | .05514 | .0004238 | .000135 | .0001370 | .0038172 |
| %RSD | 103.4126 | 45.16188 | .3645524 | 25.34397 | 49.85828 | 8.739061 | 12.59020 |
| #1 | .0000037 | -.000132 | 15.18600 | .0013062 | -.000128 | .0015988 | .0346948 |
| #2 | .0000319 | -.000050 | 15.11548 | .0015735 | -.000286 | .0016866 | .0276734 |
| #3 | .0000083 | -.000091 | 15.07731 | .0021364 | -.000396 | .0014179 | .0285884 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2315991 | 2.690140 | .0063985 | .0003278 | 289.6927 | .0007136 | .0401971 |
| Stddev | .0006113 | .005966 | .0002367 | .0000975 | 2.1374 | .0007467 | .0002486 |
| %RSD | .2639567 | .2217892 | 3.698854 | 29.73293 | .7378086 | 104.6379 | .6185456 |
| #1 | .2317456 | 2.684991 | .0061442 | .0003812 | 287.5718 | .0006636 | .0404065 |
| #2 | .2321239 | 2.696679 | .0064390 | .0003869 | 289.6602 | .0014839 | .0399223 |
| #3 | .2309278 | 2.688750 | .0066123 | .0002153 | 291.8462 | -.000007 | .0402624 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .8104813 | .0079211 | -.000013 | .0004947 | .0001908 | .6481360 | .0197610 |
| Stddev | .0098085 | .0004637 | .000289 | .0004855 | .0002706 | .0033409 | .0014183 |
| %RSD | 1.210202 | 5.853914 | 2247.923 | 98.13222 | 141.8149 | .5154677 | 7.177169 |
| #1 | .8029321 | .0083735 | .000031 | .0005102 | .0002108 | .6464220 | .0186043 |
| #2 | .8069441 | .0079429 | .000252 | .0000017 | -.000089 | .6459999 | .0213434 |
| #3 | .8215678 | .0074469 | -.000321 | .0009723 | .000451 | .6519861 | .0193355 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08 Acquired: 12/5/2024 17:21:28 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3695238 | -.003286 | .0873161 |
| Stddev | .0024997 | .000385 | .0000731 |
| %RSD | .6764607 | 11.72782 | .0837620 |
| | | | |
| #1 | .3666393 | -.002993 | .0872691 |
| #2 | .3710567 | -.003722 | .0872788 |
| #3 | .3708754 | -.003142 | .0874003 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1918.595 | 50268.26 | 13618.92 | 1313.678 | 3202.306 |
| Stddev | 45.114 | 145.54 | 48.61 | 6.962 | 43.885 |
| %RSD | 2.351413 | .2895200 | .3569034 | .5299609 | 1.370426 |
| | | | | | |
| #1 | 1947.534 | 50404.13 | 13578.35 | 1320.947 | 3234.141 |
| #2 | 1866.613 | 50285.98 | 13605.62 | 1313.016 | 3152.244 |
| #3 | 1941.638 | 50114.68 | 13672.79 | 1307.071 | 3220.532 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08DUP Acquired: 12/5/2024 17:25:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.009467 | -.010257 | -.000192 | .0059987 | -.001764 | .0686988 | .2170166 |
| Stddev | .000827 | .000651 | .000254 | .0016382 | .000788 | .0035769 | .0003371 |
| %RSD | 8.732692 | 6.350799 | 132.1495 | 27.30934 | 44.69471 | 5.206649 | .1553473 |
| #1 | -.009840 | -.011007 | .000006 | .0043743 | -.001920 | .0648453 | .2167952 |
| #2 | -.010041 | -.009932 | -.000104 | .0059713 | -.000909 | .0693379 | .2174046 |
| #3 | -.008519 | -.009832 | -.000479 | .0076504 | -.002463 | .0719130 | .2168499 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000116 | -.000073 | 15.33490 | .0019235 | -.000111 | .0016117 | .0390437 |
| Stddev | .0000608 | .000036 | .02362 | .0002755 | .000157 | .0002551 | .0056031 |
| %RSD | 522.1963 | 49.81776 | .1540551 | 14.32399 | 141.3944 | 15.83090 | 14.35079 |
| #1 | -.000038 | -.000074 | 15.34269 | .0022406 | .000070 | .0013408 | .0397352 |
| #2 | -.000007 | -.000109 | 15.30836 | .0017873 | -.000203 | .0016468 | .0331270 |
| #3 | .000079 | -.000036 | 15.35365 | .0017427 | -.000200 | .0018475 | .0442690 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2358570 | 2.722328 | .0064204 | .0003565 | 289.3391 | .0005062 | .0399931 |
| Stddev | .0009561 | .016254 | .0002337 | .0001657 | 1.6306 | .0016249 | .0005750 |
| %RSD | .4053602 | .5970463 | 3.640464 | 46.46688 | .5635662 | 320.9701 | 1.437804 |
| #1 | .2348254 | 2.719784 | .0061663 | .0005312 | 287.9348 | .0022892 | .0403820 |
| #2 | .2360320 | 2.739704 | .0066263 | .0003367 | 291.1275 | .0001208 | .0402648 |
| #3 | .2367134 | 2.707497 | .0064685 | .0002017 | 288.9551 | -.000891 | .0393326 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .8111522 | .0073960 | .0001141 | -.000569 | .0000708 | .6402574 | .0182130 |
| Stddev | .0186116 | .0001762 | .0000842 | .001083 | .0002124 | .0021941 | .0017416 |
| %RSD | 2.294460 | 2.382228 | 73.78566 | 190.5114 | 299.9325 | .3426927 | 9.562520 |
| #1 | .7942452 | .0074705 | .0002113 | -.001770 | -.000155 | .6415042 | .0194377 |
| #2 | .8081164 | .0071947 | .0000649 | .000333 | .000100 | .6415441 | .0162192 |
| #3 | .8310951 | .0075226 | .0000661 | -.000269 | .000267 | .6377240 | .0189821 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08DUP Acquired: 12/5/2024 17:25:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3742396 | -.003171 | .0876243 |
| Stddev | .0018152 | .000447 | .0002483 |
| %RSD | .4850408 | 14.09372 | .2834105 |
| | | | |
| #1 | .3729658 | -.002656 | .0877546 |
| #2 | .3734350 | -.003397 | .0877803 |
| #3 | .3763181 | -.003460 | .0873379 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 1997.969 | 50531.58 | 13516.24 | 1345.375 | 3280.779 |
| Stddev | 39.860 | 181.60 | 25.53 | 6.798 | 41.319 |
| %RSD | 1.995018 | .3593739 | .1888862 | .5052821 | 1.259420 |
| | | | | | |
| #1 | 2029.697 | 50520.17 | 13487.65 | 1344.375 | 3312.065 |
| #2 | 2010.981 | 50355.95 | 13524.30 | 1339.133 | 3296.332 |
| #3 | 1953.229 | 50718.61 | 13536.77 | 1352.618 | 3233.941 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08LX5 Acquired: 12/5/2024 17:30:21 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001731 | -.001917 | .0002203 | .0003256 | -.002017 | .0159975 | .0432092 |
| Stddev | .001968 | .001598 | .0003064 | .0019043 | .000910 | .0020846 | .0004855 |
| %RSD | 113.6736 | 83.35859 | 139.0771 | 584.7752 | 45.12163 | 13.03068 | 1.123649 |
| | | | | | | | |
| #1 | -.001739 | -.000432 | .0002621 | -.001844 | -.002245 | .0183779 | .0436266 |
| #2 | -.003696 | -.001711 | -.000105 | .001100 | -.001015 | .0144977 | .0433246 |
| #3 | .000241 | -.003608 | .000504 | .001721 | -.002792 | .0151169 | .0426763 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000277 | -.000045 | 3.164560 | -.000301 | .0000917 | -.000091 | .0048519 |
| Stddev | .0000350 | .000036 | .024910 | .000046 | .0000869 | .000084 | .0020443 |
| %RSD | 126.2675 | 79.36878 | .7871646 | 15.17619 | 94.83386 | 92.43456 | 42.13498 |
| | | | | | | | |
| #1 | -.000010 | -.000004 | 3.178617 | -.000330 | .0000525 | -.000076 | .0043290 |
| #2 | .000059 | -.000063 | 3.179264 | -.000326 | .0001912 | -.000181 | .0071069 |
| #3 | .000034 | -.000068 | 3.135798 | -.000249 | .0000312 | -.000015 | .0031198 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0487854 | .5699763 | .0010947 | .0005580 | 54.82322 | .0000155 | .0079754 |
| Stddev | .0006099 | .0028188 | .0000761 | .0003088 | .31373 | .0003056 | .0001047 |
| %RSD | 1.250122 | .4945483 | 6.947721 | 55.33571 | .5722500 | 1965.395 | 1.313246 |
| | | | | | | | |
| #1 | .0493999 | .5717561 | .0011765 | .0003620 | 55.15475 | .0000570 | .0078921 |
| #2 | .0487761 | .5714465 | .0010814 | .0009140 | 54.78392 | -.000309 | .0080930 |
| #3 | .0481803 | .5667264 | .0010261 | .0003982 | 54.53100 | .000298 | .0079410 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4568261 | -.005337 | -.000124 | -.000501 | -.000218 | .1261324 | -.000408 |
| Stddev | .0329355 | .000095 | .000221 | .000457 | .000161 | .0031954 | .001919 |
| %RSD | 7.209637 | 1.773648 | 178.0804 | 91.09907 | 73.93650 | 2.533339 | 470.2045 |
| | | | | | | | |
| #1 | .4192360 | -.005294 | -.000324 | -.000136 | -.000219 | .1246896 | .000487 |
| #2 | .4706221 | -.005272 | -.000162 | -.001013 | -.000057 | .1297947 | .000899 |
| #3 | .4806201 | -.005446 | .000113 | -.000355 | -.000380 | .1239129 | -.002611 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08LX5 Acquired: 12/5/2024 17:30:21 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0759438 | .0030133 | .0180052 |
| Stddev | .0006699 | .0000858 | .0001612 |
| %RSD | .8820864 | 2.848458 | .8955454 |
| | | | |
| #1 | .0756855 | .0029566 | .0179839 |
| #2 | .0754416 | .0029712 | .0181760 |
| #3 | .0767044 | .0031120 | .0178556 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2135.553 | 54064.27 | 13618.32 | 1431.231 | 3575.683 |
| Stddev | 12.153 | 99.02 | 115.66 | 1.015 | 17.527 |
| %RSD | .5690753 | .1831470 | .8493292 | .0708947 | .4901772 |
| | | | | | |
| #1 | 2144.642 | 53956.75 | 13545.68 | 1430.332 | 3589.506 |
| #2 | 2140.269 | 54151.71 | 13557.57 | 1431.029 | 3581.573 |
| #3 | 2121.749 | 54084.36 | 13751.70 | 1432.331 | 3555.969 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV04 Acquired: 12/5/2024 17:41:58 Type: Unk
Method: NON EPA-6010-200.7(v2494) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.672608 | 5.023425 | 4.910017 | 4.700315 | 4.632202 | 9.350561 |
| Stddev | .017917 | .013630 | .008561 | .025503 | .034348 | .027781 |
| %RSD | .3834541 | .2713342 | .1743500 | .5425896 | .7415106 | .2971067 |
| | | | | | | |
| #1 | 4.652045 | 5.039100 | 4.919112 | 4.671772 | 4.593203 | 9.330109 |
| #2 | 4.680913 | 5.016809 | 4.902116 | 4.708309 | 4.645452 | 9.339384 |
| #3 | 4.684866 | 5.014364 | 4.908823 | 4.720863 | 4.657953 | 9.382190 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.342632 | .2552479 | 2.480643 | 24.98219 | .9965409 | 2.444730 |
| Stddev | .031223 | .0024474 | .004649 | .03415 | .0053770 | .003119 |
| %RSD | .3341952 | .9588462 | .1873929 | .1366978 | .5395642 | .1275975 |
| | | | | | | |
| #1 | 9.307237 | .2580721 | 2.485429 | 25.01399 | 1.001951 | 2.448154 |
| #2 | 9.366264 | .2539264 | 2.480357 | 24.98648 | .991197 | 2.443987 |
| #3 | 9.354397 | .2537454 | 2.476145 | 24.94609 | .996475 | 2.442049 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.172455 | 4.759190 | 2.454072 | 24.28599 | 2.446387 | 1.199709 |
| Stddev | .006934 | .034836 | .000716 | .03805 | .001084 | .001984 |
| %RSD | .5914370 | .7319651 | .0291622 | .1566835 | .0443240 | .1653712 |
| | | | | | | |
| #1 | 1.164780 | 4.719051 | 2.454341 | 24.26678 | 2.447012 | 1.201196 |
| #2 | 1.174313 | 4.776983 | 2.453261 | 24.26138 | 2.447014 | 1.197456 |
| #3 | 1.178270 | 4.781535 | 2.454614 | 24.32982 | 2.445135 | 1.200475 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 25.57557 | 2.435069 | 2.380527 | 26.06706 | 4.979310 | 4.789261 |
| Stddev | .08629 | .005826 | .004301 | .13929 | .030082 | .016884 |
| %RSD | .3374113 | .2392442 | .1806724 | .5343495 | .6041428 | .3525308 |
| | | | | | | |
| #1 | 25.66785 | 2.441564 | 2.375708 | 25.92908 | 5.013825 | 4.770122 |
| #2 | 25.49688 | 2.430305 | 2.381894 | 26.06447 | 4.965443 | 4.795618 |
| #3 | 25.56198 | 2.433338 | 2.383977 | 26.20762 | 4.958663 | 4.802044 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV04 Acquired: 12/5/2024 17:41:58 Type: Unk
Method: NON EPA-6010-200.7(v2494) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.957205 | 4.789249 | 4.605491 | 4.962605 | 4.820690 | F 4.429488 |
| Stddev | .007154 | .007290 | .040380 | .013341 | .009164 | .014119 |
| %RSD | .1443171 | .1522086 | .8767840 | .2688363 | .1901027 | .3187514 |
| | | | | | | |
| #1 | 4.965435 | 4.788346 | 4.561512 | 4.960849 | 4.826206 | 4.423575 |
| #2 | 4.953708 | 4.782452 | 4.614065 | 4.976737 | 4.825752 | 4.419288 |
| #3 | 4.952472 | 4.796947 | 4.640895 | 4.950229 | 4.810111 | 4.445603 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | 4.866358 |
| Stddev | .005230 |
| %RSD | .1074651 |
| | |
| #1 | 4.865239 |
| #2 | 4.872056 |
| #3 | 4.861778 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2254.417 | 55693.51 | 13945.63 | 1512.774 | 3628.603 |
| Stddev | 18.793 | 101.85 | 42.34 | 8.767 | 17.851 |
| %RSD | .8336199 | .1828810 | .3036317 | .5795579 | .4919416 |
| | | | | | |
| #1 | 2276.117 | 55773.20 | 13897.47 | 1521.299 | 3648.611 |
| #2 | 2243.487 | 55728.58 | 13977.03 | 1513.240 | 3614.311 |
| #3 | 2243.647 | 55578.76 | 13962.38 | 1503.783 | 3622.886 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB04 Acquired: 12/5/2024 17:47:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0007021 | -.000301 | .0008442 | -.001163 | -.001179 | -.001099 | .0005775 |
| Stddev | .0016446 | .001503 | .0003160 | .000484 | .000381 | .000592 | .0004026 |
| %RSD | 234.2499 | 499.3531 | 37.43001 | 41.62622 | 32.28044 | 53.90073 | 69.70978 |
| #1 | -.000776 | -.000898 | .0006889 | -.001719 | -.001577 | -.000506 | .0002832 |
| #2 | .002474 | .001409 | .0006359 | -.000845 | -.000819 | -.001691 | .0004130 |
| #3 | .000408 | -.001414 | .0012078 | -.000923 | -.001140 | -.001099 | .0010362 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000480 | .0000786 | -.008826 | .0000524 | .0001461 | -.000973 | -.002748 |
| Stddev | .0000590 | .0000264 | .001080 | .0000714 | .0001089 | .000144 | .002099 |
| %RSD | 123.1162 | 33.63737 | 12.23454 | 136.2561 | 74.52547 | 14.75030 | 76.37911 |
| #1 | .0000871 | .0000481 | -.007908 | .0000131 | .0000456 | -.000927 | -.000845 |
| #2 | -.000020 | .0000944 | -.010016 | .0001349 | .0002617 | -.001134 | -.002400 |
| #3 | .000077 | .0000934 | -.008555 | .0000093 | .0001309 | -.000858 | -.004999 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000015 | .0026778 | -.000224 | .0005621 | .1703450 | .0003562 | -.000503 |
| Stddev | .000074 | .0114778 | .000229 | .0001673 | .0141938 | .0002048 | .000227 |
| %RSD | 504.9737 | 428.6334 | 102.0459 | 29.75609 | 8.332397 | 57.49197 | 45.15620 |
| #1 | .000060 | -.008704 | -.000224 | .0003719 | .1539683 | .0005432 | -.000766 |
| #2 | -.000087 | .014249 | .000004 | .0006281 | .1779720 | .0001374 | -.000367 |
| #3 | -.000016 | .002488 | -.000454 | .0006864 | .1790948 | .0003879 | -.000377 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0990631 | -.002649 | -.000124 | -.000771 | -.000145 | .0003505 | -.005844 |
| Stddev | .0125891 | .000119 | .000090 | .000325 | .000083 | .0032157 | .000749 |
| %RSD | 12.70815 | 4.508342 | 72.46821 | 42.18153 | 57.60529 | 917.4765 | 12.81491 |
| #1 | .0847123 | -.002661 | -.000070 | -.001026 | -.000208 | .0025230 | -.005025 |
| #2 | .1082450 | -.002524 | -.000074 | -.000405 | -.000050 | .0018722 | -.006016 |
| #3 | .1042320 | -.002762 | -.000228 | -.000881 | -.000175 | -.003344 | -.006493 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB04 Acquired: 12/5/2024 17:47:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.001623 | .0002600 | -.000021 |
| Stddev | .001890 | .0002900 | .000006 |
| %RSD | 116.4064 | 111.5672 | 26.20666 |
| | | | |
| #1 | -.003172 | -.000074 | -.000018 |
| #2 | .000482 | .000449 | -.000018 |
| #3 | -.002181 | .000405 | -.000028 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2454.847 | 59722.25 | 14205.56 | 1641.436 | 4235.515 |
| Stddev | 6.075 | 105.95 | 3.24 | 5.272 | 4.633 |
| %RSD | .2474573 | .1774091 | .0227729 | .3212108 | .1093767 |
| | | | | | |
| #1 | 2455.567 | 59814.94 | 14202.06 | 1645.952 | 4237.025 |
| #2 | 2448.444 | 59606.75 | 14208.44 | 1635.642 | 4230.315 |
| #3 | 2460.529 | 59745.06 | 14206.17 | 1642.714 | 4239.204 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08MS Acquired: 12/5/2024 17:52:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7183932 | 1.672191 | .8556133 | 1.773586 | .7135712 | 1.838670 | .3925150 |
| Stddev | .0045166 | .013007 | .0027253 | .019129 | .0079375 | .006347 | .0017185 |
| %RSD | .6287032 | .7778210 | .3185230 | 1.078533 | 1.112369 | .3451860 | .4378277 |
| #1 | .7150890 | 1.666682 | .8563203 | 1.761574 | .7068494 | 1.841373 | .3934983 |
| #2 | .7165509 | 1.687045 | .8579154 | 1.763540 | .7115360 | 1.831419 | .3905306 |
| #3 | .7235397 | 1.662845 | .8526041 | 1.795645 | .7223282 | 1.843218 | .3935162 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1980464 | .1864636 | 16.14971 | .3851122 | .1859060 | .2578369 | 2.831259 |
| Stddev | .0003688 | .0003743 | .04516 | .0003989 | .0005299 | .0020950 | .013605 |
| %RSD | .1862171 | .2007283 | .2796449 | .1035894 | .2850328 | .8125316 | .4805456 |
| #1 | .1984358 | .1866969 | 16.10308 | .3846632 | .1861910 | .2563306 | 2.816480 |
| #2 | .1980009 | .1866620 | 16.19324 | .3852472 | .1862325 | .2569507 | 2.843263 |
| #3 | .1977024 | .1860319 | 16.15282 | .3854260 | .1852947 | .2602294 | 2.834035 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4233511 | 4.492895 | .4627271 | .0711754 | 265.6220 | .2892154 | .2299272 |
| Stddev | .0021474 | .010187 | .0012999 | .0002461 | 3.4376 | .0015804 | .0007841 |
| %RSD | .5072477 | .2267444 | .2809246 | .3458258 | 1.294155 | .5464317 | .3410255 |
| #1 | .4211041 | 4.487400 | .4631663 | .0713684 | 269.3803 | .2874263 | .2306848 |
| #2 | .4235665 | 4.486634 | .4637506 | .0708982 | 262.6369 | .2897986 | .2299779 |
| #3 | .4253827 | 4.504650 | .4612645 | .0712595 | 264.8487 | .2904213 | .2291190 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.841687 | .2690458 | .3809526 | .6401665 | .1884176 | 1.276479 | 5.708697 |
| Stddev | .033728 | .0010402 | .0017698 | .0007674 | .0008796 | .006501 | .020655 |
| %RSD | .3427073 | .3866184 | .4645866 | .1198724 | .4668520 | .5092667 | .3618196 |
| #1 | 9.875828 | .2695562 | .3800913 | .6403367 | .1876874 | 1.269000 | 5.693802 |
| #2 | 9.808387 | .2697323 | .3797781 | .6408344 | .1893942 | 1.279668 | 5.732276 |
| #3 | 9.840846 | .2678491 | .3829882 | .6393282 | .1881713 | 1.280769 | 5.700012 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08MS Acquired: 12/5/2024 17:52:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3552051 | .1806218 | .2788198 |
| Stddev | .0022315 | .0016734 | .0010118 |
| %RSD | .6282220 | .9264431 | .3628909 |
| | | | |
| #1 | .3553248 | .1825139 | .2794277 |
| #2 | .3573744 | .1793364 | .2776517 |
| #3 | .3529163 | .1800151 | .2793799 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2154.834 | 53696.52 | 13665.64 | 1452.222 | 3447.204 |
| Stddev | 33.045 | 47.79 | 13.45 | 2.610 | 32.799 |
| %RSD | 1.533525 | .0889977 | .0984129 | .1797395 | .9514690 |
| | | | | | |
| #1 | 2169.104 | 53749.70 | 13662.88 | 1449.361 | 3462.644 |
| #2 | 2178.346 | 53682.69 | 13680.26 | 1454.474 | 3469.434 |
| #3 | 2117.052 | 53657.17 | 13653.79 | 1452.831 | 3409.535 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08MSD Acquired: 12/5/2024 17:56:24 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7333673 | 1.684135 | .8576273 | 1.813538 | .7309614 | 1.863903 | .4034601 |
| Stddev | .0057728 | .005741 | .0043012 | .018638 | .0077329 | .003635 | .0007721 |
| %RSD | .7871694 | .3408789 | .5015176 | 1.027737 | 1.057913 | .1950338 | .1913754 |
| #1 | .7273437 | 1.689502 | .8625294 | 1.794422 | .7234928 | 1.862830 | .4026630 |
| #2 | .7339068 | 1.684820 | .8544855 | 1.814532 | .7304572 | 1.867954 | .4042045 |
| #3 | .7388515 | 1.678082 | .8558671 | 1.831659 | .7389341 | 1.860925 | .4035130 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1948144 | .1867376 | 16.00822 | .3839581 | .1865359 | .2616237 | 2.869555 |
| Stddev | .0007776 | .0009211 | .05064 | .0006708 | .0001850 | .0020103 | .002530 |
| %RSD | .3991288 | .4932812 | .3163507 | .1747033 | .0991959 | .7684080 | .0881502 |
| #1 | .1940226 | .1877315 | 15.97982 | .3832614 | .1865881 | .2595787 | 2.866697 |
| #2 | .1948438 | .1859126 | 15.97816 | .3840133 | .1866892 | .2616949 | 2.871504 |
| #3 | .1955769 | .1865688 | 16.06669 | .3845995 | .1863304 | .2635975 | 2.870465 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4245826 | 4.467613 | .4640909 | .0717278 | 276.2898 | .2899327 | .2331731 |
| Stddev | .0008854 | .013535 | .0017449 | .0003289 | 1.2775 | .0008646 | .0007652 |
| %RSD | .2085319 | .3029672 | .3759768 | .4585626 | .4623757 | .2982103 | .3281515 |
| #1 | .4245926 | 4.483219 | .4661057 | .0718342 | 274.9898 | .2893003 | .2324438 |
| #2 | .4254629 | 4.460559 | .4630805 | .0719903 | 277.5435 | .2909179 | .2331058 |
| #3 | .4236922 | 4.459062 | .4630865 | .0713589 | 276.3361 | .2895798 | .2339697 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 10.28037 | .2679526 | .3880663 | .6418771 | .1918460 | 1.300000 | 5.727484 |
| Stddev | .06135 | .0011307 | .0018581 | .0029001 | .0008261 | .002471 | .020934 |
| %RSD | .5967498 | .4219743 | .4788162 | .4518138 | .4305893 | .1900747 | .3655079 |
| #1 | 10.35116 | .2669703 | .3861724 | .6447842 | .1909188 | 1.302148 | 5.737807 |
| #2 | 10.24731 | .2691886 | .3881400 | .6418630 | .1921157 | 1.300551 | 5.741252 |
| #3 | 10.24265 | .2676989 | .3898865 | .6389841 | .1925035 | 1.297300 | 5.703393 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08MSD Acquired: 12/5/2024 17:56:24 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3630934 | .1884454 | .2821102 |
| Stddev | .0017681 | .0010889 | .0005527 |
| %RSD | .4869438 | .5778519 | .1959064 |
| | | | |
| #1 | .3651345 | .1874123 | .2818028 |
| #2 | .3621130 | .1895826 | .2827482 |
| #3 | .3620328 | .1883412 | .2817795 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2106.512 | 52902.51 | 13641.87 | 1420.939 | 3402.209 |
| Stddev | 30.505 | 186.94 | 17.39 | 7.829 | 30.622 |
| %RSD | 1.448107 | .3533664 | .1274592 | .5509425 | .9000758 |
| | | | | | |
| #1 | 2138.916 | 52711.76 | 13630.13 | 1411.906 | 3433.718 |
| #2 | 2102.269 | 52910.37 | 13633.62 | 1425.165 | 3400.352 |
| #3 | 2078.351 | 53085.39 | 13661.84 | 1425.747 | 3372.558 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08A Acquired: 12/5/2024 18:00:34 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7198363 | 1.690104 | .8434058 | 1.789818 | .7207450 | 1.824278 | .3923071 |
| Stddev | .0044155 | .014829 | .0013694 | .006817 | .0040120 | .013994 | .0031808 |
| %RSD | .6134065 | .8773855 | .1623657 | .3808734 | .5566433 | .7671233 | .8107856 |
| #1 | .7147983 | 1.691951 | .8421403 | 1.781989 | .7180390 | 1.814094 | .3896100 |
| #2 | .7230339 | 1.703923 | .8432175 | 1.793029 | .7253544 | 1.818506 | .3914966 |
| #3 | .7216768 | 1.674439 | .8448596 | 1.794437 | .7188415 | 1.840236 | .3958147 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1920383 | .1834670 | 15.76944 | .3774597 | .1836566 | .2568464 | 2.808419 |
| Stddev | .0004013 | .0001058 | .04335 | .0007373 | .0001197 | .0011626 | .000434 |
| %RSD | .2089557 | .0576509 | .2748768 | .1953391 | .0651828 | .4526501 | .0154560 |
| #1 | .1917794 | .1833483 | 15.75207 | .3782140 | .1837875 | .2555052 | 2.808349 |
| #2 | .1925005 | .1835514 | 15.73748 | .3774247 | .1835528 | .2574664 | 2.808024 |
| #3 | .1918350 | .1835012 | 15.81878 | .3767406 | .1836294 | .2575676 | 2.808884 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4133849 | 4.400057 | .4559610 | .0707115 | 272.6027 | .2845592 | .2307918 |
| Stddev | .0008667 | .014605 | .0002673 | .0002165 | .9946 | .0003151 | .0007352 |
| %RSD | .2096488 | .3319354 | .0586200 | .3061524 | .3648658 | .1107423 | .3185664 |
| #1 | .4132726 | 4.405438 | .4557010 | .0709071 | 272.3127 | .2846576 | .2300110 |
| #2 | .4125800 | 4.383525 | .4559469 | .0704789 | 271.7853 | .2842066 | .2308936 |
| #3 | .4143023 | 4.411209 | .4562350 | .0707484 | 273.7101 | .2848133 | .2314708 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.952544 | .2608560 | .3825364 | .6347239 | .1872390 | 1.277861 | 5.691659 |
| Stddev | .079672 | .0006294 | .0014920 | .0019543 | .0005874 | .009861 | .023848 |
| %RSD | .8005229 | .2412838 | .3900270 | .3079036 | .3137082 | .7716615 | .4189980 |
| #1 | 9.893929 | .2609608 | .3809158 | .6366840 | .1868435 | 1.286628 | 5.670716 |
| #2 | 9.920443 | .2614264 | .3838528 | .6347126 | .1869595 | 1.267185 | 5.717615 |
| #3 | 10.04326 | .2601807 | .3828407 | .6327753 | .1879139 | 1.279770 | 5.686646 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-08A Acquired: 12/5/2024 18:00:34 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3475601 | .1821475 | .2770548 |
| Stddev | .0069837 | .0016130 | .0014580 |
| %RSD | 2.009336 | .8855296 | .5262371 |
| | | | |
| #1 | .3397761 | .1804720 | .2758254 |
| #2 | .3532765 | .1822806 | .2766736 |
| #3 | .3496278 | .1836897 | .2786655 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2140.136 | 53775.38 | 13871.26 | 1427.426 | 3457.139 |
| Stddev | 14.071 | 110.00 | 28.46 | 10.417 | 15.568 |
| %RSD | .6574944 | .2045556 | .2051995 | .7297998 | .4503110 |
| | | | | | |
| #1 | 2155.303 | 53742.55 | 13886.64 | 1436.653 | 3471.167 |
| #2 | 2137.599 | 53898.06 | 13888.73 | 1429.497 | 3459.860 |
| #3 | 2127.506 | 53685.53 | 13838.42 | 1416.129 | 3440.390 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-01 Acquired: 12/5/2024 18:04:45 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000344 | -.001342 | .0051396 | -.001103 | -.002773 | .0192742 |
| Stddev | .001090 | .000963 | .0004452 | .002158 | .000475 | .0015038 |
| %RSD | 317.0121 | 71.75557 | 8.662994 | 195.5869 | 17.13576 | 7.802005 |
| | | | | | | |
| #1 | -.000721 | -.001977 | .0046298 | -.000248 | -.002953 | .0179126 |
| #2 | .000885 | -.001816 | .0053364 | -.003558 | -.002235 | .0190219 |
| #3 | -.001195 | -.000234 | .0054525 | .000496 | -.003133 | .0208882 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1292200 | .0003386 | .0000914 | 35.71275 | .0066442 | .0006522 |
| Stddev | .0002168 | .0000227 | .0000801 | .13926 | .0001844 | .0001120 |
| %RSD | .1677772 | 6.694092 | 87.67420 | .3899319 | 2.774798 | 17.16653 |
| | | | | | | |
| #1 | .1292567 | .0003592 | .0001196 | 35.87155 | .0064362 | .0006659 |
| #2 | .1294161 | .0003143 | .0001536 | 35.61150 | .0067090 | .0005340 |
| #3 | .1289871 | .0003422 | .0000010 | 35.65518 | .0067874 | .0007567 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1948356 | .2215235 | .0722693 | 8.430531 | .0061507 | .0005590 |
| Stddev | .0004760 | .0024655 | .0005470 | .054821 | .0001862 | .0003531 |
| %RSD | .2442995 | 1.112961 | .7569172 | .6502629 | 3.027104 | 63.16451 |
| | | | | | | |
| #1 | .1949931 | .2229269 | .0728050 | 8.448044 | .0063640 | .0008892 |
| #2 | .1943009 | .2229670 | .0722913 | 8.369094 | .0060670 | .0001868 |
| #3 | .1952129 | .2186768 | .0717117 | 8.474456 | .0060210 | .0006010 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 29.13401 | .0010452 | .0346629 | 4.066788 | .0255038 | .0001789 |
| Stddev | .17802 | .0009776 | .0000446 | .017433 | .0005486 | .0002423 |
| %RSD | .6110546 | 93.53459 | .1285608 | .4286573 | 2.150990 | 135.4705 |
| | | | | | | |
| #1 | 28.92923 | .0012250 | .0347014 | 4.046741 | .0260905 | .0001327 |
| #2 | 29.25199 | .0019203 | .0346141 | 4.078384 | .0254172 | .0004409 |
| #3 | 29.22080 | -.000010 | .0346733 | 4.075241 | .0250036 | -.000037 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-01 Acquired: 12/5/2024 18:04:45 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001967 | -.000721 | 8.314634 | .3486856 | F 10.52950 | -.001517 |
| Stddev | .000853 | .000162 | .031160 | .0023913 | .05366 | .000250 |
| %RSD | 43.36344 | 22.53556 | .3747576 | .6858100 | .5096492 | 16.46471 |
| #1 | -.001818 | -.000657 | 8.279419 | .3471523 | 10.47699 | -.001765 |
| #2 | -.001198 | -.000906 | 8.325845 | .3474634 | 10.52727 | -.001520 |
| #3 | -.002884 | -.000600 | 8.338636 | .3514410 | 10.58425 | -.001266 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .1933804 |
| Stddev | .0004604 |
| %RSD | .2380937 |
| #1 | .1929217 |
| #2 | .1938426 |
| #3 | .1933770 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2315.832 | 57510.75 | 14355.06 | 1552.241 | 3896.313 |
| Stddev | 13.603 | 121.27 | 21.08 | 11.536 | 15.991 |
| %RSD | .5873788 | .2108572 | .1468368 | .7431545 | .4104049 |
| #1 | 2313.436 | 57645.07 | 14333.33 | 1553.087 | 3897.909 |
| #2 | 2330.474 | 57477.86 | 14375.42 | 1563.330 | 3911.446 |
| #3 | 2303.587 | 57409.33 | 14356.41 | 1540.306 | 3879.585 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02DUP Acquired: 12/5/2024 18:08:59 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000498 | -.000228 | .0002476 | -.000576 | -.002462 | .0725016 |
| Stddev | .001831 | .000736 | .0005590 | .001170 | .000799 | .0016096 |
| %RSD | 367.7730 | 322.2643 | 225.7404 | 203.1719 | 32.43434 | 2.220067 |
| | | | | | | |
| #1 | -.001739 | .000327 | -.000324 | -.001827 | -.001541 | .0735029 |
| #2 | -.001360 | .000051 | .000275 | -.000393 | -.002951 | .0733569 |
| #3 | .001605 | -.001063 | .000793 | .000492 | -.002894 | .0706449 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1409426 | .0003407 | .0001272 | 60.33837 | .0077850 | .0006847 |
| Stddev | .0005770 | .0000420 | .0000980 | .20801 | .0000941 | .0000154 |
| %RSD | .4093944 | 12.34249 | 77.01048 | .3447361 | 1.209178 | 2.253784 |
| | | | | | | |
| #1 | .1404161 | .0003600 | .0002249 | 60.12516 | .0077168 | .0006997 |
| #2 | .1408522 | .0002925 | .0000289 | 60.54076 | .0078924 | .0006689 |
| #3 | .1415595 | .0003696 | .0001278 | 60.34918 | .0077459 | .0006855 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1552982 | .2737164 | .1046389 | 11.56815 | .0068844 | .0002422 |
| Stddev | .0003800 | .0055069 | .0003476 | .05027 | .0001672 | .0002547 |
| %RSD | .2447097 | 2.011893 | .3322027 | .4345680 | 2.428539 | 105.1861 |
| | | | | | | |
| #1 | .1555354 | .2674927 | .1045319 | 11.51160 | .0069150 | -.000034 |
| #2 | .1548599 | .2779573 | .1050275 | 11.60777 | .0067040 | .000467 |
| #3 | .1554993 | .2756992 | .1043575 | 11.58509 | .0070341 | .000293 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 34.46623 | .0009016 | .0485924 | 4.553756 | .0291933 | .0004816 |
| Stddev | .10312 | .0006827 | .0001098 | .019967 | .0001619 | .0001724 |
| %RSD | .2991775 | 75.72106 | .2258720 | .4384787 | .5544271 | 35.79965 |
| | | | | | | |
| #1 | 34.58524 | .0005496 | .0486027 | 4.574101 | .0290079 | .0003505 |
| #2 | 34.40345 | .0004667 | .0484779 | 4.534189 | .0292654 | .0006769 |
| #3 | 34.41001 | .0016884 | .0486967 | 4.552977 | .0293065 | .0004174 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02DUP Acquired: 12/5/2024 18:08:59 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001464 | -.000602 | 9.141269 | .4188047 | F 11.96273 | -.005116 |
| Stddev | .001251 | .000221 | .021580 | .0061741 | .01642 | .000035 |
| %RSD | 85.43919 | 36.76146 | .2360732 | 1.474214 | .1372398 | .6873937 |
| #1 | -.001612 | -.000842 | 9.150014 | .4196679 | 11.95745 | -.005080 |
| #2 | -.000146 | -.000557 | 9.157104 | .4122444 | 11.94961 | -.005118 |
| #3 | -.002634 | -.000407 | 9.116689 | .4245017 | 11.98114 | -.005150 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .3183350 |
| Stddev | .0003483 |
| %RSD | .1094228 |
| #1 | .3179329 |
| #2 | .3185266 |
| #3 | .3185454 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2182.610 | 55087.43 | 13955.88 | 1480.234 | 3664.354 |
| Stddev | 9.849 | 18.48 | 21.14 | 4.418 | 18.206 |
| %RSD | .4512653 | .0335385 | .1514977 | .2984366 | .4968310 |
| #1 | 2185.244 | 55067.93 | 13977.18 | 1476.484 | 3678.860 |
| #2 | 2190.874 | 55089.69 | 13934.90 | 1479.114 | 3670.279 |
| #3 | 2171.711 | 55104.68 | 13955.56 | 1485.104 | 3643.924 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02 Acquired: 12/5/2024 18:13:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0008502 | .0007576 | .0007686 | -.001151 | -.003005 | .0714916 |
| Stddev | .0034051 | .0004528 | .0004754 | .001415 | .001042 | .0031177 |
| %RSD | 400.5300 | 59.77059 | 61.85797 | 122.9404 | 34.67623 | 4.361007 |
| | | | | | | |
| #1 | .0027401 | .0002759 | .0004223 | -.001199 | -.002285 | .0726766 |
| #2 | .0028911 | .0008222 | .0013106 | .000288 | -.004200 | .0679551 |
| #3 | -.003081 | .0011746 | .0005728 | -.002541 | -.002531 | .0738430 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1410325 | .0003897 | .0001295 | 60.59816 | .0081192 | .0006943 |
| Stddev | .0003216 | .0000210 | .0000625 | .11871 | .0003060 | .0001264 |
| %RSD | .2280185 | 5.381153 | 48.22234 | .1959015 | 3.768727 | 18.20563 |
| | | | | | | |
| #1 | .1409163 | .0003787 | .0001221 | 60.73213 | .0084725 | .0006263 |
| #2 | .1407851 | .0003766 | .0000711 | 60.55628 | .0079362 | .0008401 |
| #3 | .1413960 | .0004139 | .0001954 | 60.50606 | .0079490 | .0006164 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1554835 | .2743792 | .1050639 | 11.63923 | .0069437 | .0004527 |
| Stddev | .0007989 | .0018562 | .0001635 | .03578 | .0003890 | .0000364 |
| %RSD | .5138316 | .6764929 | .1556337 | .3073953 | 5.601790 | 8.046388 |
| | | | | | | |
| #1 | .1545655 | .2722488 | .1049063 | 11.66358 | .0067321 | .0004130 |
| #2 | .1560218 | .2756480 | .1052328 | 11.65595 | .0067064 | .0004846 |
| #3 | .1558631 | .2752407 | .1050527 | 11.59815 | .0073926 | .0004605 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 34.69750 | .0018965 | .0496335 | 4.586425 | .0288721 | .0003438 |
| Stddev | .13879 | .0013185 | .0002897 | .021291 | .0003994 | .0003001 |
| %RSD | .4000137 | 69.52284 | .5836689 | .4642272 | 1.383302 | 87.28076 |
| | | | | | | |
| #1 | 34.61511 | .0024390 | .0497429 | 4.588907 | .0291359 | -.000003 |
| #2 | 34.85775 | .0003933 | .0493050 | 4.606367 | .0284126 | .000523 |
| #3 | 34.61966 | .0028573 | .0498525 | 4.564001 | .0290679 | .000511 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02 Acquired: 12/5/2024 18:13:14 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.002042 | -.000592 | 9.197973 | .4177590 | F 12.03891 | -.005214 |
| Stddev | .000128 | .000237 | .015205 | .0037181 | .05322 | .000164 |
| %RSD | 6.249111 | 40.06059 | .1653114 | .8900068 | .4421016 | 3.147919 |
| #1 | -.001987 | -.000350 | 9.208993 | .4149685 | 12.00239 | -.005198 |
| #2 | -.001951 | -.000824 | 9.204300 | .4219799 | 12.09998 | -.005385 |
| #3 | -.002188 | -.000604 | 9.180626 | .4163287 | 12.01435 | -.005058 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .3194758 |
| Stddev | .0007257 |
| %RSD | .2271449 |
| #1 | .3186382 |
| #2 | .3199175 |
| #3 | .3198715 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2186.905 | 54490.63 | 13873.11 | 1447.759 | 3657.205 |
| Stddev | 7.325 | 101.34 | 18.23 | 6.418 | 10.635 |
| %RSD | .3349626 | .1859717 | .1313747 | .4432887 | .2907932 |
| #1 | 2194.956 | 54560.79 | 13890.41 | 1454.962 | 3666.495 |
| #2 | 2180.633 | 54374.45 | 13874.85 | 1442.649 | 3645.605 |
| #3 | 2185.126 | 54536.65 | 13854.08 | 1445.666 | 3659.514 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02LX5 Acquired: 12/5/2024 18:17:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0013267 | .0001456 | -.000402 | .0001105 | -.002605 | .0116252 | .0278836 |
| Stddev | .0016794 | .0005855 | .000518 | .0030977 | .000718 | .0018989 | .0003066 |
| %RSD | 126.5870 | 402.1905 | 128.7603 | 2802.648 | 27.57796 | 16.33467 | 1.099496 |
| #1 | .0023118 | -.000519 | -.000710 | -.002846 | -.001817 | .0100621 | .0278320 |
| #2 | .0022807 | .000587 | .000196 | -.000155 | -.002774 | .0137384 | .0282127 |
| #3 | -.000612 | .000368 | -.000692 | .003333 | -.003223 | .0110750 | .0276061 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001596 | .0000224 | 12.08197 | .0014606 | .0000867 | .0288066 | .0518983 |
| Stddev | .0000487 | .0000643 | .05500 | .0003752 | .0000016 | .0001461 | .0021633 |
| %RSD | 30.50927 | 286.4386 | .4552188 | 25.68892 | 1.876185 | .5070270 | 4.168279 |
| #1 | .0001810 | .0000875 | 12.03749 | .0018065 | .0000879 | .0289307 | .0500954 |
| #2 | .0001039 | -.000041 | 12.14347 | .0015136 | .0000873 | .0286456 | .0542970 |
| #3 | .0001940 | .000021 | 12.06495 | .0010617 | .0000848 | .0288433 | .0513026 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0213976 | 2.277882 | .0013366 | .0004470 | 6.052435 | .0002182 | .0088422 |
| Stddev | .0000914 | .014700 | .0001273 | .0001060 | .012715 | .0004475 | .0002076 |
| %RSD | .4270475 | .6453161 | 9.525833 | 23.71945 | .2100851 | 205.0719 | 2.347707 |
| #1 | .0213479 | 2.263773 | .0013689 | .0005058 | 6.057190 | .0004351 | .0086229 |
| #2 | .0215030 | 2.293108 | .0014447 | .0003246 | 6.038028 | .0005160 | .0088681 |
| #3 | .0213418 | 2.276764 | .0011963 | .0005106 | 6.062088 | -.000296 | .0090357 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .8836498 | -.000549 | -.000309 | -.001388 | -.000238 | 1.682694 | .0762603 |
| Stddev | .0089733 | .000452 | .000139 | .000613 | .000231 | .010458 | .0009898 |
| %RSD | 1.015484 | 82.46002 | 44.99822 | 44.16556 | 96.98033 | .6215012 | 1.297976 |
| #1 | .8770456 | -.000098 | -.000237 | -.000680 | -.000184 | 1.673642 | .0763840 |
| #2 | .8800376 | -.001003 | -.000470 | -.001756 | -.000491 | 1.680299 | .0752144 |
| #3 | .8938663 | -.000545 | -.000222 | -.001727 | -.000039 | 1.694142 | .0771824 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02LX5 Acquired: 12/5/2024 18:17:29 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 2.250546 | .0000202 | .0615613 |
| Stddev | .005085 | .0001392 | .0001340 |
| %RSD | .2259409 | 690.2792 | .2176324 |
| | | | |
| #1 | 2.253072 | .0000437 | .0615764 |
| #2 | 2.253873 | .0001461 | .0614204 |
| #3 | 2.244693 | -.000129 | .0616870 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2441.519 | 59366.92 | 14364.51 | 1627.178 | 4090.721 |
| Stddev | 2.489 | 59.69 | 33.43 | 4.909 | 3.653 |
| %RSD | .1019540 | .1005438 | .2327378 | .3016586 | .0893054 |
| | | | | | |
| #1 | 2442.370 | 59427.71 | 14348.65 | 1630.406 | 4088.894 |
| #2 | 2438.715 | 59308.40 | 14341.97 | 1621.529 | 4088.341 |
| #3 | 2443.470 | 59364.65 | 14402.92 | 1629.598 | 4094.927 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02MS Acquired: 12/5/2024 18:21:48 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7477347 | 1.956038 | .9418309 | 1.844096 | .7392482 | 1.969085 |
| Stddev | .0035383 | .031746 | .0003536 | .004980 | .0016114 | .008465 |
| %RSD | .4732028 | 1.622958 | .0375459 | .2700529 | .2179820 | .4299114 |
| #1 | .7436693 | 1.990617 | .9422382 | 1.849104 | .7374024 | 1.962582 |
| #2 | .7494157 | 1.949282 | .9416016 | 1.844040 | .7403745 | 1.978656 |
| #3 | .7501192 | 1.928213 | .9416531 | 1.839144 | .7399678 | 1.966016 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3295078 | .2182573 | .1924206 | 62.52556 | .3949043 | .1933698 |
| Stddev | .0004278 | .0002139 | .0001949 | .26075 | .0022464 | .0003832 |
| %RSD | .1298135 | .0979865 | .1012865 | .4170288 | .5688527 | .1981501 |
| #1 | .3297745 | .2183105 | .1924067 | 62.82350 | .3925221 | .1930414 |
| #2 | .3290145 | .2184396 | .1922331 | 62.41420 | .3952063 | .1932773 |
| #3 | .3297346 | .2180219 | .1926221 | 62.33899 | .3969844 | .1937908 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4340961 | 3.049515 | .3097494 | 13.70369 | .4856223 | .0739680 |
| Stddev | .0005015 | .013391 | .0008599 | .03301 | .0011068 | .0005445 |
| %RSD | .1155253 | .4391051 | .2776261 | .2409116 | .2279092 | .7362000 |
| #1 | .4341989 | 3.057233 | .3106010 | 13.74053 | .4857193 | .0735672 |
| #2 | .4345382 | 3.034053 | .3088814 | 13.67679 | .4844702 | .0745880 |
| #3 | .4335511 | 3.057259 | .3097659 | 13.69376 | .4866774 | .0737488 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 35.66539 | .2980036 | .2484345 | 13.34696 | .3259498 | .3824439 |
| Stddev | .10328 | .0019452 | .0022560 | .04221 | .0005505 | .0006464 |
| %RSD | .2895882 | .6527594 | .9080993 | .3162492 | .1688858 | .1690285 |
| #1 | 35.54644 | .3001483 | .2460785 | 13.29981 | .3258313 | .3816979 |
| #2 | 35.73238 | .2963532 | .2486498 | 13.35982 | .3265500 | .3828411 |
| #3 | 35.71734 | .2975092 | .2505751 | 13.38124 | .3254683 | .3827926 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02MS Acquired: 12/5/2024 18:21:48 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6738086 | .1909294 | 9.639351 | 6.134663 | F 12.03475 | .1843317 |
| Stddev | .0009996 | .0000693 | .020721 | .030148 | .01987 | .0001928 |
| %RSD | .1483439 | .0363157 | .2149632 | .4914323 | .1650789 | .1045770 |
| #1 | .6727747 | .1909246 | 9.622518 | 6.169467 | 12.05736 | .1841884 |
| #2 | .6747698 | .1910010 | 9.633042 | 6.117903 | 12.02684 | .1845508 |
| #3 | .6738812 | .1908626 | 9.662494 | 6.116619 | 12.02007 | .1842557 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .5198394 |
| Stddev | .0010869 |
| %RSD | .2090752 |
| #1 | .5185988 |
| #2 | .5206239 |
| #3 | .5202955 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2258.592 | 56338.56 | 13819.04 | 1522.863 | 3724.115 |
| Stddev | 8.782 | 154.84 | 12.01 | 7.817 | 17.077 |
| %RSD | .3888055 | .2748423 | .0868812 | .5133140 | .4585492 |
| #1 | 2268.690 | 56485.58 | 13809.14 | 1531.278 | 3742.751 |
| #2 | 2252.752 | 56353.17 | 13832.39 | 1521.486 | 3720.375 |
| #3 | 2254.333 | 56176.93 | 13815.58 | 1515.827 | 3709.217 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02MSD Acquired: 12/5/2024 18:25:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7301252 | 1.915995 | .9184535 | 1.805932 | .7242332 | 1.915250 |
| Stddev | .0049884 | .019253 | .0003300 | .008209 | .0036059 | .004080 |
| %RSD | .6832263 | 1.004871 | .0359271 | .4545519 | .4978963 | .2130387 |
| #1 | .7253308 | 1.894948 | .9181270 | 1.799784 | .7201166 | 1.911001 |
| #2 | .7297575 | 1.920318 | .9184467 | 1.802758 | .7268330 | 1.915613 |
| #3 | .7352873 | 1.932720 | .9187868 | 1.815254 | .7257499 | 1.919137 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3200626 | .2095873 | .1878051 | 60.58027 | .3857712 | .1890333 |
| Stddev | .0003527 | .0006343 | .0000466 | .18741 | .0005624 | .0004300 |
| %RSD | .1102048 | .3026575 | .0248275 | .3093564 | .1457971 | .2274895 |
| #1 | .3197076 | .2091733 | .1878580 | 60.78662 | .3851270 | .1888151 |
| #2 | .3204129 | .2103176 | .1877703 | 60.53354 | .3860225 | .1895286 |
| #3 | .3200672 | .2092711 | .1877868 | 60.42064 | .3861643 | .1887561 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4251850 | 2.989530 | .3004737 | 13.27706 | .4742083 | .0720468 |
| Stddev | .0003732 | .010775 | .0011155 | .03732 | .0005255 | .0002544 |
| %RSD | .0877835 | .3604099 | .3712323 | .2811233 | .1108247 | .3530702 |
| #1 | .4253634 | 2.996774 | .3017176 | 13.28176 | .4741412 | .0720716 |
| #2 | .4247560 | 2.977148 | .3001413 | 13.31182 | .4737195 | .0722878 |
| #3 | .4254355 | 2.994667 | .2995623 | 13.23761 | .4747641 | .0717809 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 35.57771 | .2889581 | .2431873 | 13.17593 | .3136800 | .3750769 |
| Stddev | .20547 | .0007593 | .0014673 | .06839 | .0014788 | .0001251 |
| %RSD | .5775111 | .2627538 | .6033708 | .5190719 | .4714267 | .0333638 |
| #1 | 35.34048 | .2893062 | .2415365 | 13.09974 | .3125951 | .3750958 |
| #2 | 35.69879 | .2894809 | .2436823 | 13.23202 | .3153644 | .3749433 |
| #3 | 35.69387 | .2880872 | .2443432 | 13.19602 | .3130805 | .3751914 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02MSD Acquired: 12/5/2024 18:25:47 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6586682 | .1849444 | 9.482529 | 6.011267 | F 11.82101 | .1801721 |
| Stddev | .0017215 | .0005514 | .011737 | .032207 | .03915 | .0014392 |
| %RSD | .2613595 | .2981505 | .1237740 | .5357759 | .3311942 | .7987897 |
| | | | | | | |
| #1 | .6569875 | .1854610 | 9.478979 | 5.982452 | 11.77880 | .1785133 |
| #2 | .6604278 | .1850083 | 9.472977 | 6.005312 | 11.82811 | .1810876 |
| #3 | .6585893 | .1843638 | 9.495631 | 6.046035 | 11.85612 | .1809155 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .5108794 |
| Stddev | .0016173 |
| %RSD | .3165783 |
| | |
| #1 | .5090375 |
| #2 | .5115336 |
| #3 | .5120671 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2286.876 | 56912.57 | 14162.11 | 1526.222 | 3780.096 |
| Stddev | 8.383 | 111.68 | 7.18 | 10.385 | 11.242 |
| %RSD | .3665759 | .1962261 | .0507183 | .6804397 | .2973957 |
| | | | | | |
| #1 | 2294.213 | 56940.82 | 14170.11 | 1533.911 | 3790.517 |
| #2 | 2288.676 | 57007.41 | 14160.02 | 1530.345 | 3781.588 |
| #3 | 2277.739 | 56789.48 | 14156.21 | 1514.408 | 3768.182 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02A Acquired: 12/5/2024 18:29:46 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7545903 | 1.964925 | .9497541 | 1.856978 | .7450237 | 1.984575 |
| Stddev | .0015984 | .015454 | .0037448 | .001843 | .0016481 | .007608 |
| %RSD | .2118213 | .7864876 | .3942953 | .0992442 | .2212121 | .3833462 |
| #1 | .7534451 | 1.976538 | .9531007 | 1.857248 | .7438121 | 1.976672 |
| #2 | .7564164 | 1.970851 | .9504525 | 1.858671 | .7443586 | 1.985204 |
| #3 | .7539094 | 1.947385 | .9457093 | 1.855015 | .7469004 | 1.991849 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3289011 | .2187342 | .1938491 | 62.51856 | .4006225 | .1951655 |
| Stddev | .0017931 | .0007816 | .0004302 | .19710 | .0006327 | .0003423 |
| %RSD | .5451650 | .3573187 | .2219436 | .3152682 | .1579222 | .1753808 |
| #1 | .3268418 | .2195893 | .1943436 | 62.74544 | .4005348 | .1950056 |
| #2 | .3297454 | .2185565 | .1935611 | 62.38960 | .4000382 | .1949325 |
| #3 | .3301162 | .2180567 | .1936424 | 62.42063 | .4012944 | .1955585 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4366317 | 3.056653 | .3091458 | 13.75458 | .4884510 | .0741066 |
| Stddev | .0011728 | .003857 | .0006711 | .03472 | .0016544 | .0000332 |
| %RSD | .2685902 | .1261918 | .2170771 | .2524474 | .3386970 | .0448554 |
| #1 | .4379399 | 3.052476 | .3095552 | 13.79447 | .4901823 | .0740803 |
| #2 | .4362804 | 3.060081 | .3083713 | 13.73816 | .4868862 | .0740956 |
| #3 | .4356748 | 3.057402 | .3095109 | 13.73111 | .4882845 | .0741440 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 36.65100 | .2986257 | .2509653 | 13.56629 | .3262372 | .3852033 |
| Stddev | .40589 | .0021504 | .0001564 | .13985 | .0008336 | .0012751 |
| %RSD | 1.107458 | .7200944 | .0623121 | 1.030876 | .2555127 | .3310240 |
| #1 | 36.18803 | .2976181 | .2510534 | 13.41121 | .3253714 | .3863805 |
| #2 | 36.81926 | .2971642 | .2507847 | 13.60483 | .3263057 | .3853805 |
| #3 | 36.94570 | .3010949 | .2510577 | 13.68284 | .3270344 | .3838488 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5044-02A Acquired: 12/5/2024 18:29:46 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6821092 | .1913272 | 9.758382 | 6.212774 | F 12.15736 | .1861450 |
| Stddev | .0013350 | .0005077 | .044391 | .043600 | .03785 | .0019459 |
| %RSD | .1957149 | .2653809 | .4549047 | .7017878 | .3113514 | 1.045362 |
| #1 | .6835542 | .1919126 | 9.709639 | 6.262986 | 12.20106 | .1839204 |
| #2 | .6818518 | .1910636 | 9.769018 | 6.190846 | 12.13627 | .1869840 |
| #3 | .6809217 | .1910055 | 9.796489 | 6.184491 | 12.13476 | .1875307 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .5277673 |
| Stddev | .0010769 |
| %RSD | .2040460 |
| #1 | .5265497 |
| #2 | .5281578 |
| #3 | .5285945 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2246.690 | 55491.03 | 13726.30 | 1491.573 | 3698.379 |
| Stddev | 1.645 | 176.73 | 6.61 | 10.364 | 5.609 |
| %RSD | .0732181 | .3184837 | .0481261 | .6948484 | .1516558 |
| #1 | 2245.962 | 55678.95 | 13725.09 | 1501.224 | 3699.023 |
| #2 | 2248.574 | 55465.95 | 13733.42 | 1492.876 | 3703.638 |
| #3 | 2245.535 | 55328.17 | 13720.38 | 1480.619 | 3692.476 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV05 Acquired: 12/5/2024 18:39:30 Type: Unk
Method: NON EPA-6010-200.7(v2495) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.579935 | 5.080113 | 4.998521 | 4.563631 | 4.503720 | 9.346701 |
| Stddev | .003399 | .017605 | .003240 | .005514 | .003496 | .006931 |
| %RSD | .0742092 | .3465567 | .0648230 | .1208209 | .0776342 | .0741571 |
| #1 | 4.576166 | 5.061876 | 4.997926 | 4.562910 | 4.499771 | 9.352399 |
| #2 | 4.580872 | 5.097011 | 4.995620 | 4.569470 | 4.506424 | 9.338985 |
| #3 | 4.582767 | 5.081452 | 5.002018 | 4.558513 | 4.504964 | 9.348720 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.207206 | .2656859 | 2.543861 | 25.46294 | 1.028639 | 2.486079 |
| Stddev | .061791 | .0018183 | .001860 | .02512 | .005463 | .001418 |
| %RSD | .6711106 | .6843718 | .0730991 | .0986689 | .5311278 | .0570359 |
| #1 | 9.271497 | .2652865 | 2.544921 | 25.47942 | 1.025155 | 2.485778 |
| #2 | 9.148263 | .2641005 | 2.541714 | 25.43402 | 1.025827 | 2.484834 |
| #3 | 9.201860 | .2676707 | 2.544948 | 25.47538 | 1.034936 | 2.487622 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.142020 | 4.768092 | 2.474791 | 24.76675 | 2.485066 | 1.210684 |
| Stddev | .000906 | .024566 | .001994 | .10441 | .002782 | .001524 |
| %RSD | .0793119 | .5152142 | .0805782 | .4215893 | .1119656 | .1258817 |
| #1 | 1.142658 | 4.750068 | 2.473174 | 24.73842 | 2.484897 | 1.210512 |
| #2 | 1.140984 | 4.796073 | 2.477019 | 24.67943 | 2.487928 | 1.209253 |
| #3 | 1.142419 | 4.758134 | 2.474180 | 24.88241 | 2.482371 | 1.212286 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 24.79332 | 2.459978 | 2.392960 | 25.40742 | 5.070148 | 4.730023 |
| Stddev | .14401 | .001582 | .010630 | .13534 | .023938 | .001825 |
| %RSD | .5808340 | .0643276 | .4442062 | .5326762 | .4721332 | .0385908 |
| #1 | 24.82734 | 2.459470 | 2.399154 | 25.31771 | 5.076649 | 4.729450 |
| #2 | 24.91727 | 2.458712 | 2.399041 | 25.56309 | 5.043632 | 4.728553 |
| #3 | 24.63534 | 2.461752 | 2.380686 | 25.34146 | 5.090165 | 4.732066 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV05 Acquired: 12/5/2024 18:39:30 Type: Unk
Method: NON EPA-6010-200.7(v2495) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 5.073607 | 4.786637 | 4.611353 | 4.960150 | 4.881138 | F 4.302249 |
| Stddev | .010572 | .008377 | .038310 | .016389 | .001591 | .013653 |
| %RSD | .2083730 | .1749996 | .8307665 | .3304049 | .0325954 | .3173357 |
| #1 | 5.066729 | 4.776965 | 4.569008 | 4.941227 | 4.882219 | 4.299112 |
| #2 | 5.068311 | 4.791478 | 4.643607 | 4.969724 | 4.879311 | 4.317197 |
| #3 | 5.085780 | 4.791468 | 4.621443 | 4.969499 | 4.881884 | 4.290439 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | 4.863095 |
| Stddev | .026051 |
| %RSD | .5356811 |
| #1 | 4.888030 |
| #2 | 4.836056 |
| #3 | 4.865199 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2388.621 | 56571.71 | 13983.29 | 1557.816 | 3748.810 |
| Stddev | 1.471 | 171.45 | 33.80 | 14.299 | 2.219 |
| %RSD | .0615630 | .3030673 | .2417329 | .9178787 | .0591860 |
| #1 | 2387.197 | 56573.44 | 13946.71 | 1550.919 | 3747.551 |
| #2 | 2388.532 | 56399.40 | 14013.38 | 1548.274 | 3751.372 |
| #3 | 2390.134 | 56742.29 | 13989.77 | 1574.256 | 3747.507 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB05 Acquired: 12/5/2024 18:43:20 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0017800 | -.000065 | .0003783 | -.000660 | .0025139 | -.001884 | .0023847 |
| Stddev | .0005912 | .001185 | .0010401 | .000549 | .0015722 | .000609 | .0006560 |
| %RSD | 33.21121 | 1815.601 | 274.9494 | 83.19301 | 62.53818 | 32.33253 | 27.50718 |
| #1 | .0012293 | -.000301 | -.000335 | -.000306 | .0038859 | -.001289 | .0026393 |
| #2 | .0017059 | .001220 | -.000102 | -.000382 | .0007984 | -.002507 | .0016396 |
| #3 | .0024047 | -.001115 | .001572 | -.001293 | .0028576 | -.001858 | .0028752 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000880 | .0000924 | -.006706 | .0001801 | .0001740 | -.000596 | -.002861 |
| Stddev | .0000282 | .0001425 | .005579 | .0000774 | .0000573 | .000351 | .003586 |
| %RSD | 32.08943 | 154.2333 | 83.19268 | 42.98698 | 32.95310 | 59.01034 | 125.3477 |
| #1 | .0000758 | .0002527 | -.008845 | .0001350 | .0001814 | -.000995 | -.002082 |
| #2 | .0001203 | .0000447 | -.010898 | .0002696 | .0002272 | -.000458 | .000272 |
| #3 | .0000679 | -.000020 | -.000374 | .0001359 | .0001133 | -.000333 | -.006772 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001909 | .0015197 | .0000388 | .0005782 | .1165378 | .0006447 | -.000574 |
| Stddev | .0001041 | .0113173 | .0002407 | .0002412 | .0136303 | .0012457 | .000164 |
| %RSD | 54.52806 | 744.7137 | 620.4492 | 41.71638 | 11.69607 | 193.2220 | 28.61749 |
| #1 | .0003107 | .0130096 | -.000223 | .0008041 | .1033812 | .0015449 | -.000450 |
| #2 | .0001231 | .0011660 | .000088 | .0006065 | .1156354 | -.000777 | -.000760 |
| #3 | .0001388 | -.009617 | .000251 | .0003242 | .1305970 | .001166 | -.000512 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0904545 | .0004327 | .0005849 | -.000881 | -.000091 | .0021268 | -.006304 |
| Stddev | .0188986 | .0005472 | .0002628 | .000461 | .000036 | .0045654 | .003499 |
| %RSD | 20.89289 | 126.4719 | 44.93011 | 52.38195 | 38.97446 | 214.6621 | 55.49868 |
| #1 | .0704989 | .0010518 | .0008811 | -.000544 | -.000132 | .0067445 | -.003304 |
| #2 | .0927848 | .0002330 | .0003796 | -.001406 | -.000073 | .0020204 | -.005462 |
| #3 | .1080799 | .0000134 | .0004940 | -.000692 | -.000069 | -.002385 | -.010147 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB05 Acquired: 12/5/2024 18:43:20 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0017417 | .0007343 | .0001977 |
| Stddev | .0027594 | .0006751 | .0000284 |
| %RSD | 158.4296 | 91.94362 | 14.35888 |
| | | | |
| #1 | .0022650 | .0014135 | .0002083 |
| #2 | -.001242 | .0007261 | .0002192 |
| #3 | .004202 | .0000633 | .0001655 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2471.825 | 58407.35 | 13800.00 | 1610.261 | 4186.167 |
| Stddev | 2.044 | 148.44 | 18.09 | 6.529 | 4.835 |
| %RSD | .0826731 | .2541412 | .1311015 | .4054481 | .1155070 |
| | | | | | |
| #1 | 2469.498 | 58317.46 | 13784.20 | 1606.581 | 4183.621 |
| #2 | 2472.653 | 58325.90 | 13819.74 | 1606.403 | 4191.743 |
| #3 | 2473.325 | 58578.68 | 13796.06 | 1617.799 | 4183.137 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165365BL Acquired: 12/5/2024 19:04:11 Type: Unk
Method: NON EPA-6010-200.7(v2496) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000219 | .0001911 | .0001436 | .0002440 | -.002502 | .0104688 | .0024541 |
| Stddev | .001350 | .0013388 | .0007962 | .0009196 | .000478 | .0020160 | .0001724 |
| %RSD | 615.8739 | 700.4798 | 554.3090 | 376.9209 | 19.11815 | 19.25748 | 7.024289 |
| #1 | .001034 | .0014777 | -.000065 | .0012791 | -.001950 | .0087412 | .0022570 |
| #2 | -.000043 | .0002902 | .001023 | -.000069 | -.002761 | .0099812 | .0025283 |
| #3 | -.001649 | -.001195 | -.000528 | -.000479 | -.002795 | .0126839 | .0025770 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000563 | .0000447 | -.009035 | -.000020 | .0000622 | -.000929 | -.000707 |
| Stddev | .0000215 | .0000664 | .006260 | .000139 | .0001030 | .000231 | .003500 |
| %RSD | 38.26407 | 148.6645 | 69.28503 | 709.2308 | 165.6411 | 24.85188 | 495.3221 |
| #1 | .0000546 | .0000777 | -.012753 | -.000178 | .0001336 | -.000685 | .003041 |
| #2 | .0000786 | -.000032 | -.012543 | .000082 | -.000056 | -.001143 | -.003891 |
| #3 | .0000356 | .000088 | -.001808 | .000038 | .000109 | -.000958 | -.001270 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0005029 | -.000430 | -.000263 | .0002987 | .1924619 | -.000186 | -.000778 |
| Stddev | .0000977 | .010280 | .000089 | .0001609 | .0191326 | .000439 | .000087 |
| %RSD | 19.43569 | 2388.084 | 33.65466 | 53.87047 | 9.940952 | 235.7234 | 11.19056 |
| #1 | .0004177 | .007321 | -.000319 | .0002461 | .1715918 | .000257 | -.000795 |
| #2 | .0004812 | .003478 | -.000309 | .0001706 | .1966214 | -.000621 | -.000855 |
| #3 | .0006096 | -.012091 | -.000161 | .0004793 | .2091726 | -.000195 | -.000683 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0524327 | -.006927 | -.000381 | -.000739 | -.000252 | -.003110 | -.007014 |
| Stddev | .0032437 | .000095 | .000064 | .000495 | .000061 | .006056 | .000866 |
| %RSD | 6.186478 | 1.366824 | 16.89718 | 66.98958 | 24.16306 | 194.7106 | 12.34667 |
| #1 | .0556981 | -.006939 | -.000345 | -.000507 | -.000190 | -.009259 | -.007515 |
| #2 | .0492111 | -.006827 | -.000455 | -.000403 | -.000312 | -.002919 | -.007512 |
| #3 | .0523888 | -.007015 | -.000342 | -.001308 | -.000253 | .002848 | -.006014 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165365BL Acquired: 12/5/2024 19:04:11 Type: Unk
Method: NON EPA-6010-200.7(v2496) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0021619 | -.000440 | -.000140 |
| Stddev | .0018010 | .000101 | .000026 |
| %RSD | 83.30532 | 23.04811 | 18.22604 |
| | | | |
| #1 | .0034808 | -.000323 | -.000163 |
| #2 | .0028949 | -.000493 | -.000113 |
| #3 | .0001100 | -.000504 | -.000145 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2537.990 | 60376.65 | 14024.37 | 1682.361 | 4283.407 |
| Stddev | 6.398 | 61.09 | 27.22 | 6.359 | 5.542 |
| %RSD | .2521047 | .1011735 | .1941083 | .3779678 | .1293748 |
| | | | | | |
| #1 | 2530.606 | 60363.93 | 14002.10 | 1687.777 | 4277.607 |
| #2 | 2541.480 | 60322.93 | 14016.29 | 1675.360 | 4283.966 |
| #3 | 2541.885 | 60443.10 | 14054.71 | 1683.947 | 4288.648 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165365BS Acquired: 12/5/2024 19:08:38 Type: Unk
Method: NON EPA-6010-200.7(v2496) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7200905 | 2.032966 | 1.001235 | 1.802143 | .7161736 | 1.923873 |
| Stddev | .0016252 | .013163 | .001254 | .011879 | .0039314 | .004592 |
| %RSD | .2256932 | .6474534 | .1252659 | .6591805 | .5489430 | .2386926 |
| | | | | | | |
| #1 | .7210054 | 2.019894 | 1.001444 | 1.795482 | .7147819 | 1.922240 |
| #2 | .7182141 | 2.046217 | .999889 | 1.795090 | .7131274 | 1.929058 |
| #3 | .7210520 | 2.032788 | 1.002371 | 1.815859 | .7206116 | 1.920320 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1923461 | .1867442 | .2043811 | 1.114596 | .4274304 | .2037047 |
| Stddev | .0008338 | .0002044 | .0002690 | .001909 | .0011448 | .0008434 |
| %RSD | .4335083 | .1094602 | .1316070 | .1712382 | .2678332 | .4140502 |
| | | | | | | |
| #1 | .1927149 | .1865496 | .2040734 | 1.112570 | .4265596 | .2028120 |
| #2 | .1929320 | .1867257 | .2044982 | 1.116360 | .4270044 | .2038137 |
| #3 | .1913915 | .1869572 | .2045717 | 1.114858 | .4287271 | .2044883 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2890091 | 2.895221 | .2168761 | 2.092488 | .5105461 | .0742244 |
| Stddev | .0011584 | .009914 | .0011207 | .014307 | .0010408 | .0004242 |
| %RSD | .4008329 | .3424197 | .5167473 | .6837354 | .2038546 | .5715448 |
| | | | | | | |
| #1 | .2884105 | 2.895441 | .2174151 | 2.098440 | .5095014 | .0741086 |
| #2 | .2882724 | 2.905023 | .2176255 | 2.076165 | .5105540 | .0738702 |
| #3 | .2903443 | 2.885199 | .2155877 | 2.102858 | .5115829 | .0746945 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.569795 | .3136720 | .2029607 | 9.807242 | .3137381 | .3906361 |
| Stddev | .009675 | .0014550 | .0007522 | .043109 | .0006992 | .0013564 |
| %RSD | .3765041 | .4638611 | .3705886 | .4395628 | .2228720 | .3472252 |
| | | | | | | |
| #1 | 2.559160 | .3146280 | .2036650 | 9.793593 | .3141401 | .3898616 |
| #2 | 2.578076 | .3143906 | .2030487 | 9.855523 | .3141434 | .3898445 |
| #3 | 2.572149 | .3119976 | .2021685 | 9.772609 | .3129307 | .3922023 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: PB165365BS Acquired: 12/5/2024 19:08:38 Type: Unk
Method: NON EPA-6010-200.7(v2496) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7108778 | .2005199 | F .6549988 | 5.691010 | F -.006498 | .1852963 |
| Stddev | .0025175 | .0002348 | .0049403 | .011142 | .001443 | .0008379 |
| %RSD | .3541417 | .1170851 | .7542528 | .1957760 | 22.20631 | .4522029 |
| #1 | .7082054 | .2007249 | .6520730 | 5.679554 | -.008095 | .1844801 |
| #2 | .7132047 | .2005710 | .6607028 | 5.701808 | -.006109 | .1861544 |
| #3 | .7112232 | .2002637 | .6522206 | 5.691668 | -.005289 | .1852545 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2093805 |
| Stddev | .0002783 |
| %RSD | .1328998 |
| #1 | .2091080 |
| #2 | .2096642 |
| #3 | .2093693 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2483.350 | 58365.03 | 13490.63 | 1621.768 | 4083.350 |
| Stddev | 6.404 | 133.94 | 55.73 | 8.839 | 4.322 |
| %RSD | .2578775 | .2294948 | .4130768 | .5450306 | .1058429 |
| #1 | 2483.247 | 58270.72 | 13440.44 | 1615.898 | 4081.222 |
| #2 | 2489.805 | 58306.01 | 13480.85 | 1617.472 | 4088.323 |
| #3 | 2476.998 | 58518.35 | 13550.60 | 1631.934 | 4080.505 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-01 Acquired: 12/5/2024 19:12:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001712 | -.000569 | .0008278 | .0080139 | -.001946 | .0197639 | .0018635 |
| Stddev | .000877 | .001305 | .0006354 | .0011172 | .000502 | .0013949 | .0003518 |
| %RSD | 51.23953 | 229.5774 | 76.76192 | 13.94112 | 25.79444 | 7.057639 | 18.87638 |
| #1 | -.000907 | -.001482 | .0011261 | .0088212 | -.001403 | .0183170 | .0021956 |
| #2 | -.002647 | -.001151 | .0012591 | .0084816 | -.002393 | .0211001 | .0018999 |
| #3 | -.001582 | .000927 | .0000981 | .0067388 | -.002041 | .0198745 | .0014949 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000159 | -.000034 | .0437553 | .0004912 | -.000010 | -.008454 | .0120599 |
| Stddev | .0000282 | .000055 | .0044955 | .0001428 | .000055 | .000230 | .0036041 |
| %RSD | 177.6088 | 165.0589 | 10.27421 | 29.07359 | 525.9281 | 2.716958 | 29.88509 |
| #1 | .0000219 | -.000006 | .0452620 | .0004745 | -.000047 | -.008490 | .0085477 |
| #2 | .0000406 | -.000097 | .0473040 | .0006416 | .000053 | -.008208 | .0157494 |
| #3 | -.000015 | .000002 | .0387000 | .0003575 | -.000037 | -.008663 | .0118826 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0013146 | .0144503 | .0001048 | .0004820 | .0071783 | .0011239 | .0075785 |
| Stddev | .0001150 | .0053790 | .0002553 | .0002029 | .0053559 | .0008411 | .0001295 |
| %RSD | 8.751032 | 37.22447 | 243.5375 | 42.09091 | 74.61313 | 74.83503 | 1.708666 |
| #1 | .0011973 | .0119585 | .0001247 | .0004779 | .0028974 | .0015200 | .0077262 |
| #2 | .0013194 | .0206234 | .0003497 | .0002812 | .0054533 | .0001579 | .0074847 |
| #3 | .0014272 | .0107691 | -.000160 | .0006869 | .0131842 | .0016939 | .0075245 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.061554 | -.009772 | -.000000 | .0181473 | .0014165 | .0044545 | .0134274 |
| Stddev | .005269 | .000620 | .000181 | .0009303 | .0002806 | .0014904 | .0024829 |
| %RSD | 8.559179 | 6.349407 | 81956.53 | 5.126479 | 19.80745 | 33.45776 | 18.49121 |
| #1 | -.055535 | -.009458 | .000209 | .0172814 | .0017197 | .0043920 | .0106874 |
| #2 | -.063797 | -.010486 | -.000094 | .0180297 | .0013638 | .0059752 | .0155281 |
| #3 | -.065331 | -.009371 | -.000115 | .0191308 | .0011660 | .0029964 | .0140667 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-01 Acquired: 12/5/2024 19:12:54 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3448840 | -.001312 | -.000118 |
| Stddev | .0033002 | .000229 | .000028 |
| %RSD | .9568865 | 17.46617 | 23.61203 |
| | | | |
| #1 | .3426910 | -.001212 | -.000086 |
| #2 | .3486794 | -.001149 | -.000135 |
| #3 | .3432816 | -.001574 | -.000134 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2503.911 | 60937.27 | 14455.42 | 1651.018 | 4391.290 |
| Stddev | 8.949 | 74.01 | 29.03 | 2.488 | 6.233 |
| %RSD | .3573911 | .1214483 | .2008166 | .1506871 | .1419403 |
| | | | | | |
| #1 | 2498.048 | 60898.81 | 14465.85 | 1652.743 | 4388.185 |
| #2 | 2499.474 | 60890.42 | 14422.61 | 1648.166 | 4387.219 |
| #3 | 2514.211 | 61022.59 | 14477.79 | 1652.144 | 4398.466 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-05 Acquired: 12/5/2024 19:17:17 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001711 | -.000836 | .0176254 | .0000860 | -.002493 | .1708315 | .5977440 |
| Stddev | .001271 | .000451 | .0004251 | .0022219 | .000196 | .0034552 | .0027362 |
| %RSD | 74.28791 | 53.90501 | 2.412079 | 2585.026 | 7.865132 | 2.022598 | .4577553 |
| #1 | -.002184 | -.001075 | .0171633 | .0023921 | -.002311 | .1705194 | .5971789 |
| #2 | -.000271 | -.000316 | .0177131 | -.002041 | -.002701 | .1744322 | .6007187 |
| #3 | -.002677 | -.001116 | .0179999 | -.000093 | -.002467 | .1675429 | .5953345 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000667 | .0002747 | 1.470869 | .0142309 | .0004308 | .0255940 | 4.724179 |
| Stddev | .0000344 | .0000510 | .008873 | .0006260 | .0000433 | .0001813 | .006285 |
| %RSD | 51.53075 | 18.55655 | .6032307 | 4.399058 | 10.06080 | .7082000 | .1330299 |
| #1 | .0000543 | .0003012 | 1.472189 | .0137278 | .0004392 | .0253918 | 4.719777 |
| #2 | .0001055 | .0003071 | 1.479007 | .0140329 | .0004693 | .0257420 | 4.731376 |
| #3 | .0000402 | .0002160 | 1.461410 | .0149320 | .0003838 | .0256480 | 4.721383 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0429268 | .1328629 | .0054956 | .0006047 | -.004058 | .0014524 | .0938940 |
| Stddev | .0001286 | .0079948 | .0002178 | .0002028 | .002868 | .0007773 | .0003570 |
| %RSD | .2996637 | 6.017357 | 3.962281 | 33.53990 | 70.66541 | 53.52042 | .3801800 |
| #1 | .0429762 | .1343269 | .0056896 | .0008224 | -.007364 | .0016336 | .0942940 |
| #2 | .0430234 | .1400246 | .0055371 | .0004211 | -.002246 | .0021232 | .0937803 |
| #3 | .0427808 | .1242372 | .0052600 | .0005707 | -.002564 | .0006005 | .0936078 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.029399 | -.006006 | .0026123 | .0147476 | .0135121 | .1336100 | .0356266 |
| Stddev | .012117 | .000523 | .0001553 | .0004635 | .0002123 | .0033261 | .0006825 |
| %RSD | 41.21618 | 8.713281 | 5.945223 | 3.142802 | 1.571148 | 2.489442 | 1.915763 |
| #1 | -.015408 | -.006086 | .0027911 | .0148340 | .0136207 | .1317904 | .0350702 |
| #2 | -.036287 | -.006484 | .0025357 | .0142471 | .0132674 | .1374490 | .0363882 |
| #3 | -.036503 | -.005447 | .0025102 | .0151619 | .0136481 | .1315906 | .0354215 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-05 Acquired: 12/5/2024 19:17:17 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .2085296 | -.001580 | .0127620 |
| Stddev | .0024572 | .000351 | .0000262 |
| %RSD | 1.178362 | 22.19220 | .2050171 |
| | | | |
| #1 | .2105438 | -.001349 | .0127327 |
| #2 | .2092531 | -.001983 | .0127704 |
| #3 | .2057918 | -.001407 | .0127829 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2423.440 | 59622.40 | 14229.13 | 1613.205 | 4190.953 |
| Stddev | 5.687 | 118.18 | 40.66 | 6.097 | 7.952 |
| %RSD | .2346492 | .1982146 | .2857311 | .3779267 | .1897494 |
| | | | | | |
| #1 | 2429.993 | 59712.27 | 14211.04 | 1614.896 | 4200.125 |
| #2 | 2420.528 | 59488.53 | 14200.66 | 1606.441 | 4185.975 |
| #3 | 2419.799 | 59666.39 | 14275.69 | 1618.277 | 4186.761 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-01 Acquired: 12/5/2024 19:21:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0842605 | -.013639 | .3052007 | -.044557 | -.005051 | 88.77197 | 1.213939 |
| Stddev | .0046600 | .001684 | .0015990 | .003018 | .000670 | 1.03789 | .013828 |
| %RSD | 5.530407 | 12.34906 | .5239051 | 6.773714 | 13.27177 | 1.169167 | 1.139068 |
| #1 | .0789056 | -.011699 | .3038815 | -.042834 | -.005542 | 89.68558 | 1.223204 |
| #2 | .0864806 | -.014486 | .3047416 | -.042794 | -.005325 | 87.64345 | 1.198045 |
| #3 | .0873952 | -.014732 | .3069790 | -.048042 | -.004288 | 88.98690 | 1.220568 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0123201 | .0222108 | 79.80952 | .2337625 | .1317772 | .2451853 | 205.2221 |
| Stddev | .0000783 | .0002495 | 1.26744 | .0001457 | .0005193 | .0024544 | .6596 |
| %RSD | .6353770 | 1.123397 | 1.588085 | .0623155 | .3940536 | 1.001050 | .3214109 |
| #1 | .0123868 | .0219460 | 81.20848 | .2336593 | .1312483 | .2423963 | 205.9601 |
| #2 | .0122339 | .0222448 | 78.73775 | .2339291 | .1317971 | .2461436 | 204.6900 |
| #3 | .0123395 | .0224415 | 79.48235 | .2336991 | .1322862 | .2470160 | 205.0161 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 5.006951 | 63.64585 | .2644116 | -.006645 | 10.71616 | .3576039 | .7648763 |
| Stddev | .076943 | .90062 | .0013092 | .000285 | .05187 | .0045868 | .0010442 |
| %RSD | 1.536723 | 1.415056 | .4951523 | 4.281745 | .4840365 | 1.282651 | .1365142 |
| #1 | 5.088694 | 64.61686 | .2630795 | -.006323 | 10.65628 | .3624478 | .7637542 |
| #2 | 4.935934 | 62.83789 | .2644588 | -.006750 | 10.74501 | .3533268 | .7658194 |
| #3 | 4.996224 | 63.48279 | .2656967 | -.006863 | 10.74720 | .3570371 | .7650554 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 19.47381 | .1217057 | .0088613 | .0095855 | 4.746451 | 2.948368 | 8.007645 |
| Stddev | .08877 | .0013032 | .0001320 | .0012947 | .061971 | .018945 | .061075 |
| %RSD | .4558652 | 1.070784 | 1.489901 | 13.50638 | 1.305622 | .6425420 | .7627025 |
| #1 | 19.38222 | .1216093 | .0090135 | .0080914 | 4.804560 | 2.965925 | 7.938727 |
| #2 | 19.47975 | .1230544 | .0087937 | .0102889 | 4.681232 | 2.928289 | 8.029149 |
| #3 | 19.55947 | .1204533 | .0087768 | .0103762 | 4.753561 | 2.950891 | 8.055059 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-01 Acquired: 12/5/2024 19:21:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 2.551088 | .2039439 | -.007399 |
| Stddev | .020930 | .0019034 | .001790 |
| %RSD | .8204284 | .9333140 | 24.19443 |
| | | | |
| #1 | 2.535249 | .2044582 | -.005955 |
| #2 | 2.543198 | .2018361 | -.009402 |
| #3 | 2.574816 | .2055373 | -.006839 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2709.657 | 67085.24 | 16904.38 | 1816.028 | 3446.211 |
| Stddev | 7.780 | 60.25 | 196.41 | 7.278 | 11.989 |
| %RSD | .2871326 | .0898126 | 1.161862 | .4007752 | .3478843 |
| | | | | | |
| #1 | 2718.593 | 67128.69 | 16697.56 | 1817.098 | 3458.532 |
| #2 | 2705.994 | 67016.46 | 17088.38 | 1808.274 | 3445.516 |
| #3 | 2704.385 | 67110.56 | 16927.20 | 1822.711 | 3434.585 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05 Acquired: 12/5/2024 19:25:46 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0908767 | -.013025 | .3460792 | -.060043 | -.006369 | 108.7846 | .9761601 |
| Stddev | .0043292 | .001899 | .0004671 | .002351 | .000422 | .1150 | .0005818 |
| %RSD | 4.763875 | 14.57962 | .1349812 | 3.915911 | 6.619065 | .1057446 | .0595973 |
| #1 | .0939559 | -.015217 | .3456899 | -.059023 | -.005981 | 108.6635 | .9764089 |
| #2 | .0927476 | -.011982 | .3459505 | -.062732 | -.006309 | 108.8925 | .9765761 |
| #3 | .0859267 | -.011876 | .3465972 | -.058373 | -.006818 | 108.7977 | .9754953 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0166805 | .0284675 | 45.03761 | .2979151 | .1621959 | .2067837 | 264.7074 |
| Stddev | .0001487 | .0005917 | .24083 | .0004625 | .0006146 | .0025940 | 2.5310 |
| %RSD | .8912472 | 2.078445 | .5347365 | .1552550 | .3789237 | 1.254463 | .9561367 |
| #1 | .0165982 | .0277890 | 45.25124 | .2973835 | .1615113 | .2037889 | 267.5871 |
| #2 | .0165913 | .0288765 | 44.77661 | .2981367 | .1623765 | .2082350 | 262.8359 |
| #3 | .0168522 | .0287370 | 45.08497 | .2982252 | .1627001 | .2083273 | 263.6991 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.323238 | 84.98976 | .3191220 | -.008931 | 11.41350 | .4135724 | .8582324 |
| Stddev | .041023 | .31669 | .0010678 | .000108 | .06065 | .0020497 | .0018465 |
| %RSD | .5601737 | .3726166 | .3346082 | 1.210957 | .5314298 | .4955965 | .2151562 |
| #1 | 7.364495 | 85.25124 | .3179284 | -.009024 | 11.46291 | .4137900 | .8599182 |
| #2 | 7.282453 | 84.63764 | .3199864 | -.008957 | 11.43179 | .4114226 | .8585201 |
| #3 | 7.322765 | 85.08041 | .3194513 | -.008812 | 11.34581 | .4155046 | .8562589 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 25.87842 | .1551887 | .0022738 | .0087829 | 6.066293 | 2.632825 | 9.133109 |
| Stddev | .16858 | .0040099 | .0000606 | .0017617 | .018134 | .020182 | .083379 |
| %RSD | .6514468 | 2.583871 | 2.663822 | 20.05844 | .2989384 | .7665507 | .9129275 |
| #1 | 26.05113 | .1598180 | .0022319 | .0073650 | 6.084659 | 2.650903 | 9.089819 |
| #2 | 25.86983 | .1529485 | .0023432 | .0107551 | 6.048399 | 2.636522 | 9.080281 |
| #3 | 25.71429 | .1527994 | .0022462 | .0082287 | 6.065820 | 2.611050 | 9.229229 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05 Acquired: 12/5/2024 19:25:46 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3989195 | .2417808 | -.052221 |
| Stddev | .0025720 | .0009828 | .003271 |
| %RSD | .6447465 | .4064912 | 6.264225 |
| | | | |
| #1 | .3967905 | .2415576 | -.055931 |
| #2 | .4017773 | .2428560 | -.049753 |
| #3 | .3981908 | .2409288 | -.050978 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2789.965 | 67603.29 | 16943.19 | 1854.094 | 3406.908 |
| Stddev | 9.224 | 240.69 | 37.08 | 12.286 | 4.306 |
| %RSD | .3306194 | .3560398 | .2188704 | .6626602 | .1263936 |
| | | | | | |
| #1 | 2789.338 | 67326.59 | 16943.45 | 1839.907 | 3409.232 |
| #2 | 2781.071 | 67764.20 | 16980.14 | 1861.215 | 3401.939 |
| #3 | 2799.487 | 67719.09 | 16905.98 | 1861.160 | 3409.552 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05DUP Acquired: 12/5/2024 19:29:51 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0899319 | -.011929 | .3397839 | -.057779 | -.005222 | 104.2341 | 1.117522 |
| Stddev | .0039057 | .004079 | .0013813 | .002262 | .002442 | 2.2420 | .024760 |
| %RSD | 4.342981 | 34.19247 | .4065084 | 3.915234 | 46.76672 | 2.150898 | 2.215652 |
| #1 | .0858753 | -.007517 | .3387860 | -.057824 | -.007799 | 105.1059 | 1.126909 |
| #2 | .0936669 | -.012709 | .3392054 | -.060018 | -.002942 | 105.9092 | 1.136217 |
| #3 | .0902534 | -.015562 | .3413603 | -.055495 | -.004925 | 101.6872 | 1.089441 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0176111 | .0283713 | 37.41271 | .2914024 | .1648337 | .1962735 | 257.2236 |
| Stddev | .0002890 | .0005021 | .76878 | .0009600 | .0010005 | .0019202 | .9417 |
| %RSD | 1.641057 | 1.769800 | 2.054876 | .3294468 | .6069866 | .9783478 | .3661113 |
| #1 | .0175880 | .0284281 | 37.63129 | .2915197 | .1647696 | .1950591 | 257.6433 |
| #2 | .0179110 | .0278432 | 38.04853 | .2922984 | .1638667 | .1952740 | 257.8825 |
| #3 | .0173343 | .0288426 | 36.55830 | .2903892 | .1658647 | .1984873 | 256.1450 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.057097 | 81.86937 | .3239236 | -.009182 | 11.08379 | .4215308 | .8301437 |
| Stddev | .203501 | 1.76942 | .0011816 | .000486 | .08607 | .0088603 | .0010122 |
| %RSD | 2.246866 | 2.161268 | .3647886 | 5.292567 | .7765313 | 2.101936 | .1219333 |
| #1 | 9.110244 | 82.43202 | .3252516 | -.009225 | 11.17476 | .4241616 | .8313122 |
| #2 | 9.228752 | 83.28904 | .3229883 | -.008676 | 11.07296 | .4287778 | .8295368 |
| #3 | 8.832297 | 79.88704 | .3235308 | -.009645 | 11.00364 | .4116530 | .8295821 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 23.74101 | .1443288 | .0024247 | .0074332 | 5.926427 | 3.452852 | 9.190395 |
| Stddev | .12948 | .0014825 | .0002259 | .0002623 | .132212 | .013706 | .021073 |
| %RSD | .5453765 | 1.027179 | 9.317106 | 3.528711 | 2.230881 | .3969590 | .2292898 |
| #1 | 23.87224 | .1439578 | .0021678 | .0075067 | 5.969490 | 3.462321 | 9.166210 |
| #2 | 23.73744 | .1430671 | .0025143 | .0071420 | 6.031738 | 3.459100 | 9.204804 |
| #3 | 23.61336 | .1459616 | .0025921 | .0076509 | 5.778053 | 3.437135 | 9.200172 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05DUP Acquired: 12/5/2024 19:29:51 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .3922531 | .2217723 | -.067572 |
| Stddev | .0076560 | .0045298 | .003270 |
| %RSD | 1.951812 | 2.042562 | 4.839249 |
| | | | |
| #1 | .3870999 | .2238794 | -.065998 |
| #2 | .4010505 | .2248648 | -.065387 |
| #3 | .3886089 | .2165728 | -.071332 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2951.555 | 71388.79 | 17340.91 | 1951.378 | 3564.311 |
| Stddev | 6.950 | 217.87 | 327.75 | 11.634 | 5.806 |
| %RSD | .2354568 | .3051855 | 1.890013 | .5962012 | .1629064 |
| | | | | | |
| #1 | 2957.565 | 71138.52 | 17211.86 | 1938.447 | 3564.068 |
| #2 | 2953.155 | 71536.09 | 17097.33 | 1960.998 | 3570.235 |
| #3 | 2943.945 | 71491.75 | 17713.53 | 1954.689 | 3558.630 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05LX5 Acquired: 12/5/2024 19:33:55 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0212663 | -.001130 | .0706389 | -.012692 | -.004057 | 24.32498 | .2420250 |
| Stddev | .0019446 | .002419 | .0002705 | .001293 | .001124 | .17714 | .0025662 |
| %RSD | 9.143813 | 214.1776 | .3828886 | 10.19058 | 27.69533 | .7282424 | 1.060304 |
| #1 | .0209147 | -.003468 | .0704451 | -.011824 | -.003756 | 24.52938 | .2449877 |
| #2 | .0233626 | -.001283 | .0705238 | -.012074 | -.003114 | 24.21610 | .2405915 |
| #3 | .0195215 | .001363 | .0709479 | -.014179 | -.005300 | 24.22946 | .2404958 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0043114 | .0022952 | 9.994737 | .0722334 | .0320499 | .0502703 | 62.48854 |
| Stddev | .0000220 | .0000473 | .084879 | .0008462 | .0000961 | .0002881 | .13255 |
| %RSD | .5100551 | 2.062346 | .8492332 | 1.171476 | .2998491 | .5730322 | .2121256 |
| #1 | .0042870 | .0022560 | 10.09274 | .0713449 | .0321248 | .0499440 | 62.63782 |
| #2 | .0043176 | .0023478 | 9.94655 | .0723255 | .0319416 | .0504892 | 62.44319 |
| #3 | .0043297 | .0022819 | 9.94492 | .0730298 | .0320834 | .0503778 | 62.38462 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.986572 | 19.36098 | .0636921 | -.001757 | 2.466033 | .1009056 | .1998023 |
| Stddev | .021325 | .16707 | .0002084 | .000166 | .013301 | .0010162 | .0003676 |
| %RSD | 1.073473 | .8628987 | .3271219 | 9.425332 | .5393653 | 1.007106 | .1839558 |
| #1 | 2.011189 | 19.54734 | .0638555 | -.001678 | 2.468996 | .1006755 | .1997444 |
| #2 | 1.974775 | 19.31096 | .0634575 | -.001947 | 2.451500 | .1020171 | .2001954 |
| #3 | 1.973752 | 19.22463 | .0637633 | -.001645 | 2.477602 | .1000241 | .1994672 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 5.413271 | .0291468 | .0001429 | -.000142 | 1.420634 | .6979880 | 1.761255 |
| Stddev | .012715 | .0004439 | .0002888 | .000932 | .010739 | .0046058 | .006140 |
| %RSD | .2348831 | 1.523146 | 202.1650 | 654.6406 | .7559267 | .6598736 | .3486211 |
| #1 | 5.424321 | .0286517 | .0000436 | -.001190 | 1.433031 | .7011173 | 1.761918 |
| #2 | 5.399374 | .0295093 | -.000083 | .000169 | 1.414206 | .6926992 | 1.754810 |
| #3 | 5.416120 | .0292795 | .000468 | .000594 | 1.414664 | .7001474 | 1.767037 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05LX5 Acquired: 12/5/2024 19:33:55 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0702825 | .0516258 | -.015655 |
| Stddev | .0016532 | .0009143 | .000135 |
| %RSD | 2.352192 | 1.771039 | .8620089 |
| | | | |
| #1 | .0684552 | .0526561 | -.015504 |
| #2 | .0716744 | .0509111 | -.015764 |
| #3 | .0707178 | .0513101 | -.015696 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2628.500 | 62000.43 | 14753.70 | 1735.073 | 3992.256 |
| Stddev | 10.722 | 103.43 | 132.24 | 13.600 | 2.815 |
| %RSD | .4078969 | .1668182 | .8963305 | .7838014 | .0705225 |
| | | | | | |
| #1 | 2616.704 | 61905.00 | 14606.78 | 1729.321 | 3989.511 |
| #2 | 2637.653 | 61985.96 | 14791.12 | 1725.295 | 3995.137 |
| #3 | 2631.143 | 62110.34 | 14863.20 | 1750.604 | 3992.120 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05MS Acquired: 12/5/2024 19:38:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6477434 | 1.805406 | 1.235518 | 1.227137 | .1962159 | 112.9466 |
| Stddev | .0029940 | .023518 | .005918 | .003709 | .0003501 | .3445 |
| %RSD | .4622219 | 1.302623 | .4790286 | .3022127 | .1784476 | .3049723 |
| #1 | .6490158 | 1.831342 | 1.229991 | 1.230421 | .1958365 | 112.5845 |
| #2 | .6498910 | 1.799404 | 1.234801 | 1.223115 | .1962846 | 112.9854 |
| #3 | .6443233 | 1.785470 | 1.241763 | 1.227875 | .1965266 | 113.2701 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.148485 | .1866606 | .2265115 | 37.88582 | .5884263 | .3642915 |
| Stddev | .004204 | .0004930 | .0007736 | .11669 | .0023213 | .0008299 |
| %RSD | .3660606 | .2641161 | .3415243 | .3080174 | .3944876 | .2278083 |
| #1 | 1.144727 | .1867834 | .2258524 | 37.75227 | .5858089 | .3636615 |
| #2 | 1.147701 | .1870806 | .2263188 | 37.93708 | .5902354 | .3639812 |
| #3 | 1.153025 | .1861178 | .2273632 | 37.96812 | .5892345 | .3652318 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3890665 | 243.0134 | 7.227187 | 79.52201 | .8146353 | .0487252 |
| Stddev | .0010260 | 1.2880 | .030050 | .29829 | .0030978 | .0004286 |
| %RSD | .2637130 | .5300145 | .4157917 | .3750976 | .3802686 | .8796578 |
| #1 | .3888576 | 241.6192 | 7.194644 | 79.19448 | .8119800 | .0484195 |
| #2 | .3881609 | 243.2621 | 7.233032 | 79.77806 | .8138874 | .0485410 |
| #3 | .3901808 | 244.1589 | 7.253885 | 79.59348 | .8180386 | .0492152 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 12.84969 | .6154697 | .9542697 | 29.33509 | .3380247 | .2613710 |
| Stddev | .03143 | .0047043 | .0013382 | .09296 | .0016626 | .0005715 |
| %RSD | .2445890 | .7643395 | .1402301 | .3168904 | .4918421 | .2186507 |
| #1 | 12.81541 | .6105899 | .9546631 | 29.22788 | .3361869 | .2619603 |
| #2 | 12.87714 | .6158430 | .9527790 | 29.39335 | .3384629 | .2608191 |
| #3 | 12.85653 | .6199762 | .9553671 | 29.38403 | .3394241 | .2613335 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05MS Acquired: 12/5/2024 19:38:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6255063 | 5.928100 | 5.805859 | F 15.47591 | .3631391 | .3747369 |
| Stddev | .0042940 | .023153 | .028466 | .09281 | .0040239 | .0006205 |
| %RSD | .6864840 | .3905680 | .4902977 | .5996989 | 1.108077 | .1655872 |
| #1 | .6222996 | 5.905841 | 5.773373 | 15.58068 | .3667414 | .3740605 |
| #2 | .6238347 | 5.926406 | 5.826435 | 15.44301 | .3638794 | .3748702 |
| #3 | .6303848 | 5.952054 | 5.817771 | 15.40402 | .3587965 | .3752799 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0978998 |
| Stddev | .0004801 |
| %RSD | .4904039 |
| #1 | .0981771 |
| #2 | .0981770 |
| #3 | .0973455 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2927.622 | 71123.70 | 17300.20 | 1960.011 | 3524.419 |
| Stddev | 6.634 | 116.55 | 13.36 | 7.749 | 10.849 |
| %RSD | .2266023 | .1638681 | .0772447 | .3953635 | .3078328 |
| #1 | 2926.199 | 71229.84 | 17304.76 | 1963.378 | 3530.950 |
| #2 | 2934.852 | 71142.29 | 17310.69 | 1965.507 | 3530.413 |
| #3 | 2921.815 | 70998.98 | 17285.15 | 1951.148 | 3511.895 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05MSD Acquired: 12/5/2024 19:42:07 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6447612 | 1.780005 | 1.223946 | 1.215641 | .1948726 | 112.2014 |
| Stddev | .0047652 | .013438 | .003906 | .001960 | .0003783 | .4691 |
| %RSD | .7390592 | .7549552 | .3191010 | .1612162 | .1941436 | .4181292 |
| #1 | .6393731 | 1.764881 | 1.219475 | 1.217047 | .1949039 | 111.7261 |
| #2 | .6464896 | 1.790574 | 1.225675 | 1.216473 | .1944796 | 112.2137 |
| #3 | .6484210 | 1.784560 | 1.226689 | 1.213402 | .1952343 | 112.6642 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.144133 | .1846495 | .2240782 | 37.45592 | .5852065 | .3612189 |
| Stddev | .005491 | .0003069 | .0005418 | .10453 | .0024999 | .0007690 |
| %RSD | .4799665 | .1661779 | .2417725 | .2790850 | .4271873 | .2128998 |
| #1 | 1.138864 | .1843140 | .2236119 | 37.40952 | .5827862 | .3606449 |
| #2 | 1.149823 | .1847183 | .2239502 | 37.38262 | .5877791 | .3609191 |
| #3 | 1.143712 | .1849160 | .2246725 | 37.57562 | .5850541 | .3620927 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3848388 | 243.0657 | 7.167662 | 78.50018 | .8076685 | .0486231 |
| Stddev | .0006952 | .1147 | .014389 | .34976 | .0020058 | .0005518 |
| %RSD | .1806407 | .0472053 | .2007428 | .4455472 | .2483464 | 1.134898 |
| #1 | .3843032 | 243.0435 | 7.154579 | 78.32964 | .8063033 | .0479969 |
| #2 | .3845888 | 242.9638 | 7.165334 | 78.26841 | .8067307 | .0488344 |
| #3 | .3856244 | 243.1900 | 7.183072 | 78.90249 | .8099714 | .0490382 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 12.87444 | .6090790 | .9481166 | 29.31575 | .3411683 | .2590984 |
| Stddev | .03213 | .0030807 | .0011167 | .10404 | .0011981 | .0007909 |
| %RSD | .2495823 | .5058006 | .1177854 | .3549058 | .3511696 | .3052549 |
| #1 | 12.83880 | .6079225 | .9469977 | 29.22616 | .3400635 | .2581858 |
| #2 | 12.90121 | .6067439 | .9492312 | 29.42986 | .3424418 | .2595860 |
| #3 | 12.88331 | .6125706 | .9481208 | 29.29124 | .3409995 | .2595233 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05MSD Acquired: 12/5/2024 19:42:07 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6219723 | 5.902174 | 6.544047 | F 15.32230 | .3639518 | .3712882 |
| Stddev | .0026392 | .014501 | .005068 | .05412 | .0011878 | .0022767 |
| %RSD | .4243217 | .2456867 | .0774438 | .3532301 | .3263591 | .6131775 |
| #1 | .6191197 | 5.885921 | 6.539072 | 15.26001 | .3653228 | .3686643 |
| #2 | .6243272 | 5.906813 | 6.543866 | 15.34900 | .3633001 | .3727396 |
| #3 | .6224700 | 5.913788 | 6.549203 | 15.35788 | .3632325 | .3724608 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0962846 |
| Stddev | .0015708 |
| %RSD | 1.631371 |
| #1 | .0945838 |
| #2 | .0965892 |
| #3 | .0976807 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2948.931 | 71509.24 | 17496.74 | 1966.321 | 3550.902 |
| Stddev | 7.296 | 39.74 | 16.88 | 4.709 | 9.381 |
| %RSD | .2474138 | .0555719 | .0964753 | .2395032 | .2641819 |
| #1 | 2953.061 | 71463.91 | 17499.83 | 1964.699 | 3558.479 |
| #2 | 2953.226 | 71525.72 | 17511.86 | 1962.637 | 3553.818 |
| #3 | 2940.507 | 71538.09 | 17478.53 | 1971.627 | 3540.410 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV06 Acquired: 12/5/2024 19:45:53 Type: Unk
Method: NON EPA-6010-200.7(v2497) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.638514 | 5.084928 | 5.083204 | 4.606390 | 4.547783 | 9.230749 |
| Stddev | .059949 | .114414 | .062981 | .057291 | .055247 | .010272 |
| %RSD | 1.292418 | 2.250068 | 1.239010 | 1.243734 | 1.214815 | .1112820 |
| | | | | | | |
| #1 | 4.569293 | 4.955021 | 5.010571 | 4.540274 | 4.484100 | 9.229506 |
| #2 | 4.672604 | 5.170708 | 5.116344 | 4.641387 | 4.576368 | 9.221155 |
| #3 | 4.673644 | 5.129054 | 5.122696 | 4.637510 | 4.582881 | 9.241586 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.072743 | .2702678 | 2.592812 | 25.60628 | 1.025582 | 2.531093 |
| Stddev | .036192 | .0007434 | .034648 | .15028 | .004268 | .034309 |
| %RSD | .3989127 | .2750496 | 1.336291 | .5868974 | .4161461 | 1.355492 |
| | | | | | | |
| #1 | 9.071477 | .2710298 | 2.552834 | 25.44327 | 1.030389 | 2.491556 |
| #2 | 9.109552 | .2702291 | 2.611460 | 25.63623 | 1.024122 | 2.548683 |
| #3 | 9.037201 | .2695446 | 2.614141 | 25.73933 | 1.022236 | 2.553039 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.156686 | 4.745484 | 2.489325 | 24.82368 | 2.532935 | 1.209062 |
| Stddev | .013289 | .045230 | .015191 | .12731 | .033184 | .000963 |
| %RSD | 1.148917 | .9531144 | .6102635 | .5128742 | 1.310086 | .0796423 |
| | | | | | | |
| #1 | 1.141348 | 4.697353 | 2.473468 | 24.68636 | 2.494632 | 1.209913 |
| #2 | 1.163929 | 4.787107 | 2.503750 | 24.84687 | 2.551164 | 1.208017 |
| #3 | 1.164780 | 4.751992 | 2.490757 | 24.93780 | 2.553009 | 1.209255 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 23.91442 | 2.458742 | 2.364704 | 24.77874 | 5.137301 | 4.788500 |
| Stddev | .20319 | .006655 | .011835 | .07301 | .004918 | .063132 |
| %RSD | .8496571 | .2706615 | .5004938 | .2946646 | .0957289 | 1.318399 |
| | | | | | | |
| #1 | 24.14016 | 2.451062 | 2.362336 | 24.81827 | 5.142968 | 4.715620 |
| #2 | 23.85692 | 2.462802 | 2.377544 | 24.82348 | 5.134788 | 4.823546 |
| #3 | 23.74617 | 2.462363 | 2.354232 | 24.69449 | 5.134148 | 4.826335 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV06 Acquired: 12/5/2024 19:45:53 Type: Unk
Method: NON EPA-6010-200.7(v2497) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 5.157720 | 4.766733 | 4.507106 | 5.059886 | 4.937639 | F 4.221371 |
| Stddev | .076096 | .014618 | .023798 | .080267 | .063679 | .014896 |
| %RSD | 1.475377 | .3066685 | .5280037 | 1.586337 | 1.289658 | .3528700 |
| | | | | | | |
| #1 | 5.069856 | 4.752830 | 4.480258 | 4.967253 | 4.864560 | 4.233002 |
| #2 | 5.202275 | 4.781974 | 4.525602 | 5.103523 | 4.967133 | 4.226529 |
| #3 | 5.201030 | 4.765394 | 4.515457 | 5.108881 | 4.981223 | 4.204581 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | 4.801900 |
| Stddev | .013479 |
| %RSD | .2807072 |
| | |
| #1 | 4.787113 |
| #2 | 4.813500 |
| #3 | 4.805089 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2403.743 | 58051.50 | 14122.65 | 1629.723 | 3765.283 |
| Stddev | 21.432 | 104.24 | 14.80 | 15.213 | 39.144 |
| %RSD | .8916170 | .1795671 | .1048259 | .9334844 | 1.039591 |
| | | | | | |
| #1 | 2428.142 | 58051.51 | 14125.18 | 1636.947 | 3810.178 |
| #2 | 2395.131 | 57947.25 | 14106.74 | 1612.243 | 3747.366 |
| #3 | 2387.957 | 58155.73 | 14136.02 | 1639.978 | 3738.305 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB06 Acquired: 12/5/2024 19:50:23 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0008288 | .0006089 | .0003593 | -.000294 | .0000565 | .0087682 | .0028683 |
| Stddev | .0011127 | .0012791 | .0017389 | .001044 | .0006537 | .0020400 | .0004388 |
| %RSD | 134.2619 | 210.0824 | 483.9850 | 354.5005 | 1157.784 | 23.26560 | 15.29658 |
| #1 | -.000456 | .0020817 | -.001132 | .000712 | .0004367 | .0101101 | .0024287 |
| #2 | .001448 | -.000224 | .002269 | -.000223 | -.000698 | .0064207 | .0033062 |
| #3 | .001494 | -.000031 | -.000059 | -.001372 | .000431 | .0097739 | .0028701 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000916 | .0000939 | -.008332 | .0000503 | .0002727 | -.001133 | .0105886 |
| Stddev | .0000194 | .0000759 | .003308 | .0001108 | .0000908 | .000223 | .0018038 |
| %RSD | 21.17636 | 80.76305 | 39.70157 | 219.9723 | 33.30976 | 19.70766 | 17.03503 |
| #1 | .0000944 | .0000779 | -.011996 | .0001410 | .0003720 | -.000997 | .0085649 |
| #2 | .0001095 | .0001766 | -.005565 | .0000832 | .0001939 | -.001011 | .0120271 |
| #3 | .0000710 | .0000274 | -.007435 | -.000073 | .0002521 | -.001390 | .0111738 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0006231 | .0089342 | -.000147 | .0003471 | .0852690 | .0009564 | -.000396 |
| Stddev | .0003717 | .0058298 | .000380 | .0001702 | .0187079 | .0012407 | .000070 |
| %RSD | 59.64552 | 65.25195 | 258.7174 | 49.04440 | 21.93988 | 129.7343 | 17.53565 |
| #1 | .0002142 | .0047792 | .000019 | .0004211 | .0657221 | .0015258 | -.000438 |
| #2 | .0007148 | .0155985 | .000122 | .0001524 | .0870786 | .0018102 | -.000316 |
| #3 | .0009404 | .0064250 | -.000581 | .0004679 | .1030064 | -.000467 | -.000435 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0309376 | -.003311 | .0001889 | -.000438 | .0004190 | .0013430 | -.005561 |
| Stddev | .0181251 | .000543 | .0003564 | .000600 | .0004089 | .0032648 | .002031 |
| %RSD | 58.58596 | 16.39694 | 188.6588 | 137.0241 | 97.58863 | 243.0905 | 36.51760 |
| #1 | .0150009 | -.003547 | .0003781 | -.000986 | -.000014 | .0024986 | -.005926 |
| #2 | .0271571 | -.002690 | .0004109 | .000203 | .000798 | .0038730 | -.003373 |
| #3 | .0506547 | -.003696 | -.000222 | -.000530 | .000473 | -.002342 | -.007385 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB06 Acquired: 12/5/2024 19:50:23 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.001979 | -.000142 | .0002487 |
| Stddev | .001285 | .000237 | .0000662 |
| %RSD | 64.93069 | 167.0256 | 26.64142 |
| | | | |
| #1 | -.002536 | -.000269 | .0001844 |
| #2 | -.002892 | -.000288 | .0003167 |
| #3 | -.000510 | .000131 | .0002449 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2571.539 | 60253.13 | 13992.08 | 1693.048 | 4338.291 |
| Stddev | 10.043 | 40.29 | 18.94 | 8.953 | 10.186 |
| %RSD | .3905317 | .0668623 | .1353357 | .5288185 | .2347860 |
| | | | | | |
| #1 | 2567.412 | 60207.61 | 13985.21 | 1698.988 | 4335.784 |
| #2 | 2582.988 | 60284.20 | 14013.49 | 1697.407 | 4349.496 |
| #3 | 2564.218 | 60267.56 | 13977.53 | 1682.750 | 4329.593 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05A Acquired: 12/5/2024 19:54:43 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6506092 | 1.818525 | 1.247182 | 1.229964 | .1980310 | 114.8654 |
| Stddev | .0007321 | .010800 | .003511 | .002744 | .0016635 | .8965 |
| %RSD | .1125261 | .5938603 | .2815232 | .2231011 | .8400064 | .7805202 |
| #1 | .6507861 | 1.822830 | 1.249726 | 1.232492 | .1999420 | 115.8971 |
| #2 | .6498049 | 1.806237 | 1.248644 | 1.230355 | .1969069 | 114.2757 |
| #3 | .6512367 | 1.826509 | 1.243176 | 1.227046 | .1972443 | 114.4233 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.161455 | .1910611 | .2279024 | 38.99837 | .5949606 | .3673077 |
| Stddev | .009038 | .0017455 | .0003053 | .41125 | .0017838 | .0004739 |
| %RSD | .7781683 | .9135895 | .1339511 | 1.054541 | .2998133 | .1290234 |
| #1 | 1.171853 | .1929365 | .2282541 | 39.47283 | .5938987 | .3675699 |
| #2 | 1.155480 | .1894838 | .2277467 | 38.77826 | .5939630 | .3667606 |
| #3 | 1.157033 | .1907630 | .2277064 | 38.74401 | .5970199 | .3675925 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3868464 | 247.3370 | 7.407986 | 81.32135 | .8212809 | .0499450 |
| Stddev | .0018849 | .7279 | .075527 | .83792 | .0015701 | .0001754 |
| %RSD | .4872563 | .2943104 | 1.019532 | 1.030376 | .1911798 | .3510905 |
| #1 | .3851363 | 248.1705 | 7.494934 | 82.28887 | .8227388 | .0500532 |
| #2 | .3888675 | 246.8260 | 7.358645 | 80.83198 | .8196186 | .0500391 |
| #3 | .3865355 | 247.0146 | 7.370381 | 80.84321 | .8214852 | .0497427 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 12.76673 | .6265382 | .9615789 | 29.24635 | .3466278 | .2623824 |
| Stddev | .01692 | .0055293 | .0032815 | .01891 | .0013529 | .0000539 |
| %RSD | .1325017 | .8825205 | .3412597 | .0646485 | .3903011 | .0205231 |
| #1 | 12.74753 | .6320156 | .9617438 | 29.24059 | .3480182 | .2623376 |
| #2 | 12.77945 | .6209583 | .9647748 | 29.26747 | .3453158 | .2624422 |
| #3 | 12.77320 | .6266406 | .9582181 | 29.23100 | .3465494 | .2623675 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5072-05A Acquired: 12/5/2024 19:54:43 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6313769 | 6.045283 | 6.148638 | F 15.64763 | .3654763 | .3764382 |
| Stddev | .0015828 | .053273 | .031934 | .02904 | .0033952 | .0027372 |
| %RSD | .2506914 | .8812358 | .5193660 | .1855567 | .9289716 | .7271342 |
| #1 | .6327432 | 6.104964 | 6.127913 | 15.65970 | .3621297 | .3794692 |
| #2 | .6296424 | 6.002532 | 6.185414 | 15.61451 | .3653812 | .3741469 |
| #3 | .6317451 | 6.028352 | 6.132589 | 15.66868 | .3689181 | .3756983 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .1003294 |
| Stddev | .0015414 |
| %RSD | 1.536311 |
| #1 | .1020752 |
| #2 | .0991566 |
| #3 | .0997563 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2937.525 | 71029.37 | 17104.70 | 1963.923 | 3522.326 |
| Stddev | 5.113 | 140.73 | 185.01 | 9.007 | 3.403 |
| %RSD | .1740715 | .1981302 | 1.081611 | .4586049 | .0966153 |
| #1 | 2941.094 | 70867.41 | 16892.15 | 1959.087 | 3519.802 |
| #2 | 2931.667 | 71121.93 | 17229.58 | 1958.368 | 3526.196 |
| #3 | 2939.814 | 71098.76 | 17192.36 | 1974.315 | 3520.979 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03 Acquired: 12/5/2024 19:58:41 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.005567 | -.005362 | .0144787 | -.000299 | .0007491 | .3249651 | .7142559 |
| Stddev | .001024 | .000666 | .0013718 | .001238 | .0004223 | .0053854 | .0027847 |
| %RSD | 18.39806 | 12.41339 | 9.474598 | 414.6656 | 56.37677 | 1.657222 | .3898793 |
| #1 | -.006328 | -.004721 | .0160025 | .001023 | .0011629 | .3190078 | .7139741 |
| #2 | -.004403 | -.005315 | .0140914 | -.000488 | .0007655 | .3294881 | .7171708 |
| #3 | -.005970 | -.006050 | .0133421 | -.001432 | .0003188 | .3263994 | .7116227 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000950 | .0002185 | 2.870343 | .0124476 | .0044553 | .0118830 | 16.30972 |
| Stddev | .0000687 | .0000182 | .031368 | .0000935 | .0000985 | .0008496 | .14661 |
| %RSD | 72.27608 | 8.309910 | 1.092833 | .7512987 | 2.211088 | 7.149669 | .8989106 |
| #1 | .0000255 | .0001977 | 2.837271 | .0125054 | .0044258 | .0127651 | 16.19926 |
| #2 | .0001629 | .0002268 | 2.874084 | .0124976 | .0043749 | .0118138 | 16.25386 |
| #3 | .0000967 | .0002310 | 2.899672 | .0123397 | .0045651 | .0110702 | 16.47605 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1662717 | .4532942 | .0083745 | .0000702 | 7.085149 | .0032977 | .1546234 |
| Stddev | .0018199 | .0069990 | .0004382 | .0001712 | .025111 | .0011355 | .0003916 |
| %RSD | 1.094547 | 1.544022 | 5.232760 | 243.8994 | .3544163 | 34.43294 | .2532278 |
| #1 | .1643486 | .4459558 | .0088726 | .0002670 | 7.085450 | .0020154 | .1547602 |
| #2 | .1664994 | .4598953 | .0080484 | -.000012 | 7.110108 | .0037015 | .1541819 |
| #3 | .1679670 | .4540314 | .0082024 | -.000045 | 7.059889 | .0041760 | .1549283 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7378073 | .0068410 | .0061089 | .0014449 | .0230483 | .5543432 | .1413333 |
| Stddev | .0085287 | .0002301 | .0000832 | .0004136 | .0005297 | .0021040 | .0029197 |
| %RSD | 1.155956 | 3.364149 | 1.362478 | 28.62778 | 2.298316 | .3795541 | 2.065857 |
| #1 | .7472666 | .0070478 | .0061110 | .0019085 | .0227765 | .5521464 | .1437786 |
| #2 | .7307047 | .0065931 | .0060247 | .0013124 | .0227097 | .5563403 | .1421207 |
| #3 | .7354506 | .0068822 | .0061911 | .0011137 | .0236587 | .5545429 | .1381006 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03 Acquired: 12/5/2024 19:58:41 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.086198 | -.000527 | .0176489 |
| Stddev | .008286 | .000304 | .0002338 |
| %RSD | .7628099 | 57.64547 | 1.324600 |
| | | | |
| #1 | 1.092962 | -.000841 | .0177408 |
| #2 | 1.076956 | -.000504 | .0178228 |
| #3 | 1.088675 | -.000235 | .0173832 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2421.850 | 60339.48 | 14464.89 | 1636.066 | 4129.055 |
| Stddev | 18.408 | 35.73 | 31.01 | 1.483 | 31.442 |
| %RSD | .7600802 | .0592154 | .2143846 | .0906581 | .7614819 |
| | | | | | |
| #1 | 2400.596 | 60346.73 | 14495.68 | 1637.680 | 4092.803 |
| #2 | 2432.270 | 60371.03 | 14465.31 | 1635.756 | 4148.903 |
| #3 | 2432.685 | 60300.68 | 14433.67 | 1634.762 | 4145.459 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03DUP Acquired: 12/5/2024 20:02:58 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.004889 | -.005342 | .0151518 | .0000555 | -.000645 | .3283338 | .7242902 |
| Stddev | .001958 | .000327 | .0006678 | .0004540 | .000372 | .0087761 | .0082042 |
| %RSD | 40.05845 | 6.115232 | 4.407515 | 817.7576 | 57.63823 | 2.672918 | 1.132723 |
| #1 | -.002762 | -.005107 | .0157609 | -.000097 | -.000769 | .3233208 | .7201229 |
| #2 | -.005287 | -.005715 | .0152567 | .000566 | -.000939 | .3232132 | .7190061 |
| #3 | -.006618 | -.005204 | .0144377 | -.000302 | -.000227 | .3384674 | .7337416 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000943 | .0001132 | 2.980710 | .0132384 | .0044295 | .0116333 | 17.10323 |
| Stddev | .0000523 | .0000309 | .056284 | .0002751 | .0002086 | .0002819 | .11309 |
| %RSD | 55.45840 | 27.31615 | 1.888274 | 2.077943 | 4.709580 | 2.423096 | .6612487 |
| #1 | .0000425 | .0001488 | 2.931373 | .0133996 | .0046155 | .0117474 | 16.97705 |
| #2 | .0001471 | .0000926 | 2.968743 | .0133950 | .0044691 | .0113123 | 17.13716 |
| #3 | .0000934 | .0000983 | 3.042016 | .0129208 | .0042039 | .0118403 | 17.19547 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1711576 | .4717947 | .0084576 | .0001466 | 7.337527 | .0033607 | .1623094 |
| Stddev | .0032796 | .0134301 | .0000402 | .0001489 | .032286 | .0004497 | .0006860 |
| %RSD | 1.916138 | 2.846597 | .4756037 | 101.5451 | .4400119 | 13.38242 | .4226483 |
| #1 | .1679503 | .4573844 | .0084112 | .0003172 | 7.374559 | .0031620 | .1630588 |
| #2 | .1710174 | .4740378 | .0084832 | .0000796 | 7.322734 | .0038755 | .1617123 |
| #3 | .1745050 | .4839621 | .0084783 | .0000431 | 7.315288 | .0030445 | .1621573 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7714522 | .0070212 | .0063270 | .0011617 | .0238031 | .5821989 | .1450203 |
| Stddev | .0087000 | .0002421 | .0001858 | .0001880 | .0007134 | .0053488 | .0025597 |
| %RSD | 1.127739 | 3.447971 | 2.937044 | 16.18392 | 2.996982 | .9187254 | 1.765033 |
| #1 | .7807481 | .0067427 | .0065205 | .0011500 | .0234640 | .5803380 | .1429007 |
| #2 | .7635059 | .0071811 | .0063104 | .0009799 | .0233224 | .5780291 | .1478640 |
| #3 | .7701027 | .0071398 | .0061500 | .0013553 | .0246227 | .5882296 | .1442961 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03DUP Acquired: 12/5/2024 20:02:58 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.102627 | -.000582 | .0176762 |
| Stddev | .005717 | .000541 | .0003549 |
| %RSD | .5185059 | 92.97892 | 2.007643 |
| | | | |
| #1 | 1.096918 | -.000628 | .0174627 |
| #2 | 1.102610 | -.000019 | .0174800 |
| #3 | 1.108352 | -.001098 | .0180858 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2406.275 | 58047.79 | 14129.09 | 1573.393 | 4085.190 |
| Stddev | 1.479 | 205.25 | 134.77 | 9.059 | 7.593 |
| %RSD | .0614808 | .3535872 | .9538258 | .5757643 | .1858662 |
| | | | | | |
| #1 | 2407.628 | 57841.34 | 14215.85 | 1563.129 | 4093.799 |
| #2 | 2406.501 | 58050.21 | 14197.58 | 1576.773 | 4082.322 |
| #3 | 2404.696 | 58251.82 | 13973.83 | 1580.275 | 4079.449 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03LX5 Acquired: 12/5/2024 20:07:15 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001261 | -.002819 | .0040100 | -.000846 | -.002082 | .0644710 | .1418437 |
| Stddev | .001542 | .000273 | .0011116 | .000762 | .000587 | .0006463 | .0004025 |
| %RSD | 122.3450 | 9.693621 | 27.72107 | 90.04589 | 28.17461 | 1.002459 | .2837924 |
| #1 | -.000444 | -.002504 | .0052378 | -.001686 | -.001444 | .0641183 | .1422300 |
| #2 | -.000299 | -.002993 | .0037203 | -.000201 | -.002202 | .0640778 | .1414267 |
| #3 | -.003040 | -.002959 | .0030719 | -.000650 | -.002598 | .0652169 | .1418745 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000705 | -.000059 | .5823540 | .0025312 | .0009115 | .0009928 | 3.309614 |
| Stddev | .0000077 | .000062 | .0036924 | .0001435 | .0001558 | .0002252 | .014972 |
| %RSD | 10.96548 | 106.2117 | .6340507 | 5.667595 | 17.09318 | 22.68643 | .4523850 |
| #1 | .0000730 | -.000076 | .5794908 | .0026504 | .0010779 | .0010800 | 3.293274 |
| #2 | .0000618 | .000011 | .5810497 | .0023720 | .0007690 | .0007370 | 3.312893 |
| #3 | .0000766 | -.000111 | .5865216 | .0025713 | .0008876 | .0011613 | 3.322675 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0343748 | .1006205 | .0014235 | .0000956 | 1.381270 | .0009020 | .0311657 |
| Stddev | .0007620 | .0074661 | .0001182 | .0000713 | .017366 | .0001634 | .0004208 |
| %RSD | 2.216853 | 7.420009 | 8.304160 | 74.57620 | 1.257235 | 18.11483 | 1.350259 |
| #1 | .0345324 | .0920241 | .0015595 | .0001778 | 1.363236 | .0010379 | .0315166 |
| #2 | .0350458 | .1054832 | .0013454 | .0000580 | 1.382697 | .0007207 | .0312812 |
| #3 | .0335463 | .1043542 | .0013656 | .0000509 | 1.397879 | .0009472 | .0306991 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1467600 | -.004949 | .0007475 | -.000205 | .0043433 | .1083477 | .0234166 |
| Stddev | .0239290 | .000101 | .0001491 | .000254 | .0003152 | .0019962 | .0006769 |
| %RSD | 16.30481 | 2.034605 | 19.94814 | 124.2788 | 7.256257 | 1.842401 | 2.890460 |
| #1 | .1217500 | -.005055 | .0009148 | -.000493 | .0040348 | .1091234 | .0226843 |
| #2 | .1490932 | -.004936 | .0006287 | -.000012 | .0043304 | .1060801 | .0240192 |
| #3 | .1694369 | -.004855 | .0006990 | -.000109 | .0046647 | .1098397 | .0235463 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03LX5 Acquired: 12/5/2024 20:07:15 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .2252172 | -.000307 | .0033865 |
| Stddev | .0055905 | .000456 | .0000308 |
| %RSD | 2.482293 | 148.5134 | .9089770 |
| | | | |
| #1 | .2294055 | -.000793 | .0033789 |
| #2 | .2188689 | -.000238 | .0033602 |
| #3 | .2273772 | .000110 | .0034203 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2569.425 | 59663.71 | 14012.50 | 1647.372 | 4305.397 |
| Stddev | 24.666 | 70.61 | 60.71 | 4.931 | 41.850 |
| %RSD | .9599845 | .1183491 | .4332667 | .2992956 | .9720364 |
| | | | | | |
| #1 | 2541.048 | 59733.72 | 13945.68 | 1652.977 | 4257.192 |
| #2 | 2581.497 | 59592.51 | 14027.54 | 1643.706 | 4326.565 |
| #3 | 2585.729 | 59664.90 | 14064.27 | 1645.432 | 4332.434 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03MS Acquired: 12/5/2024 20:11:35 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7041127 | 1.825039 | .9189679 | 1.670693 | .7050908 | 2.138758 | .8926572 |
| Stddev | .0139445 | .050854 | .0208369 | .039446 | .0182457 | .007781 | .0018801 |
| %RSD | 1.980442 | 2.786461 | 2.267425 | 2.361045 | 2.587709 | .3638128 | .2106140 |
| #1 | .7141300 | 1.868226 | .9300106 | 1.696125 | .7144795 | 2.129865 | .8911889 |
| #2 | .7100214 | 1.837902 | .9319593 | 1.690702 | .7167303 | 2.144317 | .8947762 |
| #3 | .6881866 | 1.768988 | .8949338 | 1.625253 | .6840626 | 2.142092 | .8920067 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2143481 | .1904142 | 4.000166 | .4367008 | .1998635 | .2829914 | 17.91779 |
| Stddev | .0013693 | .0045073 | .027294 | .0010030 | .0048802 | .0069292 | .07879 |
| %RSD | .6388027 | 2.367075 | .6823255 | .2296780 | 2.441771 | 2.448559 | .4397306 |
| #1 | .2132317 | .1929654 | 3.968938 | .4360425 | .2028624 | .2877073 | 17.82697 |
| #2 | .2158759 | .1930671 | 4.019463 | .4378551 | .2024959 | .2862312 | 17.96788 |
| #3 | .2139367 | .1852100 | 4.012097 | .4362046 | .1942323 | .2750358 | 17.95852 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3632117 | 2.402934 | .4918910 | .0718261 | 9.988933 | .3135410 | .3377180 |
| Stddev | .0021128 | .022896 | .0113353 | .0004882 | .024106 | .0027454 | .0013488 |
| %RSD | .5816916 | .9528267 | 2.304441 | .6797231 | .2413285 | .8756175 | .3993966 |
| #1 | .3608299 | 2.380211 | .4985881 | .0716430 | 9.992021 | .3106149 | .3377840 |
| #2 | .3648599 | 2.402592 | .4982816 | .0723794 | 9.963432 | .3160603 | .3363374 |
| #3 | .3639453 | 2.425998 | .4788033 | .0714559 | 10.01135 | .3139478 | .3390327 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.334698 | .2831589 | .4092665 | .6599469 | .2155623 | 1.077430 | 5.417165 |
| Stddev | .024140 | .0009404 | .0096197 | .0166308 | .0010651 | .005746 | .169748 |
| %RSD | .2586089 | .3321189 | 2.350471 | 2.520025 | .4940969 | .5333303 | 3.133520 |
| #1 | 9.308080 | .2826641 | .4144601 | .6700153 | .2143749 | 1.071006 | 5.526991 |
| #2 | 9.340841 | .2842434 | .4151731 | .6690744 | .2164332 | 1.079202 | 5.502850 |
| #3 | 9.355174 | .2825692 | .3981663 | .6407509 | .2158789 | 1.082081 | 5.221653 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03MS Acquired: 12/5/2024 20:11:35 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.017143 | .1905785 | .2303394 |
| Stddev | .026102 | .0006551 | .0000392 |
| %RSD | 2.566235 | .3437647 | .0170098 |
| | | | |
| #1 | 1.034659 | .1899433 | .2302951 |
| #2 | 1.029627 | .1912519 | .2303534 |
| #3 | .987143 | .1905404 | .2303696 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2400.585 | 57545.57 | 13635.36 | 1557.675 | 4031.130 |
| Stddev | 50.187 | 87.11 | 37.27 | 8.702 | 83.014 |
| %RSD | 2.090626 | .1513774 | .2733160 | .5586227 | 2.059329 |
| | | | | | |
| #1 | 2371.553 | 57457.92 | 13652.90 | 1549.880 | 3983.069 |
| #2 | 2371.665 | 57546.65 | 13592.56 | 1567.063 | 3983.334 |
| #3 | 2458.536 | 57632.13 | 13660.62 | 1556.082 | 4126.986 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03MSD Acquired: 12/5/2024 20:15:36 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6773366 | 1.746522 | .8856176 | 1.610415 | .6800887 | 2.039414 | .8454168 |
| Stddev | .0012963 | .012678 | .0007811 | .003579 | .0017841 | .006693 | .0034855 |
| %RSD | .1913890 | .7259037 | .0881966 | .2222598 | .2623364 | .3281801 | .4122770 |
| #1 | .6769399 | 1.760447 | .8850716 | 1.606352 | .6780580 | 2.034255 | .8416032 |
| #2 | .6762850 | 1.743472 | .8852690 | 1.611787 | .6808034 | 2.037010 | .8462097 |
| #3 | .6787850 | 1.735647 | .8865123 | 1.613105 | .6814047 | 2.046977 | .8484375 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2039063 | .1838037 | 3.763768 | .4154805 | .1925286 | .2726885 | 16.85013 |
| Stddev | .0010635 | .0004233 | .038558 | .0012463 | .0004708 | .0007066 | .12587 |
| %RSD | .5215471 | .2302883 | 1.024454 | .2999714 | .2445212 | .2591265 | .7470180 |
| #1 | .2026786 | .1833412 | 3.719246 | .4140587 | .1920081 | .2718728 | 16.70628 |
| #2 | .2045436 | .1838980 | 3.785807 | .4163845 | .1926531 | .2731101 | 16.94005 |
| #3 | .2044967 | .1841718 | 3.786253 | .4159982 | .1929246 | .2730827 | 16.90407 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3426314 | 2.295471 | .4734483 | .0679042 | 9.529695 | .2965495 | .3204638 |
| Stddev | .0025897 | .027116 | .0012545 | .0001759 | .010485 | .0019838 | .0006978 |
| %RSD | .7558224 | 1.181297 | .2649624 | .2590224 | .1100270 | .6689621 | .2177584 |
| #1 | .3399470 | 2.268642 | .4723746 | .0677040 | 9.539303 | .2943327 | .3200631 |
| #2 | .3428324 | 2.294905 | .4731431 | .0679747 | 9.531272 | .2981577 | .3212696 |
| #3 | .3451147 | 2.322866 | .4748272 | .0680339 | 9.518511 | .2971581 | .3200586 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 8.897871 | .2695418 | .3942855 | .6377809 | .2040555 | 1.022491 | 5.197664 |
| Stddev | .041771 | .0017148 | .0001644 | .0014743 | .0011892 | .003448 | .001213 |
| %RSD | .4694499 | .6361790 | .0416934 | .2311615 | .5827765 | .3372106 | .0233410 |
| #1 | 8.941342 | .2676268 | .3944643 | .6366930 | .2026949 | 1.022257 | 5.196650 |
| #2 | 8.894234 | .2700633 | .3941410 | .6371909 | .2045756 | 1.026051 | 5.199008 |
| #3 | 8.858038 | .2709352 | .3942511 | .6394588 | .2048960 | 1.019167 | 5.197335 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03MSD Acquired: 12/5/2024 20:15:36 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .9769776 | .1817149 | .2185739 |
| Stddev | .0053800 | .0004785 | .0007363 |
| %RSD | .5506740 | .2633118 | .3368689 |
| | | | |
| #1 | .9780476 | .1822065 | .2179075 |
| #2 | .9711431 | .1812508 | .2184498 |
| #3 | .9817422 | .1816873 | .2193644 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2485.262 | 60003.21 | 14216.38 | 1605.920 | 4172.742 |
| Stddev | 4.803 | 118.78 | 32.72 | 6.373 | 7.365 |
| %RSD | .1932411 | .1979498 | .2301468 | .3968600 | .1765056 |
| | | | | | |
| #1 | 2488.532 | 60045.49 | 14252.87 | 1605.153 | 4180.335 |
| #2 | 2479.748 | 59869.08 | 14206.63 | 1599.965 | 4165.628 |
| #3 | 2487.505 | 60095.07 | 14189.65 | 1612.642 | 4172.263 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03A Acquired: 12/5/2024 20:19:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6755665 | 1.749915 | .8788924 | 1.599866 | .6749580 | 2.022095 | .8420912 |
| Stddev | .0026188 | .019887 | .0037127 | .004309 | .0015462 | .002932 | .0033513 |
| %RSD | .3876384 | 1.136430 | .4224312 | .2693528 | .2290760 | .1450047 | .3979771 |
| #1 | .6782387 | 1.766220 | .8793141 | 1.597506 | .6742879 | 2.025441 | .8396052 |
| #2 | .6730046 | 1.727759 | .8749868 | 1.597252 | .6738599 | 2.019971 | .8407659 |
| #3 | .6754564 | 1.755766 | .8823762 | 1.604839 | .6767261 | 2.020874 | .8459025 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2021655 | .1821432 | 3.758212 | .4131490 | .1909395 | .2698001 | 16.88538 |
| Stddev | .0010892 | .0006360 | .021473 | .0013144 | .0005909 | .0004391 | .05153 |
| %RSD | .5387739 | .3491769 | .5713542 | .3181322 | .3094698 | .1627632 | .3051503 |
| #1 | .2016023 | .1822517 | 3.733521 | .4119921 | .1914034 | .2703051 | 16.82612 |
| #2 | .2014733 | .1814599 | 3.772515 | .4128767 | .1902743 | .2695077 | 16.91961 |
| #3 | .2034210 | .1827180 | 3.768600 | .4145782 | .1911410 | .2695875 | 16.91042 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3418979 | 2.274266 | .4701262 | .0681378 | 9.509972 | .2958613 | .3176205 |
| Stddev | .0016609 | .015912 | .0013002 | .0000746 | .016244 | .0011906 | .0007453 |
| %RSD | .4857983 | .6996464 | .2765547 | .1095120 | .1708117 | .4024321 | .2346610 |
| #1 | .3404762 | 2.285438 | .4713008 | .0682231 | 9.518465 | .2945615 | .3170117 |
| #2 | .3414938 | 2.256047 | .4687292 | .0680846 | 9.491242 | .2961232 | .3184517 |
| #3 | .3437235 | 2.281311 | .4703487 | .0681056 | 9.520209 | .2968992 | .3173980 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 8.873524 | .2674470 | .3919425 | .6343160 | .2022449 | 1.028649 | 5.174943 |
| Stddev | .018291 | .0012952 | .0008465 | .0029365 | .0004621 | .001090 | .015956 |
| %RSD | .2061278 | .4842724 | .2159620 | .4629343 | .2284941 | .1059268 | .3083355 |
| #1 | 8.859859 | .2660753 | .3921974 | .6346384 | .2024895 | 1.029537 | 5.190512 |
| #2 | 8.894303 | .2676168 | .3909979 | .6312316 | .2025333 | 1.028977 | 5.158626 |
| #3 | 8.866409 | .2686488 | .3926322 | .6370779 | .2017119 | 1.027433 | 5.175693 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: P5070-03A Acquired: 12/5/2024 20:19:37 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .9699080 | .1802763 | .2168079 |
| Stddev | .0048273 | .0007162 | .0002681 |
| %RSD | .4977060 | .3972969 | .1236548 |
| | | | |
| #1 | .9743445 | .1800768 | .2171173 |
| #2 | .9706121 | .1796810 | .2166609 |
| #3 | .9647673 | .1810712 | .2166455 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2506.677 | 60285.50 | 14358.44 | 1636.626 | 4209.533 |
| Stddev | 2.279 | 130.11 | 12.00 | 5.461 | 5.570 |
| %RSD | .0909037 | .2158219 | .0835685 | .3336970 | .1323096 |
| | | | | | |
| #1 | 2508.816 | 60226.61 | 14371.33 | 1637.180 | 4208.399 |
| #2 | 2506.935 | 60195.26 | 14347.60 | 1630.909 | 4215.583 |
| #3 | 2504.281 | 60434.65 | 14356.38 | 1641.790 | 4204.618 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV07 Acquired: 12/5/2024 20:23:14 Type: Unk
Method: NON EPA-6010-200.7(v2498) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 4.601602 | 5.076587 | 5.079684 | 4.550220 | 4.511048 | 9.404770 |
| Stddev | .007660 | .040027 | .017786 | .009930 | .005933 | .023213 |
| %RSD | .1664728 | .7884673 | .3501413 | .2182238 | .1315237 | .2468237 |
| #1 | 4.598596 | 5.031375 | 5.059550 | 4.540384 | 4.505368 | 9.430067 |
| #2 | 4.595901 | 5.090880 | 5.086239 | 4.550035 | 4.510572 | 9.384446 |
| #3 | 4.610310 | 5.107506 | 5.093262 | 4.560241 | 4.517206 | 9.399798 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 9.140384 | .2644379 | 2.598550 | 26.33164 | 1.052120 | 2.534484 |
| Stddev | .068870 | .0009742 | .005929 | .03207 | .002967 | .005159 |
| %RSD | .7534710 | .3683963 | .2281729 | .1217988 | .2819774 | .2035353 |
| #1 | 9.212439 | .2655554 | 2.592272 | 26.36755 | 1.052279 | 2.528565 |
| #2 | 9.075217 | .2637678 | 2.599326 | 26.32152 | 1.055004 | 2.536869 |
| #3 | 9.133496 | .2639906 | 2.604054 | 26.30585 | 1.049077 | 2.538019 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.148383 | 4.834901 | 2.535884 | 25.55698 | 2.536806 | 1.231770 |
| Stddev | .001115 | .012365 | .010105 | .03117 | .001849 | .002569 |
| %RSD | .0971326 | .2557399 | .3984693 | .1219551 | .0728849 | .2085707 |
| #1 | 1.149290 | 4.825826 | 2.545974 | 25.59272 | 2.535292 | 1.234056 |
| #2 | 1.148721 | 4.829892 | 2.525765 | 25.54283 | 2.536259 | 1.232263 |
| #3 | 1.147137 | 4.848984 | 2.535913 | 25.53540 | 2.538866 | 1.228990 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 24.91267 | 2.514176 | 2.427319 | 25.15314 | 5.219099 | 4.755910 |
| Stddev | .10674 | .005224 | .006786 | .08109 | .016437 | .004731 |
| %RSD | .4284712 | .2077780 | .2795676 | .3223887 | .3149460 | .0994744 |
| #1 | 25.03124 | 2.515461 | 2.433222 | 25.19533 | 5.237639 | 4.751626 |
| #2 | 24.88255 | 2.518637 | 2.428830 | 25.05965 | 5.206311 | 4.755116 |
| #3 | 24.82422 | 2.508429 | 2.419904 | 25.20444 | 5.213346 | 4.760988 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCV07 Acquired: 12/5/2024 20:23:14 Type: Unk
Method: NON EPA-6010-200.7(v2498) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 5.155684 | 4.850466 | 4.615872 | 5.072140 | 4.940663 | F 4.239197 |
| Stddev | .019818 | .013729 | .043988 | .028882 | .013812 | .021233 |
| %RSD | .3843963 | .2830472 | .9529695 | .5694244 | .2795585 | .5008851 |
| | | | | | | |
| #1 | 5.136251 | 4.863826 | 4.567893 | 5.043397 | 4.925224 | 4.256153 |
| #2 | 5.154934 | 4.836396 | 4.625421 | 5.071864 | 4.944917 | 4.215382 |
| #3 | 5.175867 | 4.851175 | 4.654300 | 5.101159 | 4.951847 | 4.246055 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | 4.918813 |
| Stddev | .011508 |
| %RSD | .2339683 |
| | |
| #1 | 4.922494 |
| #2 | 4.928030 |
| #3 | 4.905914 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2425.120 | 56776.02 | 13826.51 | 1582.306 | 3775.397 |
| Stddev | 5.849 | 19.77 | 55.79 | 3.548 | 3.359 |
| %RSD | .2411954 | .0348267 | .4034716 | .2241999 | .0889806 |
| | | | | | |
| #1 | 2418.382 | 56754.31 | 13763.22 | 1578.364 | 3772.376 |
| #2 | 2428.891 | 56780.76 | 13847.76 | 1583.313 | 3779.015 |
| #3 | 2428.088 | 56793.00 | 13868.55 | 1585.242 | 3774.801 |

Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB07 Acquired: 12/5/2024 20:27:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0009138 | -.001116 | .0000285 | -.000067 | .0038363 | -.000841 | .0033095 |
| Stddev | .0000798 | .000894 | .0001946 | .001785 | .0006069 | .004303 | .0003299 |
| %RSD | 8.729412 | 80.08332 | 681.4528 | 2651.054 | 15.81932 | 511.8850 | 9.966926 |
| #1 | .0010057 | -.000100 | .0002514 | -.000695 | .0040294 | -.005460 | .0029445 |
| #2 | .0008637 | -.001465 | -.000107 | .001946 | .0043232 | -.000116 | .0035863 |
| #3 | .0008719 | -.001783 | -.000058 | -.001454 | .0031564 | .003054 | .0033976 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000642 | .0001422 | -.011530 | -.000150 | .0002682 | -.000285 | -.000662 |
| Stddev | .0000127 | .0000570 | .002969 | .000549 | .0001563 | .000267 | .002838 |
| %RSD | 19.73820 | 40.06308 | 25.75461 | 365.8429 | 58.29405 | 93.56481 | 428.3701 |
| #1 | .0000768 | .0001266 | -.010101 | .000083 | .0000935 | -.000356 | .001692 |
| #2 | .0000514 | .0002054 | -.009545 | .000244 | .0003160 | -.000509 | .000134 |
| #3 | .0000644 | .0000947 | -.014943 | -.000777 | .0003951 | .000010 | -.003813 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001542 | .0086941 | -.000024 | .0002296 | .0672545 | .0010819 | -.000385 |
| Stddev | .0002934 | .0075931 | .000122 | .0001319 | .0134758 | .0003778 | .000249 |
| %RSD | 190.2745 | 87.33631 | 508.5000 | 57.42208 | 20.03698 | 34.92531 | 64.59732 |
| #1 | .0003785 | .0173996 | -.000134 | .0000793 | .0530483 | .0008505 | -.000231 |
| #2 | .0002617 | .0052442 | .000108 | .0002839 | .0688589 | .0008772 | -.000252 |
| #3 | -.000178 | .0034384 | -.000046 | .0003257 | .0798562 | .0015179 | -.000672 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0624936 | -.000641 | .0005617 | -.000034 | -.000164 | .0029593 | -.006459 |
| Stddev | .0245130 | .000350 | .0002720 | .000259 | .000430 | .0017916 | .000405 |
| %RSD | 39.22475 | 54.50670 | 48.41714 | 772.0744 | 261.8159 | 60.54132 | 6.275860 |
| #1 | .0355898 | -.000670 | .0008412 | .000188 | .000333 | .0046576 | -.006483 |
| #2 | .0683283 | -.000976 | .0005461 | -.000318 | -.000414 | .0010871 | -.006852 |
| #3 | .0835628 | -.000278 | .0002979 | .000029 | -.000412 | .0031332 | -.006043 |

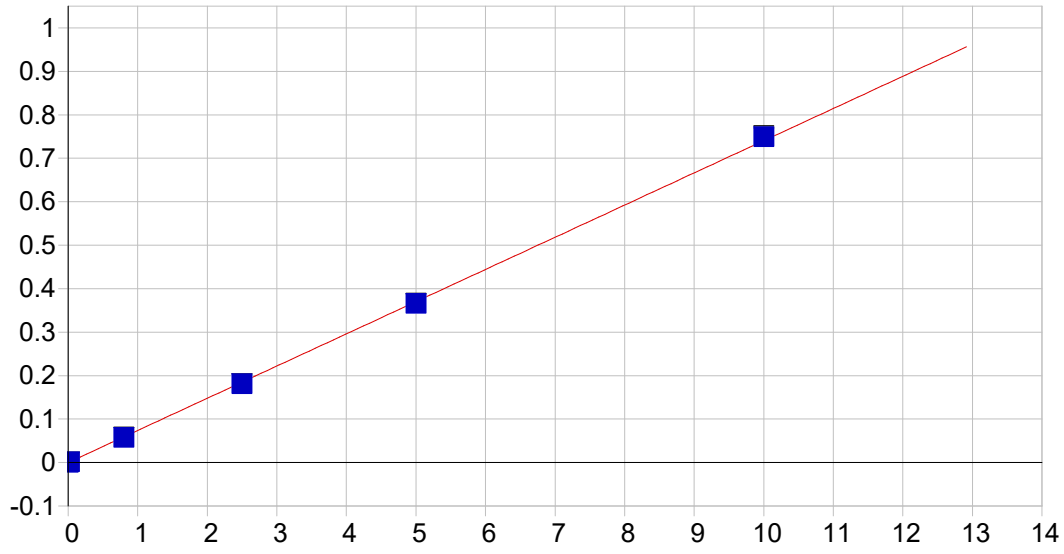
Reviewed By:
On:
Inst Id :P4
LB :LB133769

Sample Name: CCB07 Acquired: 12/5/2024 20:27:08 Type: Unk
Method: NON EPA-6010-200.7(v2491) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0027306 | .0000445 | .0001833 |
| Stddev | .0025610 | .0002592 | .0000886 |
| %RSD | 93.78871 | 582.2487 | 48.32270 |
| | | | |
| #1 | .0021555 | -.000252 | .0002739 |
| #2 | .0055303 | .000161 | .0001792 |
| #3 | .0005061 | .000225 | .0000969 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2487.203 | 57925.99 | 13266.50 | 1631.454 | 4153.053 |
| Stddev | 6.802 | 120.13 | 23.29 | 7.287 | 6.312 |
| %RSD | .2734638 | .2073932 | .1755681 | .4466770 | .1519941 |
| | | | | | |
| #1 | 2490.874 | 58060.94 | 13239.66 | 1637.617 | 4153.803 |
| #2 | 2491.381 | 57886.32 | 13281.39 | 1633.333 | 4158.957 |
| #3 | 2479.355 | 57830.70 | 13278.45 | 1623.411 | 4146.399 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



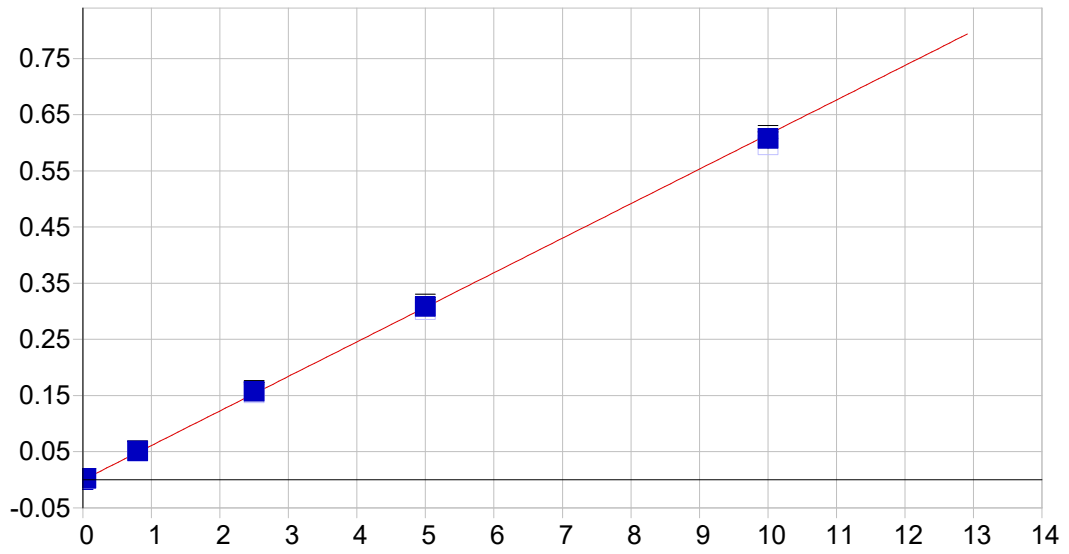

**As 189.042 {479}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000218 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.074064 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999902 | Status: | OK. |
| Std Error of Est: | 0.000024 | | |
| Predicted MDL: | 0.002037 | | |
| Predicted MQL: | 0.006790 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | -.00022 | .000 | 1 |
| S1 | .02000 | .01976 | -.000 | -1.18 | .00124 | .000 | 1 |
| S3 | 2.5000 | 2.4475 | -.052 | -2.10 | .18085 | .000 | 1 |
| S4 | 5.0000 | 4.9439 | -.056 | -1.12 | .36554 | .001 | 1 |
| S5 | 10.000 | 10.124 | .124 | 1.24 | .74881 | .002 | 1 |
| S2 | .80000 | .78472 | -.015 | -1.91 | .05784 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



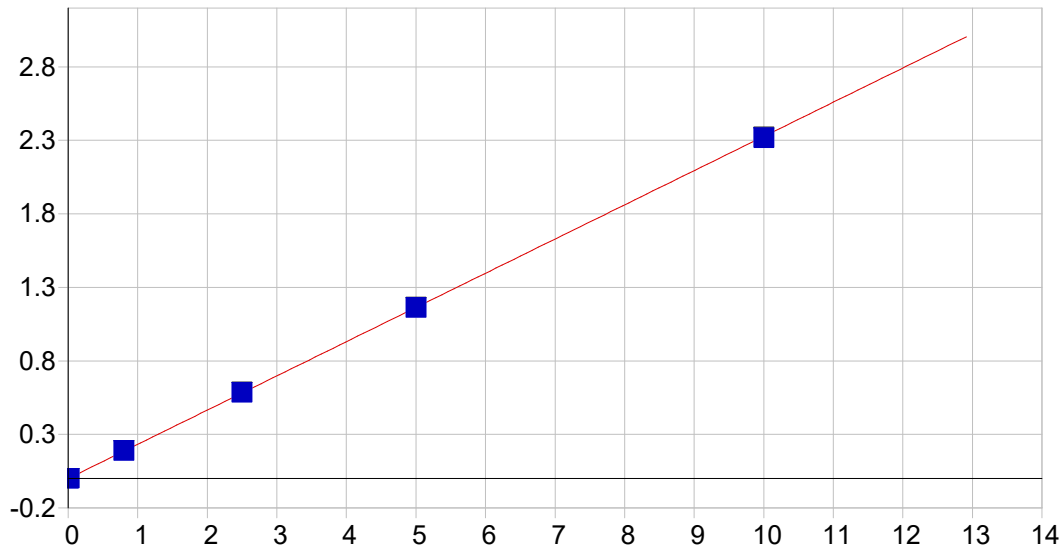

**Tl 190.856 {477}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000386 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.061517 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999860 | Status: | OK. |
| Std Error of Est: | 0.000033 | | |
| Predicted MDL: | 0.001841 | | |
| Predicted MQL: | 0.006136 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00039 | .000 | 1 |
| S1 | .04000 | .04117 | .001 | 2.92 | .00199 | .000 | 1 |
| S3 | 2.5000 | 2.5638 | .064 | 2.55 | .15450 | .002 | 1 |
| S4 | 5.0000 | 5.0157 | .016 | .314 | .30250 | .005 | 1 |
| S5 | 10.000 | 9.8812 | -.119 | -1.19 | .59614 | .006 | 1 |
| S2 | .80000 | .83813 | .038 | 4.77 | .05027 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



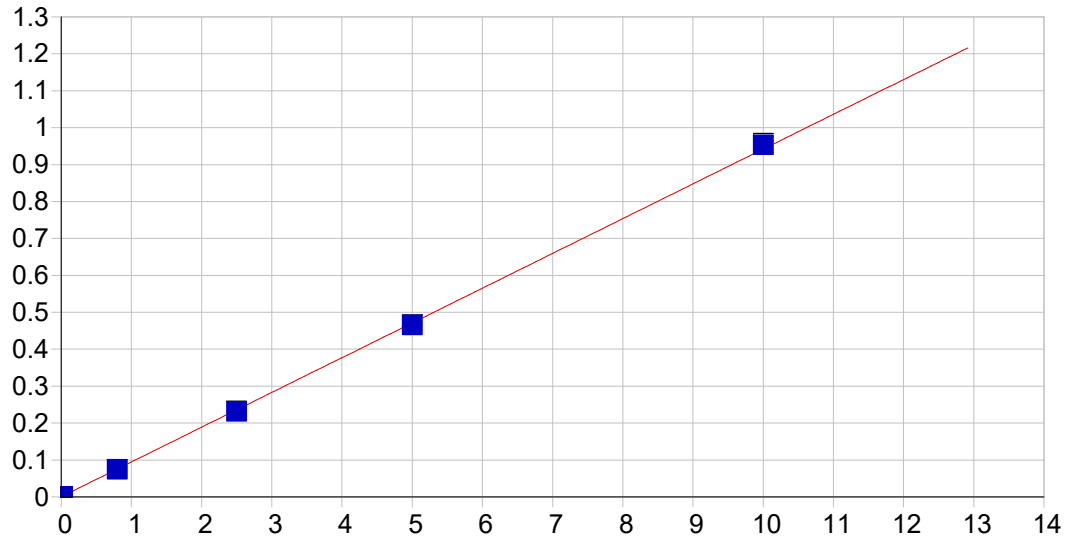

**Pb 220.353 {453}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000206 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.232715 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999985 | Status: | OK. |
| Std Error of Est: | 0.000023 | | |
| Predicted MDL: | 0.001024 | | |
| Predicted MQL: | 0.003414 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00021 | .000 | 1 |
| S1 | .01200 | .01191 | -.000 | -.730 | .00251 | .000 | 1 |
| S3 | 2.5000 | 2.5207 | .021 | .828 | .58576 | .001 | 1 |
| S4 | 5.0000 | 4.9999 | -.000 | -.001 | 1.1621 | .002 | 1 |
| S5 | 10.000 | 9.9655 | -.034 | -.345 | 2.3164 | .004 | 1 |
| S2 | .80000 | .81394 | .014 | 1.74 | .18901 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



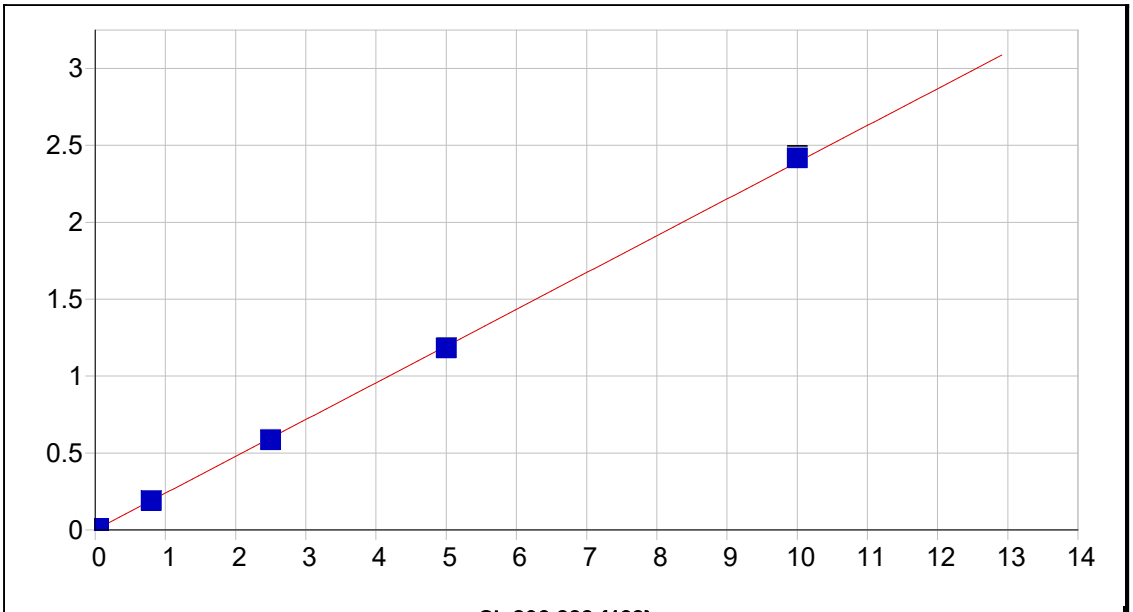

**Se 196.090 {472}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000497 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.094144 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999897 | Status: | OK. |
| Std Error of Est: | 0.000032 | | |
| Predicted MDL: | 0.001984 | | |
| Predicted MQL: | 0.006615 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00050 | .000 | 1 |
| S1 | .02000 | .01732 | -.003 | -13.4 | .00213 | .000 | 1 |
| S3 | 2.5000 | 2.4543 | -.046 | -1.83 | .23149 | .000 | 1 |
| S4 | 5.0000 | 4.9412 | -.059 | -1.18 | .46556 | .001 | 1 |
| S5 | 10.000 | 10.124 | .124 | 1.24 | .95335 | .004 | 1 |
| S2 | .80000 | .78332 | -.017 | -2.09 | .07422 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



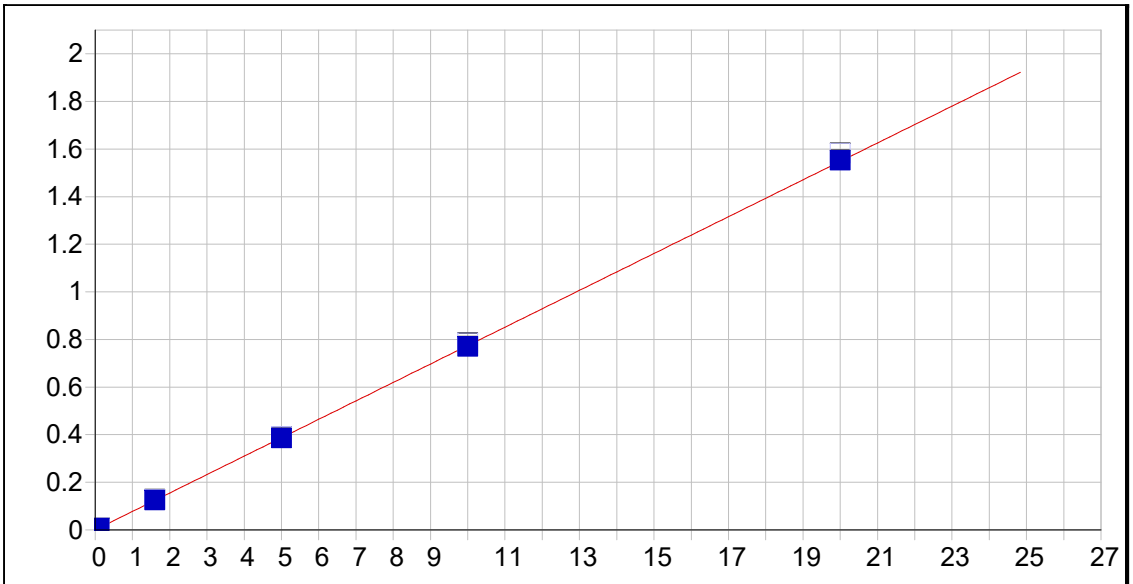

**Sb 206.833 {463}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000075 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.239030 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999912 | Status: | OK. |
| Std Error of Est: | 0.000118 | | |
| Predicted MDL: | 0.001068 | | |
| Predicted MQL: | 0.003559 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00008 | .000 | 1 |
| S1 | .05000 | .05092 | .001 | 1.84 | .01227 | .000 | 1 |
| S3 | 2.5000 | 2.4461 | -.054 | -2.16 | .58639 | .002 | 1 |
| S4 | 5.0000 | 4.9420 | -.058 | -1.16 | 1.1846 | .002 | 1 |
| S5 | 10.000 | 10.116 | .116 | 1.16 | 2.4247 | .009 | 1 |
| S2 | .80000 | .79469 | -.005 | -.664 | .19055 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



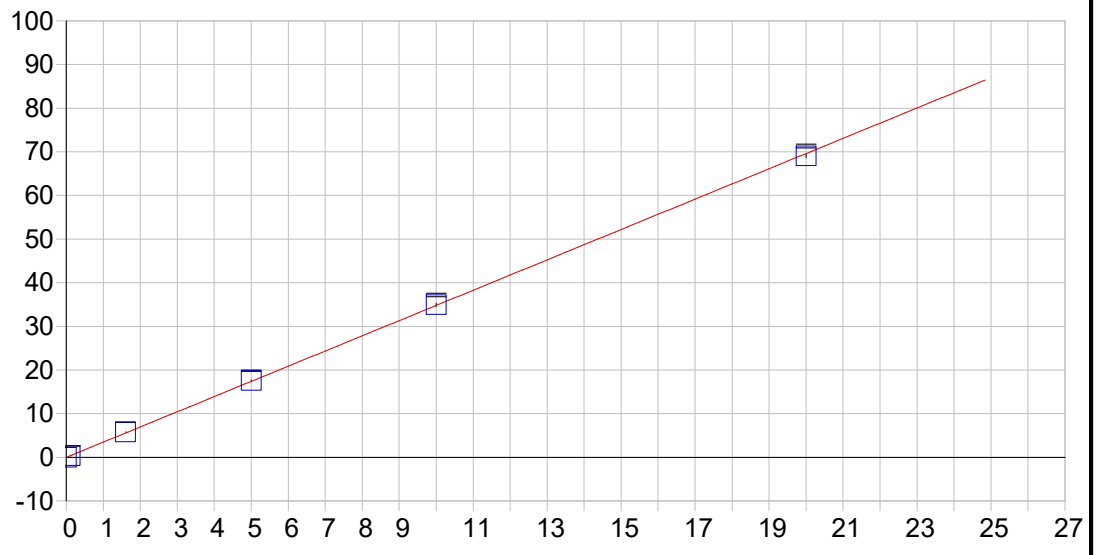

**Al 396.152 { 85}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000320 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.077395 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999989 | Status: | OK. |
| Std Error of Est: | 0.000028 | | |
| Predicted MDL: | 0.004931 | | |
| Predicted MQL: | 0.016437 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00032 | .000 | 1 |
| S1 | .10000 | .10294 | .003 | 2.94 | .00889 | .000 | 1 |
| S3 | 5.0000 | 4.9734 | -.027 | -.532 | .39274 | .000 | 1 |
| S4 | 10.000 | 9.9467 | -.053 | -.533 | .78516 | .002 | 1 |
| S5 | 20.000 | 20.060 | .060 | .302 | 1.5829 | .001 | 1 |
| S2 | 1.6000 | 1.6163 | .016 | 1.02 | .12781 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



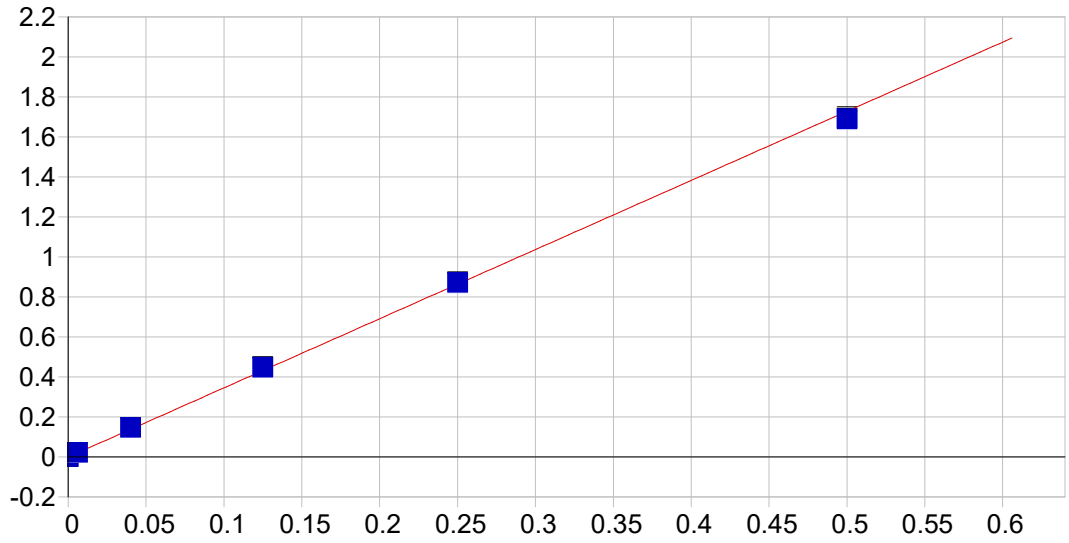

**Ba 493.409 { 68}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.016853 | Re-Slope: | 1.000000 |
| A1 (Gain): | 3.480967 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999935 | Status: | OK. |
| Std Error of Est: | 0.002951 | | |
| Predicted MDL: | 0.000417 | | |
| Predicted MQL: | 0.001390 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00001 | -.000 | .000 | -.01688 | .003 | 1 |
| S1 | .10000 | .10386 | .004 | 3.86 | .34470 | .003 | 1 |
| S3 | 5.0000 | 5.0565 | .057 | 1.13 | 17.585 | .144 | 1 |
| S4 | 10.000 | 10.037 | .037 | .368 | 34.921 | .431 | 1 |
| S5 | 20.000 | 19.839 | -.161 | -.807 | 69.041 | .463 | 1 |
| S2 | 1.6000 | 1.6642 | .064 | 4.01 | 5.7760 | .006 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



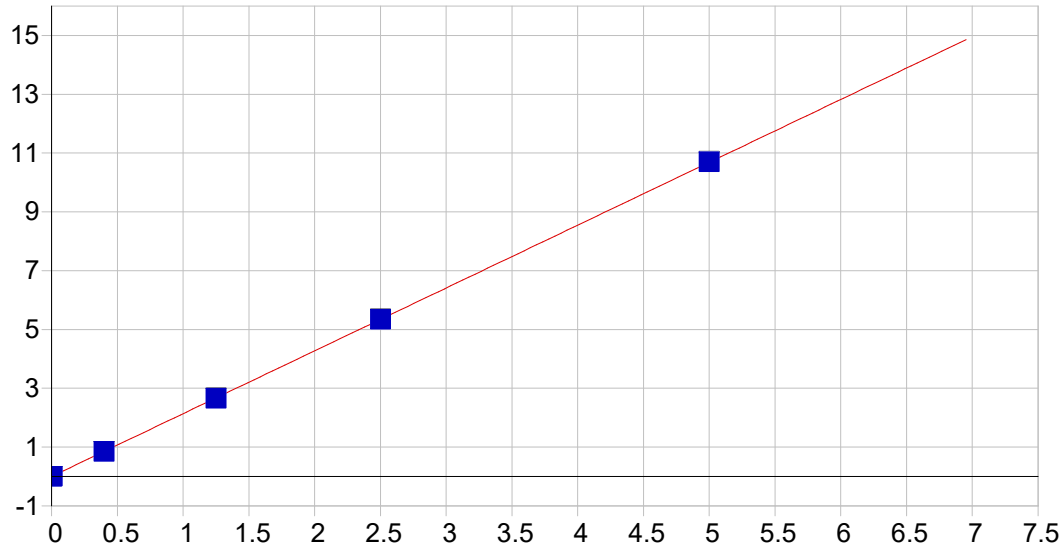

**Be 234.861 {144}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000662 | Re-Slope: | 1.000000 |
| A1 (Gain): | 3.457686 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999643 | Status: | OK. |
| Std Error of Est: | 0.000265 | | |
| Predicted MDL: | 0.000058 | | |
| Predicted MQL: | 0.000192 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00067 | .000 | 1 |
| S1 | .00600 | .00648 | .000 | 7.94 | .02158 | .000 | 1 |
| S3 | .12500 | .12991 | .005 | 3.93 | .44658 | .002 | 1 |
| S4 | .25000 | .25245 | .002 | .978 | .86834 | .002 | 1 |
| S5 | .50000 | .48951 | -.010 | -2.10 | 1.6842 | .009 | 1 |
| S2 | .04000 | .04266 | .003 | 6.65 | .14622 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



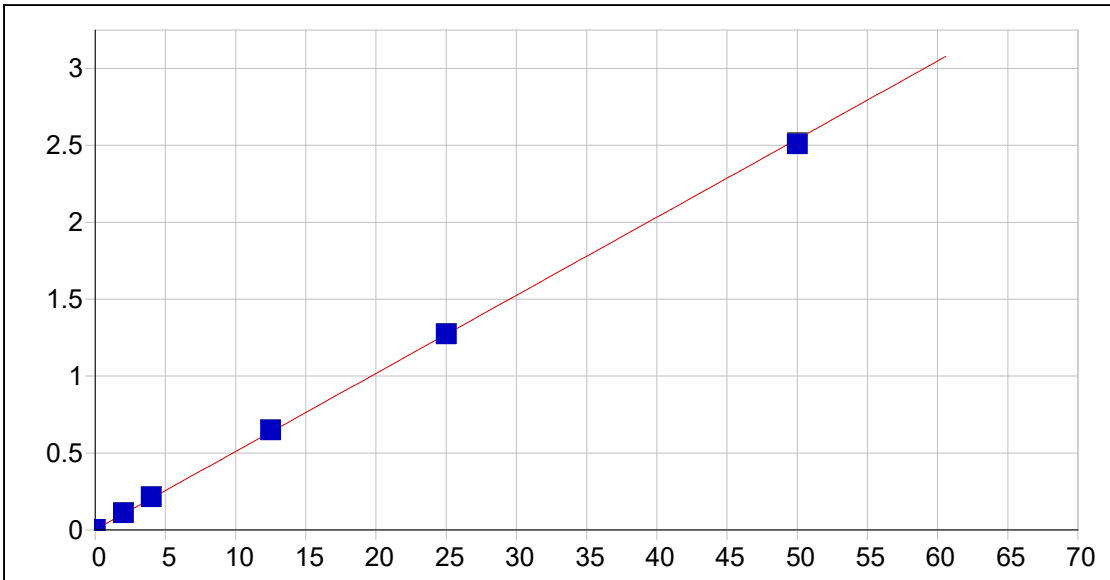

**Cd 226.502 {449}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000244 | Re-Slope: | 1.000000 |
| A1 (Gain): | 2.137212 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999999 | Status: | OK. |
| Std Error of Est: | 0.000032 | | |
| Predicted MDL: | 0.000086 | | |
| Predicted MQL: | 0.000286 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00024 | .000 | 1 |
| S1 | .00600 | .00611 | .000 | 1.89 | .01288 | .000 | 1 |
| S3 | 1.2500 | 1.2456 | -.004 | -.350 | 2.6641 | .002 | 1 |
| S4 | 2.5000 | 2.4989 | -.001 | -.044 | 5.3448 | .008 | 1 |
| S5 | 5.0000 | 5.0057 | .006 | .114 | 10.707 | .017 | 1 |
| S2 | .40000 | .39965 | -.000 | -.088 | .85459 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



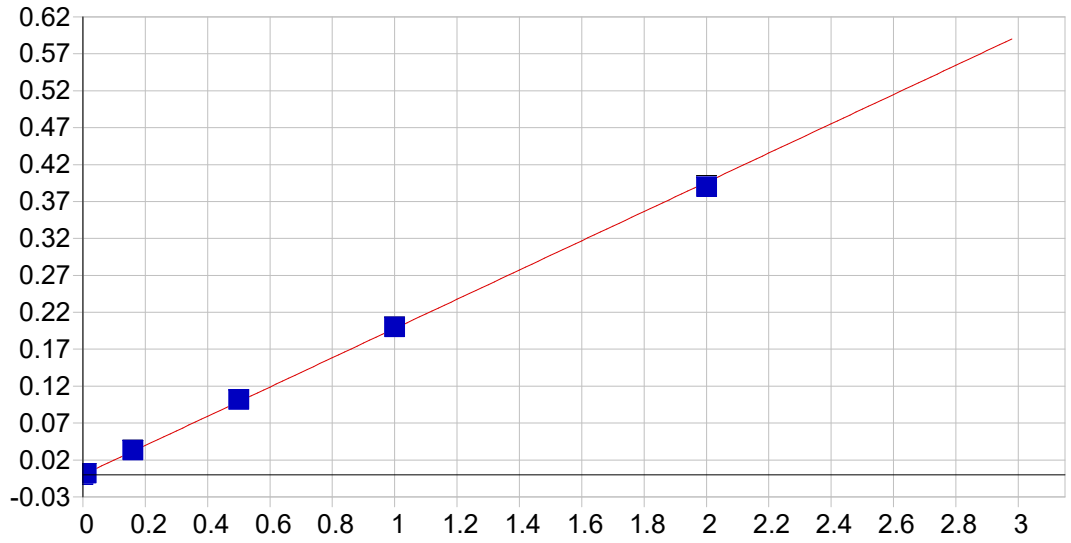

**Ca 373.690 { 90}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002078 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.050774 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999830 | Status: | OK. |
| Std Error of Est: | 0.000495 | | |
| Predicted MDL: | 0.007199 | | |
| Predicted MQL: | 0.023995 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00026 | -.000 | .000 | .00207 | .000 | 1 |
| S2 | 4.0000 | 4.1834 | .183 | 4.58 | .21449 | .001 | 1 |
| S3 | 12.500 | 12.737 | .237 | 1.90 | .64879 | .001 | 1 |
| S4 | 25.000 | 25.038 | .038 | .152 | 1.2734 | .003 | 1 |
| S5 | 50.000 | 49.391 | -.609 | -1.22 | 2.5099 | .005 | 1 |
| S1 | 2.0000 | 2.1504 | .150 | 7.52 | .11126 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



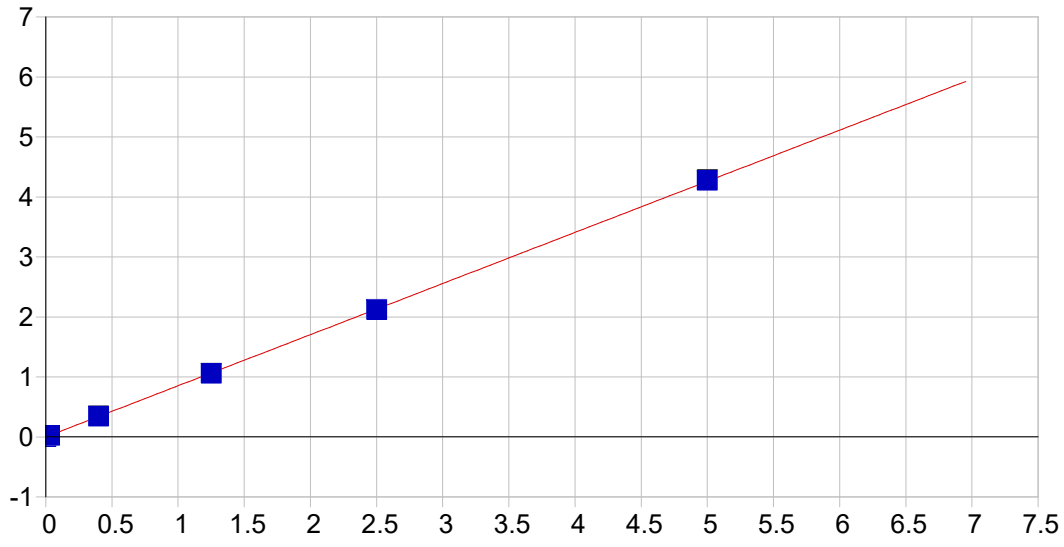

**Cr 267.716 {126}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000015 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.198035 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999831 | Status: | OK. |
| Std Error of Est: | 0.000027 | | |
| Predicted MDL: | 0.000362 | | |
| Predicted MQL: | 0.001206 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00001 | .000 | 1 |
| S1 | .01000 | .01016 | .000 | 1.59 | .00200 | .000 | 1 |
| S3 | .50000 | .51327 | .013 | 2.65 | .10166 | .000 | 1 |
| S4 | 1.0000 | 1.0095 | .009 | .946 | .19995 | .000 | 1 |
| S5 | 2.0000 | 1.9698 | -.030 | -1.51 | .39018 | .002 | 1 |
| S2 | .16000 | .16736 | .007 | 4.60 | .03314 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



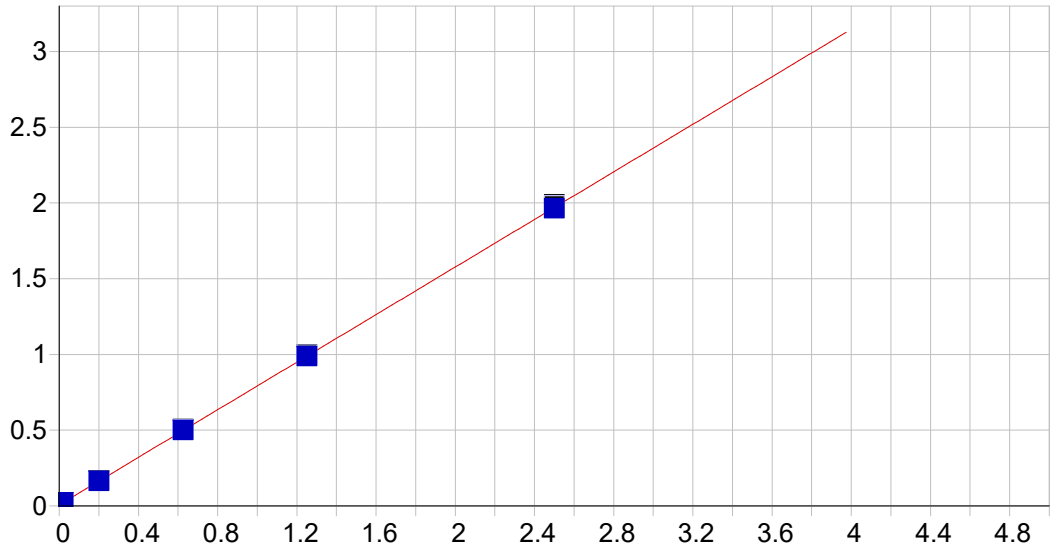

**Co 228.616 {448}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000021 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.852132 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999989 | Status: | OK. |
| Std Error of Est: | 0.000083 | | |
| Predicted MDL: | 0.000192 | | |
| Predicted MQL: | 0.000638 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00002 | .000 | 1 |
| S1 | .03000 | .03017 | .000 | .578 | .02558 | .000 | 1 |
| S3 | 1.2500 | 1.2408 | -.009 | -.736 | 1.0591 | .001 | 1 |
| S4 | 2.5000 | 2.4884 | -.012 | -.464 | 2.1240 | .001 | 1 |
| S5 | 5.0000 | 5.0172 | .017 | .344 | 4.2825 | .006 | 1 |
| S2 | .40000 | .40342 | .003 | .854 | .34432 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



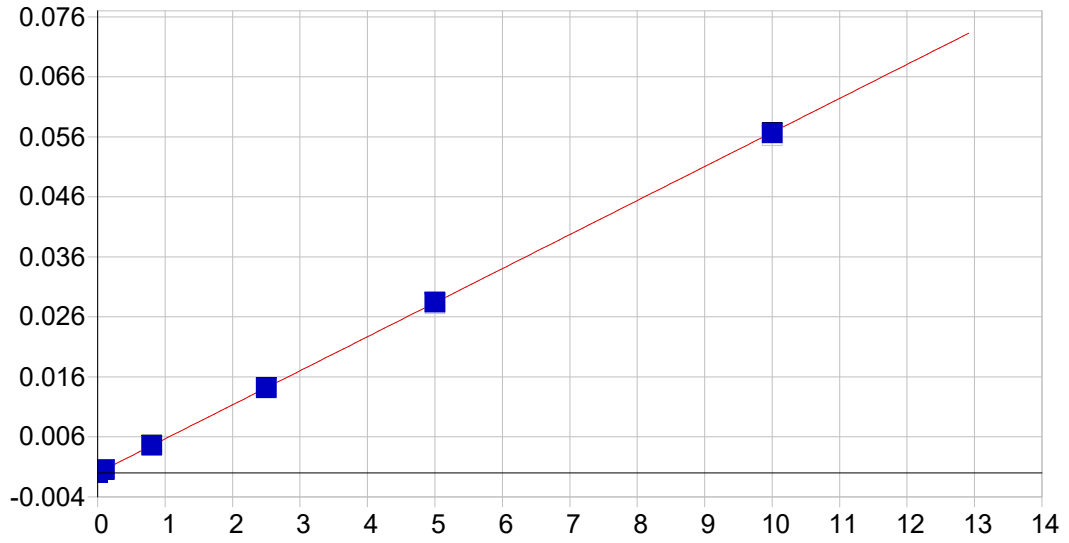

**Cu 224.700 {450}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.006935 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.785149 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999979 | Status: | OK. |
| Std Error of Est: | 0.000061 | | |
| Predicted MDL: | 0.000371 | | |
| Predicted MQL: | 0.001237 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00693 | .000 | 1 |
| S1 | .02000 | .02180 | .002 | 9.00 | .02425 | .000 | 1 |
| S3 | .62500 | .62883 | .004 | .613 | .50534 | .001 | 1 |
| S4 | 1.2500 | 1.2495 | -.001 | -.042 | .99731 | .000 | 1 |
| S5 | 2.5000 | 2.4944 | -.006 | -.223 | 1.9841 | .005 | 1 |
| S2 | .20000 | .20046 | .000 | .230 | .16582 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



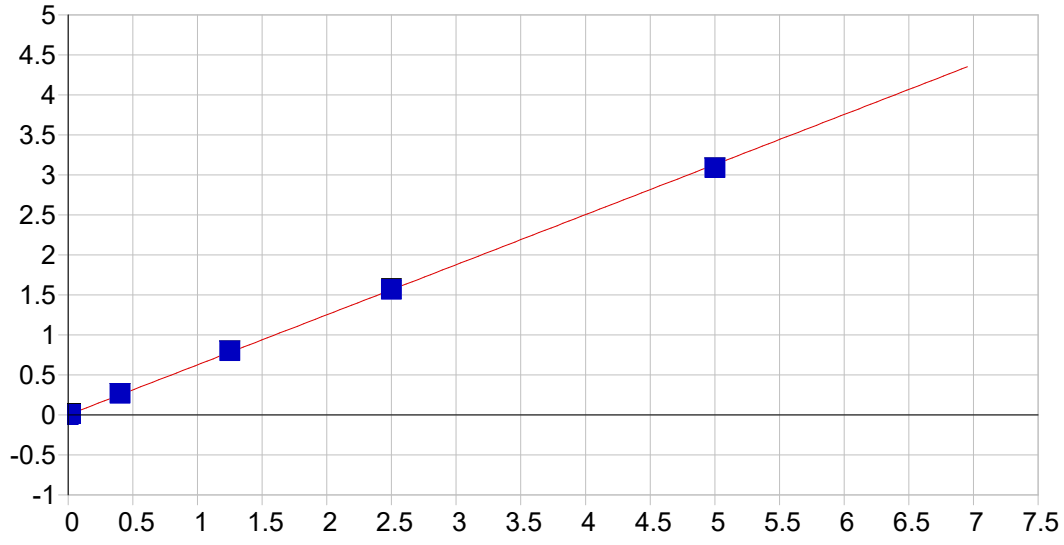

**Fe 240.488 {140}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000002 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.005673 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999994 | Status: | OK. |
| Std Error of Est: | 0.000001 | | |
| Predicted MDL: | 0.003913 | | |
| Predicted MQL: | 0.013044 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | -.00000 | .000 | 1 |
| S1 | .10000 | .09833 | -.002 | -1.67 | .00055 | .000 | 1 |
| S3 | 2.5000 | 2.5030 | .003 | .118 | .01408 | .000 | 1 |
| S4 | 5.0000 | 5.0057 | .006 | .113 | .02816 | .000 | 1 |
| S5 | 10.000 | 9.9819 | -.018 | -.181 | .05615 | .000 | 1 |
| S2 | .80000 | .81113 | .011 | 1.39 | .00456 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



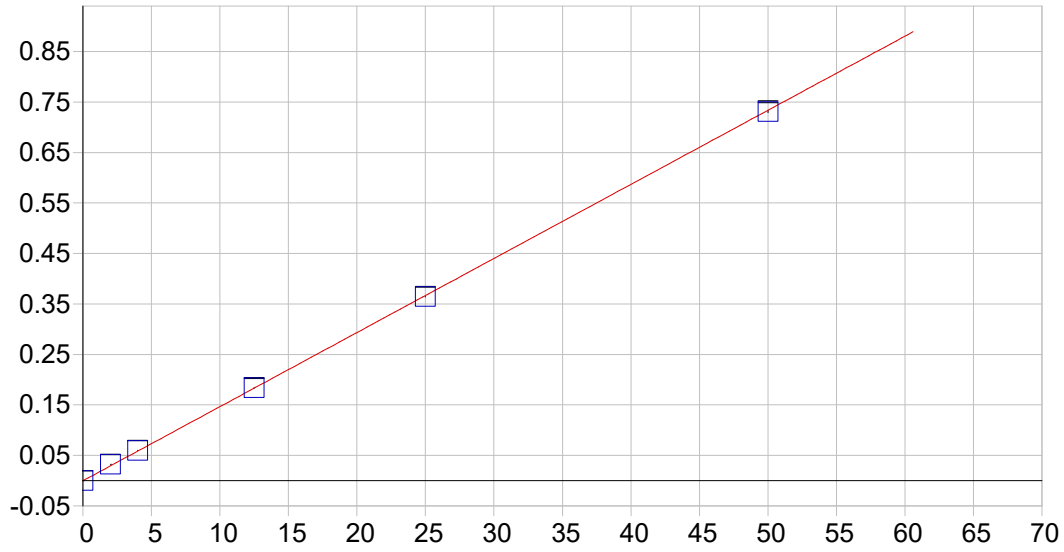

**Mn 257.610 {131}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000005 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.625830 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999799 | Status: | OK. |
| Std Error of Est: | 0.000208 | | |
| Predicted MDL: | 0.000248 | | |
| Predicted MQL: | 0.000828 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00001 | .000 | 1 |
| S1 | .02000 | .02220 | .002 | 11.0 | .01389 | .000 | 1 |
| S3 | 1.2500 | 1.2811 | .031 | 2.49 | .80192 | .002 | 1 |
| S4 | 2.5000 | 2.5044 | .004 | .175 | 1.5676 | .007 | 1 |
| S5 | 5.0000 | 4.9353 | -.065 | -1.29 | 3.0893 | .003 | 1 |
| S2 | .40000 | .42700 | .027 | 6.75 | .26728 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



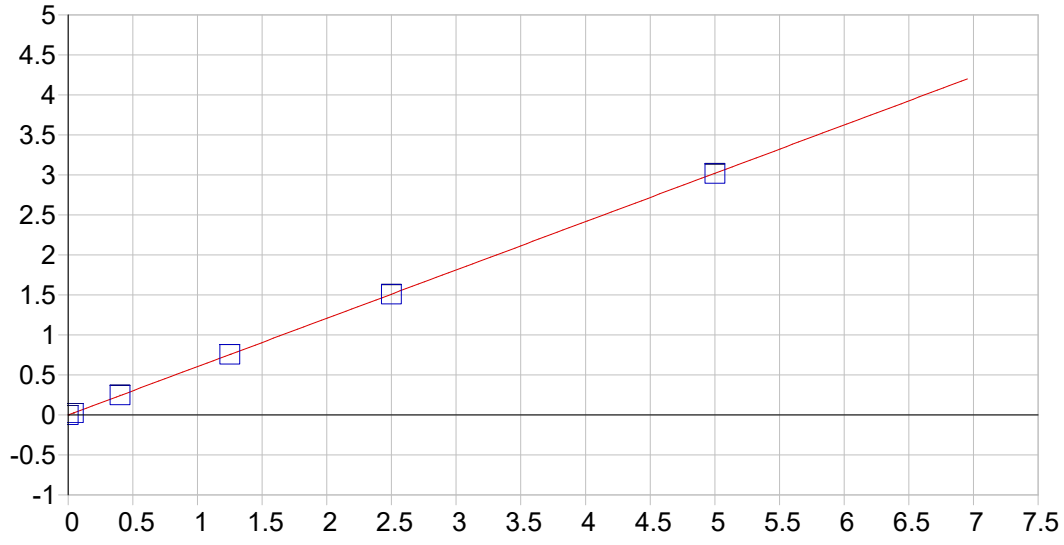

**Mg 279.079 {121}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000148 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.014674 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999849 | Status: | OK. |
| Std Error of Est: | 0.000135 | | |
| Predicted MDL: | 0.011335 | | |
| Predicted MQL: | 0.037782 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00025 | -.000 | .000 | -.00015 | .000 | 1 |
| S2 | 4.0000 | 4.0957 | .096 | 2.39 | .05995 | .000 | 1 |
| S3 | 12.500 | 12.531 | .031 | .251 | .18374 | .001 | 1 |
| S4 | 25.000 | 24.844 | -.156 | -.626 | .36442 | .001 | 1 |
| S5 | 50.000 | 49.809 | -.191 | -.381 | .73077 | .002 | 1 |
| S1 | 2.0000 | 2.2199 | .220 | 11.0 | .03243 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



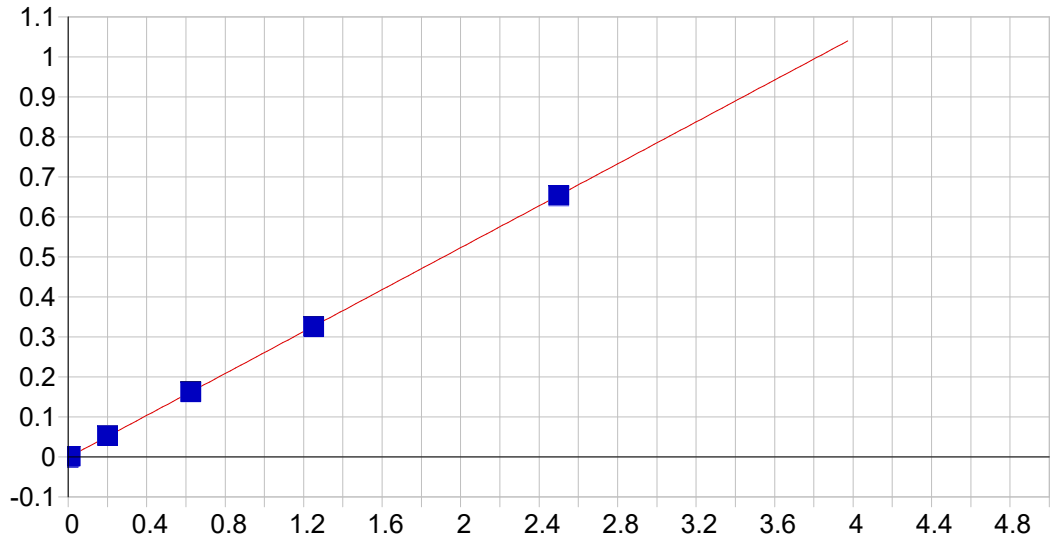

**Ni 231.604 {446}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.000205 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.603983 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999989 | Status: | OK. |
| Std Error of Est: | 0.000065 | | |
| Predicted MDL: | 0.000303 | | |
| Predicted MQL: | 0.001011 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00021 | .000 | 1 |
| S1 | .04000 | .04065 | .001 | 1.62 | .02435 | .000 | 1 |
| S3 | 1.2500 | 1.2505 | .000 | .037 | .75505 | .001 | 1 |
| S4 | 2.5000 | 2.4940 | -.006 | -.240 | 1.5061 | .002 | 1 |
| S5 | 5.0000 | 4.9967 | -.003 | -.065 | 3.0177 | .004 | 1 |
| S2 | .40000 | .40816 | .008 | 2.04 | .24632 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



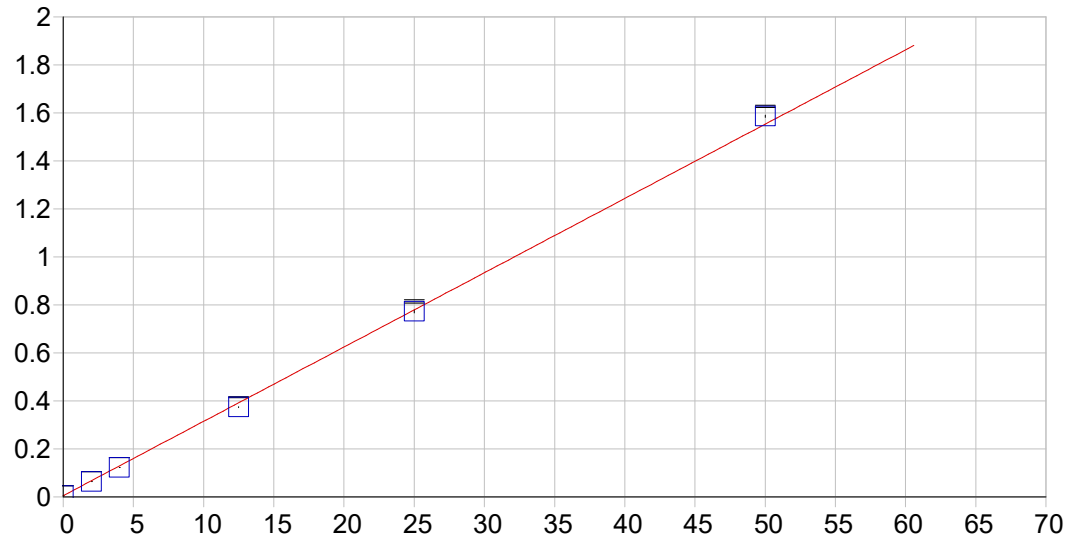

**Ag 328.068 {103}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.001212 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.262066 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999978 | Status: | OK. |
| Std Error of Est: | 0.000014 | | |
| Predicted MDL: | 0.000352 | | |
| Predicted MQL: | 0.001172 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | -.00121 | .000 | 1 |
| S1 | .01000 | .01047 | .000 | 4.67 | .00151 | .000 | 1 |
| S3 | .62500 | .62491 | -.000 | -.015 | .16190 | .000 | 1 |
| S4 | 1.2500 | 1.2461 | -.004 | -.309 | .32406 | .001 | 1 |
| S5 | 2.5000 | 2.4978 | -.002 | -.090 | .65076 | .000 | 1 |
| S2 | .20000 | .20574 | .006 | 2.87 | .05250 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



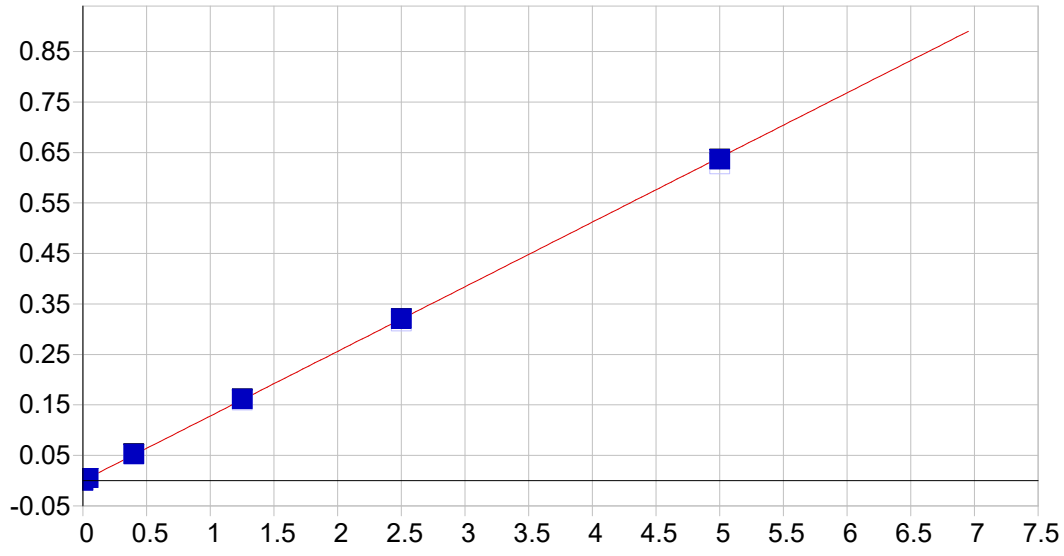

**Na 589.592 { 57}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.005369 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.030954 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999642 | Status: | OK. |
| Std Error of Est: | 0.000439 | | |
| Predicted MDL: | 0.005747 | | |
| Predicted MQL: | 0.019156 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00026 | .000 | .000 | .00538 | .000 | 1 |
| S2 | 4.0000 | 3.7872 | -.213 | -5.32 | .12260 | .000 | 1 |
| S3 | 12.500 | 11.918 | -.582 | -4.65 | .37429 | .002 | 1 |
| S4 | 25.000 | 24.809 | -.191 | -.763 | .77332 | .007 | 1 |
| S5 | 50.000 | 51.075 | 1.08 | 2.15 | 1.5863 | .005 | 1 |
| S1 | 2.0000 | 1.9100 | -.090 | -4.50 | .06449 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



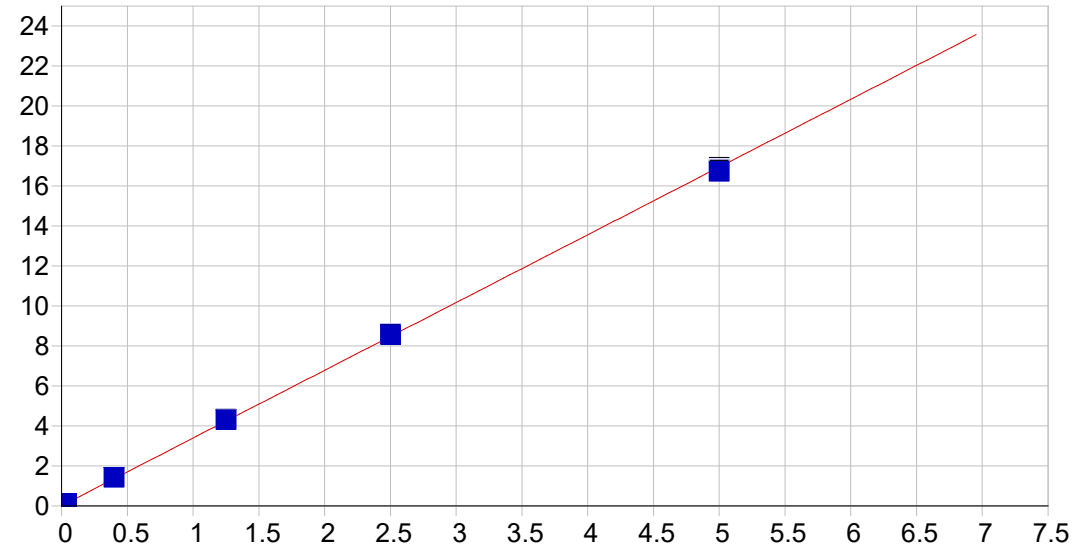

**V 292.402 {115}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000009 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.128023 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999962 | Status: | OK. |
| Std Error of Est: | 0.000026 | | |
| Predicted MDL: | 0.001327 | | |
| Predicted MQL: | 0.004424 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00001 | .000 | 1 |
| S1 | .04000 | .04094 | .001 | 2.34 | .00506 | .000 | 1 |
| S3 | 1.2500 | 1.2619 | .012 | .955 | .15923 | .000 | 1 |
| S4 | 2.5000 | 2.5048 | .005 | .192 | .31601 | .000 | 1 |
| S5 | 5.0000 | 4.9704 | -.030 | -.592 | .62700 | .000 | 1 |
| S2 | .40000 | .41193 | .012 | 2.98 | .05200 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



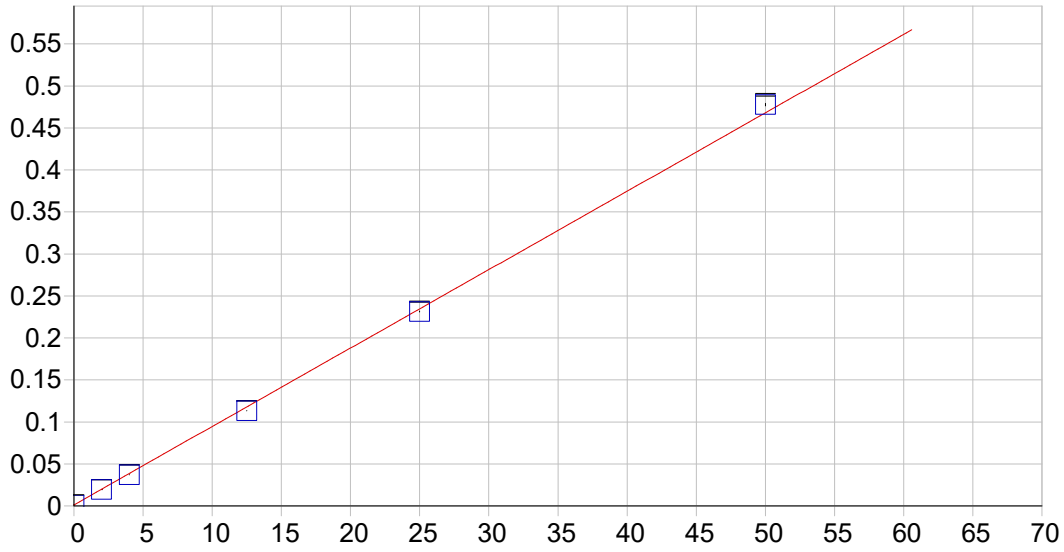

**Zn 213.856 {158}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.006154 | Re-Slope: | 1.000000 |
| A1 (Gain): | 3.388560 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999882 | Status: | OK. |
| Std Error of Est: | 0.001230 | | |
| Predicted MDL: | 0.000241 | | |
| Predicted MQL: | 0.000804 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00614 | .000 | 1 |
| S1 | .04000 | .04217 | .002 | 5.41 | .14998 | .000 | 1 |
| S3 | 1.2500 | 1.2694 | .019 | 1.55 | 4.3369 | .008 | 1 |
| S4 | 2.5000 | 2.5260 | .026 | 1.04 | 8.6246 | .010 | 1 |
| S5 | 5.0000 | 4.9359 | -.064 | -1.28 | 16.849 | .076 | 1 |
| S2 | .40000 | .41659 | .017 | 4.15 | 1.4272 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



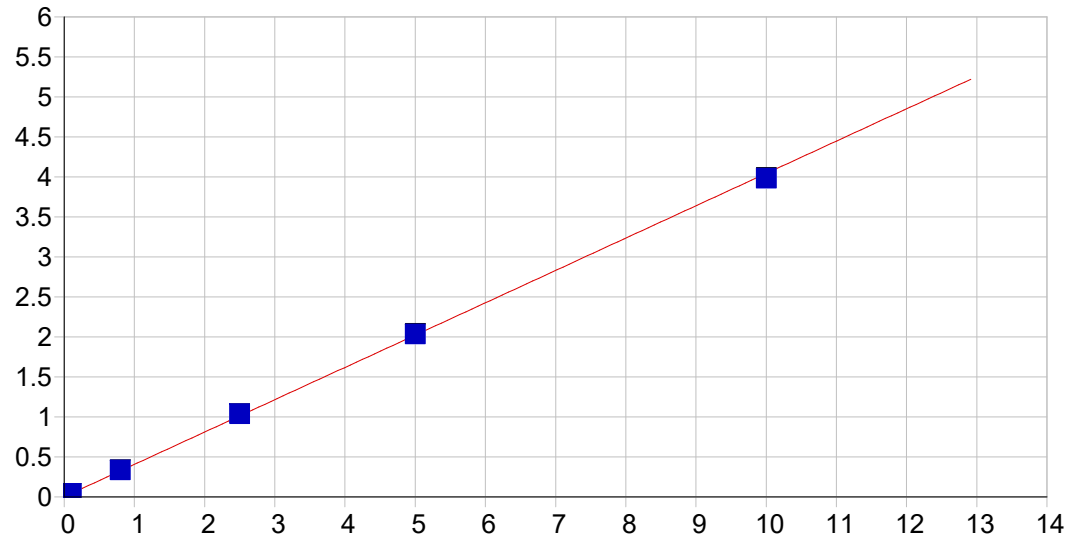

**K 766.490 { 44}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.001276 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.009334 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999706 | Status: | OK. |
| Std Error of Est: | 0.000120 | | |
| Predicted MDL: | 0.018662 | | |
| Predicted MQL: | 0.062207 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00020 | .000 | .000 | .00128 | .000 | 1 |
| S2 | 4.0000 | 3.8417 | -.158 | -3.96 | .03713 | .000 | 1 |
| S3 | 12.500 | 11.999 | -.501 | -4.01 | .11327 | .000 | 1 |
| S4 | 25.000 | 24.657 | -.343 | -1.37 | .23141 | .001 | 1 |
| S5 | 50.000 | 51.058 | 1.06 | 2.12 | .47783 | .002 | 1 |
| S1 | 2.0000 | 1.9439 | -.056 | -2.81 | .01942 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



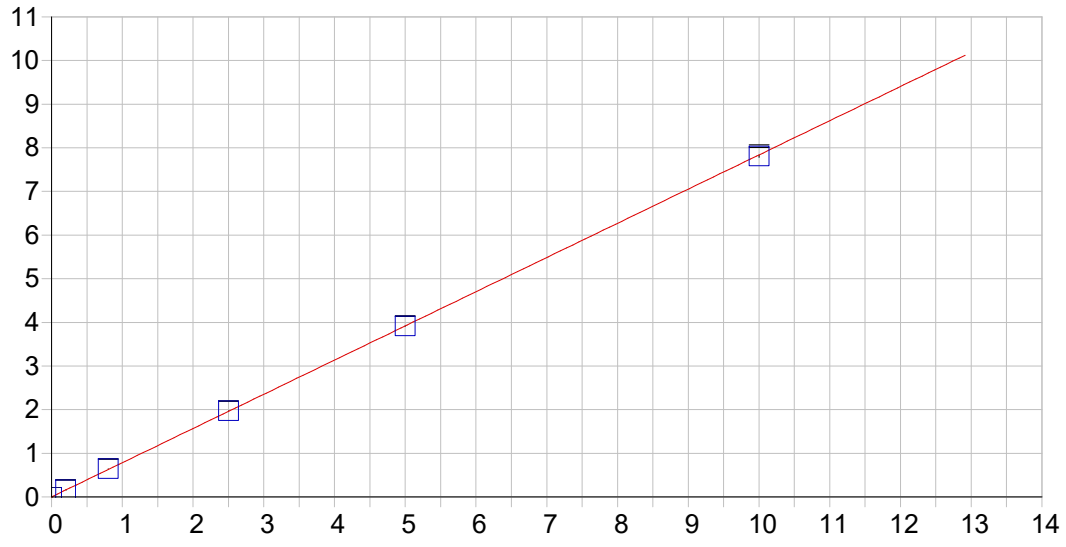

**B 249.678 {135}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002305 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.404081 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999841 | Status: | OK. |
| Std Error of Est: | 0.000378 | | |
| Predicted MDL: | 0.000597 | | |
| Predicted MQL: | 0.001991 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00001 | -.000 | .000 | .00230 | .000 | 1 |
| S1 | .10000 | .10780 | .008 | 7.80 | .04569 | .000 | 1 |
| S3 | 2.5000 | 2.5663 | .066 | 2.65 | 1.0373 | .002 | 1 |
| S4 | 5.0000 | 5.0377 | .038 | .754 | 2.0340 | .005 | 1 |
| S5 | 10.000 | 9.8578 | -.142 | -1.42 | 3.9777 | .008 | 1 |
| S2 | .80000 | .83042 | .030 | 3.80 | .33723 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



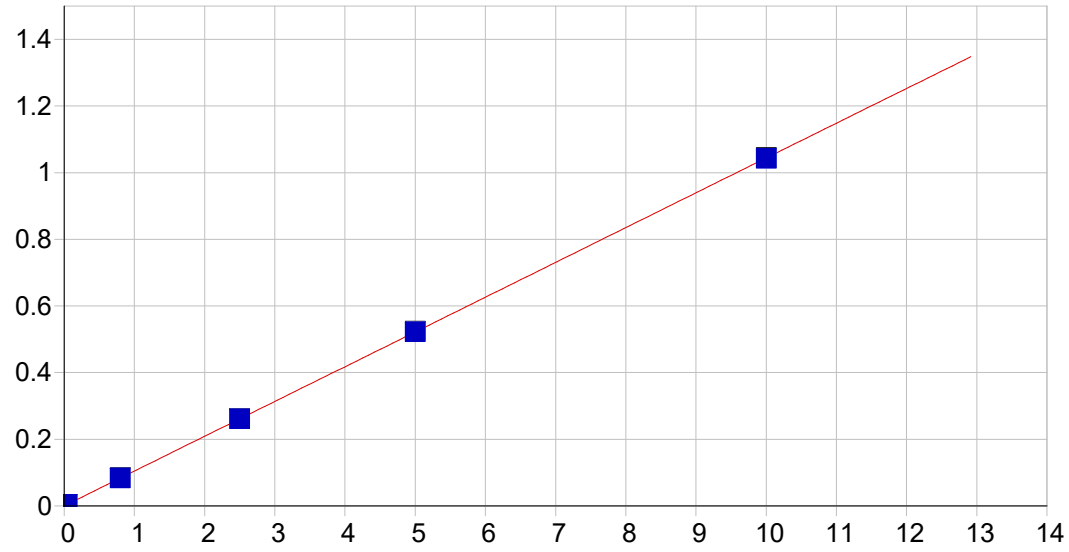

**Mo 202.030 {467}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000177 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.783746 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999975 | Status: | OK. |
| Std Error of Est: | 0.000414 | | |
| Predicted MDL: | 0.000245 | | |
| Predicted MQL: | 0.000817 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00001 | -.000 | .000 | .00017 | .000 | 1 |
| S1 | .20000 | .20731 | .007 | 3.65 | .16265 | .000 | 1 |
| S3 | 2.5000 | 2.5126 | .013 | .504 | 1.9694 | .007 | 1 |
| S4 | 5.0000 | 4.9953 | -.005 | -.095 | 3.9152 | .006 | 1 |
| S5 | 10.000 | 9.9653 | -.035 | -.347 | 7.8105 | .029 | 1 |
| S2 | .80000 | .81951 | .020 | 2.44 | .64246 | .001 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



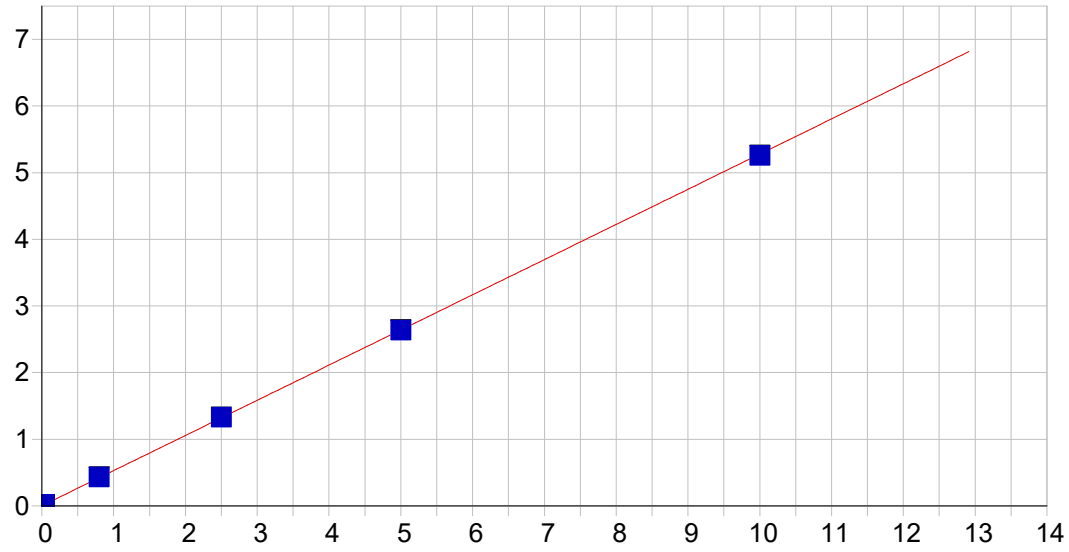

**Sn 189.989 {478}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000139 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.104378 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999999 | Status: | OK. |
| Std Error of Est: | 0.000004 | | |
| Predicted MDL: | 0.000815 | | |
| Predicted MQL: | 0.002715 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00014 | .000 | 1 |
| S1 | .04000 | .04043 | .000 | 1.08 | .00435 | .000 | 1 |
| S3 | 2.5000 | 2.5002 | .000 | .007 | .26083 | .000 | 1 |
| S4 | 5.0000 | 5.0072 | .007 | .143 | .52224 | .001 | 1 |
| S5 | 10.000 | 9.9906 | -.009 | -.094 | 1.0419 | .002 | 1 |
| S2 | .80000 | .80167 | .002 | .209 | .08373 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



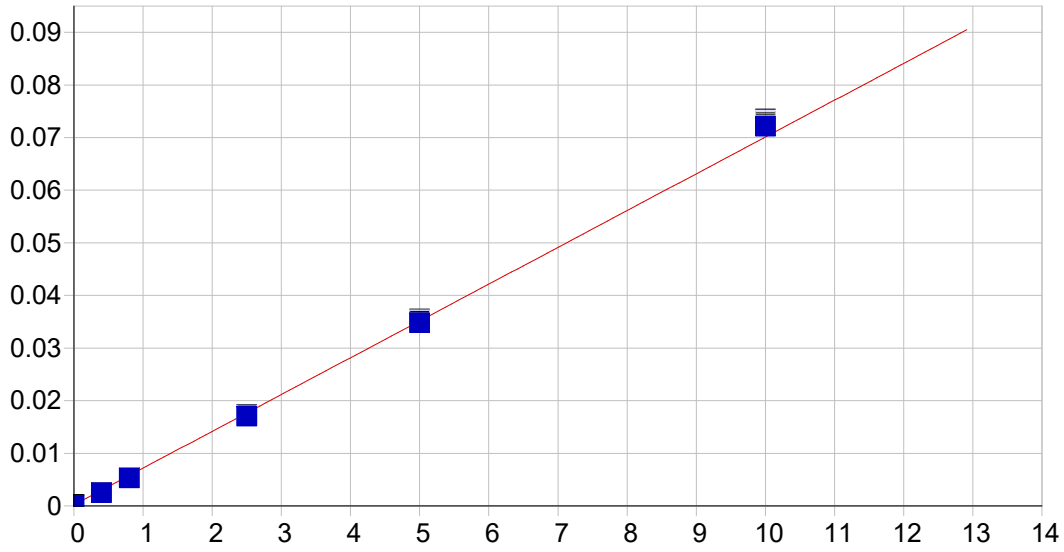

**Ti 336.121 {100}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.001815 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.527697 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999977 | Status: | OK. |
| Std Error of Est: | 0.000118 | | |
| Predicted MDL: | 0.000471 | | |
| Predicted MQL: | 0.001571 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00181 | .000 | 1 |
| S1 | .04000 | .04147 | .001 | 3.67 | .02368 | .000 | 1 |
| S3 | 2.5000 | 2.5201 | .020 | .805 | 1.3312 | .001 | 1 |
| S4 | 5.0000 | 4.9963 | -.004 | -.075 | 2.6374 | .008 | 1 |
| S5 | 10.000 | 9.9627 | -.037 | -.373 | 5.2572 | .004 | 1 |
| S2 | .80000 | .81940 | .019 | 2.42 | .43406 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



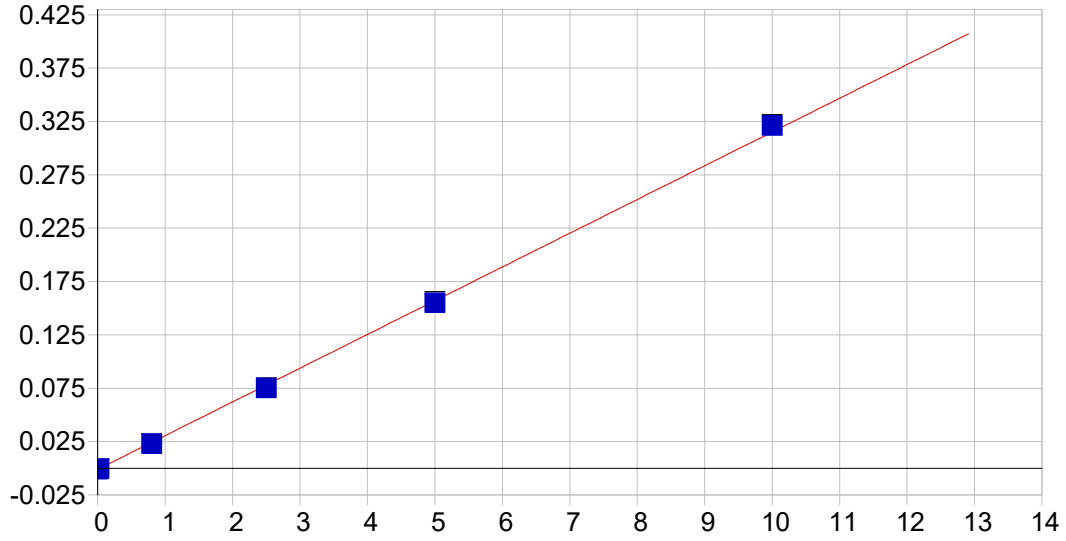

**Si 288.158 {117}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000193 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.006992 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999173 | Status: | OK. |
| Std Error of Est: | 0.000031 | | |
| Predicted MDL: | 0.005393 | | |
| Predicted MQL: | 0.017977 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00012 | .000 | .000 | .00019 | .000 | 1 |
| S1 | .40000 | .32577 | -.074 | -18.6 | .00248 | .000 | 1 |
| S3 | 2.5000 | 2.4076 | -.092 | -3.69 | .01729 | .000 | 1 |
| S4 | 5.0000 | 4.9485 | -.051 | -1.03 | .03532 | .000 | 1 |
| S5 | 10.000 | 10.286 | .286 | 2.86 | .07316 | .000 | 1 |
| S2 | .80000 | .73107 | -.069 | -8.62 | .00539 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



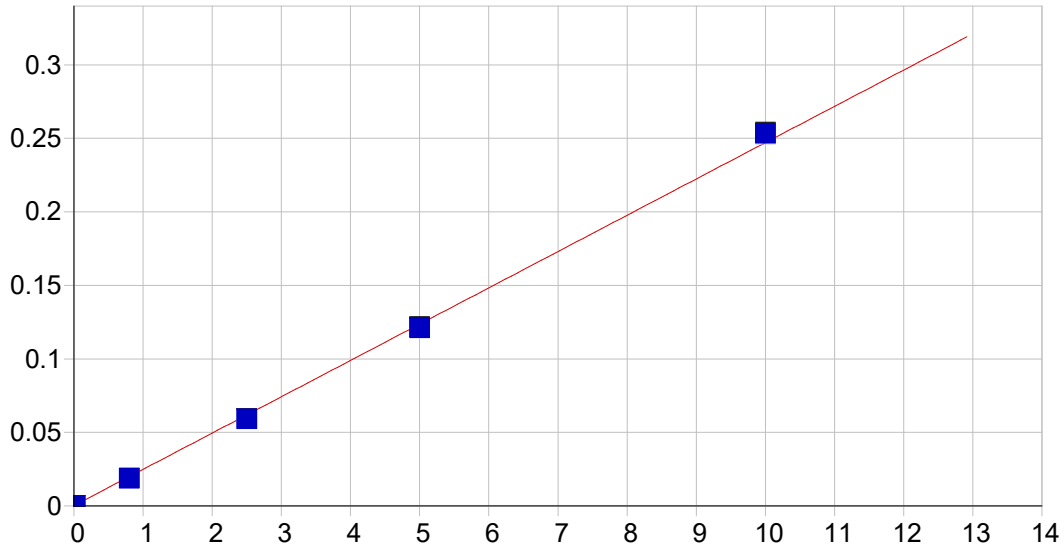

**P 177.495 {490}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | -0.001096 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.031622 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999748 | Status: | OK. |
| Std Error of Est: | 0.000017 | | |
| Predicted MDL: | 0.002562 | | |
| Predicted MQL: | 0.008540 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | -.00110 | .000 | 1 |
| S1 | .02000 | .01757 | -.002 | -12.1 | -.00054 | .000 | 1 |
| S3 | 2.5000 | 2.4128 | -.087 | -3.49 | .07519 | .000 | 1 |
| S4 | 5.0000 | 4.9375 | -.063 | -1.25 | .15501 | .001 | 1 |
| S5 | 10.000 | 10.188 | .188 | 1.88 | .32102 | .001 | 1 |
| S2 | .80000 | .76425 | -.036 | -4.47 | .02307 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



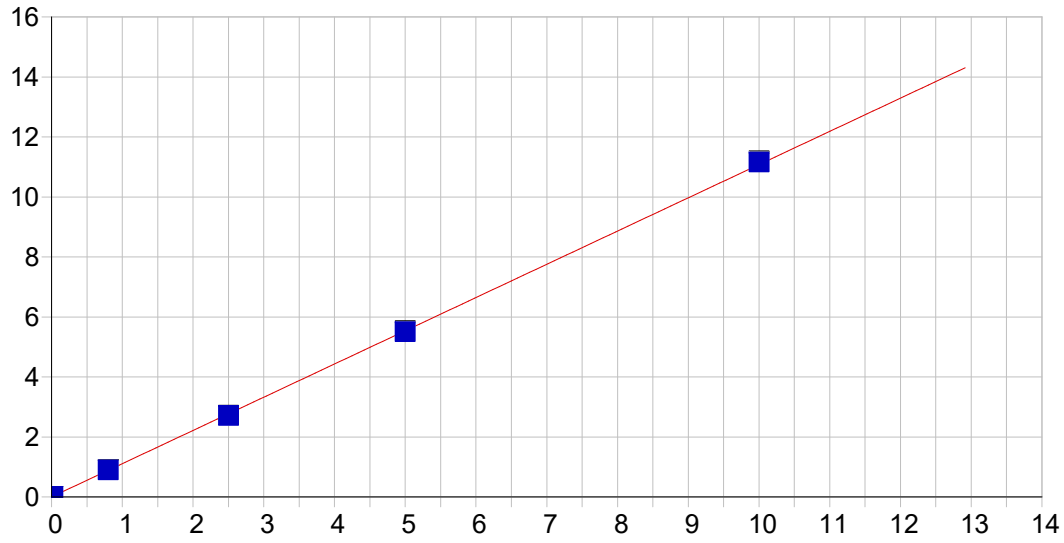

**S 182.034 {485}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000182 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.024690 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999554 | Status: | OK. |
| Std Error of Est: | 0.000017 | | |
| Predicted MDL: | 0.003258 | | |
| Predicted MQL: | 0.010860 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | .00000 | .000 | .000 | .00018 | .000 | 1 |
| S1 | .02000 | .01917 | -.001 | -4.16 | .00063 | .000 | 1 |
| S3 | 2.5000 | 2.3904 | -.110 | -4.38 | .05904 | .000 | 1 |
| S4 | 5.0000 | 4.9026 | -.097 | -1.95 | .12091 | .001 | 1 |
| S5 | 10.000 | 10.256 | .256 | 2.56 | .25277 | .001 | 1 |
| S2 | .80000 | .75130 | -.049 | -6.09 | .01868 | .000 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



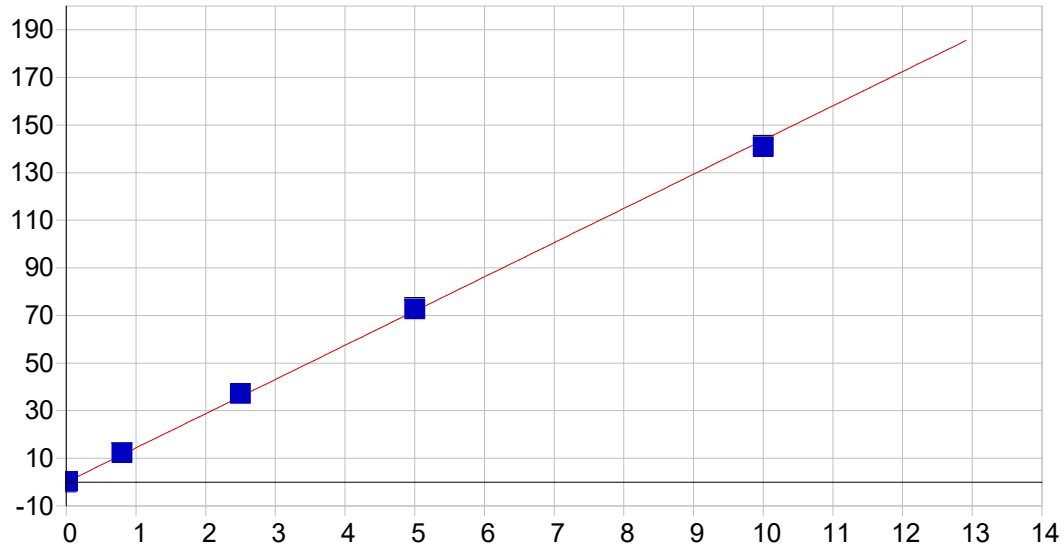

**Li 670.784 { 50}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.002038 | Re-Slope: | 1.000000 |
| A1 (Gain): | 1.107343 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999942 | Status: | OK. |
| Std Error of Est: | 0.000280 | | |
| Predicted MDL: | 0.000653 | | |
| Predicted MQL: | 0.002176 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00204 | .001 | 1 |
| S5 | 10.000 | 10.076 | .076 | .758 | 11.169 | .033 | 1 |
| S4 | 5.0000 | 4.9674 | -.033 | -.652 | 5.5076 | .027 | 1 |
| S3 | 2.5000 | 2.4457 | -.054 | -2.17 | 2.7127 | .008 | 1 |
| S1 | .02000 | .02071 | .001 | 3.55 | .02537 | .001 | 1 |
| S2 | .80000 | .81039 | .010 | 1.30 | .90021 | .004 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790



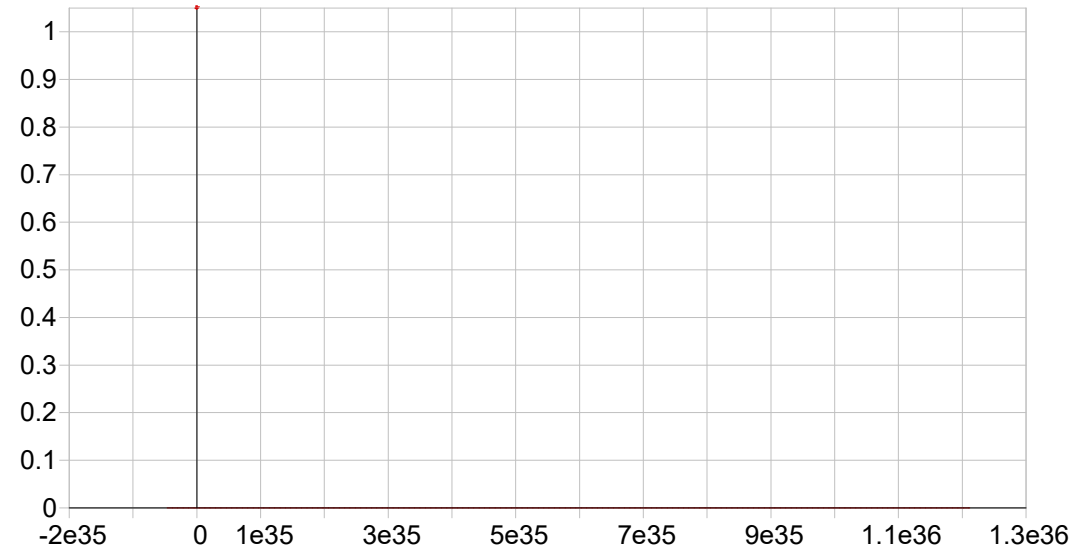

**Sr 407.771 { 83}**

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 12:14:14 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000207 | Re-Slope: | 1.000000 |
| A1 (Gain): | 14.370415 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.999683 | Status: | OK. |
| Std Error of Est: | 0.008491 | | |
| Predicted MDL: | 0.000029 | | |
| Predicted MQL: | 0.000098 | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|
| S0 | .00000 | -.00000 | -.000 | .000 | .00016 | .000 | 1 |
| S1 | .02000 | .02169 | .002 | 8.46 | .31337 | .001 | 1 |
| S3 | 2.5000 | 2.5848 | .085 | 3.39 | 37.181 | .047 | 1 |
| S4 | 5.0000 | 5.0590 | .059 | 1.18 | 72.773 | .570 | 1 |
| S5 | 10.000 | 9.7987 | -.201 | -2.01 | 140.96 | .599 | 1 |
| S2 | .80000 | .85572 | .056 | 6.96 | 12.309 | .024 | 1 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

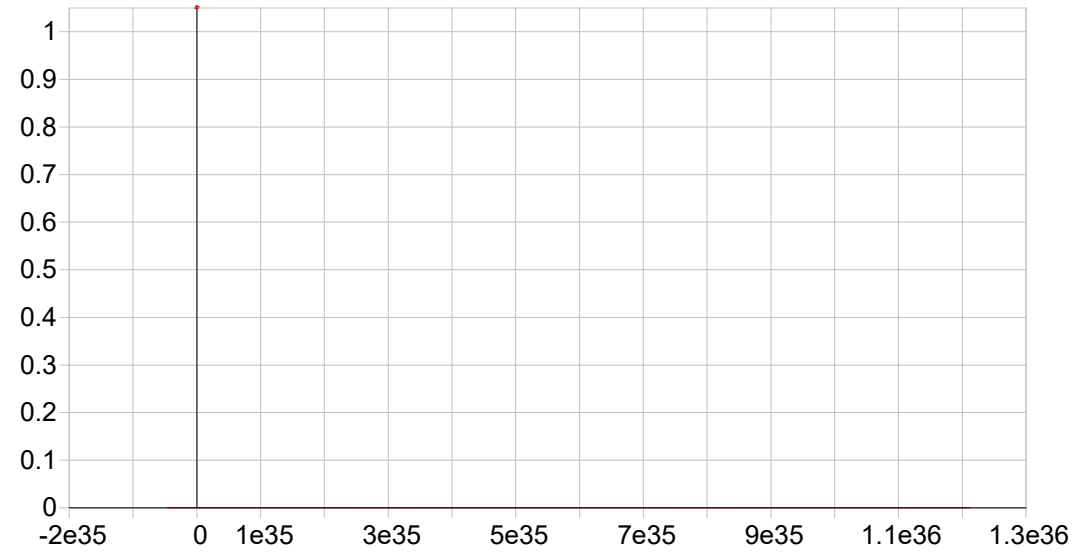



**Y 224.306 {450}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | 12/6/2024 11:45:35 | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000000 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.000000 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.000000 | Status: | Warning Zero Gain |
| Std Error of Est: | 0.000000 | | |
| Predicted MDL: | n/a | | |
| Predicted MQL: | n/a | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|




**Y 360.073 { 94}***

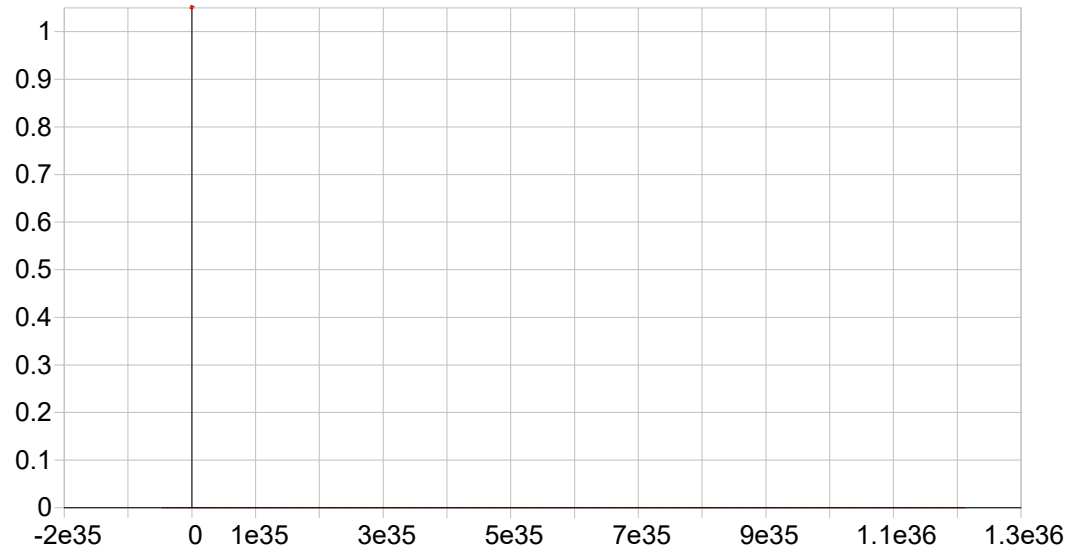
| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000000 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.000000 | Y-int: | 0.000000 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

| | | | | | |
|---|---|---|---|---|---|
| A2 (Curvature): | 0.000000 | | | | |
| n (Exponent): | 1.000000 | | | | |
| Correlation: | 0.000000 | Status: | Warning | Zero Gain | |
| Std Error of Est: | 0.000000 | | | | |
| Predicted MDL: | n/a | | | | |
| Predicted MQL: | n/a | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|



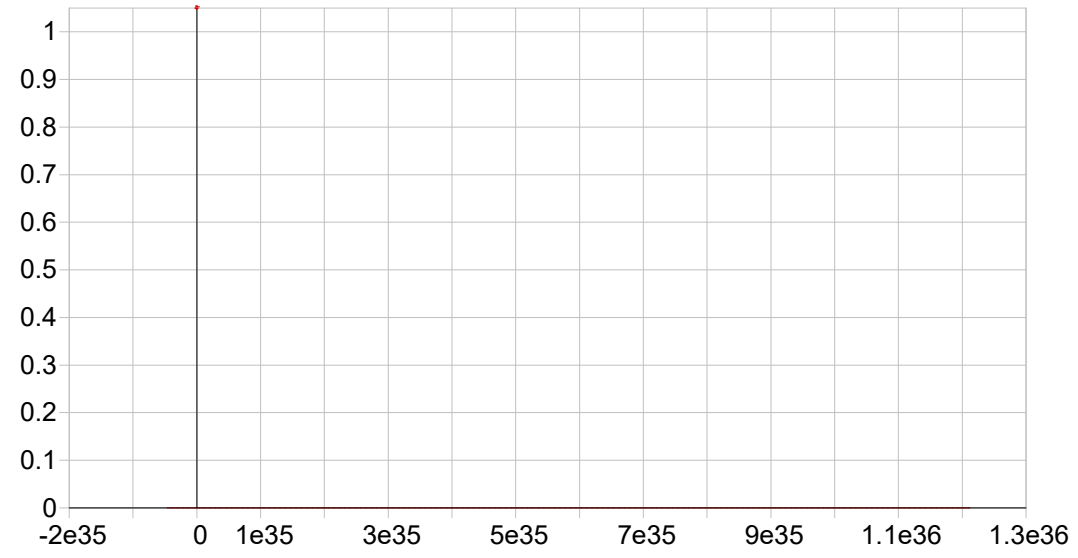

**Y 371.030 { 91}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |

| | | | |
|---|---|---|---|
| A0 (Offset): | 0.000000 | Re-Slope: | 1.000000 |
| A1 (Gain): | 0.000000 | Y-int: | 0.000000 |
| A2 (Curvature): | 0.000000 | | |
| n (Exponent): | 1.000000 | | |
| Correlation: | 0.000000 | Status: | Warning Zero Gain |
| Std Error of Est: | 0.000000 | | |
| Predicted MDL: | n/a | | |
| Predicted MQL: | n/a | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|

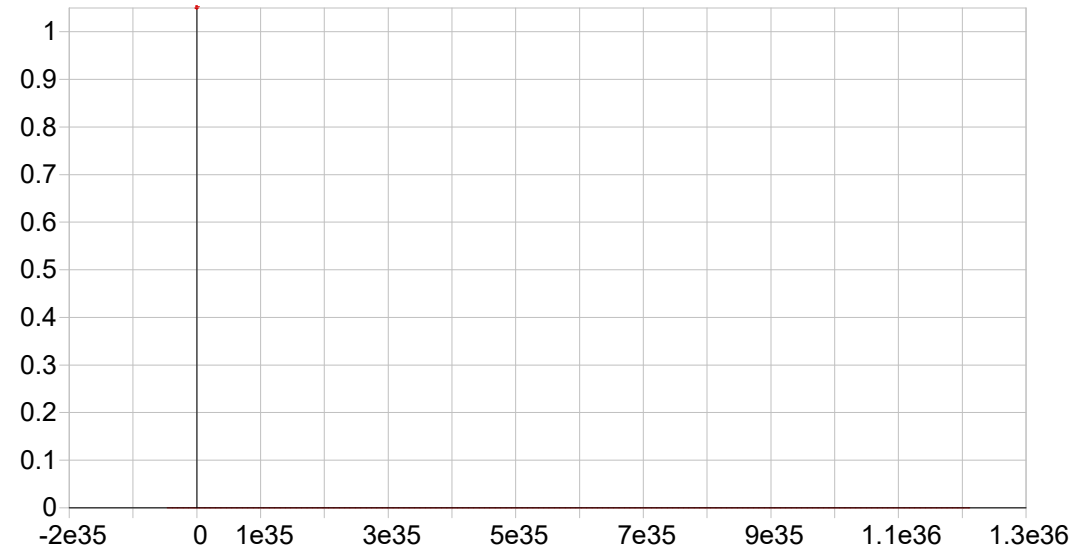
Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790




**Y 224.306 {150}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |
| A0 (Offset): | 0.000000 | | Re-Slope: | 1.000000 | |
| A1 (Gain): | 0.000000 | | Y-int: | 0.000000 | |
| A2 (Curvature): | 0.000000 | | | | |
| n (Exponent): | 1.000000 | | | | |
| Correlation: | 0.000000 | | Status: | Warning | Zero Gain |
| Std Error of Est: | 0.000000 | | | | |
| Predicted MDL: | n/a | | | | |
| Predicted MQL: | n/a | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|




**In 230.606 {446}***

| | | | | | |
|---|---|---|---|---|---|
| Date of Fit: | <not fit> | Type of Fit: | Linear | Weighting: | 1/Conc |
| A0 (Offset): | 0.000000 | | Re-Slope: | 1.000000 | |
| A1 (Gain): | 0.000000 | | Y-int: | 0.000000 | |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A2 (Curvature): | | 0.000000 | | | | | |
| n (Exponent): | | 1.000000 | | | | | |
| Correlation: | | 0.000000 | | Status: | Warning | Zero Gain | |
| Std Error of Est: | | 0.000000 | | | | | |
| Predicted MDL: | | n/a | | | | | |
| Predicted MQL: | | n/a | | | | | |

| Std. Name | Stated Conc. | Found Conc. | Difference | % Diff. | (S)IR | Std Dev | Emphasis |
|---|---|---|---|---|---|---|---|

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S0 Acquired: 12/6/2024 11:48:28 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **-.00022** | **-.00039** | **-.00021** | **.00050** | **.00008** | **.00032** | **-.01688** | **-.00067** |
| Stddev | .00002 | .00004 | .00004 | .00012 | .00000 | .00014 | .00255 | .00021 |
| %RSD | 9.9345 | 10.231 | 19.012 | 24.771 | 5.7055 | 43.023 | 15.090 | 31.974 |
| #1 | -.00023 | -.00040 | -.00020 | .00064 | .00008 | .00019 | -.01863 | -.00056 |
| #2 | -.00023 | -.00034 | -.00017 | .00043 | .00007 | .00046 | -.01806 | -.00053 |
| #3 | -.00019 | -.00042 | -.00025 | .00043 | .00007 | .00031 | -.01396 | -.00091 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **-.00024** | **.00207** | **-.00001** | **-.00002** | **.00693** | **-.00000** | **-.00001** | **-.00015** |
| Stddev | .00005 | .00027 | .00003 | .00014 | .00027 | .00001 | .00001 | .00003 |
| %RSD | 20.969 | 13.090 | 231.16 | 663.28 | 3.8603 | 518.15 | 150.00 | 17.668 |
| #1 | -.00019 | .00197 | .00002 | .00014 | .00667 | .00001 | -.00001 | -.00016 |
| #2 | -.00025 | .00237 | -.00001 | -.00011 | .00692 | -.00001 | .00000 | -.00017 |
| #3 | -.00029 | .00185 | -.00005 | -.00010 | .00721 | -.00001 | -.00002 | -.00012 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **-.00021** | **-.00121** | **.00538** | **.00001** | **.00614** | **.00128** | **.00230** | **.00017** |
| Stddev | .00018 | .00008 | .00032 | .00003 | .00009 | .00019 | .00006 | .00010 |
| %RSD | 85.908 | 6.4949 | 5.8705 | 333.60 | 1.5196 | 14.960 | 2.5719 | 62.027 |
| #1 | -.00038 | -.00130 | .00502 | .00000 | .00619 | .00111 | .00223 | .00025 |
| #2 | -.00022 | -.00119 | .00548 | -.00002 | .00603 | .00125 | .00233 | .00019 |
| #3 | -.00002 | -.00115 | .00563 | .00004 | .00620 | .00148 | .00234 | .00005 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.00014** | **.00181** | **.00019** | **-.00110** | **.00018** | **.00204** | **.00016** |
| Stddev | .00005 | .00011 | .00004 | .00011 | .00001 | .00073 | .00019 |
| %RSD | 35.019 | 6.2799 | 18.694 | 10.036 | 6.8841 | 35.789 | 120.82 |
| #1 | .00013 | .00189 | .00018 | -.00099 | .00017 | .00120 | .00013 |
| #2 | .00010 | .00168 | .00024 | -.00109 | .00019 | .00242 | .00036 |
| #3 | .00019 | .00187 | .00017 | -.00121 | .00019 | .00250 | -.00002 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S0 Acquired: 12/6/2024 11:48:28 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2726.8 | 63449. | 13609. | 1900.6 | 4609.0 |
| Stddev | .2 | 69. | 42. | .6 | 4.2 |
| %RSD | .00862 | .10823 | .30855 | .03160 | .09168 |
| #1 | 2726.5 | 63383. | 13561. | 1901.2 | 4604.5 |
| #2 | 2727.0 | 63520. | 13634. | 1900.0 | 4609.9 |
| #3 | 2726.8 | 63444. | 13632. | 1900.6 | 4612.8 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S1 Acquired: 12/6/2024 11:52:52 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.00124** | **.00199** | **.00251** | **.00213** | **.01227** | **.00889** | **.34470** | **.02158** |
| Stddev | .00016 | .00007 | .00023 | .00007 | .00013 | .00041 | .00276 | .00025 |
| %RSD | 13.312 | 3.5660 | 9.1990 | 3.0765 | 1.0804 | 4.5833 | .80000 | 1.1457 |
| #1 | .00139 | .00203 | .00276 | .00208 | .01222 | .00870 | .34748 | .02165 |
| #2 | .00127 | .00191 | .00231 | .00211 | .01217 | .00861 | .34464 | .02178 |
| #3 | .00106 | .00202 | .00245 | .00220 | .01242 | .00935 | .34196 | .02130 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.01288** | **.11126** | **.00200** | **.02558** | **.02425** | **.00055** | **.01389** | **.03243** |
| Stddev | .00006 | .00011 | .00005 | .00009 | .00012 | .00001 | .00013 | .00012 |
| %RSD | .44121 | .09720 | 2.7294 | .34498 | .50394 | 1.9857 | .92044 | .37863 |
| #1 | .01282 | .11123 | .00206 | .02548 | .02412 | .00056 | .01390 | .03229 |
| #2 | .01294 | .11138 | .00198 | .02561 | .02437 | .00054 | .01376 | .03246 |
| #3 | .01288 | .11118 | .00196 | .02565 | .02426 | .00055 | .01402 | .03253 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.02435** | **.00151** | **.06449** | **.00506** | **.14998** | **.01942** | **.04569** | **.16265** |
| Stddev | .00010 | .00001 | .00010 | .00003 | .00045 | .00005 | .00004 | .00021 |
| %RSD | .39075 | .52897 | .15682 | .59473 | .30190 | .24070 | .09103 | .12888 |
| #1 | .02445 | .00151 | .06438 | .00506 | .14997 | .01938 | .04566 | .16264 |
| #2 | .02426 | .00152 | .06452 | .00503 | .15044 | .01947 | .04574 | .16245 |
| #3 | .02433 | .00151 | .06457 | .00509 | .14954 | .01941 | .04568 | .16287 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.00435** | **.02368** | **.00248** | **-.00054** | **.00063** | **.02537** | **.31337** |
| Stddev | .00010 | .00030 | .00000 | .00002 | .00005 | .00069 | .00118 |
| %RSD | 2.2446 | 1.2511 | .07589 | 4.6000 | 8.6648 | 2.7008 | .37600 |
| #1 | .00431 | .02364 | .00248 | -.00057 | .00058 | .02505 | .31467 |
| #2 | .00447 | .02400 | .00248 | -.00052 | .00068 | .02616 | .31308 |
| #3 | .00428 | .02341 | .00247 | -.00053 | .00064 | .02490 | .31236 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S1 Acquired: 12/6/2024 11:52:52 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2661.0 | 62452. | 13516. | 1900.7 | 4451.8 |
| Stddev | 4.9 | 137. | 25. | 4.1 | 6.3 |
| %RSD | .18417 | .22006 | .18737 | .21581 | .14197 |
| #1 | 2656.4 | 62294. | 13506. | 1897.5 | 4446.9 |
| #2 | 2666.2 | 62545. | 13498. | 1905.3 | 4458.9 |
| #3 | 2660.3 | 62517. | 13545. | 1899.2 | 4449.5 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S2 Acquired: 12/6/2024 11:57:15 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.05784** | **.05027** | **.18901** | **.07422** | **.19055** | **.12781** | **5.7760** | **.14622** |
| Stddev | .00022 | .00031 | .00023 | .00020 | .00026 | .00083 | .0064 | .00016 |
| %RSD | .38708 | .62251 | .12073 | .27165 | .13396 | .64780 | .11058 | .10894 |
| #1 | .05759 | .05050 | .18924 | .07437 | .19054 | .12876 | 5.7834 | .14635 |
| #2 | .05791 | .05039 | .18879 | .07399 | .19081 | .12748 | 5.7717 | .14626 |
| #3 | .05801 | .04991 | .18899 | .07430 | .19030 | .12720 | 5.7731 | .14604 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.85459** | **.21449** | **.03314** | **.34432** | **.16582** | **.00456** | **.26728** | **.05995** |
| Stddev | .00097 | .00065 | .00012 | .00070 | .00042 | .00003 | .00031 | .00012 |
| %RSD | .11314 | .30524 | .35998 | .20275 | .25388 | .64700 | .11621 | .19893 |
| #1 | .85478 | .21446 | .03301 | .34455 | .16539 | .00453 | .26743 | .05999 |
| #2 | .85354 | .21515 | .03315 | .34354 | .16585 | .00457 | .26692 | .05982 |
| #3 | .85544 | .21384 | .03325 | .34488 | .16623 | .00458 | .26748 | .06005 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.24632** | **.05250** | **.12260** | **.05200** | **1.4272** | **.03713** | **.33723** | **.64246** |
| Stddev | .00071 | .00013 | .00035 | .00039 | .0010 | .00015 | .00040 | .00137 |
| %RSD | .28661 | .25630 | .28174 | .74709 | .06969 | .39071 | .11821 | .21279 |
| #1 | .24658 | .05242 | .12298 | .05240 | 1.4278 | .03707 | .33742 | .64177 |
| #2 | .24552 | .05265 | .12250 | .05163 | 1.4278 | .03703 | .33750 | .64404 |
| #3 | .24686 | .05242 | .12231 | .05197 | 1.4261 | .03730 | .33677 | .64158 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.08373** | **.43406** | **.00539** | **.02307** | **.01868** | **.90021** | **12.309** |
| Stddev | .00022 | .00038 | .00003 | .00009 | .00013 | .00387 | .024 |
| %RSD | .26632 | .08817 | .51709 | .37651 | .71477 | .42990 | .19755 |
| #1 | .08366 | .43362 | .00536 | .02317 | .01863 | .90392 | 12.336 |
| #2 | .08355 | .43433 | .00540 | .02303 | .01883 | .89620 | 12.301 |
| #3 | .08398 | .43422 | .00541 | .02301 | .01858 | .90052 | 12.289 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S2 Acquired: 12/6/2024 11:57:15 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2667.5 | 62460. | 13697. | 1885.4 | 4388.1 |
| Stddev | 5.8 | 71. | 31. | 3.4 | 1.1 |
| %RSD | .21904 | .11361 | .22366 | .18296 | .02397 |
| | | | | | |
| #1 | 2673.5 | 62378. | 13662. | 1881.5 | 4389.0 |
| #2 | 2661.8 | 62506. | 13708. | 1886.8 | 4388.3 |
| #3 | 2667.1 | 62495. | 13720. | 1887.9 | 4386.9 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S3 Acquired: 12/6/2024 12:01:33 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.18085** | **.15450** | **.58576** | **.23149** | **.58639** | **.39274** | **17.585** | **.44658** |
| Stddev | .00017 | .00169 | .00055 | .00044 | .00232 | .00019 | .144 | .00196 |
| %RSD | .09336 | 1.0966 | .09354 | .19037 | .39623 | .04964 | .82091 | .43897 |
| #1 | .18068 | .15539 | .58630 | .23184 | .58451 | .39292 | 17.420 | .44508 |
| #2 | .18102 | .15255 | .58520 | .23100 | .58568 | .39253 | 17.690 | .44880 |
| #3 | .18086 | .15556 | .58577 | .23164 | .58899 | .39277 | 17.644 | .44587 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2.6641** | **.64879** | **.10166** | **1.0591** | **.50534** | **.01408** | **.80192** | **.18374** |
| Stddev | .0021 | .00141 | .00021 | .0010 | .00132 | .00004 | .00162 | .00083 |
| %RSD | .08037 | .21698 | .20379 | .08964 | .26181 | .27301 | .20232 | .45327 |
| #1 | 2.6666 | .64717 | .10149 | 1.0593 | .50390 | .01411 | .80378 | .18303 |
| #2 | 2.6627 | .64970 | .10160 | 1.0599 | .50562 | .01404 | .80116 | .18353 |
| #3 | 2.6630 | .64950 | .10189 | 1.0581 | .50650 | .01408 | .80082 | .18466 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.75505** | **.16190** | **.37429** | **.15923** | **4.3369** | **.11327** | **1.0373** | **1.9694** |
| Stddev | .00076 | .00032 | .00209 | .00019 | .0079 | .00008 | .0020 | .0069 |
| %RSD | .10005 | .19873 | .55816 | .11805 | .18221 | .06671 | .19677 | .35081 |
| #1 | .75592 | .16183 | .37660 | .15902 | 4.3295 | .11320 | 1.0350 | 1.9634 |
| #2 | .75460 | .16163 | .37374 | .15931 | 4.3359 | .11335 | 1.0385 | 1.9678 |
| #3 | .75462 | .16226 | .37254 | .15937 | 4.3452 | .11325 | 1.0385 | 1.9770 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.26083** | **1.3312** | **.01729** | **.07519** | **.05904** | **2.7127** | **37.181** |
| Stddev | .00034 | .0007 | .00009 | .00031 | .00031 | .0078 | .047 |
| %RSD | .13149 | .05290 | .54325 | .41594 | .52679 | .28878 | .12530 |
| #1 | .26109 | 1.3306 | .01735 | .07522 | .05901 | 2.7182 | 37.138 |
| #2 | .26044 | 1.3320 | .01718 | .07486 | .05875 | 2.7162 | 37.173 |
| #3 | .26097 | 1.3310 | .01733 | .07549 | .05937 | 2.7037 | 37.231 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S3 Acquired: 12/6/2024 12:01:33 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2593.8** | **60852.** | **13615.** | **1824.9** | **4173.5** |
| Stddev | 7.1 | 179. | 6. | 6.4 | 3.8 |
| %RSD | .27194 | .29383 | .04216 | .35261 | .09046 |
| | | | | | |
| #1 | 2601.1 | 60755. | 13622. | 1826.0 | 4175.0 |
| #2 | 2593.3 | 61058. | 13613. | 1830.6 | 4176.3 |
| #3 | 2587.0 | 60742. | 13611. | 1817.9 | 4169.2 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S4 Acquired: 12/6/2024 12:05:51 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.36554** | **.30250** | **1.1621** | **.46556** | **1.1846** | **.78516** | **34.921** | **.86834** |
| Stddev | .00079 | .00495 | .0017 | .00117 | .0020 | .00178 | .431 | .00227 |
| %RSD | .21658 | 1.6358 | .14556 | .25119 | .17135 | .22708 | 1.2356 | .26158 |
| #1 | .36577 | .30765 | 1.1636 | .46684 | 1.1862 | .78487 | 35.306 | .87096 |
| #2 | .36620 | .30206 | 1.1602 | .46530 | 1.1853 | .78354 | 35.002 | .86686 |
| #3 | .36466 | .29778 | 1.1624 | .46454 | 1.1823 | .78707 | 34.455 | .86721 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **5.3448** | **1.2734** | **.19995** | **2.1240** | **.99731** | **.02816** | **1.5676** | **.36442** |
| Stddev | .0076 | .0027 | .00033 | .0011 | .00035 | .00006 | .0069 | .00059 |
| %RSD | .14179 | .21360 | .16719 | .05070 | .03465 | .21818 | .44340 | .16099 |
| #1 | 5.3475 | 1.2763 | .20030 | 2.1248 | .99728 | .02820 | 1.5756 | .36399 |
| #2 | 5.3362 | 1.2727 | .19993 | 2.1228 | .99698 | .02818 | 1.5640 | .36508 |
| #3 | 5.3507 | 1.2710 | .19963 | 2.1246 | .99767 | .02809 | 1.5632 | .36418 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **1.5061** | **.32406** | **.77332** | **.31601** | **8.6246** | **.23141** | **2.0340** | **3.9152** |
| Stddev | .0017 | .00061 | .00703 | .00038 | .0096 | .00058 | .0055 | .0055 |
| %RSD | .11513 | .18920 | .90968 | .11985 | .11105 | .25132 | .26906 | .14075 |
| #1 | 1.5081 | .32471 | .78114 | .31643 | 8.6150 | .23208 | 2.0403 | 3.9215 |
| #2 | 1.5047 | .32396 | .77129 | .31591 | 8.6342 | .23114 | 2.0301 | 3.9128 |
| #3 | 1.5056 | .32350 | .76752 | .31570 | 8.6246 | .23102 | 2.0316 | 3.9113 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.52224** | **2.6374** | **.03532** | **.15501** | **.12091** | **5.5076** | **72.773** |
| Stddev | .00113 | .0079 | .00020 | .00120 | .00057 | .0269 | .570 |
| %RSD | .21626 | .29837 | .55316 | .77262 | .46817 | .48845 | .78301 |
| #1 | .52340 | 2.6464 | .03510 | .15596 | .12156 | 5.5318 | 73.138 |
| #2 | .52115 | 2.6320 | .03546 | .15540 | .12064 | 5.4787 | 73.064 |
| #3 | .52217 | 2.6337 | .03540 | .15367 | .12053 | 5.5125 | 72.116 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S4 Acquired: 12/6/2024 12:05:51 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2510.6** | **59526.** | **13603.** | **1753.8** | **3984.4** |
| Stddev | 2.9 | 145. | 48. | 2.0 | 6.3 |
| %RSD | .11432 | .24403 | .35479 | .11441 | .15924 |
| | | | | | |
| #1 | 2510.4 | 59398. | 13548. | 1755.3 | 3980.2 |
| #2 | 2507.9 | 59496. | 13625. | 1751.5 | 3981.2 |
| #3 | 2513.6 | 59684. | 13637. | 1754.5 | 3991.7 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S5 Acquired: 12/6/2024 12:10:03 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 | Be2348 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **.74881** | **.59614** | **2.3164** | **.95335** | **2.4247** | **1.5829** | **69.041** | **1.6842** |
| Stddev | .00239 | .00576 | .0037 | .00406 | .0092 | .0007 | .463 | .0087 |
| %RSD | .31935 | .96619 | .16011 | .42629 | .38084 | .04359 | .67031 | .51677 |
| #1 | .74754 | .59174 | 2.3136 | .95113 | 2.4206 | 1.5834 | 68.518 | 1.6941 |
| #2 | .74732 | .59403 | 2.3149 | .95087 | 2.4182 | 1.5821 | 69.397 | 1.6780 |
| #3 | .75157 | .60266 | 2.3206 | .95804 | 2.4352 | 1.5832 | 69.208 | 1.6804 |

| Elem | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 | Mn2576 | Mg2790 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **10.707** | **2.5099** | **.39018** | **4.2825** | **1.9841** | **.05615** | **3.0893** | **.73077** |
| Stddev | .017 | .0047 | .00156 | .0063 | .0052 | .00010 | .0034 | .00188 |
| %RSD | .15737 | .18821 | .39952 | .14646 | .26215 | .18216 | .10975 | .25677 |
| #1 | 10.688 | 2.5150 | .39195 | 4.2759 | 1.9809 | .05616 | 3.0919 | .73288 |
| #2 | 10.714 | 2.5058 | .38961 | 4.2834 | 1.9813 | .05624 | 3.0904 | .73017 |
| #3 | 10.719 | 2.5088 | .38900 | 4.2883 | 1.9901 | .05604 | 3.0855 | .72927 |

| Elem | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **3.0177** | **.65076** | **1.5863** | **.62700** | **16.849** | **.47783** | **3.9777** | **7.8105** |
| Stddev | .0040 | .00042 | .0048 | .00048 | .076 | .00160 | .0076 | .0286 |
| %RSD | .13274 | .06467 | .30056 | .07666 | .45128 | .33567 | .19203 | .36674 |
| #1 | 3.0131 | .65125 | 1.5861 | .62705 | 16.835 | .47620 | 3.9857 | 7.7889 |
| #2 | 3.0204 | .65048 | 1.5912 | .62650 | 16.932 | .47941 | 3.9705 | 7.7996 |
| #3 | 3.0197 | .65056 | 1.5817 | .62745 | 16.781 | .47788 | 3.9769 | 7.8430 |

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **1.0419** | **5.2572** | **.07316** | **.32102** | **.25277** | **11.169** | **140.96** |
| Stddev | .0016 | .0044 | .00034 | .00106 | .00076 | .033 | .60 |
| %RSD | .15731 | .08416 | .46468 | .32970 | .30031 | .29966 | .42476 |
| #1 | 1.0401 | 5.2597 | .07278 | .32086 | .25192 | 11.131 | 140.32 |
| #2 | 1.0422 | 5.2599 | .07342 | .32004 | .25302 | 11.190 | 141.04 |
| #3 | 1.0433 | 5.2521 | .07330 | .32214 | .25338 | 11.187 | 141.51 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: S5 Acquired: 12/6/2024 12:10:03 Type: Cal
Method: NON EPA-6010-200.7(v2499) Mode: IR Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2360.9 | 57482. | 13409. | 1652.1 | 3692.2 |
| Stddev | 6.0 | 136. | 42. | 12.3 | 7.5 |
| %RSD | .25338 | .23586 | .31296 | .74679 | .20182 |
| | | | | | |
| #1 | 2365.9 | 57426. | 13363. | 1654.2 | 3700.7 |
| #2 | 2362.4 | 57383. | 13416. | 1638.9 | 3688.2 |
| #3 | 2354.3 | 57636. | 13446. | 1663.3 | 3687.5 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICV01 Acquired: 12/6/2024 12:14:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9950069** | **1.038737** | **.9999449** | **1.028630** | **1.019173** | **2.569841** |
| Stddev | .0028617 | .010441 | .0007274 | .004002 | .003013 | .012211 |
| %RSD | .2876079 | 1.005143 | .0727429 | .3890846 | .2956281 | .4751669 |
| #1 | .9945823 | 1.047529 | 1.000375 | 1.029905 | 1.019067 | 2.556201 |
| #2 | .9980571 | 1.041486 | .999105 | 1.031840 | 1.022237 | 2.579753 |
| #3 | .9923812 | 1.027197 | 1.000355 | 1.024146 | 1.016214 | 2.573570 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.5157129** | **.5176569** | **.5034005** | **10.08203** | **.5262517** | **.5120550** |
| Stddev | .0009090 | .0010968 | .0008408 | .01544 | .0017604 | .0003531 |
| %RSD | .1762651 | .2118779 | .1670290 | .1531862 | .3345245 | .0689680 |
| #1 | .5158260 | .5169744 | .5034715 | 10.09811 | .5246065 | .5117838 |
| #2 | .5147527 | .5189221 | .5025265 | 10.08068 | .5281082 | .5119268 |
| #3 | .5165601 | .5170742 | .5042036 | 10.06731 | .5260403 | .5124543 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.5279246** | **9.869855** | **.5211655** | **5.929339** | **.5140424** | **.2530267** |
| Stddev | .0002850 | .030712 | .0020728 | .026434 | .0002354 | .0003611 |
| %RSD | .0539772 | .3111736 | .3977163 | .4458142 | .0457855 | .1427094 |
| #1 | .5278434 | 9.901266 | .5228964 | 5.959823 | .5140461 | .2526507 |
| #2 | .5282413 | 9.839892 | .5188685 | 5.915430 | .5138052 | .2530584 |
| #3 | .5276891 | 9.868408 | .5217317 | 5.912763 | .5142758 | .2533708 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **9.548372** | **.5127348** | **1.032034** | **9.768405** | F **.0171183** | F **.0008645** |
| Stddev | .023525 | .0021372 | .001802 | .041022 | .0001846 | .0002317 |
| %RSD | .2463789 | .4168232 | .1746177 | .4199441 | 1.078452 | 26.79697 |
| #1 | 9.538203 | .5119341 | 1.034098 | 9.771677 | .0173089 | .0009795 |
| #2 | 9.531642 | .5111136 | 1.030772 | 9.725846 | .0171057 | .0010162 |
| #3 | 9.575271 | .5151567 | 1.031233 | 9.807693 | .0169403 | .0005979 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICV01 Acquired: 12/6/2024 12:14:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICV01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F -.001003 | F -.000268 | F .0016140 | F .0055422 | F .0000184 | F -.001585 |
| Stddev | .000688 | .000307 | .0040285 | .0007679 | .0016537 | .000273 |
| %RSD | 68.59483 | 114.5122 | 249.5954 | 13.85517 | 8991.099 | 17.22181 |
| #1 | -.000286 | .000086 | -.002485 | .0064252 | -.001224 | -.001755 |
| #2 | -.001658 | -.000446 | .001759 | .0050310 | .001895 | -.001730 |
| #3 | -.001065 | -.000446 | .005568 | .0051704 | -.000616 | -.001270 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | F -.008410 |
| Stddev | .000012 |
| %RSD | .1414048 |
| #1 | -.008417 |
| #2 | -.008396 |
| #3 | -.008416 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2559.778 | 61204.47 | 13834.45 | 1784.520 | 4254.546 |
| Stddev | .382 | 131.57 | 35.12 | 8.527 | 3.748 |
| %RSD | .0149323 | .2149605 | .2538940 | .4778404 | .0881026 |
| #1 | 2559.485 | 61072.23 | 13793.89 | 1775.295 | 4257.848 |
| #2 | 2559.640 | 61335.34 | 13854.28 | 1792.114 | 4255.320 |
| #3 | 2560.210 | 61205.83 | 13855.17 | 1786.150 | 4250.472 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LLICV01 Acquired: 12/6/2024 12:20:00 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0197574 | .0401282 | .0105228 | .0179678 | .0510959 | .1047103 | .0969324 |
| Stddev | .0016683 | .0019763 | .0002140 | .0018892 | .0007199 | .0051237 | .0005104 |
| %RSD | 8.443734 | 4.924947 | 2.033246 | 10.51419 | 1.408942 | 4.893188 | .5264997 |
| #1 | .0216661 | .0410829 | .0107088 | .0201037 | .0507401 | .0988443 | .0963998 |
| #2 | .0185779 | .0378558 | .0102889 | .0165158 | .0506232 | .1069768 | .0974171 |
| #3 | .0190283 | .0414458 | .0105705 | .0172839 | .0519244 | .1083099 | .0969803 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0061992 | .0059792 | 2.047987 | .0100479 | .0295078 | .0221209 | .0980836 |
| Stddev | .0000459 | .0000366 | .004877 | .0000849 | .0001777 | .0003021 | .0031014 |
| %RSD | .7405079 | .6127171 | .2381501 | .8448687 | .6021712 | 1.365481 | 3.161978 |
| #1 | .0061470 | .0059705 | 2.044714 | .0100289 | .0295120 | .0218344 | .0986080 |
| #2 | .0062332 | .0059476 | 2.053593 | .0101407 | .0296834 | .0224364 | .1008894 |
| #3 | .0062174 | .0060193 | 2.045654 | .0099741 | .0293281 | .0220918 | .0947535 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0206428 | 2.135528 | .0395155 | .0105519 | 1.810484 | .0398113 | .0421728 |
| Stddev | .0003721 | .018403 | .0002696 | .0002891 | .006134 | .0006520 | .0003351 |
| %RSD | 1.802700 | .8617437 | .6822485 | 2.740130 | .3388003 | 1.637633 | .7944888 |
| #1 | .0203251 | 2.128560 | .0392208 | .0102347 | 1.803908 | .0399039 | .0419749 |
| #2 | .0205511 | 2.121627 | .0397498 | .0106204 | 1.811493 | .0404120 | .0419838 |
| #3 | .0210522 | 2.156398 | .0395761 | .0108007 | 1.816051 | .0391180 | .0425596 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.892993 | .1096103 | .2064980 | .0386066 | .0398072 | .3250473 | .0172820 |
| Stddev | .026283 | .0002841 | .0003329 | .0011064 | .0004682 | .0074770 | .0025005 |
| %RSD | 1.388412 | .2591782 | .1611992 | 2.865741 | 1.176147 | 2.300288 | 14.46887 |
| #1 | 1.862735 | .1099217 | .2063649 | .0373491 | .0403476 | .3219443 | .0144522 |
| #2 | 1.910148 | .1093654 | .2068768 | .0390404 | .0395516 | .3196213 | .0191935 |
| #3 | 1.906097 | .1095437 | .2062523 | .0394304 | .0395225 | .3335762 | .0182004 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LLICV01 Acquired: 12/6/2024 12:20:00 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: LLICV01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0186481 | .0190730 | .0208366 |
| Stddev | .0014159 | .0008382 | .0000543 |
| %RSD | 7.592906 | 4.394694 | .2606892 |
| #1 | .0178629 | .0181053 | .0207794 |
| #2 | .0177988 | .0195718 | .0208874 |
| #3 | .0202827 | .0195420 | .0208429 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2628.144 | 62337.53 | 13815.33 | 1818.083 | 4469.142 |
| Stddev | 5.077 | 115.47 | 34.64 | 3.778 | 4.438 |
| %RSD | .1931852 | .1852287 | .2507068 | .2078179 | .0993123 |
| #1 | 2625.606 | 62291.99 | 13781.70 | 1815.335 | 4467.064 |
| #2 | 2624.837 | 62468.82 | 13813.39 | 1822.392 | 4466.124 |
| #3 | 2633.990 | 62251.77 | 13850.89 | 1816.522 | 4474.239 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICB01 Acquired: 12/6/2024 12:24:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000253** | **-.000293** | **-.000761** | **-.000901** | **.0007179** | **-.002897** | **-.001949** |
| Stddev | .0009467 | .001024 | .000053 | .001988 | .0002503 | .005373 | .000579 |
| %RSD | 3735.830 | 349.6381 | 6.986214 | 220.7912 | 34.86452 | 185.4472 | 29.70832 |
| #1 | -.001067 | -.000243 | -.000816 | -.000789 | .0008415 | -.008956 | -.002000 |
| #2 | .000602 | .000705 | -.000710 | -.002942 | .0008824 | -.001023 | -.002501 |
| #3 | .000541 | -.001341 | -.000758 | .001030 | .0004299 | .001287 | -.001346 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000747** | **.0000272** | **-.007974** | **.0000199** | **.0000095** | **-.000472** | **-.000292** |
| Stddev | .0000312 | .0000680 | .005365 | .0001304 | .0001458 | .000373 | .002155 |
| %RSD | 41.74590 | 250.0801 | 67.28682 | 656.6102 | 1536.797 | 79.01908 | 737.7539 |
| #1 | .0000689 | .0000220 | -.002624 | -.000102 | .0001542 | -.000671 | .001237 |
| #2 | .0000468 | .0000976 | -.013355 | .000157 | .0000118 | -.000042 | .000643 |
| #3 | .0001084 | -.000038 | -.007943 | .000005 | -.000137 | -.000702 | -.002756 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000079** | **.0021320** | **.0002536** | **.0002897** | **-.024239** | **.0001112** | **-.001036** |
| Stddev | .000206 | .0090437 | .0000755 | .0002962 | .010584 | .0008309 | .000355 |
| %RSD | 261.3619 | 424.1807 | 29.76968 | 102.2270 | 43.66376 | 747.1582 | 34.27853 |
| #1 | -.000277 | -.005748 | .0002468 | .0004344 | -.035854 | -.000801 | -.000909 |
| #2 | -.000093 | .012006 | .0001818 | .0004858 | -.021721 | .000825 | -.001437 |
| #3 | .000134 | .000138 | .0003323 | -.000051 | -.015141 | .000310 | -.000761 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.027134** | **.0025701** | **.0001850** | **-.000717** | **-.000123** | **-.005075** | **-.003040** |
| Stddev | .005615 | .0002689 | .0001896 | .000714 | .000290 | .001741 | .001188 |
| %RSD | 20.69546 | 10.46323 | 102.4880 | 99.52676 | 236.6660 | 34.29779 | 39.08140 |
| #1 | -.032643 | .0023176 | .0001426 | -.000093 | -.000054 | -.007019 | -.002289 |
| #2 | -.021418 | .0028529 | .0003922 | -.001496 | -.000441 | -.004549 | -.004410 |
| #3 | -.027340 | .0025400 | .0000202 | -.000563 | .000127 | -.003658 | -.002421 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICB01 Acquired: 12/6/2024 12:24:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICB01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **-.002511** | **-.000694** | **-.000013** |
| Stddev | .001082 | .000756 | .000008 |
| %RSD | 43.10342 | 108.8764 | 64.60847 |
| #1 | -.001275 | -.001553 | -.000004 |
| #2 | -.002968 | -.000398 | -.000015 |
| #3 | -.003289 | -.000131 | -.000020 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2630.432** | **62730.96** | **13713.69** | **1842.909** | **4551.111** |
| Stddev | 2.480 | 127.90 | 33.54 | 9.804 | 3.534 |
| %RSD | .0942910 | .2038821 | .2445837 | .5320090 | .0776587 |
| #1 | 2632.978 | 62625.70 | 13675.32 | 1835.229 | 4550.209 |
| #2 | 2628.023 | 62873.30 | 13728.32 | 1853.953 | 4555.009 |
| #3 | 2630.293 | 62693.88 | 13737.44 | 1839.546 | 4548.115 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CRI01 Acquired: 12/6/2024 12:28:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0201963 | .0413979 | .0111279 | .0198316 | .0500760 | .1045023 | .0974534 |
| Stddev | .0017517 | .0006105 | .0004816 | .0015222 | .0004341 | .0018720 | .0004883 |
| %RSD | 8.673097 | 1.474723 | 4.327881 | 7.675573 | .8668846 | 1.791369 | .5010490 |
| #1 | .0217317 | .0415432 | .0109969 | .0187027 | .0503726 | .1064286 | .0974077 |
| #2 | .0182883 | .0419226 | .0116615 | .0215628 | .0502777 | .1043883 | .0979630 |
| #3 | .0205689 | .0407279 | .0107254 | .0192294 | .0495778 | .1026898 | .0969896 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0061969 | .0058934 | 2.062441 | .0100219 | .0294539 | .0220463 | .0965879 |
| Stddev | .0000545 | .0000196 | .004360 | .0001192 | .0000219 | .0002535 | .0029766 |
| %RSD | .8786304 | .3329655 | .2114025 | 1.188857 | .0742097 | 1.149838 | 3.081710 |
| #1 | .0062424 | .0059076 | 2.059521 | .0099660 | .0294359 | .0217870 | .0936798 |
| #2 | .0061366 | .0058710 | 2.060350 | .0101587 | .0294782 | .0220583 | .0964553 |
| #3 | .0062116 | .0059016 | 2.067453 | .0099409 | .0294475 | .0222936 | .0996285 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0209596 | 2.156755 | .0399791 | .0102858 | 1.810461 | .0402960 | .0424250 |
| Stddev | .0002611 | .010422 | .0002380 | .0000914 | .004317 | .0004720 | .0002633 |
| %RSD | 1.245573 | .4832234 | .5954233 | .8883905 | .2384321 | 1.171310 | .6207488 |
| #1 | .0206582 | 2.145625 | .0400068 | .0101838 | 1.808221 | .0400719 | .0427249 |
| #2 | .0211073 | 2.166284 | .0397284 | .0103603 | 1.815437 | .0408382 | .0422316 |
| #3 | .0211134 | 2.158355 | .0402021 | .0103131 | 1.807724 | .0399777 | .0423185 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.909635 | .1046205 | .2075951 | .0392162 | .0399823 | .3276935 | .0157701 |
| Stddev | .015574 | .0012230 | .0002234 | .0008271 | .0006459 | .0023233 | .0000421 |
| %RSD | .8155704 | 1.169006 | .1076037 | 2.109148 | 1.615600 | .7089847 | .2667196 |
| #1 | 1.901684 | .1054938 | .2073728 | .0397868 | .0406016 | .3292681 | .0157218 |
| #2 | 1.899640 | .1051449 | .2078196 | .0395942 | .0400327 | .3250251 | .0157893 |
| #3 | 1.927580 | .1032227 | .2075930 | .0382676 | .0393126 | .3287871 | .0157991 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CRI01 Acquired: 12/6/2024 12:28:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CRI01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0176617 | .0190053 | .0208996 |
| Stddev | .0013953 | .0004148 | .0000993 |
| %RSD | 7.900256 | 2.182674 | .4751635 |
| #1 | .0165653 | .0185448 | .0208044 |
| #2 | .0171873 | .0193496 | .0210025 |
| #3 | .0192323 | .0191215 | .0208918 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2623.061 | 62651.80 | 13838.39 | 1840.801 | 4469.738 |
| Stddev | 4.942 | 24.18 | 34.59 | 1.314 | 6.147 |
| %RSD | .1884121 | .0385967 | .2499434 | .0713570 | .1375191 |
| #1 | 2626.130 | 62626.00 | 13847.81 | 1841.926 | 4476.799 |
| #2 | 2617.359 | 62673.95 | 13800.07 | 1841.120 | 4465.583 |
| #3 | 2625.693 | 62655.45 | 13867.29 | 1839.358 | 4466.832 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSA01 Acquired: 12/6/2024 12:50:59 Type: Unk
Method: NON EPA-6010-200.7(v2500) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0063854** | **-.002739** | **.0119258** | **-.018612** | **-.002001** | **266.5186** |
| Stddev | .0033028 | .001724 | .0036034 | .001451 | .001288 | .7309 |
| %RSD | 51.72429 | 62.95691 | 30.21493 | 7.794018 | 64.33635 | .2742523 |
| #1 | .0094744 | -.004194 | .0146562 | -.020254 | -.003339 | 265.6864 |
| #2 | .0067779 | -.000835 | .0132797 | -.018078 | -.001894 | 267.0565 |
| #3 | .0029039 | -.003187 | .0078416 | -.017505 | -.000771 | 266.8129 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0018154** | **.0014751** | **.0043327** | **249.8535** | **.0583485** | **.0024317** |
| Stddev | .0001730 | .0000786 | .0001223 | .3661 | .0005579 | .0001563 |
| %RSD | 9.527467 | 5.327302 | 2.823242 | .1465126 | .9562160 | 6.425755 |
| #1 | .0016177 | .0013864 | .0042850 | 249.6284 | .0586934 | .0022514 |
| #2 | .0019387 | .0015030 | .0044717 | 249.6563 | .0577048 | .0025147 |
| #3 | .0018898 | .0015359 | .0042414 | 250.2759 | .0586473 | .0025289 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000591** | **100.8494** | **.0048669** | **272.7946** | **.0328801** | **-.001234** |
| Stddev | .000253 | .1015 | .0003964 | .4506 | .0004125 | .000325 |
| %RSD | 42.85432 | .1006465 | 8.143914 | .1651949 | 1.254609 | 26.33863 |
| #1 | -.000308 | 100.8687 | .0044702 | 273.0765 | .0326809 | -.001604 |
| #2 | -.000796 | 100.9399 | .0052629 | 272.2748 | .0333544 | -.000997 |
| #3 | -.000671 | 100.7397 | .0048677 | 273.0324 | .0326050 | -.001100 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1198943** | **.0083412** | **-.006247** | **.0140736** | **.0284579** | **-.000568** |
| Stddev | .0185452 | .0008590 | .000551 | .0300609 | .0001910 | .000423 |
| %RSD | 15.46796 | 10.29892 | 8.813736 | 213.5974 | .6711721 | 74.40550 |
| #1 | .1024381 | .0091851 | -.005682 | -.020633 | .0282532 | -.000136 |
| #2 | .1178808 | .0074677 | -.006278 | .031900 | .0286313 | -.000981 |
| #3 | .1393641 | .0083707 | -.006782 | .030954 | .0284891 | -.000588 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSA01 Acquired: 12/6/2024 12:50:59 Type: Unk
Method: NON EPA-6010-200.7(v2500) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSA01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.004676 | -.001326 | .0149330 | .0099043 | -.010352 | F -.042326 |
| Stddev | .000862 | .000317 | .0035167 | .0030890 | .002167 | .000349 |
| %RSD | 18.43248 | 23.93306 | 23.55013 | 31.18797 | 20.93821 | .8233658 |
| #1 | -.005669 | -.001166 | .0182420 | .0067056 | -.010715 | -.041947 |
| #2 | -.004230 | -.001691 | .0153170 | .0128703 | -.012314 | -.042400 |
| #3 | -.004128 | -.001120 | .0112400 | .0101372 | -.008025 | -.042632 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0050121 |
| Stddev | .0003446 |
| %RSD | 6.875707 |
| #1 | .0049978 |
| #2 | .0046749 |
| #3 | .0053637 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2238.902 | 53075.65 | 12894.81 | 1529.947 | 3409.916 |
| Stddev | 3.345 | 146.79 | 5.48 | 2.091 | 7.888 |
| %RSD | .1493833 | .2765608 | .0424993 | .1366437 | .2313348 |
| #1 | 2235.912 | 52928.51 | 12896.84 | 1529.764 | 3403.554 |
| #2 | 2242.514 | 53076.36 | 12898.98 | 1532.123 | 3418.742 |
| #3 | 2238.279 | 53222.08 | 12888.60 | 1527.954 | 3407.452 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSAB01 Acquired: 12/6/2024 12:55:37 Type: Unk
Method: NON EPA-6010-200.7(v2501) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1059221 | .0813965 | .0605307 | .0330611 | .6084385 | 264.3929 |
| Stddev | .0034553 | .0022020 | .0015122 | .0019710 | .0032580 | .6576 |
| %RSD | 3.262159 | 2.705287 | 2.498289 | 5.961599 | .5354672 | .2487206 |
| #1 | .1023155 | .0799463 | .0611061 | .0343692 | .6060721 | 264.4402 |
| #2 | .1092032 | .0803129 | .0588152 | .0307942 | .6070891 | 263.7129 |
| #3 | .1062476 | .0839304 | .0616707 | .0340199 | .6121544 | 265.0256 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5007856 | .5067591 | 1.008522 | 245.5568 | .5613862 | .5084212 |
| Stddev | .0007624 | .0015132 | .001264 | .3083 | .0015857 | .0010860 |
| %RSD | .1522398 | .2985984 | .1253184 | .1255328 | .2824689 | .2136085 |
| #1 | .5016006 | .5082893 | 1.008851 | 245.2185 | .5620442 | .5093958 |
| #2 | .5000898 | .5052636 | 1.009588 | 245.6302 | .5595773 | .5086173 |
| #3 | .5006666 | .5067245 | 1.007126 | 245.8217 | .5625370 | .5072505 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4859634 | 99.23169 | .4945183 | 267.9322 | 1.030547 | .1963589 |
| Stddev | .0021362 | .24412 | .0008962 | .6552 | .001539 | .0006850 |
| %RSD | .4395757 | .2460079 | .1812226 | .2445439 | .1493192 | .3488267 |
| #1 | .4854381 | 98.99002 | .4938786 | 267.1963 | 1.029249 | .1963172 |
| #2 | .4841389 | 99.47818 | .4955426 | 268.1481 | 1.032247 | .1956957 |
| #3 | .4883132 | 99.22687 | .4941337 | 268.4522 | 1.030146 | .1970637 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1040701 | .5013904 | .9420485 | -.035493 | F .0255190 | F -.000038 |
| Stddev | .0153071 | .0007554 | .0019592 | .026692 | .0003536 | .000499 |
| %RSD | 14.70843 | .1506528 | .2079756 | 75.20350 | 1.385676 | 1310.018 |
| #1 | .0884675 | .5007704 | .9399279 | -.060253 | .0253110 | .000035 |
| #2 | .1046794 | .5011691 | .9437912 | -.039011 | .0253187 | -.000570 |
| #3 | .1190635 | .5022317 | .9424266 | -.007217 | .0259273 | .000420 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSAB01 Acquired: 12/6/2024 12:55:37 Type: Unk
Method: NON EPA-6010-200.7(v2501) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSAB01 Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F -.003845 | F -.002145 | F .0065975 | F .0158147 | F -.008894 | F -.041752 |
| Stddev | .001683 | .000177 | .0053558 | .0030141 | .001734 | .000542 |
| %RSD | 43.77436 | 8.229233 | 81.17849 | 19.05901 | 19.50009 | 1.297333 |
| #1 | -.004807 | -.002182 | .0010983 | .0189261 | -.010227 | -.041333 |
| #2 | -.001901 | -.002300 | .0068971 | .0129084 | -.009523 | -.042363 |
| #3 | -.004826 | -.001953 | .0117973 | .0156094 | -.006933 | -.041559 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | F .0056664 |
| Stddev | .0002544 |
| %RSD | 4.489452 |
| #1 | .0059365 |
| #2 | .0054313 |
| #3 | .0056314 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2214.778 | 53242.00 | 12980.13 | 1521.910 | 3404.036 |
| Stddev | 8.481 | 158.59 | 14.90 | 4.069 | 1.801 |
| %RSD | .3829102 | .2978625 | .1148195 | .2673624 | .0529175 |
| #1 | 2217.335 | 53383.28 | 12987.69 | 1526.172 | 3405.882 |
| #2 | 2221.686 | 53070.46 | 12962.96 | 1518.066 | 3403.942 |
| #3 | 2205.313 | 53272.26 | 12989.74 | 1521.491 | 3402.283 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSADLX20 Acquired: 12/6/2024 13:00:39 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.001618** | **-.000577** | **-.000760** | **-.000571** | **-.000399** | **12.46810** | **-.003077** |
| Stddev | .001221 | .000413 | .000413 | .001655 | .000676 | .01442 | .000395 |
| %RSD | 75.47271 | 71.50182 | 54.41643 | 289.8103 | 169.5207 | .1156661 | 12.84597 |
| #1 | -.000682 | -.000101 | -.000944 | -.002022 | -.000739 | 12.48473 | -.002825 |
| #2 | -.001172 | -.000807 | -.001048 | -.000922 | .000380 | 12.46066 | -.002874 |
| #3 | -.002999 | -.000825 | -.000286 | .001231 | -.000837 | 12.45893 | -.003533 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0001709** | **.0001369** | **12.29117** | **.0029441** | **.0001721** | **.0000233** | **4.823142** |
| Stddev | .0000302 | .0000256 | .00222 | .0000887 | .0000854 | .0004529 | .015095 |
| %RSD | 17.65777 | 18.67515 | .0180800 | 3.013338 | 49.64014 | 1946.584 | .3129640 |
| #1 | .0002042 | .0001287 | 12.29365 | .0028438 | .0002427 | .0002662 | 4.808951 |
| #2 | .0001632 | .0001165 | 12.28936 | .0029760 | .0001965 | -.000499 | 4.821473 |
| #3 | .0001453 | .0001656 | 12.29051 | .0030124 | .0000771 | .000303 | 4.839002 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0001265** | **12.59746** | **.0015733** | **.0004712** | **.0237593** | **.0001641** | **.0066109** |
| Stddev | .0001699 | .01047 | .0002686 | .0002709 | .0094821 | .0006002 | .0002950 |
| %RSD | 134.3389 | .0831405 | 17.06987 | 57.48942 | 39.90911 | 365.8484 | 4.462365 |
| #1 | -.000068 | 12.58537 | .0014300 | .0005350 | .0128951 | .0001627 | .0064123 |
| #2 | .000204 | 12.60390 | .0014067 | .0001741 | .0303690 | -.000435 | .0069499 |
| #3 | .000244 | 12.60310 | .0018831 | .0007045 | .0280140 | .000765 | .0064705 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.082883** | **-.002038** | **.0000606** | **-.001168** | **-.000126** | **.0028389** | **-.000528** |
| Stddev | .015638 | .000289 | .0001937 | .000435 | .000335 | .0022601 | .002015 |
| %RSD | 18.86762 | 14.19451 | 319.5562 | 37.27801 | 265.5930 | 79.61192 | 381.9478 |
| #1 | -.086324 | -.001793 | .0002835 | -.001000 | -.000512 | .0054452 | -.001222 |
| #2 | -.096515 | -.001965 | -.000035 | -.001662 | .000089 | .0016495 | -.002104 |
| #3 | -.065811 | -.002357 | -.000067 | -.000842 | .000045 | .0014218 | .001743 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSADLX20 Acquired: 12/6/2024 13:00:39 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSADLX20 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **-.001399** | **-.003075** | **.0003358** |
| Stddev | .002458 | .000369 | .0000527 |
| %RSD | 175.7183 | 11.99668 | 15.69576 |
| | | | |
| #1 | -.002319 | -.003436 | .0003829 |
| #2 | .001386 | -.002698 | .0002789 |
| #3 | -.003264 | -.003090 | .0003457 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2559.546** | **60663.29** | **13746.54** | **1757.232** | **4279.929** |
| Stddev | 7.242 | 93.62 | 50.57 | 4.266 | 5.448 |
| %RSD | .2829293 | .1543194 | .3678670 | .2427453 | .1272938 |
| | | | | | |
| #1 | 2564.901 | 60557.25 | 13689.20 | 1752.573 | 4283.341 |
| #2 | 2562.430 | 60734.49 | 13765.68 | 1760.947 | 4282.800 |
| #3 | 2551.306 | 60698.13 | 13784.75 | 1758.175 | 4273.646 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSABDLX20 Acquired: 12/6/2024 13:04:56 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0053292 | .0040052 | .0024986 | .0029592 | .0289567 | 12.68437 | .0220010 |
| Stddev | .0005051 | .0005618 | .0003095 | .0006637 | .0008168 | .01260 | .0002140 |
| %RSD | 9.477210 | 14.02653 | 12.38838 | 22.42917 | 2.820772 | .0992977 | .9725497 |
| #1 | .0054074 | .0037929 | .0022066 | .0026880 | .0298811 | 12.69042 | .0217540 |
| #2 | .0057907 | .0046422 | .0028231 | .0024740 | .0286562 | 12.66990 | .0221196 |
| #3 | .0047897 | .0035804 | .0024661 | .0037156 | .0283326 | 12.69281 | .0221294 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0263245 | .0505586 | 12.50434 | .0292528 | .0252048 | .0261039 | 4.867997 |
| Stddev | .0001959 | .0001981 | .06253 | .0002123 | .0001419 | .0004415 | .016522 |
| %RSD | .7440318 | .3918759 | .5000715 | .7258489 | .5630204 | 1.691219 | .3393934 |
| #1 | .0262514 | .0503449 | 12.47868 | .0290697 | .0250971 | .0264311 | 4.869389 |
| #2 | .0261757 | .0507361 | 12.45873 | .0292032 | .0251518 | .0256018 | 4.850823 |
| #3 | .0265464 | .0505949 | 12.57562 | .0294856 | .0253656 | .0262789 | 4.883779 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0255702 | 12.87197 | .0524531 | .0096538 | .0260082 | .0255962 | .0599401 |
| Stddev | .0002569 | .06893 | .0003218 | .0002170 | .0074765 | .0010123 | .0003212 |
| %RSD | 1.004602 | .5354789 | .6135939 | 2.248096 | 28.74674 | 3.954994 | .5359417 |
| #1 | .0252899 | 12.80073 | .0523613 | .0094355 | .0183687 | .0259280 | .0603108 |
| #2 | .0257944 | 12.87686 | .0528108 | .0098695 | .0263457 | .0264010 | .0597672 |
| #3 | .0256262 | 12.93833 | .0521870 | .0096565 | .0333103 | .0244596 | .0597423 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.069083 | -.001837 | .0000726 | -.001031 | .0001386 | -.001186 | -.000733 |
| Stddev | .013857 | .000349 | .0001591 | .000072 | .0000909 | .003069 | .001170 |
| %RSD | 20.05806 | 18.96945 | 219.2010 | 7.011499 | 65.53578 | 258.6971 | 159.6319 |
| #1 | -.084884 | -.002232 | .0001520 | -.001019 | .0001700 | .000446 | .000113 |
| #2 | -.059004 | -.001572 | -.000111 | -.000966 | .0002097 | .000722 | -.000244 |
| #3 | -.063360 | -.001708 | .000176 | -.001109 | .0000363 | -.004726 | -.002068 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: ICSABDLX20 Acquired: 12/6/2024 13:04:56 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: ICSABDLX20 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .0007419 | -.003215 | .0003585 |
| Stddev | .0026330 | .000093 | .0000137 |
| %RSD | 354.9187 | 2.903302 | 3.821641 |
| #1 | -.000581 | -.003163 | .0003633 |
| #2 | .003774 | -.003159 | .0003691 |
| #3 | -.000968 | -.003323 | .0003430 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2549.990 | 60582.70 | 13675.34 | 1760.355 | 4241.477 |
| Stddev | 6.313 | 179.48 | 38.22 | 14.010 | 2.148 |
| %RSD | .2475821 | .2962560 | .2795159 | .7958600 | .0506346 |
| #1 | 2543.795 | 60405.40 | 13646.30 | 1747.068 | 4239.359 |
| #2 | 2556.415 | 60578.42 | 13718.64 | 1759.006 | 4243.653 |
| #3 | 2549.760 | 60764.28 | 13661.07 | 1774.990 | 4241.419 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV01 Acquired: 12/6/2024 13:09:11 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **5.005538** | **5.054725** | **5.015509** | **5.058872** | **4.950787** | **10.04433** | **9.798900** |
| Stddev | .015915 | .043344 | .004444 | .020971 | .014751 | .03133 | .066203 |
| %RSD | .3179491 | .8574958 | .0886047 | .4145346 | .2979559 | .3118767 | .6756216 |
| #1 | 4.993868 | 5.103353 | 5.019310 | 5.063379 | 4.942412 | 10.01468 | 9.722456 |
| #2 | 4.999078 | 5.040671 | 5.016595 | 5.036014 | 4.942129 | 10.07709 | 9.837420 |
| #3 | 5.023667 | 5.020153 | 5.010623 | 5.077223 | 4.967819 | 10.04121 | 9.836824 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2491318** | **2.516681** | **24.74840** | **1.022059** | **2.509178** | **1.275389** | **4.942168** |
| Stddev | .0008747 | .002745 | .05478 | .000151 | .001560 | .005217 | .013297 |
| %RSD | .3511085 | .1090783 | .2213596 | .0148012 | .0621568 | .4090849 | .2690492 |
| #1 | .2485789 | 2.519686 | 24.68520 | 1.021912 | 2.510979 | 1.273338 | 4.942060 |
| #2 | .2501403 | 2.514305 | 24.77751 | 1.022051 | 2.508235 | 1.271509 | 4.955518 |
| #3 | .2486762 | 2.516052 | 24.78247 | 1.022215 | 2.508321 | 1.281320 | 4.928925 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.441746** | **24.78151** | **2.513097** | **1.248762** | **24.25260** | **2.500861** | **2.553939** |
| Stddev | .006471 | .08560 | .001473 | .000553 | .13059 | .005470 | .010461 |
| %RSD | .2649954 | .3454223 | .0586315 | .0442939 | .5384431 | .2187338 | .4096132 |
| #1 | 2.437243 | 24.70740 | 2.514771 | 1.248864 | 24.39215 | 2.494703 | 2.563830 |
| #2 | 2.449161 | 24.76193 | 2.511997 | 1.248165 | 24.23230 | 2.502720 | 2.542988 |
| #3 | 2.438834 | 24.87521 | 2.512524 | 1.249257 | 24.13335 | 2.505160 | 2.554999 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **24.73519** | **4.923375** | **5.111328** | **5.014973** | **4.925971** | **5.031279** | **4.997046** |
| Stddev | .01825 | .016656 | .013486 | .009751 | .013523 | .016709 | .023921 |
| %RSD | .0737916 | .3383126 | .2638527 | .1944363 | .2745223 | .3321031 | .4787048 |
| #1 | 24.71456 | 4.917144 | 5.112811 | 5.023659 | 4.912595 | 5.012035 | 5.021356 |
| #2 | 24.74180 | 4.942248 | 5.097162 | 5.016835 | 4.939636 | 5.042108 | 4.996248 |
| #3 | 24.74922 | 4.910732 | 5.124012 | 5.004426 | 4.925680 | 5.039693 | 4.973534 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV01 Acquired: 12/6/2024 13:09:11 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.932878** | **4.878441** | **4.985567** |
| Stddev | .011247 | .015268 | .018288 |
| %RSD | .2280064 | .3129707 | .3668204 |
| | | | |
| #1 | 4.945806 | 4.872037 | 4.995374 |
| #2 | 4.925340 | 4.895868 | 4.996860 |
| #3 | 4.927489 | 4.867418 | 4.964467 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2397.342** | **57389.84** | **13378.23** | **1636.538** | **3839.920** |
| Stddev | 9.982 | 114.65 | 27.50 | 8.163 | 7.507 |
| %RSD | .4163771 | .1997707 | .2055222 | .4988193 | .1954965 |
| | | | | | |
| #1 | 2400.539 | 57262.93 | 13386.58 | 1629.265 | 3840.803 |
| #2 | 2405.333 | 57485.93 | 13347.54 | 1645.368 | 3846.946 |
| #3 | 2386.153 | 57420.67 | 13400.60 | 1634.982 | 3832.010 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB01 Acquired: 12/6/2024 13:13:22 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003873 | -.000809 | -.000342 | -.000897 | .0025424 | .0047262 | -.003306 |
| Stddev | .0013453 | .000414 | .000709 | .001640 | .0010663 | .0013887 | .000301 |
| %RSD | 347.3974 | 51.13013 | 206.9574 | 182.8695 | 41.94056 | 29.38348 | 9.110529 |
| #1 | .0007804 | -.001192 | -.001121 | -.002786 | .0033889 | .0036288 | -.003152 |
| #2 | -.001111 | -.000864 | .000265 | .000163 | .0028934 | .0062875 | -.003113 |
| #3 | .001492 | -.000371 | -.000171 | -.000067 | .0013448 | .0042622 | -.003653 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000496 | .0000819 | .0056747 | .0001199 | -.000042 | -.000045 | -.001311 |
| Stddev | .0000304 | .0000374 | .0040675 | .0001316 | .000210 | .000163 | .002423 |
| %RSD | 61.22673 | 45.70448 | 71.67782 | 109.7083 | 496.4624 | 362.2307 | 184.9066 |
| #1 | .0000280 | .0000528 | .0046658 | .0000055 | .000013 | -.000225 | .001487 |
| #2 | .0000844 | .0000688 | .0022066 | .0000906 | .000134 | -.000004 | -.002742 |
| #3 | .0000365 | .0001242 | .0101517 | .0002637 | -.000274 | .000094 | -.002677 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001391 | -.001924 | .0001516 | .0003660 | -.018926 | .0002725 | -.000743 |
| Stddev | .0000913 | .006387 | .0001549 | .0001604 | .007189 | .0010204 | .000109 |
| %RSD | 65.60471 | 331.9341 | 102.2069 | 43.82366 | 37.98718 | 374.5050 | 14.67319 |
| #1 | .0001957 | .004977 | -.000013 | .0003814 | -.026969 | .0003428 | -.000673 |
| #2 | .0000338 | -.003122 | .000294 | .0005181 | -.016686 | .0012559 | -.000686 |
| #3 | .0001878 | -.007627 | .000174 | .0001984 | -.013124 | -.000781 | -.000868 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.085436 | .0031635 | .0005602 | -.000237 | .0003746 | .0022959 | -.003111 |
| Stddev | .005787 | .0008540 | .0000928 | .000549 | .0002374 | .0055048 | .001558 |
| %RSD | 6.774034 | 26.99595 | 16.57188 | 232.2330 | 63.36872 | 239.7645 | 50.10182 |
| #1 | -.087854 | .0032695 | .0005994 | .000348 | .0002783 | .0057368 | -.004892 |
| #2 | -.089623 | .0039596 | .0006270 | -.000316 | .0002005 | .0052039 | -.002442 |
| #3 | -.078832 | .0022614 | .0004542 | -.000742 | .0006450 | -.004053 | -.001998 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB01 Acquired: 12/6/2024 13:13:22 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB01 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.002629 | -.000999 | .0000787 |
| Stddev | .001614 | .000699 | .0000206 |
| %RSD | 61.37778 | 69.98563 | 26.22550 |
| #1 | -.004276 | -.001616 | .0000623 |
| #2 | -.002561 | -.001142 | .0001018 |
| #3 | -.001051 | -.000239 | .0000719 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2580.299 | 61457.50 | 13697.25 | 1772.695 | 4477.651 |
| Stddev | 2.173 | 44.99 | 18.32 | 7.653 | 2.170 |
| %RSD | .0842295 | .0732025 | .1337797 | .4317253 | .0484628 |
| #1 | 2580.977 | 61431.39 | 13695.49 | 1764.316 | 4475.236 |
| #2 | 2582.052 | 61431.67 | 13679.88 | 1779.317 | 4479.437 |
| #3 | 2577.867 | 61509.45 | 13716.40 | 1774.451 | 4478.280 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165393BL Acquired: 12/6/2024 13:17:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0014470 | .0008959 | .0000788 | .0018095 | .0012197 | .0014824 | -.003185 |
| Stddev | .0002523 | .0029674 | .0004052 | .0009612 | .0001342 | .0016359 | .000368 |
| %RSD | 17.43433 | 331.2240 | 514.0006 | 53.11931 | 11.00506 | 110.3569 | 11.55506 |
| #1 | .0011560 | -.001465 | -.000197 | .0009480 | .0013483 | .0029656 | -.003423 |
| #2 | .0016038 | .004227 | -.000111 | .0028462 | .0012301 | -.000272 | -.003371 |
| #3 | .0015812 | -.000075 | .000544 | .0016342 | .0010805 | .001754 | -.002761 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0002649 | .0002578 | .0117292 | .0004886 | .0002919 | .0000716 | .0045312 |
| Stddev | .0000489 | .0000364 | .0035850 | .0002387 | .0001375 | .0002316 | .0035594 |
| %RSD | 18.44493 | 14.11150 | 30.56478 | 48.85766 | 47.10691 | 323.3528 | 78.55280 |
| #1 | .0003176 | .0002764 | .0099368 | .0006844 | .0003301 | .0001754 | .0085249 |
| #2 | .0002560 | .0002158 | .0093939 | .0005587 | .0004062 | -.000194 | .0033748 |
| #3 | .0002211 | .0002811 | .0158569 | .0002227 | .0001393 | .000233 | .0016938 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001209 | .0069856 | .0006277 | .0007348 | -.012655 | .0006485 | .0008882 |
| Stddev | .0001961 | .0068030 | .0000496 | .0001762 | .007268 | .0010181 | .0001398 |
| %RSD | 162.2094 | 97.38687 | 7.900381 | 23.97554 | 57.43390 | 157.0006 | 15.73964 |
| #1 | .0000313 | .0035176 | .0005730 | .0008977 | -.021005 | -.000483 | .0007297 |
| #2 | -.000014 | .0148237 | .0006698 | .0005478 | -.009209 | .001491 | .0009939 |
| #3 | .000346 | .0026154 | .0006403 | .0007588 | -.007750 | .000938 | .0009410 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.054090 | .0001053 | .0005813 | -.000030 | .0003292 | .0030489 | .0056016 |
| Stddev | .009717 | .0001468 | .0001211 | .000764 | .0008536 | .0072897 | .0014257 |
| %RSD | 17.96418 | 139.4397 | 20.83398 | 2573.924 | 259.2865 | 239.0939 | 25.45170 |
| #1 | -.047888 | -.000010 | .0004435 | .000616 | .0013032 | .0044889 | .0072248 |
| #2 | -.065289 | .000271 | .0006295 | .000169 | -.000027 | -.004853 | .0045526 |
| #3 | -.049094 | .000055 | .0006708 | -.000873 | -.000288 | .009511 | .0050273 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165393BL Acquired: 12/6/2024 13:17:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000708 | -.001139 | .0002457 |
| Stddev | .001059 | .000527 | .0000323 |
| %RSD | 149.5177 | 46.24949 | 13.15248 |
| #1 | .000434 | -.001746 | .0002822 |
| #2 | -.001658 | -.000857 | .0002207 |
| #3 | -.000901 | -.000813 | .0002342 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2579.192 | 61451.45 | 13740.65 | 1743.345 | 4481.918 |
| Stddev | 8.109 | 162.35 | 31.17 | 5.906 | 12.458 |
| %RSD | .3144045 | .2641969 | .2268205 | .3387821 | .2779695 |
| #1 | 2574.470 | 61513.14 | 13707.08 | 1744.673 | 4471.669 |
| #2 | 2574.551 | 61573.91 | 13768.66 | 1748.474 | 4478.301 |
| #3 | 2588.555 | 61267.29 | 13746.21 | 1736.888 | 4495.785 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165393BS Acquired: 12/6/2024 13:22:04 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.7406467** | **1.984188** | **.9502460** | **1.863648** | **.7421918** | **1.956336** |
| Stddev | .0017407 | .013955 | .0010834 | .006447 | .0022757 | .007227 |
| %RSD | .2350207 | .7032916 | .1140114 | .3459478 | .3066175 | .3694077 |
| #1 | .7426566 | 1.998657 | .9509223 | 1.868391 | .7407821 | 1.948280 |
| #2 | .7396435 | 1.983096 | .9508193 | 1.866246 | .7409762 | 1.958480 |
| #3 | .7396399 | 1.970812 | .9489964 | 1.856307 | .7448172 | 1.962248 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1896989** | **.2056008** | **.1907559** | **1.032822** | **.4004463** | **.1934634** |
| Stddev | .0007150 | .0000702 | .0003077 | .006390 | .0008048 | .0003330 |
| %RSD | .3769134 | .0341233 | .1613058 | .6187256 | .2009841 | .1721191 |
| #1 | .1891947 | .2055207 | .1909013 | 1.033185 | .4007338 | .1938303 |
| #2 | .1905171 | .2056514 | .1904024 | 1.039024 | .3995372 | .1933795 |
| #3 | .1893847 | .2056304 | .1909639 | 1.026258 | .4010679 | .1931803 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3026029** | **2.836405** | **.2005194** | **1.967064** | **.4867157** | **.0724213** |
| Stddev | .0002737 | .003338 | .0004387 | .008679 | .0003325 | .0002649 |
| %RSD | .0904555 | .1176928 | .2187865 | .4412321 | .0683095 | .3658255 |
| #1 | .3028488 | 2.837678 | .2002981 | 1.957745 | .4863532 | .0727234 |
| #2 | .3023080 | 2.838920 | .2010247 | 1.968530 | .4870064 | .0722284 |
| #3 | .3026520 | 2.832618 | .2002355 | 1.974917 | .4867874 | .0723122 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.575046** | **.2982491** | **.2014354** | **8.939354** | **.2938099** | **.3944048** |
| Stddev | .017319 | .0005981 | .0009460 | .038445 | .0008029 | .0011569 |
| %RSD | .6725874 | .2005195 | .4696332 | .4300657 | .2732626 | .2933410 |
| #1 | 2.568830 | .2987352 | .2011495 | 8.938890 | .2935096 | .3953148 |
| #2 | 2.594616 | .2975813 | .2006652 | 8.978029 | .2947197 | .3947968 |
| #3 | 2.561693 | .2984307 | .2024913 | 8.901143 | .2932006 | .3931028 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165393BS Acquired: 12/6/2024 13:22:04 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6653550 | .1936412 | F .6707269 | 5.500257 | F -.011324 | .1974257 |
| Stddev | .0009836 | .0007259 | .0013895 | .015905 | .001499 | .0009980 |
| %RSD | .1478302 | .3748908 | .2071610 | .2891617 | 13.23666 | .5054833 |
| #1 | .6649107 | .1930008 | .6699200 | 5.491561 | -.009675 | .1962754 |
| #2 | .6664824 | .1944298 | .6723313 | 5.490596 | -.011693 | .1980602 |
| #3 | .6646719 | .1934930 | .6699294 | 5.518613 | -.012604 | .1979415 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2008256 |
| Stddev | .0007192 |
| %RSD | .3581001 |
| #1 | .2002704 |
| #2 | .2016380 |
| #3 | .2005685 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2655.983 | 62402.06 | 13551.78 | 1828.515 | 4425.084 |
| Stddev | 6.436 | 127.84 | 13.92 | 9.557 | 4.617 |
| %RSD | .2423295 | .2048612 | .1027487 | .5226763 | .1043428 |
| #1 | 2650.057 | 62271.49 | 13545.46 | 1824.656 | 4420.584 |
| #2 | 2655.062 | 62526.98 | 13567.74 | 1839.398 | 4424.856 |
| #3 | 2662.830 | 62407.72 | 13542.13 | 1821.491 | 4429.810 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165328BL Acquired: 12/6/2024 13:26:06 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.001517** | **-.000299** | **-.000742** | **-.000813** | **.0007363** | **-.000733** | **-.001150** |
| Stddev | .001067 | .001320 | .000524 | .000562 | .0007317 | .001128 | .000547 |
| %RSD | 70.33951 | 441.0277 | 70.65795 | 69.08820 | 99.38264 | 153.7351 | 47.61062 |
| #1 | -.002518 | -.000057 | -.000212 | -.001441 | .0002287 | .000566 | -.001301 |
| #2 | -.000394 | .000883 | -.000754 | -.000637 | .0015750 | -.001309 | -.000543 |
| #3 | -.001639 | -.001723 | -.001260 | -.000360 | .0004051 | -.001457 | -.001606 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000655** | **.0000392** | **-.008010** | **-.000013** | **.0000548** | **-.000303** | **.0020337** |
| Stddev | .0000139 | .0000519 | .002739 | .000026 | .0000693 | .000292 | .0013412 |
| %RSD | 21.20819 | 132.4509 | 34.19361 | 203.4553 | 126.5151 | 96.41283 | 65.94921 |
| #1 | .0000664 | .0000502 | -.010992 | .000016 | .0000753 | -.000576 | .0013818 |
| #2 | .0000512 | .0000845 | -.005606 | -.000020 | .0001115 | .000005 | .0011430 |
| #3 | .0000789 | -.000017 | -.007433 | -.000034 | -.000022 | -.000338 | .0035762 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000145** | **-.006027** | **.0000850** | **.0002198** | **-.030483** | **-.000302** | **-.000890** |
| Stddev | .000050 | .008230 | .0001044 | .0002459 | .012319 | .000321 | .000048 |
| %RSD | 34.45114 | 136.5450 | 122.8581 | 111.8864 | 40.41259 | 106.6284 | 5.423305 |
| #1 | -.000101 | -.014610 | .0000320 | .0004993 | -.044593 | -.000571 | -.000940 |
| #2 | -.000135 | -.005268 | .0002053 | .0000371 | -.024991 | .000054 | -.000843 |
| #3 | -.000200 | .001797 | .0000177 | .0001228 | -.021865 | -.000387 | -.000887 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.099658** | **-.001183** | **.0000570** | **-.000671** | **.0004561** | **-.002661** | **.0000559** |
| Stddev | .007732 | .000252 | .0000677 | .000243 | .0001773 | .001286 | .0010271 |
| %RSD | 7.759006 | 21.33653 | 118.8405 | 36.23689 | 38.87892 | 48.32500 | 1837.162 |
| #1 | -.095182 | -.001287 | .0000753 | -.000706 | .0006396 | -.004143 | -.000405 |
| #2 | -.095206 | -.000895 | .0001136 | -.000895 | .0004431 | -.001995 | .001233 |
| #3 | -.108587 | -.001366 | -.000018 | -.000412 | .0002856 | -.001845 | -.000660 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165328BL Acquired: 12/6/2024 13:26:06 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **-.002457** | **-.000560** | **-.000006** |
| Stddev | .003442 | .000300 | .000026 |
| %RSD | 140.1116 | 53.62365 | 454.9624 |
| | | | |
| #1 | -.002314 | -.000214 | .000005 |
| #2 | -.005968 | -.000708 | .000013 |
| #3 | .000912 | -.000757 | -.000035 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2669.034** | **62909.27** | **13706.76** | **1840.643** | **4576.582** |
| Stddev | 2.771 | 67.52 | 16.12 | 5.511 | 3.925 |
| %RSD | .1038076 | .1073361 | .1175980 | .2993866 | .0857692 |
| | | | | | |
| #1 | 2671.317 | 62969.82 | 13689.38 | 1842.879 | 4577.377 |
| #2 | 2669.832 | 62836.45 | 13721.22 | 1844.684 | 4580.049 |
| #3 | 2665.951 | 62921.53 | 13709.66 | 1834.366 | 4572.320 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165328BS Acquired: 12/6/2024 13:30:26 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7478421 | 1.986322 | .9532483 | 1.891968 | .7464472 | 1.959721 |
| Stddev | .0010838 | .015668 | .0003859 | .006720 | .0023539 | .008889 |
| %RSD | .1449206 | .7887796 | .0404825 | .3551764 | .3153453 | .4535649 |
| #1 | .7465989 | 2.004184 | .9532255 | 1.888542 | .7451410 | 1.956140 |
| #2 | .7483396 | 1.974904 | .9528743 | 1.887653 | .7491646 | 1.953181 |
| #3 | .7485879 | 1.979877 | .9536451 | 1.899711 | .7450360 | 1.969841 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1898165 | .2043253 | .1920607 | 1.030284 | .4032203 | .1942599 |
| Stddev | .0004301 | .0002647 | .0000702 | .005846 | .0005638 | .0002825 |
| %RSD | .2265838 | .1295679 | .0365677 | .5673862 | .1398339 | .1454062 |
| #1 | .1897979 | .2042793 | .1920065 | 1.034973 | .4026250 | .1944723 |
| #2 | .1902555 | .2046100 | .1920356 | 1.032145 | .4032897 | .1939393 |
| #3 | .1893959 | .2040866 | .1921400 | 1.023734 | .4037462 | .1943681 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3061117 | 2.853449 | .2000853 | 1.965182 | .4881183 | .0727368 |
| Stddev | .0006755 | .001362 | .0001529 | .003502 | .0003232 | .0002794 |
| %RSD | .2206828 | .0477484 | .0764067 | .1781917 | .0662037 | .3840949 |
| #1 | .3053568 | 2.852586 | .1999189 | 1.963654 | .4884853 | .0725403 |
| #2 | .3066594 | 2.852741 | .2002196 | 1.962705 | .4878761 | .0730566 |
| #3 | .3063188 | 2.855019 | .2001174 | 1.969189 | .4879936 | .0726134 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.599639 | .2998434 | .2033389 | 9.017457 | .2904084 | .3977952 |
| Stddev | .006045 | .0017898 | .0009927 | .008065 | .0003571 | .0004407 |
| %RSD | .2325295 | .5969205 | .4881867 | .0894407 | .1229641 | .1107854 |
| #1 | 2.604957 | .2978824 | .2021936 | 9.009099 | .2902678 | .3983039 |
| #2 | 2.593065 | .3013889 | .2039515 | 9.018079 | .2901430 | .3975542 |
| #3 | 2.600894 | .3002590 | .2038717 | 9.025193 | .2908144 | .3975276 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165328BS Acquired: 12/6/2024 13:30:26 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6626915 | .1924930 | F .6812194 | 5.518928 | F -.010043 | .1985002 |
| Stddev | .0014040 | .0002465 | .0042814 | .022355 | .001014 | .0008144 |
| %RSD | .2118675 | .1280790 | .6284873 | .4050605 | 10.10167 | .4102972 |
| #1 | .6633341 | .1924719 | .6781298 | 5.542105 | -.010428 | .1980998 |
| #2 | .6636592 | .1922577 | .6794219 | 5.517184 | -.008892 | .1994374 |
| #3 | .6610812 | .1927494 | .6861065 | 5.497497 | -.010808 | .1979635 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2008953 |
| Stddev | .0001564 |
| %RSD | .0778734 |
| #1 | .2008136 |
| #2 | .2010757 |
| #3 | .2007967 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2613.879 | 61895.88 | 13582.74 | 1790.198 | 4378.900 |
| Stddev | 4.877 | 98.24 | 27.86 | 4.764 | 5.931 |
| %RSD | .1865989 | .1587102 | .2051414 | .2660974 | .1354521 |
| #1 | 2618.365 | 61782.82 | 13558.19 | 1784.889 | 4380.795 |
| #2 | 2614.585 | 61944.49 | 13577.00 | 1794.099 | 4383.652 |
| #3 | 2608.687 | 61960.34 | 13613.03 | 1791.605 | 4372.253 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5026-05 Acquired: 12/6/2024 13:34:28 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0049194** | **-.008435** | **.0236194** | **-.012173** | **-.000145** | **34.51461** |
| Stddev | .0013827 | .003270 | .0009458 | .000796 | .000417 | .08307 |
| %RSD | 28.10747 | 38.76533 | 4.004206 | 6.540193 | 287.5603 | .2406805 |
| #1 | .0034326 | -.005310 | .0244433 | -.011282 | .000329 | 34.41972 |
| #2 | .0051589 | -.011833 | .0225867 | -.012425 | -.000308 | 34.54997 |
| #3 | .0061667 | -.008163 | .0238283 | -.012813 | -.000457 | 34.57416 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1140456** | **.0025789** | **.0024945** | **37.88453** | **.0809504** | **.0418622** |
| Stddev | .0003621 | .0000730 | .0001171 | .07446 | .0004708 | .0003806 |
| %RSD | .3175249 | 2.830021 | 4.692819 | .1965419 | .5816406 | .9091781 |
| #1 | .1136773 | .0026631 | .0025619 | 37.85636 | .0813983 | .0416059 |
| #2 | .1144012 | .0025395 | .0023593 | 37.96896 | .0809933 | .0416812 |
| #3 | .1140584 | .0025341 | .0025622 | 37.82826 | .0804595 | .0422995 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0772856** | **73.30130** | **.8763200** | **32.33976** | **.0878316** | **-.000674** |
| Stddev | .0008228 | .26976 | .0032118 | .03047 | .0002000 | .000299 |
| %RSD | 1.064658 | .3680149 | .3665091 | .0942143 | .2276499 | 44.35032 |
| #1 | .0779187 | 73.00248 | .8733468 | 32.31339 | .0876632 | -.001019 |
| #2 | .0763555 | 73.37454 | .8797264 | 32.37311 | .0880526 | -.000496 |
| #3 | .0775826 | 73.52687 | .8758870 | 32.33277 | .0877789 | -.000506 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.429297** | **.1000371** | **.1807734** | **6.366654** | **.0257357** | **.0034286** |
| Stddev | .011679 | .0002300 | .0009778 | .034609 | .0007596 | .0000495 |
| %RSD | .8170799 | .2299063 | .5408812 | .5436021 | 2.951356 | 1.444318 |
| #1 | 1.417312 | .1000311 | .1811306 | 6.333982 | .0253302 | .0034383 |
| #2 | 1.429936 | .1002701 | .1796672 | 6.363059 | .0266119 | .0034726 |
| #3 | 1.440643 | .0998102 | .1815223 | 6.402920 | .0252649 | .0033750 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5026-05 Acquired: 12/6/2024 13:34:28 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000147 | 1.793626 | F 16.30365 | 3.540362 | .7398414 | .0554813 |
| Stddev | .000617 | .002405 | .07654 | .008219 | .0022010 | .0004286 |
| %RSD | 420.1245 | .1340744 | .4694752 | .2321457 | .2974985 | .7725729 |
| #1 | -.000652 | 1.790884 | 16.21708 | 3.536701 | .7418344 | .0549864 |
| #2 | .000541 | 1.795374 | 16.33153 | 3.549775 | .7402108 | .0557341 |
| #3 | -.000330 | 1.794621 | 16.36234 | 3.534610 | .7374791 | .0557234 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.002040 |
| Stddev | .000141 |
| %RSD | 6.907735 |
| #1 | -.002092 |
| #2 | -.001881 |
| #3 | -.002148 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2587.154 | 62340.13 | 14520.33 | 1765.292 | 3997.145 |
| Stddev | 5.806 | 43.78 | 25.93 | 3.620 | 3.297 |
| %RSD | .2244132 | .0702201 | .1785692 | .2050387 | .0824847 |
| #1 | 2592.151 | 62389.93 | 14502.62 | 1769.333 | 4000.588 |
| #2 | 2588.527 | 62322.71 | 14508.28 | 1762.347 | 3996.833 |
| #3 | 2580.785 | 62307.74 | 14550.09 | 1764.196 | 3994.016 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV02 Acquired: 12/6/2024 13:38:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.880108** | **4.914520** | **4.902099** | **4.940101** | **4.852332** | **9.805741** | **9.400585** |
| Stddev | .009370 | .030643 | .005818 | .013887 | .015989 | .036991 | .082299 |
| %RSD | .1920047 | .6235193 | .1186927 | .2811104 | .3295173 | .3772403 | .8754711 |
| #1 | 4.869501 | 4.949830 | 4.907642 | 4.952994 | 4.838591 | 9.763194 | 9.312095 |
| #2 | 4.883563 | 4.894893 | 4.896040 | 4.925397 | 4.848525 | 9.823747 | 9.474836 |
| #3 | 4.887260 | 4.898836 | 4.902614 | 4.941913 | 4.869882 | 9.830281 | 9.414822 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2439780** | **2.457040** | **24.20431** | **1.007045** | **2.446355** | **1.246519** | **4.810765** |
| Stddev | .0005608 | .003795 | .10929 | .004568 | .003305 | .002781 | .030235 |
| %RSD | .2298485 | .1544706 | .4515449 | .4536437 | .1350924 | .2230959 | .6284867 |
| #1 | .2443380 | 2.461267 | 24.07975 | 1.011352 | 2.448230 | 1.246011 | 4.775949 |
| #2 | .2442641 | 2.453923 | 24.28416 | 1.007529 | 2.442539 | 1.244028 | 4.825930 |
| #3 | .2433319 | 2.455931 | 24.24901 | 1.002253 | 2.448295 | 1.249519 | 4.830416 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.364778** | **24.36698** | **2.449054** | **1.225518** | **23.48684** | **2.443851** | **2.503749** |
| Stddev | .010356 | .09364 | .002724 | .001239 | .04514 | .009511 | .009257 |
| %RSD | .4379154 | .3842979 | .1112454 | .1010679 | .1922055 | .3891995 | .3697352 |
| #1 | 2.352820 | 24.28936 | 2.451515 | 1.224461 | 23.43725 | 2.435437 | 2.508701 |
| #2 | 2.370707 | 24.47098 | 2.446126 | 1.226881 | 23.52555 | 2.441946 | 2.509477 |
| #3 | 2.370806 | 24.34059 | 2.449521 | 1.225212 | 23.49772 | 2.454171 | 2.493069 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.93175** | **4.809824** | **4.994689** | **4.884678** | **4.769576** | **4.953473** | **4.896648** |
| Stddev | .06508 | .012733 | .006540 | .009981 | .021437 | .037330 | .015952 |
| %RSD | .2719600 | .2647227 | .1309472 | .2043272 | .4494521 | .7536051 | .3257777 |
| #1 | 23.85686 | 4.797595 | 4.995556 | 4.896015 | 4.744842 | 4.914449 | 4.913455 |
| #2 | 23.96374 | 4.823007 | 4.987758 | 4.880802 | 4.781093 | 4.957128 | 4.881716 |
| #3 | 23.97464 | 4.808869 | 5.000753 | 4.877217 | 4.782793 | 4.988840 | 4.894773 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV02 Acquired: 12/6/2024 13:38:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV02 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.805876** | **4.708359** | **4.834016** |
| Stddev | .009020 | .020264 | .019040 |
| %RSD | .1876949 | .4303759 | .3938794 |
| #1 | 4.814107 | 4.685262 | 4.815424 |
| #2 | 4.796233 | 4.716670 | 4.853475 |
| #3 | 4.807288 | 4.723147 | 4.833150 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2451.380** | **58462.75** | **13671.59** | **1675.048** | **3930.465** |
| Stddev | 10.449 | 102.98 | 40.37 | 8.035 | 13.834 |
| %RSD | .4262434 | .1761478 | .2953127 | .4796821 | .3519719 |
| #1 | 2455.958 | 58471.66 | 13690.13 | 1671.544 | 3930.299 |
| #2 | 2458.758 | 58355.61 | 13625.27 | 1669.360 | 3944.382 |
| #3 | 2439.423 | 58560.99 | 13699.36 | 1684.240 | 3916.715 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB02 Acquired: 12/6/2024 13:42:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000308** | **-.001033** | **-.001082** | **-.000905** | **.0030604** | **.0007412** | **-.002772** |
| Stddev | .001888 | .000592 | .000323 | .001015 | .0010389 | .0058689 | .000453 |
| %RSD | 613.1573 | 57.30286 | 29.86836 | 112.2290 | 33.94621 | 791.7964 | 16.34442 |
| #1 | .001551 | -.001190 | -.001181 | -.001459 | .0032722 | .0017844 | -.003295 |
| #2 | -.002223 | -.001531 | -.001345 | .000267 | .0039771 | .0060185 | -.002525 |
| #3 | -.000252 | -.000378 | -.000721 | -.001522 | .0019319 | -.005579 | -.002496 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000777** | **.0001603** | **-.002412** | **-.000020** | **.0000801** | **-.000536** | **-.001753** |
| Stddev | .0000053 | .0000132 | .007069 | .000229 | .0000333 | .000055 | .004292 |
| %RSD | 6.781426 | 8.252448 | 293.0224 | 1163.912 | 41.56052 | 10.20671 | 244.8044 |
| #1 | .0000811 | .0001499 | .003745 | .000233 | .0000417 | -.000488 | -.003483 |
| #2 | .0000804 | .0001558 | -.000851 | -.000213 | .0000982 | -.000595 | -.004910 |
| #3 | .0000716 | .0001752 | -.010131 | -.000079 | .0001004 | -.000524 | .003134 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000174** | **.0054894** | **.0001171** | **.0003281** | **-.041663** | **.0008131** | **-.001129** |
| Stddev | .000068 | .0050674 | .0001852 | .0001741 | .011723 | .0001397 | .000228 |
| %RSD | 39.27797 | 92.31324 | 158.1564 | 53.04208 | 28.13853 | 17.17821 | 20.21907 |
| #1 | -.000111 | .0028902 | -.000011 | .0005281 | -.054983 | .0009743 | -.000963 |
| #2 | -.000247 | .0113291 | .000033 | .0002106 | -.037091 | .0007341 | -.001035 |
| #3 | -.000165 | .0022489 | .000329 | .0002457 | -.032914 | .0007308 | -.001390 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.090255** | **.0021195** | **.0004032** | **-.000243** | **.0005707** | **.0009291** | **-.001135** |
| Stddev | .026155 | .0003602 | .0000710 | .000188 | .0005044 | .0030982 | .000729 |
| %RSD | 28.97956 | 16.99273 | 17.59813 | 77.32710 | 88.39136 | 333.4761 | 64.27543 |
| #1 | -.104135 | .0025328 | .0003542 | -.000069 | .0010246 | -.002499 | -.001907 |
| #2 | -.106544 | .0018728 | .0003707 | -.000443 | .0006598 | .003530 | -.000458 |
| #3 | -.060085 | .0019528 | .0004845 | -.000218 | .0000276 | .001756 | -.001038 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB02 Acquired: 12/6/2024 13:42:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB02 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **-.002107** | **-.001376** | **.0000208** |
| Stddev | .001077 | .000281 | .0000140 |
| %RSD | 51.12791 | 20.42585 | 67.16808 |
| #1 | -.001944 | -.001620 | .0000106 |
| #2 | -.001120 | -.001069 | .0000151 |
| #3 | -.003256 | -.001439 | .0000367 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2614.410** | **62415.54** | **14042.44** | **1788.798** | **4546.033** |
| Stddev | 3.977 | 110.15 | 49.49 | 8.015 | 4.621 |
| %RSD | .1521041 | .1764734 | .3524029 | .4480593 | .1016547 |
| #1 | 2609.939 | 62475.42 | 13995.58 | 1791.585 | 4541.391 |
| #2 | 2617.553 | 62482.78 | 14037.55 | 1795.048 | 4550.633 |
| #3 | 2615.738 | 62288.43 | 14094.19 | 1779.762 | 4546.075 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P4997-07 Acquired: 12/6/2024 13:47:10 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1569758** | **-.077733** | **.0543897** | **.0140430** | **-.013002** | **1543.143** |
| Stddev | .0015089 | .008931 | .0029253 | .0075644 | .004417 | 14.625 |
| %RSD | .9612310 | 11.48930 | 5.378412 | 53.86606 | 33.97038 | .9477386 |
| #1 | .1554040 | -.069074 | .0577657 | .0203873 | -.016741 | 1545.131 |
| #2 | .1584127 | -.077212 | .0526031 | .0160701 | -.008129 | 1556.672 |
| #3 | .1571106 | -.086913 | .0528004 | .0056716 | -.014136 | 1527.626 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.209948** | **-.000424** | **.0063803** | **71.21711** | **.0446971** | **.0188321** |
| Stddev | .010760 | .000036 | .0001930 | 1.03920 | .0001690 | .0002064 |
| %RSD | .8892855 | 8.532602 | 3.024246 | 1.459201 | .3781522 | 1.095963 |
| #1 | 1.215596 | -.000383 | .0065018 | 71.74287 | .0448914 | .0190128 |
| #2 | 1.216708 | -.000452 | .0061578 | 71.88838 | .0445839 | .0188764 |
| #3 | 1.197540 | -.000437 | .0064812 | 70.02009 | .0446159 | .0186072 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.182934** | **75.08695** | F **44.20593** | **17.27776** | **.0457779** | **.0053561** |
| Stddev | .002354 | .13205 | .44736 | .26705 | .0000348 | .0005899 |
| %RSD | .1990294 | .1758660 | 1.011997 | 1.545636 | .0761056 | 11.01368 |
| #1 | 1.180759 | 75.23905 | 44.21886 | 17.34453 | .0457940 | .0053950 |
| #2 | 1.185434 | 75.00156 | 44.64668 | 17.50510 | .0458018 | .0047477 |
| #3 | 1.182610 | 75.02023 | 43.75224 | 16.98367 | .0457379 | .0059255 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **71.37750** | **.0736822** | **.2952814** | **6.685431** | **.0701433** | **.0032533** |
| Stddev | .22531 | .0013844 | .0014150 | .012121 | .0003169 | .0008076 |
| %RSD | .3156606 | 1.878831 | .4792160 | .1813083 | .4517541 | 24.82471 |
| #1 | 71.51271 | .0724805 | .2955240 | 6.678938 | .0699749 | .0040620 |
| #2 | 71.11740 | .0751960 | .2937607 | 6.699415 | .0705088 | .0024468 |
| #3 | 71.50239 | .0733701 | .2965594 | 6.677940 | .0699461 | .0032511 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P4997-07 Acquired: 12/6/2024 13:47:10 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0049909 | .3756161 | F 45.95038 | F 28.12051 | F 62.99062 | -.001623 |
| Stddev | .0016192 | .0039296 | .06228 | .06847 | .16337 | .000478 |
| %RSD | 32.44336 | 1.046162 | .1355382 | .2434712 | .2593614 | 29.43669 |
| #1 | .0032385 | .3772629 | 45.98773 | 28.17340 | 63.03044 | -.001114 |
| #2 | .0053026 | .3784543 | 45.98493 | 28.04318 | 62.81102 | -.002062 |
| #3 | .0064316 | .3711311 | 45.87848 | 28.14497 | 63.13040 | -.001695 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2122624 |
| Stddev | .0030201 |
| %RSD | 1.422819 |
| #1 | .2134452 |
| #2 | .2145122 |
| #3 | .2088300 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2259.287 | 52994.17 | 13358.34 | 1544.136 | 3279.230 |
| Stddev | 6.535 | 110.28 | 132.12 | 12.928 | 5.392 |
| %RSD | .2892657 | .2081030 | .9890415 | .8372035 | .1644205 |
| #1 | 2265.166 | 53061.68 | 13317.55 | 1540.508 | 3284.430 |
| #2 | 2252.250 | 53053.93 | 13251.42 | 1558.490 | 3279.596 |
| #3 | 2260.446 | 52866.91 | 13506.04 | 1533.410 | 3273.665 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07 Acquired: 12/6/2024 13:58:33 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1088704** | **-.070286** | **.0343001** | **.0191425** | **-.009039** | **1395.097** |
| Stddev | .0020975 | .001403 | .0020759 | .0014126 | .002392 | 2.575 |
| %RSD | 1.926638 | 1.995917 | 6.052119 | 7.379228 | 26.46484 | .1845699 |
| #1 | .1110844 | -.070952 | .0340987 | .0185346 | -.006494 | 1395.192 |
| #2 | .1086141 | -.071232 | .0364694 | .0207572 | -.009381 | 1392.477 |
| #3 | .1069129 | -.068674 | .0323323 | .0181356 | -.011241 | 1397.624 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.086346** | **-.000362** | **.0045093** | **70.76211** | **.0355369** | **.0122529** |
| Stddev | .004253 | .000059 | .0000334 | .14470 | .0004108 | .0001529 |
| %RSD | .3914713 | 16.36860 | .7413947 | .2044886 | 1.155896 | 1.247966 |
| #1 | 1.090191 | -.000429 | .0045405 | 70.59583 | .0354362 | .0123036 |
| #2 | 1.081778 | -.000318 | .0044740 | 70.83106 | .0351858 | .0123739 |
| #3 | 1.087069 | -.000338 | .0045133 | 70.85944 | .0359886 | .0120810 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9294653** | **47.03596** | **35.25557** | **17.04384** | **.0366550** | **.0042680** |
| Stddev | .0023435 | .07017 | .15166 | .03347 | .0001906 | .0001180 |
| %RSD | .2521401 | .1491774 | .4301713 | .1963656 | .5200922 | 2.765269 |
| #1 | .9290740 | 46.95776 | 35.08058 | 17.02553 | .0368087 | .0041430 |
| #2 | .9319798 | 47.05669 | 35.34904 | 17.08247 | .0364417 | .0043776 |
| #3 | .9273420 | 47.09342 | 35.33709 | 17.02352 | .0367147 | .0042833 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **72.54459** | **.0489113** | **.2541558** | **6.531362** | **.0567476** | **.0028151** |
| Stddev | .39361 | .0008769 | .0002260 | .034072 | .0006976 | .0005605 |
| %RSD | .5425802 | 1.792843 | .0889061 | .5216618 | 1.229271 | 19.91066 |
| #1 | 72.93964 | .0480528 | .2540706 | 6.515927 | .0565679 | .0034155 |
| #2 | 72.15243 | .0488756 | .2539848 | 6.507740 | .0575175 | .0023056 |
| #3 | 72.54169 | .0498055 | .2544120 | 6.570419 | .0561576 | .0027241 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07 Acquired: 12/6/2024 13:58:33 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0031075 | .2305110 | F 41.44984 | F 20.92085 | F 55.99594 | -.004922 |
| Stddev | .0025004 | .0012130 | .07577 | .06235 | .08341 | .000470 |
| %RSD | 80.46281 | .5262239 | .1828046 | .2980295 | .1489640 | 9.541514 |
| #1 | .0004314 | .2293665 | 41.36646 | 20.96970 | 56.07625 | -.004431 |
| #2 | .0053841 | .2317825 | 41.46855 | 20.94222 | 55.90973 | -.005367 |
| #3 | .0035072 | .2303839 | 41.51450 | 20.85062 | 56.00185 | -.004968 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2250455 |
| Stddev | .0010941 |
| %RSD | .4861640 |
| #1 | .2259827 |
| #2 | .2238432 |
| #3 | .2253107 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2253.542 | 53472.38 | 13460.26 | 1545.586 | 3315.041 |
| Stddev | 5.800 | 146.51 | 31.65 | 6.334 | 11.006 |
| %RSD | .2573531 | .2739938 | .2351088 | .4098032 | .3319919 |
| #1 | 2258.833 | 53616.44 | 13486.87 | 1552.779 | 3327.740 |
| #2 | 2247.341 | 53477.15 | 13468.65 | 1543.132 | 3308.263 |
| #3 | 2254.452 | 53323.54 | 13425.27 | 1540.846 | 3309.122 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07DUP Acquired: 12/6/2024 14:04:04 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1091285** | **-.071637** | **.0374789** | **.0162879** | **-.011060** | **1416.751** |
| Stddev | .0009411 | .008660 | .0050733 | .0068438 | .001757 | 12.797 |
| %RSD | .8624160 | 12.08820 | 13.53656 | 42.01759 | 15.88845 | .9032928 |
| #1 | .1101057 | -.068431 | .0341502 | .0093174 | -.012715 | 1402.110 |
| #2 | .1090517 | -.065037 | .0433180 | .0165488 | -.009216 | 1425.803 |
| #3 | .1082281 | -.081442 | .0349685 | .0229975 | -.011249 | 1422.341 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.108578** | **-.000387** | **.0046764** | **71.27500** | **.0355198** | **.0119493** |
| Stddev | .013231 | .000046 | .0002208 | .73494 | .0002813 | .0002497 |
| %RSD | 1.193517 | 11.74983 | 4.720903 | 1.031127 | .7921040 | 2.089835 |
| #1 | 1.094704 | -.000336 | .0047870 | 70.44768 | .0352024 | .0116702 |
| #2 | 1.121055 | -.000404 | .0044222 | 71.85235 | .0356184 | .0121516 |
| #3 | 1.109977 | -.000422 | .0048200 | 71.52496 | .0357385 | .0120259 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9425769** | **47.99011** | **35.80792** | **17.13470** | **.0372286** | **.0045330** |
| Stddev | .0044697 | .14336 | .47734 | .23725 | .0005553 | .0001207 |
| %RSD | .4741976 | .2987364 | 1.333056 | 1.384601 | 1.491577 | 2.663195 |
| #1 | .9374276 | 47.87913 | 35.26113 | 16.86326 | .0368930 | .0046717 |
| #2 | .9448502 | 48.15197 | 36.14147 | 17.30248 | .0378695 | .0044510 |
| #3 | .9454531 | 47.93921 | 36.02117 | 17.23836 | .0369232 | .0044764 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **74.11587** | **.0497865** | **.2559956** | **6.652101** | **.0582218** | **.0019441** |
| Stddev | .33551 | .0012257 | .0008152 | .022875 | .0005057 | .0005849 |
| %RSD | .4526836 | 2.461820 | .3184403 | .3438703 | .8685398 | 30.08463 |
| #1 | 74.05271 | .0510471 | .2560000 | 6.640029 | .0586313 | .0025490 |
| #2 | 74.47847 | .0485990 | .2568086 | 6.678483 | .0583776 | .0013815 |
| #3 | 73.81642 | .0497135 | .2551782 | 6.637792 | .0576566 | .0019020 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07DUP Acquired: 12/6/2024 14:04:04 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0030654 | .2384606 | F 42.41355 | F 21.22412 | F 56.54872 | -.004718 |
| Stddev | .0015838 | .0009712 | .08348 | .02161 | .03090 | .000407 |
| %RSD | 51.66470 | .4072653 | .1968157 | .1018219 | .0546501 | 8.628079 |
| #1 | .0040747 | .2392333 | 42.45638 | 21.21950 | 56.51304 | -.004606 |
| #2 | .0038816 | .2373705 | 42.46692 | 21.24766 | 56.56586 | -.004378 |
| #3 | .0012401 | .2387781 | 42.31735 | 21.20519 | 56.56725 | -.005169 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2288530 |
| Stddev | .0032874 |
| %RSD | 1.436446 |
| #1 | .2251580 |
| #2 | .2314532 |
| #3 | .2299479 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2215.687 | 52662.12 | 13333.14 | 1528.255 | 3265.081 |
| Stddev | 18.494 | 122.27 | 165.03 | 3.551 | 18.459 |
| %RSD | .8346736 | .2321783 | 1.237711 | .2323787 | .5653475 |
| #1 | 2237.037 | 52779.53 | 13523.07 | 1527.415 | 3286.368 |
| #2 | 2204.606 | 52535.51 | 13224.76 | 1525.199 | 3253.506 |
| #3 | 2205.419 | 52671.32 | 13251.59 | 1532.151 | 3255.368 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07LX5 Acquired: 12/6/2024 14:08:25 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0212980** | **-.012417** | **.0091294** | **.0042195** | **-.002616** | **288.8426** |
| Stddev | .0019569 | .001072 | .0007365 | .0013708 | .001248 | .8384 |
| %RSD | 9.188222 | 8.635827 | 8.066875 | 32.48611 | 47.71518 | .2902655 |
| #1 | .0200282 | -.011292 | .0090642 | .0057504 | -.003703 | 288.2449 |
| #2 | .0203142 | -.013428 | .0098963 | .0038025 | -.002892 | 288.4818 |
| #3 | .0235516 | -.012532 | .0084277 | .0031057 | -.001253 | 289.8010 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2129090** | **-.000075** | **.0006791** | **14.92389** | **.0077399** | **.0026083** |
| Stddev | .0010494 | .000023 | .0001179 | .05035 | .0003973 | .0001578 |
| %RSD | .4929107 | 30.40986 | 17.36248 | .3373882 | 5.133807 | 6.050567 |
| #1 | .2137028 | -.000072 | .0005639 | 14.96504 | .0072853 | .0027236 |
| #2 | .2117191 | -.000054 | .0006738 | 14.86774 | .0080204 | .0024285 |
| #3 | .2133050 | -.000100 | .0007996 | 14.93888 | .0079142 | .0026729 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2078978** | **9.381686** | **7.566162** | **3.577404** | **.0080199** | **.0010441** |
| Stddev | .0012886 | .091663 | .025767 | .006714 | .0003904 | .0002712 |
| %RSD | .6198262 | .9770416 | .3405598 | .1876680 | 4.867875 | 25.97903 |
| #1 | .2087889 | 9.277311 | 7.591459 | 3.583626 | .0082553 | .0010086 |
| #2 | .2064203 | 9.418654 | 7.539948 | 3.578297 | .0075692 | .0007923 |
| #3 | .2084842 | 9.449092 | 7.567078 | 3.570288 | .0082351 | .0013313 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.54733** | **.0096469** | **.0491914** | **1.095431** | **.0103380** | **.0001610** |
| Stddev | .14105 | .0017182 | .0009222 | .024668 | .0004820 | .0003019 |
| %RSD | 1.124126 | 17.81078 | 1.874666 | 2.251866 | 4.662490 | 187.4842 |
| #1 | 12.38561 | .0078643 | .0481395 | 1.067131 | .0097846 | .0001946 |
| #2 | 12.64493 | .0112925 | .0495737 | 1.112374 | .0106662 | .0004447 |
| #3 | 12.61144 | .0097838 | .0498609 | 1.106789 | .0105632 | -.000156 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07LX5 Acquired: 12/6/2024 14:08:25 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000025 | .0478476 | 7.900026 | 4.170578 | F 11.17978 | -.002100 |
| Stddev | .000800 | .0004347 | .076658 | .031831 | .07291 | .000488 |
| %RSD | 3166.244 | .9085047 | .9703536 | .7632194 | .6521896 | 23.22757 |
| #1 | .000729 | .0475073 | 7.818192 | 4.197063 | 11.23516 | -.002625 |
| #2 | .000059 | .0483373 | 7.970163 | 4.135265 | 11.09717 | -.002015 |
| #3 | -.000864 | .0476982 | 7.911724 | 4.179406 | 11.20701 | -.001661 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0460821 |
| Stddev | .0002367 |
| %RSD | .5136537 |
| #1 | .0463485 |
| #2 | .0458961 |
| #3 | .0460016 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2458.679 | 57813.80 | 13588.45 | 1691.962 | 3847.325 |
| Stddev | 9.563 | 544.46 | 66.70 | 16.115 | 19.076 |
| %RSD | .3889591 | .9417396 | .4908689 | .9524452 | .4958246 |
| #1 | 2448.192 | 58438.29 | 13515.18 | 1709.974 | 3828.899 |
| #2 | 2466.918 | 57438.73 | 13645.65 | 1678.910 | 3866.990 |
| #3 | 2460.928 | 57564.39 | 13604.52 | 1687.003 | 3846.087 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07MS Acquired: 12/6/2024 14:12:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9082439** | **1.651421** | **.9156835** | **2.040715** | **.6938631** | **1433.302** |
| Stddev | .0149770 | .038632 | .0108181 | .032548 | .0087189 | 9.862 |
| %RSD | 1.649004 | 2.339303 | 1.181419 | 1.594950 | 1.256568 | .6880960 |
| #1 | .9135929 | 1.628839 | .9125229 | 2.033244 | .6975489 | 1422.448 |
| #2 | .8913268 | 1.629396 | .9067978 | 2.012551 | .6839067 | 1435.745 |
| #3 | .9198120 | 1.696028 | .9277299 | 2.076349 | .7001338 | 1441.714 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.321757** | **.2047040** | **.1979382** | **73.90930** | **.4093927** | **.2067291** |
| Stddev | .008573 | .0002781 | .0030051 | .28344 | .0012701 | .0027375 |
| %RSD | .6486363 | .1358531 | 1.518199 | .3834961 | .3102344 | 1.324173 |
| #1 | 1.315110 | .2045289 | .1976209 | 73.58558 | .4087770 | .2058952 |
| #2 | 1.318727 | .2045585 | .1951044 | 74.11288 | .4108533 | .2045055 |
| #3 | 1.331434 | .2050247 | .2010894 | 74.02944 | .4085478 | .2097865 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.159401** | **44.55174** | **33.69860** | **19.19827** | **.5158899** | **.0873931** |
| Stddev | .014559 | .16951 | .28150 | .09325 | .0075080 | .0002593 |
| %RSD | 1.255776 | .3804799 | .8353395 | .4857268 | 1.455352 | .2967621 |
| #1 | 1.157412 | 44.35790 | 33.47538 | 19.09945 | .5138949 | .0871904 |
| #2 | 1.145938 | 44.67223 | 33.60559 | 19.28472 | .5095808 | .0876853 |
| #3 | 1.174853 | 44.62507 | 34.01483 | 19.21065 | .5241939 | .0873034 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **76.48401** | **.3427454** | **.4638684** | **18.02860** | **.3172179** | **.3637236** |
| Stddev | .55277 | .0026137 | .0029988 | .09768 | .0013064 | .0034740 |
| %RSD | .7227290 | .7625749 | .6464857 | .5418252 | .4118420 | .9551264 |
| #1 | 76.07815 | .3397561 | .4610695 | 17.95191 | .3169930 | .3634519 |
| #2 | 76.26032 | .3438797 | .4670336 | 17.99533 | .3160385 | .3603934 |
| #3 | 77.11358 | .3446002 | .4635022 | 18.13858 | .3186221 | .3673255 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07MS Acquired: 12/6/2024 14:12:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5858478 | .3951055 | F 41.57967 | F 25.89938 | F 55.66137 | .2199057 |
| Stddev | .0079412 | .0024742 | .22324 | .45858 | .90091 | .0026994 |
| %RSD | 1.355511 | .6262180 | .5368925 | 1.770632 | 1.618558 | 1.227546 |
| #1 | .5827822 | .3924039 | 41.32331 | 25.71813 | 55.40290 | .2192997 |
| #2 | .5798964 | .3956514 | 41.73122 | 25.55911 | 54.91794 | .2175608 |
| #3 | .5948649 | .3972612 | 41.68448 | 26.42088 | 56.66326 | .2228567 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4492220 |
| Stddev | .0032398 |
| %RSD | .7211987 |
| #1 | .4463790 |
| #2 | .4485377 |
| #3 | .4527492 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2220.197 | 53260.32 | 13074.63 | 1539.920 | 3250.196 |
| Stddev | 23.486 | 186.38 | 56.37 | 13.731 | 41.120 |
| %RSD | 1.057827 | .3499379 | .4311054 | .8916980 | 1.265149 |
| #1 | 2227.343 | 53475.11 | 13132.07 | 1554.938 | 3263.308 |
| #2 | 2239.280 | 53164.64 | 13072.43 | 1528.007 | 3283.161 |
| #3 | 2193.969 | 53141.23 | 13019.40 | 1536.815 | 3204.119 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07MSD Acquired: 12/6/2024 14:17:00 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.8977225** | **1.603239** | **.9021848** | **2.035525** | **.6881815** | **1423.661** |
| Stddev | .0065501 | .005004 | .0017185 | .002463 | .0011074 | 10.271 |
| %RSD | .7296352 | .3120892 | .1904762 | .1210216 | .1609192 | .7214755 |
| #1 | .8925903 | 1.608205 | .9010364 | 2.034973 | .6875009 | 1427.740 |
| #2 | .8954774 | 1.598199 | .9013575 | 2.038218 | .6894593 | 1411.977 |
| #3 | .9051000 | 1.603314 | .9041604 | 2.033385 | .6875842 | 1431.267 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.291971** | **.2031240** | **.1952904** | **72.99764** | **.4076505** | **.2030371** |
| Stddev | .006718 | .0003133 | .0001836 | .30986 | .0014093 | .0004028 |
| %RSD | .5200168 | .1542333 | .0940262 | .4244851 | .3457099 | .1984086 |
| #1 | 1.291118 | .2034513 | .1954849 | 72.81136 | .4084759 | .2031428 |
| #2 | 1.299075 | .2030938 | .1952660 | 72.82622 | .4060232 | .2025920 |
| #3 | 1.285719 | .2028269 | .1951201 | 73.35534 | .4084523 | .2033766 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.146926** | **43.51933** | **33.14734** | **19.03259** | **.5068370** | **.0866723** |
| Stddev | .001507 | .20785 | .04309 | .07469 | .0003834 | .0002814 |
| %RSD | .1314364 | .4775977 | .1299844 | .3924212 | .0756531 | .3246402 |
| #1 | 1.146144 | 43.46099 | 33.17958 | 19.00465 | .5072627 | .0869462 |
| #2 | 1.145971 | 43.34688 | 33.09840 | 18.97590 | .5065188 | .0866865 |
| #3 | 1.148664 | 43.75011 | 33.16404 | 19.11722 | .5067295 | .0863840 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **74.35610** | **.3383440** | **.4603375** | **17.67227** | **.3130920** | **.3606946** |
| Stddev | .33302 | .0018694 | .0006172 | .01408 | .0014392 | .0009792 |
| %RSD | .4478689 | .5524990 | .1340694 | .0796786 | .4596673 | .2714733 |
| #1 | 74.52540 | .3366515 | .4597131 | 17.65716 | .3114836 | .3618185 |
| #2 | 74.57046 | .3380301 | .4603522 | 17.68502 | .3142581 | .3602398 |
| #3 | 73.97245 | .3403505 | .4609472 | 17.67464 | .3135342 | .3600255 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07MSD Acquired: 12/6/2024 14:17:00 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5725412 | .3894535 | F 41.17072 | F 25.26756 | F 54.50996 | .2150773 |
| Stddev | .0015751 | .0005502 | .15747 | .04180 | .07156 | .0023120 |
| %RSD | .2751003 | .1412875 | .3824732 | .1654164 | .1312860 | 1.074954 |
| #1 | .5742429 | .3888658 | 41.09314 | 25.31177 | 54.55073 | .2166362 |
| #2 | .5722459 | .3899564 | 41.06709 | 25.22868 | 54.42732 | .2161746 |
| #3 | .5711346 | .3895383 | 41.35192 | 25.26224 | 54.55181 | .2124210 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4419219 |
| Stddev | .0015245 |
| %RSD | .3449607 |
| #1 | .4418007 |
| #2 | .4435034 |
| #3 | .4404617 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2228.672 | 53718.28 | 13160.01 | 1541.237 | 3289.184 |
| Stddev | 1.583 | 167.91 | 25.76 | 3.469 | 2.513 |
| %RSD | .0710389 | .3125841 | .1957374 | .2251070 | .0764164 |
| #1 | 2230.084 | 53763.47 | 13173.20 | 1542.963 | 3291.678 |
| #2 | 2228.971 | 53858.97 | 13176.51 | 1543.505 | 3289.222 |
| #3 | 2226.961 | 53532.39 | 13130.33 | 1537.243 | 3286.652 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07A Acquired: 12/6/2024 14:21:14 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9004092** | **1.624998** | **.9141554** | **2.036347** | **.6842569** | **1440.092** |
| Stddev | .0019112 | .025709 | .0056015 | .011087 | .0059094 | 11.273 |
| %RSD | .2122593 | 1.582075 | .6127514 | .5444612 | .8636187 | .7827937 |
| #1 | .9022421 | 1.605552 | .9104958 | 2.047327 | .6821049 | 1432.393 |
| #2 | .8984283 | 1.615296 | .9113666 | 2.025156 | .6797251 | 1434.852 |
| #3 | .9005571 | 1.654146 | .9206039 | 2.036557 | .6909407 | 1453.031 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.292728** | **.2047506** | **.1979363** | **73.53596** | **.4175037** | **.2059188** |
| Stddev | .004142 | .0007463 | .0005287 | .56502 | .0017098 | .0008420 |
| %RSD | .3204028 | .3645076 | .2670964 | .7683621 | .4095339 | .4089203 |
| #1 | 1.296936 | .2051786 | .1980956 | 73.22683 | .4190042 | .2060649 |
| #2 | 1.288656 | .2038888 | .1973463 | 73.19294 | .4156422 | .2050133 |
| #3 | 1.292592 | .2051844 | .1983670 | 74.18809 | .4178646 | .2066783 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.150861** | **44.16467** | **33.14378** | **19.22636** | **.5141221** | **.0884487** |
| Stddev | .003851 | .25814 | .06482 | .13329 | .0012211 | .0004595 |
| %RSD | .3345931 | .5844986 | .1955619 | .6932711 | .2375058 | .5195389 |
| #1 | 1.151092 | 44.06587 | 33.18530 | 19.15312 | .5139096 | .0889652 |
| #2 | 1.146901 | 43.97052 | 33.06909 | 19.14576 | .5130212 | .0880851 |
| #3 | 1.154592 | 44.45762 | 33.17694 | 19.38022 | .5154355 | .0882958 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **74.94531** | **.3426367** | **.4688335** | **17.94312** | **.3141205** | **.3629047** |
| Stddev | .63934 | .0017672 | .0004344 | .12054 | .0021023 | .0016306 |
| %RSD | .8530809 | .5157765 | .0926635 | .6717761 | .6692643 | .4493094 |
| #1 | 75.68311 | .3409342 | .4693324 | 18.08183 | .3147692 | .3622849 |
| #2 | 74.55397 | .3425136 | .4685386 | 17.86382 | .3117703 | .3616749 |
| #3 | 74.59886 | .3444623 | .4686295 | 17.88370 | .3158220 | .3647543 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5018-07A Acquired: 12/6/2024 14:21:14 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5820443 | .3925631 | F 42.22265 | F 25.73041 | F 55.24291 | .2162221 |
| Stddev | .0031266 | .0015122 | .20225 | .11825 | .24148 | .0021772 |
| %RSD | .5371664 | .3852161 | .4790184 | .4595659 | .4371295 | 1.006902 |
| #1 | .5786799 | .3922178 | 42.33960 | 25.75710 | 55.10530 | .2187147 |
| #2 | .5825924 | .3912535 | 41.98911 | 25.60109 | 55.10168 | .2152593 |
| #3 | .5848605 | .3942182 | 42.33925 | 25.83302 | 55.52174 | .2146924 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4420794 |
| Stddev | .0018305 |
| %RSD | .4140758 |
| #1 | .4434664 |
| #2 | .4400045 |
| #3 | .4427672 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2223.613 | 52450.21 | 13016.50 | 1495.039 | 3261.302 |
| Stddev | 4.127 | 226.82 | 51.82 | 4.202 | 4.685 |
| %RSD | .1855898 | .4324532 | .3980782 | .2810420 | .1436570 |
| #1 | 2219.169 | 52256.95 | 13014.87 | 1492.599 | 3256.094 |
| #2 | 2227.325 | 52699.93 | 13069.12 | 1499.890 | 3265.173 |
| #3 | 2224.346 | 52393.74 | 12965.52 | 1492.627 | 3262.638 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5051-07 Acquired: 12/6/2024 14:25:26 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1435440** | **-.075894** | **.0390187** | **.0176630** | **-.011919** | **1489.792** |
| Stddev | .0050047 | .006012 | .0035017 | .0058580 | .003896 | 5.787 |
| %RSD | 3.486537 | 7.921125 | 8.974343 | 33.16563 | 32.69197 | .3884126 |
| #1 | .1391380 | -.082419 | .0361934 | .0206249 | -.015659 | 1483.162 |
| #2 | .1425085 | -.070581 | .0379263 | .0214486 | -.012215 | 1493.826 |
| #3 | .1489854 | -.074681 | .0429363 | .0109154 | -.007883 | 1492.387 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.178377** | **-.000718** | **.0057952** | **72.44862** | **.0416988** | **.0170754** |
| Stddev | .003980 | .000035 | .0002493 | .28343 | .0002024 | .0003407 |
| %RSD | .3377154 | 4.911308 | 4.302285 | .3912189 | .4853733 | 1.995241 |
| #1 | 1.176565 | -.000709 | .0055369 | 72.12134 | .0416461 | .0167326 |
| #2 | 1.175625 | -.000757 | .0058143 | 72.61133 | .0419224 | .0170795 |
| #3 | 1.182940 | -.000688 | .0060345 | 72.61319 | .0415280 | .0174140 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.001978** | **67.36625** | F **43.93396** | **17.65289** | **.0457482** | **.0052327** |
| Stddev | .004121 | .21019 | .22370 | .03698 | .0001167 | .0002033 |
| %RSD | .4112869 | .3120047 | .5091777 | .2094569 | .2549833 | 3.884211 |
| #1 | 1.001120 | 67.43460 | 43.69555 | 17.61870 | .0458253 | .0050082 |
| #2 | 1.006460 | 67.53376 | 43.96705 | 17.64783 | .0458053 | .0052857 |
| #3 | .998353 | 67.13040 | 44.13927 | 17.69213 | .0456140 | .0054043 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **70.33651** | **.0656971** | **.2565637** | **6.539375** | **.0673286** | **.0028738** |
| Stddev | .29545 | .0025509 | .0008025 | .024300 | .0008399 | .0004350 |
| %RSD | .4200554 | 3.882814 | .3127853 | .3716022 | 1.247428 | 15.13526 |
| #1 | 70.66177 | .0654798 | .2570873 | 6.551996 | .0680717 | .0029916 |
| #2 | 70.26302 | .0632618 | .2569640 | 6.554768 | .0674967 | .0032377 |
| #3 | 70.08474 | .0683496 | .2556398 | 6.511361 | .0664174 | .0023921 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5051-07 Acquired: 12/6/2024 14:25:26 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0045452 | .3390054 | F 46.16704 | F 28.00372 | F 64.60601 | -.003375 |
| Stddev | .0010150 | .0003299 | .18281 | .16497 | .15524 | .000137 |
| %RSD | 22.33176 | .0973078 | .3959831 | .5890847 | .2402863 | 4.048162 |
| #1 | .0035274 | .3392507 | 46.30904 | 27.83667 | 64.42819 | -.003407 |
| #2 | .0055574 | .3386304 | 46.23132 | 28.00798 | 64.71453 | -.003492 |
| #3 | .0045509 | .3391351 | 45.96077 | 28.16652 | 64.67530 | -.003225 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2096323 |
| Stddev | .0008403 |
| %RSD | .4008400 |
| #1 | .2094135 |
| #2 | .2089231 |
| #3 | .2105604 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2321.007 | 53772.16 | 13394.88 | 1595.840 | 3320.579 |
| Stddev | 11.148 | 211.61 | 49.37 | 8.672 | 12.405 |
| %RSD | .4803180 | .3935275 | .3685861 | .5433823 | .3735876 |
| #1 | 2311.727 | 53656.24 | 13450.95 | 1587.021 | 3307.697 |
| #2 | 2317.922 | 53643.84 | 13375.75 | 1596.142 | 3321.596 |
| #3 | 2333.373 | 54016.40 | 13357.94 | 1604.356 | 3332.445 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07 Acquired: 12/6/2024 14:29:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1620067** | **-.087844** | **.0452555** | **.0201677** | **-.010198** | **1697.035** |
| Stddev | .0032487 | .005990 | .0017082 | .0024838 | .006194 | 11.270 |
| %RSD | 2.005307 | 6.818487 | 3.774547 | 12.31582 | 60.73476 | .6641239 |
| #1 | .1652752 | -.084783 | .0456644 | .0189166 | -.013802 | 1710.024 |
| #2 | .1619668 | -.094746 | .0433800 | .0230283 | -.013745 | 1689.842 |
| #3 | .1587781 | -.084004 | .0467221 | .0185582 | -.003046 | 1691.239 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.316203** | **-.000726** | **.0061398** | **75.70989** | **.0436720** | **.0172253** |
| Stddev | .004712 | .000039 | .0001548 | .51564 | .0004616 | .0002116 |
| %RSD | .3580049 | 5.357054 | 2.521532 | .6810704 | 1.056989 | 1.228273 |
| #1 | 1.321298 | -.000735 | .0060872 | 76.30510 | .0441992 | .0171127 |
| #2 | 1.315309 | -.000684 | .0060182 | 75.39902 | .0433401 | .0174694 |
| #3 | 1.312002 | -.000760 | .0063141 | 75.42555 | .0434768 | .0170938 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.123346** | **72.24879** | F **48.39975** | **16.97589** | **.0505129** | **.0060199** |
| Stddev | .003160 | .39386 | .22716 | .12200 | .0006950 | .0003214 |
| %RSD | .2812602 | .5451433 | .4693474 | .7186878 | 1.375961 | 5.339087 |
| #1 | 1.125707 | 72.67028 | 48.65086 | 17.10798 | .0499198 | .0062855 |
| #2 | 1.124575 | 72.18597 | 48.20854 | 16.95227 | .0512777 | .0056626 |
| #3 | 1.119757 | 71.89011 | 48.33987 | 16.86742 | .0503413 | .0061117 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **68.84284** | **.0729795** | **.2835627** | **6.694421** | **.0707018** | **.0025381** |
| Stddev | .13078 | .0008815 | .0006832 | .019985 | .0009074 | .0005751 |
| %RSD | .1899743 | 1.207903 | .2409403 | .2985252 | 1.283382 | 22.65705 |
| #1 | 68.92519 | .0737473 | .2840474 | 6.680922 | .0716158 | .0027401 |
| #2 | 68.91128 | .0731743 | .2827813 | 6.717379 | .0698012 | .0018893 |
| #3 | 68.69203 | .0720169 | .2838595 | 6.684962 | .0706885 | .0029849 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07 Acquired: 12/6/2024 14:29:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0037436 | .2456263 | F 51.79160 | F 29.93593 | F 68.73331 | -.005103 |
| Stddev | .0019950 | .0004275 | .10627 | .08368 | .20840 | .000395 |
| %RSD | 53.29259 | .1740509 | .2051928 | .2795186 | .3031940 | 7.739221 |
| #1 | .0022144 | .2453605 | 51.83221 | 30.01029 | 68.82732 | -.005515 |
| #2 | .0060003 | .2461195 | 51.67101 | 29.95218 | 68.87813 | -.005064 |
| #3 | .0030159 | .2453990 | 51.87158 | 29.84532 | 68.49447 | -.004728 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2277616 |
| Stddev | .0005011 |
| %RSD | .2199935 |
| #1 | .2283349 |
| #2 | .2274079 |
| #3 | .2275419 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2325.422 | 53208.11 | 13349.25 | 1597.309 | 3315.789 |
| Stddev | 7.343 | 86.70 | 41.66 | .758 | 8.536 |
| %RSD | .3157890 | .1629472 | .3120590 | .0474485 | .2574216 |
| #1 | 2316.984 | 53229.34 | 13303.23 | 1596.771 | 3306.177 |
| #2 | 2328.913 | 53282.22 | 13384.39 | 1596.980 | 3318.708 |
| #3 | 2330.368 | 53112.76 | 13360.13 | 1598.176 | 3322.483 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DUP Acquired: 12/6/2024 14:34:10 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1638367** | **-.082477** | **.0438956** | **.0216372** | **-.011524** | **1725.087** |
| Stddev | .0051112 | .002696 | .0011939 | .0022300 | .004710 | 11.060 |
| %RSD | 3.119709 | 3.268618 | 2.719832 | 10.30639 | 40.86871 | .6411168 |
| #1 | .1597491 | -.085561 | .0443115 | .0241296 | -.011496 | 1725.065 |
| #2 | .1695674 | -.081298 | .0448260 | .0209509 | -.016248 | 1714.039 |
| #3 | .1621935 | -.080571 | .0425494 | .0198309 | -.006829 | 1736.159 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.310300** | **-.000673** | **.0066526** | **76.04689** | **.0441338** | **.0173866** |
| Stddev | .004170 | .000052 | .0000865 | .32715 | .0005857 | .0000249 |
| %RSD | .3182804 | 7.711852 | 1.300287 | .4302010 | 1.327179 | .1429472 |
| #1 | 1.307233 | -.000722 | .0067473 | 75.98142 | .0443612 | .0173965 |
| #2 | 1.308618 | -.000619 | .0066328 | 75.75742 | .0434685 | .0174049 |
| #3 | 1.315049 | -.000679 | .0065778 | 76.40183 | .0445717 | .0173583 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.142267** | **72.19623** | F **48.34527** | **17.07437** | **.0512679** | **.0060812** |
| Stddev | .002984 | .10732 | .37835 | .08008 | .0003245 | .0006093 |
| %RSD | .2612380 | .1486450 | .7825983 | .4690134 | .6328717 | 10.01962 |
| #1 | 1.142038 | 72.09926 | 48.12136 | 17.09326 | .0516131 | .0056401 |
| #2 | 1.139404 | 72.31153 | 48.13235 | 16.98653 | .0512213 | .0067765 |
| #3 | 1.145359 | 72.17790 | 48.78211 | 17.14331 | .0509693 | .0058271 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **68.37429** | **.0731426** | **.2882171** | **6.754426** | **.0681878** | **.0034697** |
| Stddev | .29066 | .0004255 | .0008510 | .044844 | .0010471 | .0005121 |
| %RSD | .4250969 | .5817284 | .2952740 | .6639152 | 1.535614 | 14.75900 |
| #1 | 68.12248 | .0729530 | .2876236 | 6.702645 | .0670342 | .0040333 |
| #2 | 68.69236 | .0728448 | .2891921 | 6.780436 | .0684509 | .0033427 |
| #3 | 68.30804 | .0736299 | .2878356 | 6.780197 | .0690782 | .0030330 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DUP Acquired: 12/6/2024 14:34:10 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0050613 | .2449273 | F 52.49649 | F 29.85358 | F 69.00775 | -.005556 |
| Stddev | .0015722 | .0018778 | .14417 | .18386 | .15051 | .000389 |
| %RSD | 31.06291 | .7666740 | .2746197 | .6158643 | .2181130 | 7.007267 |
| #1 | .0051674 | .2429707 | 52.33486 | 30.06403 | 69.15320 | -.005114 |
| #2 | .0034388 | .2450963 | 52.54281 | 29.72417 | 69.01741 | -.005847 |
| #3 | .0065778 | .2467149 | 52.61180 | 29.77253 | 68.85264 | -.005708 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2279372 |
| Stddev | .0008934 |
| %RSD | .3919297 |
| #1 | .2274040 |
| #2 | .2274391 |
| #3 | .2289686 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2270.203 | 52628.50 | 13264.66 | 1551.208 | 3256.403 |
| Stddev | 10.960 | 118.33 | 60.62 | 6.345 | 9.866 |
| %RSD | .4827804 | .2248424 | .4569686 | .4090271 | .3029852 |
| #1 | 2276.816 | 52758.56 | 13290.18 | 1557.964 | 3265.309 |
| #2 | 2276.241 | 52599.76 | 13308.34 | 1550.285 | 3258.102 |
| #3 | 2257.551 | 52527.19 | 13195.46 | 1545.375 | 3245.797 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV03 Acquired: 12/6/2024 14:42:27 Type: Unk
Method: NON EPA-6010-200.7(v2502) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.819690** | **4.845704** | **4.875528** | **4.870575** | **4.776356** | **9.820445** | **9.368712** |
| Stddev | .021899 | .006161 | .004951 | .014573 | .013775 | .073100 | .106111 |
| %RSD | .4543742 | .1271441 | .1015552 | .2992056 | .2884074 | .7443608 | 1.132609 |
| #1 | 4.795109 | 4.839530 | 4.879386 | 4.854758 | 4.760988 | 9.775587 | 9.290003 |
| #2 | 4.826840 | 4.851852 | 4.869945 | 4.873510 | 4.780487 | 9.780952 | 9.326746 |
| #3 | 4.837121 | 4.845730 | 4.877254 | 4.883457 | 4.787594 | 9.904797 | 9.489388 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2449340** | **2.450296** | **24.19935** | **1.000005** | **2.433972** | **1.233605** | **4.772156** |
| Stddev | .0012800 | .001622 | .25846 | .002450 | .000828 | .001898 | .027752 |
| %RSD | .5225726 | .0661782 | 1.068038 | .2450245 | .0340087 | .1538946 | .5815352 |
| #1 | .2441633 | 2.452162 | 23.98303 | 1.002465 | 2.434250 | 1.232022 | 4.745538 |
| #2 | .2442272 | 2.449501 | 24.12946 | .999987 | 2.434626 | 1.233084 | 4.770013 |
| #3 | .2464115 | 2.449226 | 24.48557 | .997565 | 2.433041 | 1.235710 | 4.800917 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.362156** | **24.29699** | **2.440848** | **1.213053** | **24.92107** | **2.449013** | **2.466938** |
| Stddev | .023612 | .24844 | .001530 | .001042 | .13521 | .021643 | .004957 |
| %RSD | .9996069 | 1.022501 | .0626715 | .0859350 | .5425434 | .8837420 | .2009329 |
| #1 | 2.343758 | 24.14616 | 2.442392 | 1.211852 | 25.05739 | 2.432641 | 2.461409 |
| #2 | 2.353928 | 24.16107 | 2.439333 | 1.213584 | 24.91882 | 2.440847 | 2.470985 |
| #3 | 2.388781 | 24.58373 | 2.440820 | 1.213724 | 24.78700 | 2.473551 | 2.468421 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.32600** | **4.806496** | **4.936737** | **4.855514** | **4.760643** | **4.955559** | **4.871258** |
| Stddev | .02646 | .029059 | .010773 | .006832 | .028797 | .031069 | .003543 |
| %RSD | .1134518 | .6045673 | .2182216 | .1407072 | .6049030 | .6269538 | .0727344 |
| #1 | 23.32040 | 4.787300 | 4.926188 | 4.862626 | 4.735899 | 4.919789 | 4.869435 |
| #2 | 23.35482 | 4.792262 | 4.936302 | 4.854914 | 4.753778 | 4.971070 | 4.868998 |
| #3 | 23.30279 | 4.839928 | 4.947721 | 4.849001 | 4.792253 | 4.975819 | 4.875341 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV03 Acquired: 12/6/2024 14:42:27 Type: Unk
Method: NON EPA-6010-200.7(v2502) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV03 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.783235** | **4.642796** | **4.808604** |
| Stddev | .005273 | .006546 | .049052 |
| %RSD | .1102368 | .1410013 | 1.020095 |
| | | | |
| #1 | 4.789295 | 4.639925 | 4.752204 |
| #2 | 4.779699 | 4.638176 | 4.832289 |
| #3 | 4.780710 | 4.650287 | 4.841320 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2460.195** | **58560.41** | **13555.21** | **1685.618** | **3932.806** |
| Stddev | 5.785 | 39.49 | 73.56 | 8.190 | 2.124 |
| %RSD | .2351571 | .0674367 | .5426667 | .4858777 | .0540198 |
| | | | | | |
| #1 | 2466.851 | 58605.94 | 13599.00 | 1694.866 | 3934.255 |
| #2 | 2457.357 | 58539.88 | 13596.34 | 1682.706 | 3930.367 |
| #3 | 2456.376 | 58535.41 | 13470.28 | 1679.282 | 3933.796 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB03 Acquired: 12/6/2024 14:46:28 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0011206 | -.001643 | -.000556 | -.001864 | .0022258 | .0054912 | -.002109 |
| Stddev | .0010293 | .000574 | .000400 | .000597 | .0006305 | .0028187 | .000420 |
| %RSD | 91.85568 | 34.92347 | 71.90887 | 32.00090 | 28.32906 | 51.33081 | 19.92333 |
| #1 | .0000523 | -.002090 | -.000893 | -.001536 | .0029315 | .0049331 | -.001801 |
| #2 | .0021060 | -.001844 | -.000114 | -.001504 | .0020278 | .0085471 | -.002588 |
| #3 | .0012035 | -.000996 | -.000661 | -.002553 | .0017179 | .0029933 | -.001938 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001227 | .0000826 | -.004553 | -.000033 | -.000054 | -.000760 | -.000210 |
| Stddev | .0000616 | .0000053 | .008644 | .000216 | .000048 | .000163 | .002050 |
| %RSD | 50.20775 | 6.478776 | 189.8694 | 650.5250 | 87.29812 | 21.44976 | 978.4010 |
| #1 | .0000589 | .0000765 | .000181 | .000213 | .000000 | -.000884 | .000897 |
| #2 | .0001818 | .0000866 | -.014529 | -.000189 | -.000085 | -.000822 | -.002575 |
| #3 | .0001274 | .0000846 | .000691 | -.000123 | -.000079 | -.000575 | .001050 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003121 | -.000070 | .0003329 | .0006021 | .1166861 | -.000378 | -.001053 |
| Stddev | .0001653 | .010620 | .0001210 | .0002867 | .0127777 | .001400 | .000037 |
| %RSD | 52.94724 | 15193.26 | 36.33697 | 47.61597 | 10.95053 | 370.5030 | 3.507111 |
| #1 | .0001670 | -.010646 | .0003280 | .0002780 | .1024154 | .001061 | -.001094 |
| #2 | .0004920 | -.000157 | .0004563 | .0007059 | .1205760 | -.000459 | -.001044 |
| #3 | .0002773 | .010593 | .0002145 | .0008225 | .1270668 | -.001736 | -.001022 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.088380 | .0032672 | .0007853 | -.000582 | .0004652 | .0024704 | -.002008 |
| Stddev | .009458 | .0003003 | .0001751 | .000548 | .0001139 | .0011492 | .002045 |
| %RSD | 10.70163 | 9.190432 | 22.29055 | 94.12393 | 24.49440 | 46.51888 | 101.8276 |
| #1 | -.099300 | .0035960 | .0009863 | -.000022 | .0005403 | .0024742 | -.003761 |
| #2 | -.082842 | .0031983 | .0006666 | -.000607 | .0005212 | .0036178 | -.002503 |
| #3 | -.082997 | .0030075 | .0007030 | -.001118 | .0003341 | .0013193 | .000239 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB03 Acquired: 12/6/2024 14:46:28 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB03 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.001459 | -.000197 | .0001620 |
| Stddev | .000910 | .000260 | .0001376 |
| %RSD | 62.40228 | 132.1577 | 84.94343 |
| #1 | -.001008 | -.000235 | .0003179 |
| #2 | -.002506 | -.000435 | .0001108 |
| #3 | -.000861 | .000080 | .0000574 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2649.372 | 62750.33 | 13964.53 | 1798.042 | 4572.520 |
| Stddev | 3.379 | 265.36 | 125.08 | 8.288 | 3.400 |
| %RSD | .1275336 | .4228764 | .8956958 | .4609595 | .0743525 |
| #1 | 2650.836 | 62446.76 | 13820.12 | 1789.566 | 4573.039 |
| #2 | 2645.508 | 62866.13 | 14034.67 | 1798.431 | 4568.891 |
| #3 | 2651.773 | 62938.11 | 14038.80 | 1806.129 | 4575.631 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07LX5 Acquired: 12/6/2024 14:50:48 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0297042** | **-.014063** | **.0140600** | **-.000163** | **-.002470** | **358.1984** |
| Stddev | .0021881 | .001811 | .0006177 | .001225 | .000950 | .9636 |
| %RSD | 7.366293 | 12.87427 | 4.393549 | 751.7215 | 38.47000 | .2690091 |
| #1 | .0272441 | -.012015 | .0144230 | .000760 | -.002671 | 357.8217 |
| #2 | .0314329 | -.015449 | .0133467 | .000304 | -.003303 | 357.4800 |
| #3 | .0304356 | -.014726 | .0144102 | -.001553 | -.001435 | 359.2934 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2581055** | **-.000197** | **.0008913** | **15.60463** | **.0091716** | **.0035214** |
| Stddev | .0000658 | .000046 | .0000395 | .05317 | .0002274 | .0000362 |
| %RSD | .0254931 | 23.25658 | 4.434303 | .3407556 | 2.478969 | 1.028224 |
| #1 | .2581646 | -.000243 | .0009271 | 15.64994 | .0093613 | .0034803 |
| #2 | .2581173 | -.000151 | .0008489 | 15.54609 | .0089196 | .0035350 |
| #3 | .2580346 | -.000198 | .0008980 | 15.61786 | .0092341 | .0035488 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2568564** | **14.10202** | **10.30052** | **3.489401** | **.0105781** | **.0017136** |
| Stddev | .0004083 | .04310 | .02551 | .035420 | .0001040 | .0002643 |
| %RSD | .1589699 | .3056246 | .2476632 | 1.015068 | .9832183 | 15.42569 |
| #1 | .2570518 | 14.09065 | 10.31143 | 3.459972 | .0105920 | .0018516 |
| #2 | .2571303 | 14.06575 | 10.27137 | 3.479518 | .0104678 | .0014088 |
| #3 | .2563871 | 14.14967 | 10.31876 | 3.528713 | .0106744 | .0018803 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **11.91630** | **.0151319** | **.0545302** | **1.117423** | **.0145304** | **.0008167** |
| Stddev | .03669 | .0011935 | .0003974 | .023186 | .0006487 | .0005627 |
| %RSD | .3079253 | 7.887278 | .7288078 | 2.074963 | 4.464148 | 68.89911 |
| #1 | 11.93521 | .0164610 | .0542245 | 1.091652 | .0148569 | .0002648 |
| #2 | 11.93967 | .0147827 | .0543867 | 1.136593 | .0149509 | .0013896 |
| #3 | 11.87400 | .0141519 | .0549795 | 1.124024 | .0137834 | .0007957 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07LX5 Acquired: 12/6/2024 14:50:48 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000183 | .0501373 | 9.772585 | 5.876428 | F 13.79432 | -.001477 |
| Stddev | .000505 | .0002909 | .030672 | .010971 | .03983 | .000440 |
| %RSD | 275.2344 | .5801578 | .3138554 | .1866959 | .2887644 | 29.76710 |
| #1 | -.000584 | .0502433 | 9.746757 | 5.887646 | 13.83320 | -.000980 |
| #2 | -.000350 | .0498083 | 9.764512 | 5.865722 | 13.75360 | -.001633 |
| #3 | .000384 | .0503603 | 9.806485 | 5.875915 | 13.79616 | -.001817 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0466729 |
| Stddev | .0001874 |
| %RSD | .4014419 |
| #1 | .0465616 |
| #2 | .0468892 |
| #3 | .0465679 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2480.026 | 58357.79 | 13821.22 | 1720.962 | 3824.384 |
| Stddev | 7.219 | 63.80 | 33.17 | 3.829 | .917 |
| %RSD | .2910861 | .1093219 | .2400036 | .2224949 | .0239700 |
| #1 | 2487.376 | 58303.34 | 13784.46 | 1724.410 | 3824.445 |
| #2 | 2472.945 | 58427.99 | 13848.93 | 1716.841 | 3823.438 |
| #3 | 2479.756 | 58342.04 | 13830.26 | 1721.634 | 3825.269 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MS Acquired: 12/6/2024 14:55:09 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9835258** | **1.643842** | **.9408259** | **2.075568** | **.5739221** | **1815.359** |
| Stddev | .0071799 | .005985 | .0012343 | .008754 | .0056448 | 1.637 |
| %RSD | .7300131 | .3641054 | .1311881 | .4217484 | .9835525 | .0901518 |
| #1 | .9752471 | 1.641727 | .9400504 | 2.074172 | .5691828 | 1813.865 |
| #2 | .9872809 | 1.639202 | .9422492 | 2.084936 | .5724164 | 1817.108 |
| #3 | .9880494 | 1.650598 | .9401780 | 2.067596 | .5801671 | 1815.105 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.631042** | **.2155863** | **.2060804** | **81.96304** | **.4388887** | **.2184753** |
| Stddev | .004845 | .0008018 | .0005936 | .51409 | .0011045 | .0003419 |
| %RSD | .2970594 | .3719187 | .2880317 | .6272164 | .2516628 | .1564823 |
| #1 | 1.636589 | .2164571 | .2057043 | 82.51870 | .4378581 | .2181955 |
| #2 | 1.628902 | .2154232 | .2057721 | 81.86608 | .4387533 | .2183740 |
| #3 | 1.627635 | .2148785 | .2067646 | 81.50434 | .4400546 | .2188564 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.440928** | **79.08570** | F **51.90319** | **20.07228** | **.5436323** | **.0945411** |
| Stddev | .002667 | .28627 | .19611 | .18325 | .0011458 | .0003146 |
| %RSD | .1850632 | .3619711 | .3778299 | .9129418 | .2107607 | .3327918 |
| #1 | 1.437849 | 79.26722 | 52.06016 | 20.26225 | .5425254 | .0941815 |
| #2 | 1.442499 | 78.75570 | 51.96605 | 20.05799 | .5435582 | .0946760 |
| #3 | 1.442436 | 79.23419 | 51.68336 | 19.89659 | .5448133 | .0947658 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **76.23043** | **.3820780** | **.5206876** | **18.90775** | **.3380799** | **.3096999** |
| Stddev | .45910 | .0040598 | .0030731 | .10695 | .0010805 | .0010222 |
| %RSD | .6022478 | 1.062556 | .5902071 | .5656387 | .3195947 | .3300588 |
| #1 | 76.00403 | .3861477 | .5192779 | 18.83609 | .3380904 | .3085736 |
| #2 | 75.92851 | .3820582 | .5185723 | 18.85647 | .3369943 | .3099575 |
| #3 | 76.75876 | .3780282 | .5242127 | 19.03068 | .3391552 | .3105687 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MS Acquired: 12/6/2024 14:55:09 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4653497 | .4325466 | F 55.92573 | F 36.62836 | F 72.29393 | .2174106 |
| Stddev | .0038427 | .0009808 | .21012 | .12127 | .14220 | .0004437 |
| %RSD | .8257714 | .2267391 | .3757104 | .3310791 | .1967032 | .2040851 |
| #1 | .4658087 | .4335165 | 55.96811 | 36.70542 | 72.29147 | .2179153 |
| #2 | .4612980 | .4325678 | 55.69766 | 36.48857 | 72.15297 | .2170818 |
| #3 | .4689422 | .4315554 | 56.11144 | 36.69108 | 72.43735 | .2172348 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4565106 |
| Stddev | .0013807 |
| %RSD | .3024481 |
| #1 | .4580901 |
| #2 | .4559081 |
| #3 | .4555335 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2223.478 | 52088.50 | 12914.43 | 1535.050 | 3171.718 |
| Stddev | 2.430 | 175.29 | 42.70 | 8.427 | 4.285 |
| %RSD | .1092733 | .3365242 | .3306575 | .5489788 | .1350934 |
| #1 | 2226.020 | 52216.52 | 12872.11 | 1537.016 | 3173.695 |
| #2 | 2221.178 | 52160.27 | 12913.69 | 1542.319 | 3174.657 |
| #3 | 2223.237 | 51888.71 | 12957.50 | 1525.813 | 3166.801 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSD Acquired: 12/6/2024 14:59:22 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9834840** | **1.634700** | **.9337711** | **2.061688** | **.5662728** | **1821.938** |
| Stddev | .0066057 | .012224 | .0023259 | .009760 | .0049661 | 1.808 |
| %RSD | .6716628 | .7477809 | .2490917 | .4733793 | .8769816 | .0992458 |
| #1 | .9766285 | 1.625328 | .9353752 | 2.051856 | .5608024 | 1824.020 |
| #2 | .9898077 | 1.648526 | .9348345 | 2.071374 | .5704973 | 1821.032 |
| #3 | .9840158 | 1.630245 | .9311035 | 2.061833 | .5675188 | 1820.761 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.603103** | **.2132781** | **.2031659** | **81.28542** | **.4322954** | **.2145249** |
| Stddev | .000884 | .0009785 | .0003146 | .18609 | .0014679 | .0005988 |
| %RSD | .0551529 | .4588065 | .1548545 | .2289289 | .3395500 | .2791318 |
| #1 | 1.602107 | .2141562 | .2034293 | 81.07059 | .4337689 | .2142218 |
| #2 | 1.603797 | .2134548 | .2032508 | 81.39684 | .4322841 | .2141383 |
| #3 | 1.603403 | .2122232 | .2028175 | 81.38882 | .4308332 | .2152147 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.426632** | **78.06051** | F **51.50607** | **19.90753** | **.5347318** | **.0937751** |
| Stddev | .004218 | .23109 | .18665 | .05097 | .0004156 | .0004749 |
| %RSD | .2956312 | .2960347 | .3623910 | .2560484 | .0777145 | .5064266 |
| #1 | 1.421770 | 77.85419 | 51.46561 | 19.84869 | .5352080 | .0939188 |
| #2 | 1.428819 | 78.01711 | 51.34296 | 19.93550 | .5345444 | .0941615 |
| #3 | 1.429307 | 78.31021 | 51.70963 | 19.93839 | .5344429 | .0932449 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **74.79274** | **.3777370** | **.5141455** | **18.56946** | **.3326062** | **.3073612** |
| Stddev | .02929 | .0005981 | .0030512 | .07691 | .0012891 | .0004506 |
| %RSD | .0391560 | .1583291 | .5934578 | .4141938 | .3875621 | .1465913 |
| #1 | 74.81105 | .3778884 | .5144723 | 18.48351 | .3333540 | .3069812 |
| #2 | 74.80821 | .3770777 | .5109439 | 18.63181 | .3333470 | .3072434 |
| #3 | 74.75896 | .3782448 | .5170201 | 18.59305 | .3311178 | .3078589 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSD Acquired: 12/6/2024 14:59:22 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4590965 | .4265046 | F 55.44110 | F 36.43178 | F 71.43584 | .2139659 |
| Stddev | .0052046 | .0015972 | .07969 | .03243 | .06666 | .0002415 |
| %RSD | 1.133653 | .3744895 | .1437379 | .0890173 | .0933172 | .1128483 |
| #1 | .4650895 | .4263062 | 55.34995 | 36.44659 | 71.46715 | .2141947 |
| #2 | .4557126 | .4250159 | 55.49759 | 36.45417 | 71.48109 | .2139893 |
| #3 | .4564874 | .4281918 | 55.47577 | 36.39459 | 71.35929 | .2137136 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4501129 |
| Stddev | .0005475 |
| %RSD | .1216431 |
| #1 | .4497326 |
| #2 | .4507405 |
| #3 | .4498657 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2240.514 | 52233.85 | 12933.23 | 1530.845 | 3208.296 |
| Stddev | 8.409 | 162.11 | 25.45 | 12.048 | 4.904 |
| %RSD | .3753001 | .3103467 | .1968004 | .7870418 | .1528501 |
| #1 | 2250.027 | 52415.41 | 12962.29 | 1540.769 | 3213.071 |
| #2 | 2237.441 | 52182.54 | 12922.50 | 1534.328 | 3208.545 |
| #3 | 2234.074 | 52103.62 | 12914.89 | 1517.439 | 3203.273 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07A Acquired: 12/6/2024 15:03:35 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9887169** | **1.645890** | **.9237275** | **2.068737** | **.5681203** | **1798.088** |
| Stddev | .0049554 | .018212 | .0031742 | .008165 | .0043883 | 9.602 |
| %RSD | .5011943 | 1.106493 | .3436316 | .3946718 | .7724244 | .5340124 |
| #1 | .9857350 | 1.656136 | .9241261 | 2.060985 | .5724514 | 1808.823 |
| #2 | .9944372 | 1.624863 | .9203728 | 2.067966 | .5636770 | 1790.318 |
| #3 | .9859785 | 1.656671 | .9266836 | 2.077259 | .5682326 | 1795.123 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.588933** | **.2112788** | **.2027700** | **80.08831** | **.4301324** | **.2140745** |
| Stddev | .005777 | .0005119 | .0009676 | .25623 | .0010241 | .0007792 |
| %RSD | .3635548 | .2422777 | .4771790 | .3199397 | .2380997 | .3639608 |
| #1 | 1.595449 | .2106930 | .2016828 | 79.87756 | .4292611 | .2131948 |
| #2 | 1.586910 | .2115030 | .2030908 | 80.01385 | .4312605 | .2146776 |
| #3 | 1.584440 | .2116403 | .2035365 | 80.37353 | .4298756 | .2143512 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.423815** | **77.09341** | F **51.00469** | **19.60221** | **.5324621** | **.0927452** |
| Stddev | .009445 | .02939 | .12365 | .08171 | .0024157 | .0004554 |
| %RSD | .6633454 | .0381230 | .2424204 | .4168368 | .4536791 | .4910802 |
| #1 | 1.413112 | 77.08265 | 50.94935 | 19.57074 | .5301755 | .0925685 |
| #2 | 1.427350 | 77.12666 | 50.91837 | 19.54092 | .5322218 | .0932625 |
| #3 | 1.430982 | 77.07090 | 51.14634 | 19.69498 | .5349889 | .0924046 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **74.42415** | **.3738165** | **.5109669** | **18.38680** | **.3294353** | **.3060248** |
| Stddev | .50156 | .0013074 | .0010696 | .07036 | .0011195 | .0016899 |
| %RSD | .6739272 | .3497297 | .2093260 | .3826474 | .3398183 | .5522218 |
| #1 | 74.99794 | .3724950 | .5121994 | 18.46596 | .3283864 | .3041503 |
| #2 | 74.20535 | .3751092 | .5102822 | 18.33141 | .3306140 | .3064925 |
| #3 | 74.06915 | .3738452 | .5104190 | 18.36302 | .3293054 | .3074317 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07A Acquired: 12/6/2024 15:03:35 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4528860 | .4211680 | F 54.88747 | F 36.50282 | F 71.39873 | .2108909 |
| Stddev | .0025540 | .0016104 | .05142 | .16345 | .33176 | .0014773 |
| %RSD | .5639288 | .3823685 | .0936754 | .4477798 | .4646584 | .7004847 |
| #1 | .4507420 | .4210787 | 54.93677 | 36.57782 | 71.13142 | .2125906 |
| #2 | .4522044 | .4196041 | 54.83417 | 36.31533 | 71.29473 | .2101651 |
| #3 | .4557116 | .4228212 | 54.89147 | 36.61532 | 71.77003 | .2099169 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4457253 |
| Stddev | .0014178 |
| %RSD | .3180957 |
| #1 | .4473625 |
| #2 | .4448974 |
| #3 | .4449162 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2226.192 | 52585.91 | 13044.99 | 1540.620 | 3188.142 |
| Stddev | 14.745 | 35.37 | 14.99 | 5.545 | 17.692 |
| %RSD | .6623589 | .0672604 | .1149331 | .3599359 | .5549333 |
| #1 | 2243.218 | 52545.30 | 13059.38 | 1535.845 | 3208.568 |
| #2 | 2217.560 | 52609.93 | 13046.15 | 1546.702 | 3177.649 |
| #3 | 2217.798 | 52602.51 | 13029.46 | 1539.314 | 3178.209 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5069-01 Acquired: 12/6/2024 15:07:50 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2278695 | .0415702 | 4.916117 | -.481662 | .0892087 | 490.7141 |
| Stddev | .0053834 | .0042918 | .011540 | .003407 | .0041861 | 2.8907 |
| %RSD | 2.362495 | 10.32419 | .2347308 | .7073088 | 4.692493 | .5890809 |
| #1 | .2340415 | .0444343 | 4.929238 | -.484810 | .0908965 | 493.8799 |
| #2 | .2241426 | .0366357 | 4.907543 | -.478045 | .0844422 | 488.2151 |
| #3 | .2254245 | .0436405 | 4.911571 | -.482132 | .0922874 | 490.0472 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 3.080622 | .0235642 | .3383709 | 375.7656 | 1.687401 | .4036299 |
| Stddev | .013572 | .0000833 | .0027715 | 1.1240 | .005139 | .0013875 |
| %RSD | .4405753 | .3535772 | .8190745 | .2991097 | .3045637 | .3437664 |
| #1 | 3.091505 | .0234680 | .3415452 | 376.6280 | 1.693191 | .4050197 |
| #2 | 3.084947 | .0236124 | .3364315 | 376.1744 | 1.683379 | .4022446 |
| #3 | 3.065414 | .0236122 | .3371360 | 374.4945 | 1.685633 | .4036254 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 15.11266 | F 1430.914 | 29.44280 | 401.5599 | .9218791 | ^ ***** |
| Stddev | .00861 | 4.487 | .05097 | .8525 | .0013124 | ----- |
| %RSD | .0569629 | .3135676 | .1731018 | .2122985 | .1423563 | ----- |
| #1 | 15.12107 | 1426.180 | 29.50145 | 401.5339 | .9230595 | ^ ----- |
| #2 | 15.10386 | 1431.458 | 29.41769 | 402.4251 | .9221119 | ^ ----- |
| #3 | 15.11304 | 1435.104 | 29.40926 | 400.7207 | .9204660 | ^ ----- |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 45.84493 | .9148686 | 22.62842 | 23.07360 | ^ ***** | .0739935 |
| Stddev | .09480 | .0019012 | .09629 | .02236 | ----- | .0011059 |
| %RSD | .2067855 | .2078069 | .4255340 | .0968976 | ----- | 1.494605 |
| #1 | 45.74035 | .9138753 | 22.51724 | 23.06057 | ^ ----- | .0727880 |
| #2 | 45.92523 | .9170607 | 22.68299 | 23.06081 | ^ ----- | .0742314 |
| #3 | 45.86922 | .9136699 | 22.68503 | 23.09941 | ^ ----- | .0749612 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5069-01 Acquired: 12/6/2024 15:07:50 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .4110711 | 6.736886 | F 34.38284 | F 24.66467 | F 95.69635 | .2740214 |
| Stddev | .0014228 | .017207 | .35537 | .17516 | .44011 | .0003337 |
| %RSD | .3461179 | .2554132 | 1.033578 | .7101456 | .4598980 | .1217617 |
| #1 | .4116029 | 6.736768 | 34.04461 | 24.86084 | 96.20027 | .2738725 |
| #2 | .4121514 | 6.754152 | 34.35073 | 24.60922 | 95.38744 | .2744036 |
| #3 | .4094590 | 6.719739 | 34.75317 | 24.52395 | 95.50134 | .2737881 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .5754523 |
| Stddev | .0093489 |
| %RSD | 1.624621 |
| #1 | .5831985 |
| #2 | .5780907 |
| #3 | .5650677 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2251.860 | 60151.19 | 15333.50 | 1559.170 | 2845.668 |
| Stddev | 4.120 | 48.15 | 40.02 | 7.435 | 4.781 |
| %RSD | .1829675 | .0800465 | .2610008 | .4768603 | .1679995 |
| #1 | 2256.127 | 60160.05 | 15304.64 | 1566.545 | 2846.193 |
| #2 | 2251.549 | 60194.30 | 15316.68 | 1559.290 | 2850.164 |
| #3 | 2247.904 | 60099.23 | 15379.19 | 1551.676 | 2840.646 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01 Acquired: 12/6/2024 15:12:41 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0507858** | **-.003067** | **.0643563** | **-.021218** | **.0003570** | **50.89126** | **.2828305** |
| Stddev | .0015994 | .002516 | .0010956 | .001528 | .0006518 | .03198 | .0005574 |
| %RSD | 3.149202 | 82.03272 | 1.702387 | 7.202989 | 182.5505 | .0628459 | .1970692 |
| #1 | .0505496 | -.001218 | .0646959 | -.022529 | .0005951 | 50.87306 | .2829880 |
| #2 | .0524902 | -.002050 | .0652418 | -.021586 | .0008563 | 50.92819 | .2832922 |
| #3 | .0493178 | -.005932 | .0631311 | -.019539 | -.000380 | 50.87252 | .2822113 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0047620** | **.0032006** | **3.727963** | **.1461329** | **.0414100** | **.0972053** | **133.2867** |
| Stddev | .0000861 | .0000910 | .018278 | .0003243 | .0002173 | .0002862 | .4069 |
| %RSD | 1.807287 | 2.844519 | .4902890 | .2219202 | .5248142 | .2944042 | .3052782 |
| #1 | .0048400 | .0033005 | 3.706860 | .1457611 | .0415724 | .0970120 | 132.9081 |
| #2 | .0046697 | .0031222 | 3.738798 | .1462800 | .0414945 | .0970698 | 133.7169 |
| #3 | .0047764 | .0031792 | 3.738230 | .1463576 | .0411631 | .0975340 | 133.2350 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.9424324** | **5.620681** | **.0498281** | **.0000317** | **.0564931** | **.2584574** | **.1745682** |
| Stddev | .0029131 | .038955 | .0001711 | .0002520 | .0021826 | .0005464 | .0005671 |
| %RSD | .3091073 | .6930657 | .3434502 | 794.6464 | 3.863482 | .2114052 | .3248693 |
| #1 | .9390722 | 5.575707 | .0500059 | -.000171 | .0583926 | .2590500 | .1741392 |
| #2 | .9442463 | 5.642442 | .0498140 | -.000047 | .0541089 | .2583486 | .1752112 |
| #3 | .9439788 | 5.643893 | .0496645 | .000314 | .0569777 | .2579737 | .1743543 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.025385** | **.0336710** | **.0047026** | **.0055027** | **.8561703** | **2.627519** | **1.376052** |
| Stddev | .020556 | .0013652 | .0003125 | .0006894 | .0021047 | .007484 | .002037 |
| %RSD | .5106701 | 4.054639 | 6.645439 | 12.52820 | .2458316 | .2848413 | .1480632 |
| #1 | 4.046923 | .0326987 | .0046963 | .0061811 | .8567263 | 2.618910 | 1.374771 |
| #2 | 4.005976 | .0352318 | .0050183 | .0048029 | .8579412 | 2.631166 | 1.374984 |
| #3 | 4.023255 | .0330825 | .0043933 | .0055240 | .8538434 | 2.632480 | 1.378402 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01 Acquired: 12/6/2024 15:12:41 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .8728901 | .0315295 | -.105167 |
| Stddev | .0042553 | .0005649 | .000425 |
| %RSD | .4874915 | 1.791658 | .4043490 |
| | | | |
| #1 | .8777177 | .0311887 | -.104714 |
| #2 | .8712689 | .0321816 | -.105558 |
| #3 | .8696838 | .0312182 | -.105228 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2598.502 | 63424.98 | 14759.97 | 1788.061 | 4141.789 |
| Stddev | 4.237 | 52.68 | 8.22 | 7.696 | 4.606 |
| %RSD | .1630722 | .0830620 | .0557120 | .4304227 | .1112039 |
| | | | | | |
| #1 | 2598.185 | 63451.54 | 14769.00 | 1793.723 | 4136.487 |
| #2 | 2602.888 | 63364.30 | 14758.00 | 1779.298 | 4144.086 |
| #3 | 2594.431 | 63459.09 | 14752.92 | 1791.164 | 4144.796 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01DUP Acquired: 12/6/2024 15:16:51 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0507437 | -.001268 | .0642109 | -.020288 | -.000008 | 50.49349 | .2831858 |
| Stddev | .0014035 | .001596 | .0006245 | .001844 | .000968 | .09357 | .0009380 |
| %RSD | 2.765883 | 125.8453 | .9725227 | 9.090687 | 12570.60 | .1853126 | .3312210 |
| #1 | .0495112 | -.000995 | .0634934 | -.018808 | -.000199 | 50.40390 | .2821214 |
| #2 | .0504486 | .000173 | .0645074 | -.019702 | -.000865 | 50.59059 | .2838914 |
| #3 | .0522713 | -.002982 | .0646319 | -.022354 | .001041 | 50.48598 | .2835445 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0048773 | .0028693 | 3.594454 | .1468110 | .0416604 | .0988098 | 133.3792 |
| Stddev | .0000514 | .0000893 | .030363 | .0005705 | .0000962 | .0008348 | .4201 |
| %RSD | 1.054650 | 3.111974 | .8447069 | .3886284 | .2309062 | .8448940 | .3149504 |
| #1 | .0049352 | .0029709 | 3.560436 | .1465236 | .0416064 | .0978472 | 132.9339 |
| #2 | .0048370 | .0028336 | 3.604116 | .1474681 | .0416034 | .0993361 | 133.4352 |
| #3 | .0048597 | .0028034 | 3.618810 | .1464412 | .0417715 | .0992460 | 133.7684 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .9465513 | 5.643571 | .0497547 | -.000658 | .0406173 | .2595200 | .1623884 |
| Stddev | .0068812 | .028126 | .0001826 | .000172 | .0050702 | .0025139 | .0001018 |
| %RSD | .7269804 | .4983778 | .3669803 | 26.13212 | 12.48292 | .9686542 | .0626826 |
| #1 | .9399339 | 5.611787 | .0495970 | -.000462 | .0355309 | .2566172 | .1625059 |
| #2 | .9460508 | 5.653682 | .0497124 | -.000783 | .0456712 | .2609722 | .1623296 |
| #3 | .9536691 | 5.665244 | .0499547 | -.000729 | .0406499 | .2609705 | .1623296 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 3.914974 | .0371467 | .0042164 | .0056888 | .8594578 | 2.622310 | 1.391769 |
| Stddev | .034477 | .0004492 | .0001122 | .0004655 | .0056806 | .016776 | .001553 |
| %RSD | .8806411 | 1.209360 | 2.661445 | 8.182897 | .6609563 | .6397576 | .1116140 |
| #1 | 3.912610 | .0370105 | .0043422 | .0051994 | .8545679 | 2.603274 | 1.392088 |
| #2 | 3.950572 | .0367814 | .0041803 | .0061260 | .8581164 | 2.634938 | 1.390081 |
| #3 | 3.881740 | .0376483 | .0041266 | .0057408 | .8656891 | 2.628718 | 1.393139 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01DUP Acquired: 12/6/2024 15:16:51 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .8620275 | .0311168 | -.105498 |
| Stddev | .0070027 | .0001525 | .000388 |
| %RSD | .8123480 | .4900715 | .3674209 |
| #1 | .8551868 | .0312668 | -.105187 |
| #2 | .8617141 | .0309619 | -.105376 |
| #3 | .8691816 | .0311215 | -.105932 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2670.418 | 64104.71 | 14716.11 | 1845.215 | 4201.201 |
| Stddev | 5.756 | 126.43 | 43.44 | 12.580 | 5.555 |
| %RSD | .2155383 | .1972256 | .2951562 | .6817504 | .1322318 |
| #1 | 2664.357 | 64012.60 | 14757.10 | 1832.227 | 4199.511 |
| #2 | 2675.809 | 64052.68 | 14720.64 | 1846.077 | 4207.404 |
| #3 | 2671.089 | 64248.85 | 14670.58 | 1857.342 | 4196.686 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01LX5 Acquired: 12/6/2024 15:21:02 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0113962 | -.000138 | .0133636 | -.006143 | -.000781 | 10.56137 | .0606100 |
| Stddev | .0031885 | .001054 | .0003626 | .001960 | .000172 | .00330 | .0005446 |
| %RSD | 27.97894 | 765.5232 | 2.713323 | 31.90907 | 22.06132 | .0312016 | .8984791 |
| #1 | .0149312 | -.000144 | .0129836 | -.003906 | -.000770 | 10.56508 | .0599830 |
| #2 | .0087373 | -.001188 | .0137058 | -.006966 | -.000615 | 10.56022 | .0609648 |
| #3 | .0105201 | .000919 | .0134016 | -.007558 | -.000959 | 10.55879 | .0608823 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0011238 | .0001760 | .7186874 | .0312823 | .0085896 | .0215374 | 27.91170 |
| Stddev | .0000889 | .0000694 | .0089631 | .0004904 | .0002009 | .0004287 | .08197 |
| %RSD | 7.910988 | 39.43672 | 1.247154 | 1.567767 | 2.338904 | 1.990466 | .2936903 |
| #1 | .0010513 | .0001568 | .7113317 | .0307572 | .0087286 | .0215671 | 27.82434 |
| #2 | .0012230 | .0002529 | .7286707 | .0317285 | .0086811 | .0219505 | 27.92384 |
| #3 | .0010971 | .0001182 | .7160599 | .0313612 | .0083593 | .0210947 | 27.98693 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2075118 | 1.222991 | .0103142 | -.000330 | .0425467 | .0544235 | .0324515 |
| Stddev | .0003042 | .014642 | .0001629 | .000181 | .0173606 | .0004118 | .0001145 |
| %RSD | .1465965 | 1.197246 | 1.579188 | 54.92495 | 40.80373 | .7566120 | .3529202 |
| #1 | .2077166 | 1.237854 | .0101359 | -.000237 | .0263686 | .0543540 | .0325774 |
| #2 | .2071622 | 1.222539 | .0103514 | -.000215 | .0403842 | .0540509 | .0324236 |
| #3 | .2076565 | 1.208580 | .0104553 | -.000539 | .0608872 | .0548656 | .0323535 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7020650 | .0052223 | .0006770 | .0000379 | .1809859 | .5241692 | .2813168 |
| Stddev | .0116264 | .0002923 | .0000596 | .0006272 | .0017752 | .0065288 | .0029921 |
| %RSD | 1.656023 | 5.597160 | 8.804077 | 1656.246 | .9808474 | 1.245547 | 1.063619 |
| #1 | .6886470 | .0049331 | .0006183 | .0002933 | .1828594 | .5178972 | .2779200 |
| #2 | .7084006 | .0052160 | .0007375 | .0004970 | .1793289 | .5236830 | .2824681 |
| #3 | .7091475 | .0055176 | .0006752 | -.000677 | .1807694 | .5309275 | .2835623 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01LX5 Acquired: 12/6/2024 15:21:02 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .1764416 | .0059048 | -.022002 |
| Stddev | .0003482 | .0003453 | .000072 |
| %RSD | .1973442 | 5.847067 | .3273257 |
| #1 | .1760674 | .0055150 | -.021921 |
| #2 | .1767561 | .0061721 | -.022059 |
| #3 | .1765015 | .0060272 | -.022025 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2703.252 | 63400.10 | 13909.74 | 1879.198 | 4453.100 |
| Stddev | 4.035 | 57.71 | 47.98 | 3.647 | 2.317 |
| %RSD | .1492701 | .0910314 | .3449078 | .1940682 | .0520409 |
| #1 | 2704.242 | 63376.20 | 13877.52 | 1875.685 | 4450.573 |
| #2 | 2706.701 | 63358.17 | 13886.82 | 1878.945 | 4455.127 |
| #3 | 2698.815 | 63465.92 | 13964.87 | 1882.965 | 4453.600 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01MS Acquired: 12/6/2024 15:25:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.8010300** | **1.874968** | **1.027130** | **1.719334** | **.3636938** | **75.23176** | **.5360764** |
| Stddev | .0017663 | .007879 | .001560 | .006017 | .0007374 | .14405 | .0022513 |
| %RSD | .2205035 | .4202272 | .1518898 | .3499447 | .2027487 | .1914721 | .4199555 |
| #1 | .7992597 | 1.874113 | 1.025374 | 1.718843 | .3635155 | 75.10844 | .5334809 |
| #2 | .8010381 | 1.867551 | 1.027661 | 1.713577 | .3630619 | 75.19674 | .5372490 |
| #3 | .8027923 | 1.883240 | 1.028356 | 1.725581 | .3645040 | 75.39008 | .5374993 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2067468** | **.2030028** | **5.076055** | **.5958219** | **.2541720** | **.4098726** | **176.3880** |
| Stddev | .0001815 | .0000646 | .006143 | .0021441 | .0001913 | .0003325 | .3088 |
| %RSD | .0877980 | .0318136 | .1210270 | .3598616 | .0752574 | .0811214 | .1750765 |
| #1 | .2067518 | .2029367 | 5.069335 | .5949848 | .2543524 | .4094987 | 176.0732 |
| #2 | .2065628 | .2030061 | 5.077450 | .5942226 | .2541924 | .4099839 | 176.4004 |
| #3 | .2069258 | .2030657 | 5.081382 | .5982583 | .2539714 | .4101351 | 176.6905 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.231623** | **9.102359** | **.5718324** | **.0717926** | **2.709548** | **.6562518** | **.4097375** |
| Stddev | .002379 | .026534 | .0005898 | .0002289 | .028932 | .0026960 | .0009103 |
| %RSD | .1931208 | .2915041 | .1031337 | .3188310 | 1.067770 | .4108121 | .2221674 |
| #1 | 1.232611 | 9.130058 | .5718037 | .0717388 | 2.676493 | .6584514 | .4093459 |
| #2 | 1.228909 | 9.077168 | .5712575 | .0720436 | 2.730265 | .6532442 | .4107781 |
| #3 | 1.233348 | 9.099850 | .5724360 | .0715954 | 2.721887 | .6570597 | .4090885 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **13.46007** | **.2713391** | **.3828193** | **.6309925** | **1.279361** | **3.924791** | **7.362907** |
| Stddev | .08806 | .0011722 | .0003691 | .0016871 | .002943 | .010315 | .019610 |
| %RSD | .6542504 | .4319964 | .0964101 | .2673700 | .2300757 | .2628185 | .2663353 |
| #1 | 13.35864 | .2700141 | .3823933 | .6295549 | 1.275992 | 3.933141 | 7.384931 |
| #2 | 13.50460 | .2722407 | .3830425 | .6305728 | 1.281438 | 3.913260 | 7.347339 |
| #3 | 13.51698 | .2717627 | .3830221 | .6328498 | 1.280652 | 3.927973 | 7.356450 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01MS Acquired: 12/6/2024 15:25:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.000426 | .2449499 | .0757049 |
| Stddev | .007241 | .0012540 | .0004623 |
| %RSD | .7237502 | .5119538 | .6106537 |
| #1 | 1.007551 | .2435564 | .0751821 |
| #2 | .993075 | .2453057 | .0760597 |
| #3 | 1.000652 | .2459876 | .0758730 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2646.259 | 63523.46 | 14203.25 | 1825.834 | 4104.180 |
| Stddev | 4.181 | 107.58 | 23.53 | 9.011 | 3.954 |
| %RSD | .1580021 | .1693523 | .1656900 | .4935371 | .0963289 |
| #1 | 2650.793 | 63640.29 | 14182.48 | 1836.223 | 4108.550 |
| #2 | 2642.554 | 63501.60 | 14228.81 | 1821.143 | 4103.139 |
| #3 | 2645.431 | 63428.49 | 14198.45 | 1820.137 | 4100.852 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01MSD Acquired: 12/6/2024 15:29:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .7906202 | 1.854203 | 1.011283 | 1.707085 | .3598908 | 74.07296 | .5243022 |
| Stddev | .0022295 | .014871 | .002702 | .003055 | .0019342 | .13299 | .0025223 |
| %RSD | .2819917 | .8020194 | .2672174 | .1789597 | .5374377 | .1795422 | .4810817 |
| #1 | .7914751 | 1.866685 | 1.008557 | 1.710609 | .3594035 | 73.92867 | .5230852 |
| #2 | .7880898 | 1.837749 | 1.011331 | 1.705449 | .3620221 | 74.19063 | .5272022 |
| #3 | .7922958 | 1.858175 | 1.013961 | 1.705197 | .3582469 | 74.09957 | .5226191 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2010445 | .2000522 | 5.018781 | .5882182 | .2503718 | .4022377 | 174.3632 |
| Stddev | .0004328 | .0005320 | .026643 | .0016948 | .0005088 | .0012824 | .4584 |
| %RSD | .2152869 | .2659192 | .5308579 | .2881277 | .2032101 | .3188165 | .2629024 |
| #1 | .2015038 | .1996594 | 5.022857 | .5870699 | .2497867 | .4030489 | 174.1850 |
| #2 | .2006443 | .1998398 | 5.043150 | .5874198 | .2506185 | .4007592 | 174.8839 |
| #3 | .2009854 | .2006576 | 4.990335 | .5901647 | .2507102 | .4029049 | 174.0206 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.196414 | 8.895204 | .5633070 | .0710162 | 2.681158 | .6424738 | .4036929 |
| Stddev | .004912 | .034840 | .0009498 | .0001253 | .012598 | .0012791 | .0013173 |
| %RSD | .4105530 | .3916696 | .1686175 | .1763940 | .4698754 | .1990953 | .3263222 |
| #1 | 1.193455 | 8.913070 | .5622250 | .0711072 | 2.669224 | .6410178 | .4049597 |
| #2 | 1.202084 | 8.917487 | .5636931 | .0710680 | 2.694329 | .6434167 | .4037888 |
| #3 | 1.193703 | 8.855055 | .5640031 | .0708733 | 2.679921 | .6429869 | .4023302 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 13.43041 | .2642312 | .3803018 | .6213081 | 1.254868 | 4.008086 | 7.281011 |
| Stddev | .05171 | .0012016 | .0002060 | .0022410 | .002710 | .028645 | .018259 |
| %RSD | .3850222 | .4547618 | .0541747 | .3606914 | .2159475 | .7146858 | .2507699 |
| #1 | 13.38939 | .2631434 | .3804677 | .6208757 | 1.253402 | 3.983993 | 7.298759 |
| #2 | 13.48850 | .2640291 | .3800712 | .6193148 | 1.257996 | 4.039759 | 7.262281 |
| #3 | 13.41335 | .2655210 | .3803666 | .6237338 | 1.253207 | 4.000507 | 7.281992 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01MSD Acquired: 12/6/2024 15:29:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .9837880 | .2402912 | .0725262 |
| Stddev | .0038941 | .0010888 | .0005085 |
| %RSD | .3958318 | .4531233 | .7010863 |
| | | | |
| #1 | .9852748 | .2392819 | .0721521 |
| #2 | .9793694 | .2414451 | .0731051 |
| #3 | .9867197 | .2401465 | .0723213 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2654.825 | 63501.98 | 14455.51 | 1822.261 | 4132.929 |
| Stddev | 5.472 | 20.10 | 26.23 | 4.108 | 1.163 |
| %RSD | .2061055 | .0316599 | .1814825 | .2254099 | .0281363 |
| | | | | | |
| #1 | 2649.247 | 63523.21 | 14437.89 | 1818.004 | 4132.049 |
| #2 | 2655.045 | 63499.50 | 14442.98 | 1822.578 | 4132.490 |
| #3 | 2660.184 | 63483.23 | 14485.66 | 1826.201 | 4134.247 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV04 Acquired: 12/6/2024 15:40:34 Type: Unk
Method: NON EPA-6010-200.7(v2506) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.871450** | **4.908309** | **4.955478** | **4.907397** | **4.784339** | **9.823094** | **9.560022** |
| Stddev | .013808 | .079963 | .005015 | .020373 | .009564 | .014129 | .056242 |
| %RSD | .2834440 | 1.629128 | .1012020 | .4151412 | .1998917 | .1438353 | .5883059 |
| #1 | 4.860221 | 4.835755 | 4.955796 | 4.886493 | 4.773891 | 9.835030 | 9.565271 |
| #2 | 4.886867 | 4.994042 | 4.960327 | 4.908505 | 4.786465 | 9.807494 | 9.501340 |
| #3 | 4.867263 | 4.895128 | 4.950312 | 4.927193 | 4.792660 | 9.826759 | 9.613456 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2496168** | **2.498755** | **24.61994** | **1.016807** | **2.477214** | **1.244085** | **4.883362** |
| Stddev | .0008411 | .000894 | .05140 | .004675 | .001491 | .000325 | .015578 |
| %RSD | .3369434 | .0357603 | .2087819 | .4597451 | .0602060 | .0260930 | .3190081 |
| #1 | .2486829 | 2.499681 | 24.57811 | 1.011772 | 2.477806 | 1.244029 | 4.865417 |
| #2 | .2498528 | 2.497898 | 24.60439 | 1.021010 | 2.475517 | 1.244434 | 4.893414 |
| #3 | .2503146 | 2.498686 | 24.67733 | 1.017639 | 2.478318 | 1.243792 | 4.891255 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.416118** | **24.75055** | **2.481885** | **1.227302** | **25.61600** | **2.480474** | **2.429368** |
| Stddev | .004623 | .06588 | .000142 | .001959 | .12535 | .003113 | .009329 |
| %RSD | .1913355 | .2661789 | .0057160 | .1595857 | .4893578 | .1255083 | .3840148 |
| #1 | 2.410818 | 24.69529 | 2.481967 | 1.225698 | 25.60984 | 2.478502 | 2.427276 |
| #2 | 2.419316 | 24.73291 | 2.481721 | 1.226722 | 25.74432 | 2.484063 | 2.421263 |
| #3 | 2.418221 | 24.82346 | 2.481966 | 1.229485 | 25.49384 | 2.478856 | 2.439566 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.46360** | **4.877799** | **4.994352** | **4.949422** | **4.818825** | **5.112867** | **4.950523** |
| Stddev | .07370 | .010619 | .009502 | .006485 | .001414 | .028716 | .018041 |
| %RSD | .3140845 | .2177057 | .1902531 | .1310352 | .0293512 | .5616387 | .3644159 |
| #1 | 23.42364 | 4.876261 | 4.983383 | 4.945620 | 4.817352 | 5.079774 | 4.938053 |
| #2 | 23.54864 | 4.868033 | 5.000055 | 4.956911 | 4.818950 | 5.131210 | 4.971209 |
| #3 | 23.41851 | 4.889103 | 4.999618 | 4.945736 | 4.820173 | 5.127617 | 4.942307 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV04 Acquired: 12/6/2024 15:40:34 Type: Unk
Method: NON EPA-6010-200.7(v2506) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV04 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.841848** | **4.649151** | **4.863035** |
| Stddev | .020232 | .016855 | .024974 |
| %RSD | .4178511 | .3625371 | .5135547 |
| #1 | 4.823163 | 4.643736 | 4.884991 |
| #2 | 4.863334 | 4.668048 | 4.835866 |
| #3 | 4.839046 | 4.635669 | 4.868249 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2460.820** | **58144.82** | **13436.07** | **1681.823** | **3913.893** |
| Stddev | 4.661 | 55.20 | 29.46 | 5.247 | 6.405 |
| %RSD | .1893928 | .0949378 | .2192607 | .3120015 | .1636509 |
| #1 | 2463.787 | 58087.02 | 13407.59 | 1676.361 | 3917.659 |
| #2 | 2463.224 | 58150.43 | 13466.42 | 1686.825 | 3917.523 |
| #3 | 2455.448 | 58196.99 | 13434.19 | 1682.282 | 3906.498 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB04 Acquired: 12/6/2024 15:44:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0007085** | **-.001006** | **-.000117** | **-.000389** | **.0028155** | **.0137595** | **-.000866** |
| Stddev | .0029937 | .001416 | .001081 | .001022 | .0014688 | .0020414 | .000247 |
| %RSD | 422.5444 | 140.7781 | 924.3303 | 262.7037 | 52.16741 | 14.83619 | 28.56138 |
| #1 | -.002748 | -.000426 | .000451 | -.000628 | .0038779 | .0142480 | -.000582 |
| #2 | .002490 | -.002620 | -.001363 | -.001271 | .0034291 | .0155122 | -.000981 |
| #3 | .002383 | .000028 | .000561 | .000731 | .0011394 | .0115181 | -.001035 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000526** | **.0001713** | **-.001087** | **.0001504** | **.0001273** | **-.000242** | **.0077896** |
| Stddev | .0000761 | .0000430 | .007101 | .0003046 | .0001894 | .000139 | .0007308 |
| %RSD | 144.8086 | 25.08057 | 653.2334 | 202.4931 | 148.8508 | 57.39199 | 9.381869 |
| #1 | .0001383 | .0002207 | .004465 | .0000678 | .0001608 | -.000126 | .0085915 |
| #2 | .0000267 | .0001426 | -.009089 | -.000104 | .0002977 | -.000204 | .0076164 |
| #3 | -.000007 | .0001506 | .001362 | .000488 | -.000077 | -.000396 | .0071610 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0005724** | **-.001006** | **.0005344** | **.0007873** | **.0507638** | **.0008439** | **-.000807** |
| Stddev | .0000974 | .002728 | .0003179 | .0000992 | .0125345 | .0007522 | .000137 |
| %RSD | 17.02349 | 271.1136 | 59.48745 | 12.59676 | 24.69173 | 89.14038 | 17.01410 |
| #1 | .0005157 | .001661 | .0006780 | .0007893 | .0365662 | .0005222 | -.000657 |
| #2 | .0006849 | -.000888 | .0001700 | .0006872 | .0554266 | .0017035 | -.000838 |
| #3 | .0005165 | -.003792 | .0007551 | .0008855 | .0602985 | .0003059 | -.000926 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.060190** | **.0053236** | **.0010499** | **-.000830** | **.0013275** | **.0025687** | **-.002643** |
| Stddev | .001252 | .0002836 | .0002587 | .000698 | .0001246 | .0034289 | .000625 |
| %RSD | 2.080201 | 5.327156 | 24.63653 | 84.07984 | 9.382676 | 133.4920 | 23.63494 |
| #1 | -.058930 | .0054273 | .0012691 | -.000437 | .0012099 | .0036280 | -.001997 |
| #2 | -.060204 | .0055407 | .0007646 | -.000418 | .0013147 | -.001265 | -.003244 |
| #3 | -.061434 | .0050027 | .0011160 | -.001636 | .0014580 | .005343 | -.002689 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB04 Acquired: 12/6/2024 15:44:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB04 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.003846 | -.000125 | .0006486 |
| Stddev | .001448 | .000115 | .0001072 |
| %RSD | 37.66146 | 92.01750 | 16.52099 |
| #1 | -.004755 | -.000191 | .0007380 |
| #2 | -.002175 | .000008 | .0006779 |
| #3 | -.004607 | -.000190 | .0005298 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2624.178 | 62209.93 | 13624.71 | 1811.855 | 4525.391 |
| Stddev | 3.549 | 94.17 | 5.48 | 4.530 | 5.429 |
| %RSD | .1352427 | .1513690 | .0402430 | .2500282 | .1199579 |
| #1 | 2620.099 | 62168.06 | 13622.83 | 1806.802 | 4522.367 |
| #2 | 2626.555 | 62143.96 | 13620.41 | 1813.207 | 4531.658 |
| #3 | 2625.881 | 62317.77 | 13630.88 | 1815.555 | 4522.147 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01A Acquired: 12/6/2024 15:48:36 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .8020518 | 1.870463 | 1.022877 | 1.730337 | .3665896 | 74.13253 | .5350920 |
| Stddev | .0030644 | .001542 | .000719 | .002561 | .0009555 | .16079 | .0033836 |
| %RSD | .3820651 | .0824304 | .0702595 | .1479982 | .2606485 | .2168934 | .6323414 |
| #1 | .8040639 | 1.870924 | 1.022262 | 1.732627 | .3676799 | 74.02354 | .5326260 |
| #2 | .7985251 | 1.871722 | 1.023667 | 1.727572 | .3658981 | 74.05685 | .5337006 |
| #3 | .8035665 | 1.868744 | 1.022702 | 1.730812 | .3661908 | 74.31719 | .5389495 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .1997755 | .2019722 | 5.112447 | .5859793 | .2535028 | .4046543 | 176.8169 |
| Stddev | .0006813 | .0001000 | .019788 | .0026249 | .0003411 | .0021837 | 1.0668 |
| %RSD | .3410226 | .0494854 | .3870476 | .4479493 | .1345546 | .5396568 | .6033317 |
| #1 | .1993740 | .2018568 | 5.098910 | .5843049 | .2534991 | .4071339 | 175.6543 |
| #2 | .1993903 | .2020262 | 5.135156 | .5846284 | .2538457 | .4030177 | 177.0458 |
| #3 | .2005621 | .2020334 | 5.103275 | .5890045 | .2531635 | .4038112 | 177.7507 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.210812 | 8.842035 | .5696116 | .0723043 | 2.750030 | .6432086 | .4068880 |
| Stddev | .007403 | .036832 | .0007598 | .0002823 | .018828 | .0050949 | .0015795 |
| %RSD | .6113682 | .4165516 | .1333952 | .3903901 | .6846482 | .7921096 | .3881796 |
| #1 | 1.202294 | 8.807098 | .5687571 | .0720649 | 2.745478 | .6377830 | .4073573 |
| #2 | 1.214452 | 8.880506 | .5702113 | .0722324 | 2.733896 | .6439515 | .4081796 |
| #3 | 1.215689 | 8.838502 | .5698664 | .0726156 | 2.770717 | .6478913 | .4051270 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 13.75183 | .2692970 | .3821765 | .6299672 | 1.276936 | 4.259813 | 7.325275 |
| Stddev | .06514 | .0033557 | .0013063 | .0018915 | .006814 | .007213 | .013534 |
| %RSD | .4736755 | 1.246115 | .3418071 | .3002583 | .5336522 | .1693189 | .1847527 |
| #1 | 13.74265 | .2656811 | .3834147 | .6278163 | 1.269314 | 4.251533 | 7.326643 |
| #2 | 13.69177 | .2698986 | .3808114 | .6307141 | 1.279054 | 4.264730 | 7.311109 |
| #3 | 13.82108 | .2723112 | .3823033 | .6313713 | 1.282440 | 4.263176 | 7.338072 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5076-01A Acquired: 12/6/2024 15:48:36 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.000223 | .2442233 | .0740212 |
| Stddev | .007765 | .0014626 | .0006438 |
| %RSD | .7762864 | .5988917 | .8697237 |
| #1 | 1.009174 | .2436869 | .0740608 |
| #2 | .996185 | .2431046 | .0733585 |
| #3 | .995309 | .2458784 | .0746443 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2635.256 | 63477.57 | 14526.08 | 1834.856 | 4091.017 |
| Stddev | 10.365 | 24.34 | 22.51 | 6.694 | 6.015 |
| %RSD | .3933367 | .0383434 | .1549380 | .3648414 | .1470279 |
| #1 | 2624.787 | 63490.66 | 14548.43 | 1829.605 | 4085.332 |
| #2 | 2645.515 | 63492.56 | 14503.42 | 1832.568 | 4097.315 |
| #3 | 2635.467 | 63449.49 | 14526.39 | 1842.394 | 4090.405 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5095-01 Acquired: 12/6/2024 15:52:36 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0660730** | **-.005892** | **.2627390** | **-.072798** | **-.001082** | **149.6222** |
| Stddev | .0012334 | .004945 | .0047931 | .001194 | .002142 | .3302 |
| %RSD | 1.866709 | 83.92975 | 1.824299 | 1.640166 | 197.9538 | .2206814 |
| #1 | .0663880 | -.000182 | .2578816 | -.073676 | -.001959 | 149.2412 |
| #2 | .0647126 | -.008719 | .2628701 | -.073279 | .001359 | 149.7992 |
| #3 | .0671183 | -.008775 | .2674652 | -.071439 | -.002647 | 149.8260 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.658759** | **.0173459** | **.0372384** | **94.57198** | **.3467686** | **.2226975** |
| Stddev | .004250 | .0000055 | .0003843 | .32576 | .0014078 | .0003848 |
| %RSD | .1598307 | .0314838 | 1.032091 | .3444612 | .4059880 | .1728092 |
| #1 | 2.654304 | .0173520 | .0367953 | 94.79658 | .3483914 | .2224285 |
| #2 | 2.659205 | .0173443 | .0374818 | 94.72101 | .3458736 | .2225257 |
| #3 | 2.662768 | .0173415 | .0374381 | 94.19836 | .3460409 | .2231383 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2669257** | **361.2345** | **8.616108** | **92.72572** | **.4807973** | **-.001713** |
| Stddev | .0005631 | 1.8561 | .028363 | .23571 | .0012002 | .000732 |
| %RSD | .2109409 | .5138285 | .3291902 | .2542064 | .2496289 | 42.73480 |
| #1 | .2674051 | 361.0519 | 8.611316 | 92.79820 | .4800094 | -.002412 |
| #2 | .2670663 | 359.4765 | 8.646562 | 92.91668 | .4802039 | -.001774 |
| #3 | .2663057 | 363.1752 | 8.590446 | 92.46228 | .4821786 | -.000952 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **13.67135** | **.4192963** | **.9273600** | **34.09031** | **.1608996** | **.0020068** |
| Stddev | .02935 | .0005977 | .0017148 | .01276 | .0028890 | .0002217 |
| %RSD | .2146683 | .1425474 | .1849089 | .0374422 | 1.795518 | 11.04531 |
| #1 | 13.63852 | .4188758 | .9293099 | 34.07757 | .1603855 | .0019587 |
| #2 | 13.69505 | .4190325 | .9266831 | 34.10310 | .1583021 | .0018132 |
| #3 | 13.68047 | .4199805 | .9260870 | 34.09027 | .1640111 | .0022486 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5095-01 Acquired: 12/6/2024 15:52:36 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0099545 | 3.664020 | 1.751450 | F 10.67311 | .5864354 | .3808473 |
| Stddev | .0006672 | .004621 | .015485 | .03081 | .0016600 | .0011956 |
| %RSD | 6.702644 | .1261156 | .8841344 | .2886977 | .2830631 | .3139410 |
| #1 | .0100319 | 3.658762 | 1.768904 | 10.63841 | .5875853 | .3794667 |
| #2 | .0092519 | 3.667437 | 1.739362 | 10.69726 | .5845323 | .3815344 |
| #3 | .0105796 | 3.665860 | 1.746083 | 10.68367 | .5871885 | .3815408 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.055206 |
| Stddev | .001970 |
| %RSD | 3.567757 |
| #1 | -.055965 |
| #2 | -.052970 |
| #3 | -.056683 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2931.115 | 71957.98 | 17297.47 | 2043.715 | 3557.422 |
| Stddev | 12.689 | 104.54 | 13.24 | 4.330 | 13.012 |
| %RSD | .4329025 | .1452760 | .0765417 | .2118914 | .3657729 |
| #1 | 2934.813 | 71849.11 | 17292.13 | 2040.032 | 3563.737 |
| #2 | 2941.543 | 71967.26 | 17287.74 | 2048.485 | 3566.072 |
| #3 | 2916.987 | 72057.56 | 17312.55 | 2042.626 | 3542.458 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5096-01 Acquired: 12/6/2024 15:56:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3334467 | .0257821 | 3.182391 | -.136423 | .0141929 | 174.0356 |
| Stddev | .0018470 | .0013860 | .003830 | .004446 | .0005661 | .3607 |
| %RSD | .5539154 | 5.375768 | .1203635 | 3.258804 | 3.988831 | .2072796 |
| #1 | .3344588 | .0264667 | 3.183514 | -.141510 | .0137448 | 173.8475 |
| #2 | .3313148 | .0241870 | 3.178125 | -.133286 | .0140047 | 174.4515 |
| #3 | .3345664 | .0266926 | 3.185535 | -.134472 | .0148292 | 173.8077 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.477616 | .0196597 | .0808840 | 49.93919 | .9431221 | .2978337 |
| Stddev | .006696 | .0000585 | .0007975 | .13694 | .0018145 | .0012776 |
| %RSD | .2702502 | .2977369 | .9860308 | .2742105 | .1923972 | .4289570 |
| #1 | 2.469885 | .0196339 | .0817391 | 49.99503 | .9436542 | .2970339 |
| #2 | 2.481407 | .0197267 | .0801604 | 50.03938 | .9411010 | .2971600 |
| #3 | 2.481556 | .0196184 | .0807525 | 49.78315 | .9446111 | .2993071 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.074847 | 664.5556 | 11.08320 | 92.42676 | .6398744 | -.007650 |
| Stddev | .006315 | 4.7411 | .02292 | .29550 | .0006705 | .000289 |
| %RSD | .5875577 | .7134213 | .2067653 | .3197131 | .1047877 | 3.780002 |
| #1 | 1.081969 | 659.3638 | 11.06273 | 92.59526 | .6397015 | -.007928 |
| #2 | 1.069928 | 668.6555 | 11.10795 | 92.59947 | .6393072 | -.007351 |
| #3 | 1.072645 | 665.6475 | 11.07892 | 92.08556 | .6406144 | -.007671 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 13.42369 | .6321748 | 2.389870 | 28.20516 | .1468947 | .0167943 |
| Stddev | .07622 | .0020205 | .004076 | .14708 | .0065342 | .0001235 |
| %RSD | .5678140 | .3196124 | .1705504 | .5214532 | 4.448192 | .7356192 |
| #1 | 13.34292 | .6300870 | 2.385168 | 28.03734 | .1396743 | .0168165 |
| #2 | 13.49436 | .6341206 | 2.392405 | 28.31161 | .1486090 | .0166611 |
| #3 | 13.43379 | .6323166 | 2.392036 | 28.26654 | .1524008 | .0169052 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5096-01 Acquired: 12/6/2024 15:56:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2129698 | 3.414836 | 2.220070 | F 10.93390 | 1.761453 | .5559496 |
| Stddev | .0013352 | .006160 | .018741 | .06572 | .012349 | .0011714 |
| %RSD | .6269271 | .1804000 | .8441769 | .6010566 | .7010508 | .2106940 |
| #1 | .2119140 | 3.411570 | 2.199278 | 10.86564 | 1.756798 | .5546541 |
| #2 | .2144707 | 3.421942 | 2.225273 | 10.93931 | 1.752108 | .5569339 |
| #3 | .2125248 | 3.410996 | 2.235661 | 10.99674 | 1.775452 | .5562609 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.362510 |
| Stddev | .004209 |
| %RSD | 1.161013 |
| #1 | -.357891 |
| #2 | -.366129 |
| #3 | -.363510 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2695.737 | 67172.09 | 16081.91 | 1892.834 | 3559.041 |
| Stddev | 3.546 | 224.02 | 6.45 | 7.891 | 2.214 |
| %RSD | .1315443 | .3335006 | .0401139 | .4168657 | .0622133 |
| #1 | 2691.981 | 67429.88 | 16074.95 | 1901.889 | 3557.217 |
| #2 | 2696.202 | 67024.64 | 16083.10 | 1887.433 | 3561.504 |
| #3 | 2699.027 | 67061.76 | 16087.69 | 1889.180 | 3558.401 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5096-05 Acquired: 12/6/2024 16:01:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0620407 | -.004251 | 2.160962 | -.062713 | .0026591 | 143.4972 |
| Stddev | .0016048 | .000539 | .006908 | .000994 | .0022106 | .0618 |
| %RSD | 2.586715 | 12.68000 | .3196883 | 1.585728 | 83.13179 | .0430369 |
| #1 | .0622794 | -.004862 | 2.153853 | -.063741 | .0002462 | 143.5644 |
| #2 | .0635129 | -.003844 | 2.161383 | -.062641 | .0031444 | 143.4430 |
| #3 | .0603300 | -.004046 | 2.167650 | -.061756 | .0045867 | 143.4841 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.153693 | .0138794 | .0326939 | 60.63651 | .3272727 | .2236688 |
| Stddev | .003892 | .0000978 | .0003587 | .25225 | .0008524 | .0006305 |
| %RSD | .1807280 | .7043662 | 1.097275 | .4160026 | .2604683 | .2818796 |
| #1 | 2.158059 | .0138513 | .0328335 | 60.82144 | .3275272 | .2231480 |
| #2 | 2.150586 | .0137987 | .0322864 | 60.73893 | .3279690 | .2234888 |
| #3 | 2.152436 | .0139881 | .0329619 | 60.34916 | .3263220 | .2243697 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3938216 | 323.1945 | 7.079960 | 70.96304 | .4195053 | -.001254 |
| Stddev | .0010677 | 1.2020 | .022607 | .28940 | .0015268 | .000469 |
| %RSD | .2711072 | .3719076 | .3193100 | .4078240 | .3639433 | 37.40994 |
| #1 | .3946122 | 322.3243 | 7.096419 | 71.14843 | .4190653 | -.001476 |
| #2 | .3926071 | 322.6930 | 7.089277 | 71.11113 | .4182468 | -.001570 |
| #3 | .3942456 | 324.5660 | 7.054183 | 70.62956 | .4212037 | -.000715 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.417955 | .4529929 | 1.330121 | 17.53829 | .1312888 | .0081116 |
| Stddev | .003064 | .0001580 | .002359 | .01124 | .0022438 | .0000801 |
| %RSD | .0413094 | .0348818 | .1773632 | .0640671 | 1.709036 | .9880386 |
| #1 | 7.421357 | .4531073 | 1.332437 | 17.55125 | .1293760 | .0081698 |
| #2 | 7.417099 | .4528126 | 1.330205 | 17.53120 | .1307318 | .0080202 |
| #3 | 7.415411 | .4530588 | 1.327721 | 17.53243 | .1337587 | .0081450 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5096-05 Acquired: 12/6/2024 16:01:18 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0331104 | 2.656104 | 2.525707 | F 10.22652 | 1.391039 | .3901387 |
| Stddev | .0003504 | .004371 | .010587 | .04630 | .000655 | .0008372 |
| %RSD | 1.058335 | .1645630 | .4191529 | .4527107 | .0471144 | .2145976 |
| #1 | .0335033 | 2.660889 | 2.513701 | 10.25249 | 1.391127 | .3910301 |
| #2 | .0328303 | 2.655102 | 2.529719 | 10.17307 | 1.390344 | .3893689 |
| #3 | .0329975 | 2.652322 | 2.533702 | 10.25400 | 1.391645 | .3900170 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.062073 |
| Stddev | .001678 |
| %RSD | 2.703035 |
| #1 | -.060694 |
| #2 | -.061585 |
| #3 | -.063941 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2882.417 | 70655.40 | 16956.12 | 2011.333 | 3662.073 |
| Stddev | 5.292 | 95.62 | 36.99 | 5.324 | 5.066 |
| %RSD | .1835992 | .1353333 | .2181607 | .2646768 | .1383336 |
| #1 | 2877.364 | 70744.06 | 16922.52 | 2016.948 | 3663.909 |
| #2 | 2887.919 | 70668.04 | 16950.08 | 2006.359 | 3665.965 |
| #3 | 2881.967 | 70554.08 | 16995.76 | 2010.692 | 3656.345 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5098-01 Acquired: 12/6/2024 16:05:31 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0410071 | .0014718 | .1284644 | -.028022 | -.000721 | 89.51540 | .3671863 |
| Stddev | .0013509 | .0009713 | .0002879 | .002856 | .001912 | .02819 | .0004858 |
| %RSD | 3.294176 | 65.99429 | .2241329 | 10.19226 | 265.2137 | .0314917 | .1323028 |
| #1 | .0398995 | .0013657 | .1283057 | -.030460 | -.002927 | 89.51689 | .3677451 |
| #2 | .0406097 | .0024917 | .1287968 | -.024880 | .000459 | 89.48649 | .3669500 |
| #3 | .0425121 | .0005579 | .1282907 | -.028726 | .000305 | 89.54282 | .3668639 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0062853 | .0066091 | 20.40521 | .1423034 | .0764441 | 1.099514 | 169.6166 |
| Stddev | .0000078 | .0002468 | .11223 | .0008991 | .0007320 | .010800 | .7290 |
| %RSD | .1244491 | 3.734338 | .5500023 | .6318058 | .9575680 | .9822286 | .4297681 |
| #1 | .0062885 | .0068103 | 20.42549 | .1426626 | .0768206 | 1.103647 | 169.5041 |
| #2 | .0062909 | .0066833 | 20.50592 | .1429674 | .0769113 | 1.107637 | 170.3952 |
| #3 | .0062763 | .0063337 | 20.28423 | .1412803 | .0756005 | 1.087258 | 168.9503 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 3.283766 | 34.75509 | .1592855 | .0005509 | 1.986836 | .2228875 | .4428602 |
| Stddev | .019755 | .23705 | .0013058 | .0003745 | .006841 | .0014155 | .0016529 |
| %RSD | .6016078 | .6820515 | .8198065 | 67.97541 | .3443037 | .6350862 | .3732260 |
| #1 | 3.296776 | 34.82687 | .1596044 | .0001686 | 1.991408 | .2241872 | .4409808 |
| #2 | 3.293488 | 34.94796 | .1604024 | .0005672 | 1.978972 | .2230960 | .4435120 |
| #3 | 3.261033 | 34.49045 | .1578498 | .0009170 | 1.990129 | .2213793 | .4440878 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 6.671627 | .0725532 | .0010955 | .0057220 | 1.194843 | 3.721503 | 3.124033 |
| Stddev | .022416 | .0006933 | .0002815 | .0009396 | .002812 | .017161 | .011817 |
| %RSD | .3359941 | .9556164 | 25.69956 | 16.42111 | .2353792 | .4611188 | .3782451 |
| #1 | 6.659607 | .0717760 | .0012853 | .0066456 | 1.195801 | 3.740850 | 3.121194 |
| #2 | 6.657784 | .0727752 | .0012291 | .0057535 | 1.197052 | 3.708122 | 3.137010 |
| #3 | 6.697490 | .0731083 | .0007720 | .0047671 | 1.191677 | 3.715536 | 3.113894 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5098-01 Acquired: 12/6/2024 16:05:31 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.286419 | .1810609 | -.066442 |
| Stddev | .009302 | .0010719 | .000859 |
| %RSD | .7230791 | .5920155 | 1.293298 |
| #1 | 1.295906 | .1808529 | -.066116 |
| #2 | 1.286038 | .1801082 | -.067417 |
| #3 | 1.277314 | .1822216 | -.065794 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2645.473 | 64025.50 | 15013.15 | 1809.300 | 3963.468 |
| Stddev | 22.798 | 92.42 | 59.70 | 10.037 | 31.098 |
| %RSD | .8617616 | .1443475 | .3976785 | .5547558 | .7846216 |
| #1 | 2632.207 | 64132.21 | 14980.28 | 1819.299 | 3946.303 |
| #2 | 2632.415 | 63972.27 | 14977.11 | 1809.376 | 3944.735 |
| #3 | 2671.797 | 63972.01 | 15082.07 | 1799.225 | 3999.366 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5100-01 Acquired: 12/6/2024 16:09:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0423989 | -.008881 | .3739336 | -.035465 | -.000573 | 119.2298 | .5110811 |
| Stddev | .0013573 | .002344 | .0014204 | .000753 | .000890 | .1821 | .0020378 |
| %RSD | 3.201283 | 26.39202 | .3798654 | 2.123525 | 155.2002 | .1527136 | .3987170 |
| #1 | .0421225 | -.011164 | .3729176 | -.035044 | .000451 | 119.0237 | .5097936 |
| #2 | .0412010 | -.006480 | .3733264 | -.035016 | -.001156 | 119.2969 | .5134305 |
| #3 | .0438731 | -.009000 | .3755567 | -.036335 | -.001014 | 119.3688 | .5100193 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0078962 | .0135178 | 90.60498 | .1727415 | .0866135 | .1699619 | 201.9608 |
| Stddev | .0001989 | .0002097 | .27375 | .0006403 | .0000626 | .0023599 | .8663 |
| %RSD | 2.518571 | 1.550965 | .3021324 | .3706879 | .0723110 | 1.388464 | .4289325 |
| #1 | .0079198 | .0133006 | 90.77660 | .1732164 | .0866440 | .1687998 | 202.7011 |
| #2 | .0076865 | .0135338 | 90.74907 | .1729947 | .0865414 | .1684084 | 202.1733 |
| #3 | .0080821 | .0137190 | 90.28929 | .1720132 | .0866550 | .1726774 | 201.0081 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 3.636478 | 50.70888 | .1623657 | -.001193 | 4.979631 | .3097306 | .6320704 |
| Stddev | .016519 | .18381 | .0006449 | .000264 | .021352 | .0023935 | .0019098 |
| %RSD | .4542666 | .3624835 | .3971800 | 22.08468 | .4287840 | .7727544 | .3021506 |
| #1 | 3.636395 | 50.89215 | .1623259 | -.001395 | 4.992742 | .3077539 | .6338683 |
| #2 | 3.653038 | 50.70996 | .1630295 | -.000895 | 4.991158 | .3123917 | .6300656 |
| #3 | 3.620000 | 50.52454 | .1617416 | -.001290 | 4.954993 | .3090461 | .6322774 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 6.455824 | .0687989 | .0022588 | .0155317 | 2.655596 | 5.512631 | 5.764023 |
| Stddev | .015662 | .0021767 | .0002232 | .0011498 | .006211 | .024593 | .023525 |
| %RSD | .2426082 | 3.163799 | 9.881585 | 7.403115 | .2338772 | .4461123 | .4081275 |
| #1 | 6.448702 | .0712377 | .0021028 | .0154576 | 2.657132 | 5.534483 | 5.738287 |
| #2 | 6.473782 | .0681059 | .0021592 | .0144207 | 2.660896 | 5.517410 | 5.769364 |
| #3 | 6.444989 | .0670532 | .0025145 | .0167168 | 2.648762 | 5.485999 | 5.784418 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5100-01 Acquired: 12/6/2024 16:09:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 1.357278 | .0953579 | .0179721 |
| Stddev | .004953 | .0001887 | .0009793 |
| %RSD | .3649587 | .1979177 | 5.448875 |
| #1 | 1.353039 | .0954206 | .0168528 |
| #2 | 1.356070 | .0955073 | .0183925 |
| #3 | 1.362723 | .0951458 | .0186710 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2801.360 | 66889.03 | 15773.89 | 1923.082 | 3822.568 |
| Stddev | 3.373 | 125.43 | 31.78 | 10.279 | 2.077 |
| %RSD | .1203914 | .1875155 | .2014813 | .5345144 | .0543341 |
| #1 | 2799.044 | 66774.57 | 15795.89 | 1916.170 | 3821.116 |
| #2 | 2805.229 | 66869.40 | 15737.45 | 1918.181 | 3821.640 |
| #3 | 2799.807 | 67023.12 | 15788.33 | 1934.894 | 3824.947 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5105-01 Acquired: 12/6/2024 16:13:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.511848** | **.0225062** | **.5971194** | **-.151098** | **.0158662** | **156.4332** |
| Stddev | .003021 | .0008476 | .0026456 | .000276 | .0011747 | .4303 |
| %RSD | .1998128 | 3.766130 | .4430520 | .1824867 | 7.403468 | .2750946 |
| #1 | 1.508370 | .0227976 | .5972882 | -.150926 | .0169454 | 156.4469 |
| #2 | 1.513360 | .0215514 | .5996764 | -.150952 | .0146151 | 155.9962 |
| #3 | 1.513815 | .0231697 | .5943934 | -.151416 | .0160381 | 156.8566 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.126220** | **.0311318** | **.0853952** | **190.3259** | **.4556571** | **.4811361** |
| Stddev | .002456 | .0002891 | .0009224 | .1193 | .0003325 | .0009713 |
| %RSD | .2180405 | .9284716 | 1.080174 | .0626840 | .0729805 | .2018844 |
| #1 | 1.123951 | .0308003 | .0843947 | 190.4350 | .4553481 | .4812146 |
| #2 | 1.128828 | .0313307 | .0862119 | 190.1985 | .4560090 | .4801279 |
| #3 | 1.125882 | .0312646 | .0855788 | 190.3441 | .4556141 | .4820658 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.5985412** | **654.8583** | **10.76360** | **118.4091** | **.4996559** | **-.017597** |
| Stddev | .0033581 | 3.2793 | .00946 | .2888 | .0014087 | .000719 |
| %RSD | .5610532 | .5007684 | .0878649 | .2439138 | .2819381 | 4.088711 |
| #1 | .5948011 | 657.9058 | 10.76018 | 118.2485 | .5006313 | -.016869 |
| #2 | .6012979 | 651.3882 | 10.77429 | 118.2364 | .4980409 | -.018308 |
| #3 | .5995245 | 655.2811 | 10.75633 | 118.7426 | .5002956 | -.017615 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.127734** | **.5224558** | **1.670848** | **16.30853** | **.1501219** | **.0065950** |
| Stddev | .001838 | .0015267 | .005610 | .02837 | .0060344 | .0001239 |
| %RSD | .1629470 | .2922198 | .3357444 | .1739771 | 4.019634 | 1.879087 |
| #1 | 1.129571 | .5217964 | 1.677313 | 16.33651 | .1569478 | .0065568 |
| #2 | 1.127736 | .5213696 | 1.667966 | 16.30932 | .1454972 | .0067335 |
| #3 | 1.125895 | .5242014 | 1.667266 | 16.27978 | .1479207 | .0064946 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5105-01 Acquired: 12/6/2024 16:13:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0363836 | 3.249689 | 2.462031 | F 10.43597 | 1.163072 | .0987647 |
| Stddev | .0014614 | .007062 | .002134 | .03155 | .010940 | .0006340 |
| %RSD | 4.016739 | .2173098 | .0866690 | .3023276 | .9406491 | .6419160 |
| #1 | .0358083 | 3.241692 | 2.464480 | 10.42127 | 1.163941 | .0981751 |
| #2 | .0380452 | 3.255070 | 2.460567 | 10.41445 | 1.151722 | .0986839 |
| #3 | .0352975 | 3.252304 | 2.461047 | 10.47219 | 1.173551 | .0994353 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.280948 |
| Stddev | .004007 |
| %RSD | 1.426194 |
| #1 | -.284873 |
| #2 | -.276864 |
| #3 | -.281107 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2936.658 | 72883.78 | 17194.56 | 2069.041 | 3517.950 |
| Stddev | 5.547 | 123.58 | 22.45 | 14.619 | 5.463 |
| %RSD | .1888769 | .1695541 | .1305884 | .7065459 | .1552792 |
| #1 | 2942.974 | 72744.30 | 17211.48 | 2052.290 | 3524.113 |
| #2 | 2932.581 | 72979.60 | 17203.11 | 2075.608 | 3516.032 |
| #3 | 2934.419 | 72927.44 | 17169.08 | 2079.224 | 3513.706 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5108-01 Acquired: 12/6/2024 16:17:59 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0232476** | **-.144684** | **.0715845** | **-.151204** | **-.001825** | **397.4076** |
| Stddev | .0024535 | .004630 | .0028336 | .001477 | .001757 | 2.6719 |
| %RSD | 10.55396 | 3.199892 | 3.958416 | .9768888 | 96.28363 | .6723226 |
| #1 | .0259266 | -.145910 | .0686989 | -.151914 | -.003383 | 394.6942 |
| #2 | .0227063 | -.148577 | .0716915 | -.149506 | .000080 | 397.4926 |
| #3 | .0211099 | -.139565 | .0743631 | -.152193 | -.002173 | 400.0359 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2800928** | **.0123863** | **.0989660** | **308.2720** | **.3027911** | **.5597849** |
| Stddev | .0003304 | .0000490 | .0002762 | 1.0682 | .0011193 | .0010702 |
| %RSD | .1179790 | .3958623 | .2790740 | .3465097 | .3696428 | .1911835 |
| #1 | .2797714 | .0124353 | .0987396 | 307.0582 | .3015240 | .5590264 |
| #2 | .2800754 | .0123863 | .0988846 | 309.0689 | .3032041 | .5593192 |
| #3 | .2804316 | .0123372 | .0992737 | 308.6890 | .3036451 | .5610090 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1.111464** | **628.0008** | **6.502136** | **327.6811** | **.8785334** | **-.006263** |
| Stddev | .005522 | .7797 | .027083 | .9096 | .0017905 | .001059 |
| %RSD | .4967979 | .1241536 | .4165278 | .2775863 | .2038032 | 16.91279 |
| #1 | 1.110052 | 627.9221 | 6.471502 | 326.6629 | .8767384 | -.005055 |
| #2 | 1.117554 | 627.2634 | 6.522901 | 328.4135 | .8785427 | -.007036 |
| #3 | 1.106784 | 628.8168 | 6.512005 | 327.9669 | .8803193 | -.006697 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **8.305046** | **1.655825** | **.8179886** | **.7307708** | **.5133600** | **-.005041** |
| Stddev | .018668 | .003258 | .0004857 | .0036873 | .0047393 | .000479 |
| %RSD | .2247772 | .1967719 | .0593761 | .5045761 | .9231915 | 9.491809 |
| #1 | 8.321939 | 1.652370 | .8174356 | .7266065 | .5093181 | -.005529 |
| #2 | 8.285004 | 1.658842 | .8183459 | .7320849 | .5121859 | -.004572 |
| #3 | 8.308194 | 1.656263 | .8181842 | .7336211 | .5185759 | -.005023 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5108-01 Acquired: 12/6/2024 16:17:59 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.028593 | F 34.64821 | 1.594498 | F 10.06334 | 5.372772 | .2159755 |
| Stddev | .001877 | .07118 | .005285 | .01217 | .023076 | .0008119 |
| %RSD | 6.564271 | .2054280 | .3314612 | .1209141 | .4295007 | .3759029 |
| #1 | -.026449 | 34.57695 | 1.589659 | 10.07024 | 5.347910 | .2156656 |
| #2 | -.029938 | 34.71931 | 1.593698 | 10.04929 | 5.376902 | .2153643 |
| #3 | -.029391 | 34.64836 | 1.600138 | 10.07049 | 5.393505 | .2168967 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | -.246495 |
| Stddev | .000471 |
| %RSD | .1908798 |
| #1 | -.246858 |
| #2 | -.245963 |
| #3 | -.246663 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2684.198 | 67414.40 | 16795.77 | 1858.972 | 3159.876 |
| Stddev | 7.646 | 71.05 | 34.90 | 5.074 | 5.890 |
| %RSD | .2848387 | .1053945 | .2078125 | .2729661 | .1864143 |
| #1 | 2675.377 | 67362.67 | 16834.75 | 1855.363 | 3155.023 |
| #2 | 2688.297 | 67495.41 | 16785.13 | 1864.774 | 3166.429 |
| #3 | 2688.920 | 67385.12 | 16767.42 | 1856.779 | 3158.174 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LR1 Acquired: 12/6/2024 16:25:34 Type: Unk
Method: NON EPA-6010-200.7(v2503) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0422990** | **-.022119** | **-.013169** | **-.235352** | **-.008285** | **1852.242** | **.0135875** |
| Stddev | .0120978 | .006193 | .006950 | .007612 | .002099 | 6.231 | .0001215 |
| %RSD | 28.60062 | 27.99799 | 52.77547 | 3.234438 | 25.33923 | .3364232 | .8945169 |
| #1 | .0301180 | -.029208 | -.020690 | -.236433 | -.008236 | 1849.245 | .0134488 |
| #2 | .0424672 | -.019390 | -.006983 | -.227257 | -.006211 | 1848.075 | .0136752 |
| #3 | .0543117 | -.017759 | -.011835 | -.242366 | -.010409 | 1859.405 | .0136385 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0097751** | **.1278610** | **1641.661** | **-.001590** | **.0467936** | **.3264891** | **988.9050** |
| Stddev | .0000915 | .0020134 | 3.913 | .000354 | .0008362 | .0091202 | 8.7918 |
| %RSD | .9359202 | 1.574694 | .2383632 | 22.27388 | 1.787086 | 2.793425 | .8890433 |
| #1 | .0097176 | .1256245 | 1645.931 | -.001783 | .0459436 | .3160220 | 998.6702 |
| #2 | .0097271 | .1295292 | 1640.806 | -.001182 | .0476154 | .3327264 | 981.6190 |
| #3 | .0098806 | .1284294 | 1638.246 | -.001807 | .0468219 | .3307190 | 986.4259 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.109808** | **1693.142** | **.0166376** | **-.043808** | **1831.461** | **.0616388** | **.3326270** |
| Stddev | .001053 | 7.956 | .0009103 | .002414 | 6.451 | .0019591 | .0040390 |
| %RSD | .9585076 | .4699233 | 5.471323 | 5.511252 | .3522142 | 3.178382 | 1.214270 |
| #1 | -.108650 | 1701.942 | .0156093 | -.041658 | 1837.284 | .0595432 | .3325734 |
| #2 | -.110705 | 1686.455 | .0173402 | -.046420 | 1832.571 | .0619486 | .3366925 |
| #3 | -.110070 | 1691.029 | .0169634 | -.043345 | 1824.527 | .0634246 | .3286151 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **1252.030** | **.1173760** | **-.013046** | **.0074727** | **-.036546** | **.1458906** | **.0893452** |
| Stddev | 1.566 | .0145757 | .001908 | .0051191 | .000370 | .0142223 | .0173374 |
| %RSD | .1250966 | 12.41795 | 14.62391 | 68.50448 | 1.012929 | 9.748607 | 19.40491 |
| #1 | 1252.170 | .1341377 | -.014503 | .0071343 | -.036913 | .1562973 | .0720385 |
| #2 | 1253.522 | .1076779 | -.013749 | .0025311 | -.036553 | .1516896 | .1067131 |
| #3 | 1250.399 | .1103124 | -.010887 | .0127526 | -.036172 | .1296850 | .0892841 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LR1 Acquired: 12/6/2024 16:25:34 Type: Unk
Method: NON EPA-6010-200.7(v2503) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **-.217380** | **-.262678** | **-.977592** |
| Stddev | .014857 | .000185 | .008765 |
| %RSD | 6.834731 | .0704112 | .8965805 |
| | | | |
| #1 | -.226108 | -.262891 | -.987332 |
| #2 | -.200225 | -.262559 | -.970339 |
| #3 | -.225806 | -.262584 | -.975106 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **1450.200** | **36580.06** | **10093.19** | **993.7973** | **2068.371** |
| Stddev | 6.039 | 35.80 | 17.61 | 3.6226 | 2.542 |
| %RSD | .4164289 | .0978789 | .1744642 | .3645169 | .1229194 |
| | | | | | |
| #1 | 1452.576 | 36561.12 | 10083.45 | 991.8829 | 2070.030 |
| #2 | 1443.334 | 36557.70 | 10082.61 | 991.5336 | 2065.444 |
| #3 | 1454.689 | 36621.35 | 10113.52 | 997.9754 | 2069.639 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LR2 Acquired: 12/6/2024 16:30:30 Type: Unk
Method: NON EPA-6010-200.7(v2503) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0125600 | -.044675 | 229.6170 | .0043546 | -.001667 | .0795559 | ^F ***** |
| Stddev | .0012082 | .003445 | .2150 | .0026753 | .000617 | .0099539 | ----- |
| %RSD | 9.619022 | 7.710994 | .0936331 | 61.43619 | 37.03043 | 12.51183 | ----- |
| #1 | .0112964 | -.045377 | 229.3941 | .0033837 | -.002240 | .0806241 | ^ ----- |
| #2 | .0126799 | -.040933 | 229.6339 | .0023004 | -.001014 | .0889326 | ^ ----- |
| #3 | .0137038 | -.047714 | 229.8231 | .0073799 | -.001747 | .0691110 | ^ ----- |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.002632 | -.006935 | .3198716 | .0131360 | -.026987 | 257.6941 | .0117410 |
| Stddev | .000067 | .000013 | .0093928 | .0002355 | .000394 | .8256 | .0100718 |
| %RSD | 2.551334 | .1812600 | 2.936418 | 1.792835 | 1.460254 | .3203631 | 85.78270 |
| #1 | -.002574 | -.006938 | .3148216 | .0128838 | -.027014 | 257.5704 | .0130504 |
| #2 | -.002706 | -.006921 | .3307090 | .0133502 | -.027367 | 256.9373 | .0210941 |
| #3 | -.002616 | -.006945 | .3140841 | .0131740 | -.026580 | 258.5745 | .0010786 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 43.90602 | -.068677 | 46.70814 | .0056260 | .8705715 | -.016959 | 36.46378 |
| Stddev | .47557 | .011462 | .01020 | .0000794 | .0378797 | .000759 | .21477 |
| %RSD | 1.083159 | 16.68951 | .0218395 | 1.410557 | 4.351129 | 4.478033 | .5889964 |
| #1 | 43.60636 | -.072496 | 46.70175 | .0055477 | .8971401 | -.016095 | 36.43055 |
| #2 | 43.65733 | -.055793 | 46.70277 | .0056239 | .8873781 | -.017258 | 36.26756 |
| #3 | 44.45437 | -.077742 | 46.71991 | .0057064 | .8271965 | -.017523 | 36.69322 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .5992306 | -.002953 | -.005429 | -.006214 | -.044222 | -.002500 | 2.083949 |
| Stddev | .0636726 | .000609 | .000393 | .000109 | .000328 | .001957 | .021091 |
| %RSD | 10.62572 | 20.61054 | 7.231613 | 1.749133 | .7407660 | 78.31505 | 1.012084 |
| #1 | .6616584 | -.003086 | -.005792 | -.006146 | -.043970 | -.002364 | 2.061531 |
| #2 | .6016509 | -.003483 | -.005482 | -.006158 | -.044103 | -.004521 | 2.103399 |
| #3 | .5343823 | -.002288 | -.005012 | -.006340 | -.044592 | -.000613 | 2.086917 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: LR2 Acquired: 12/6/2024 16:30:30 Type: Unk
Method: NON EPA-6010-200.7(v2503) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.035326 | .0005490 | .0019267 |
| Stddev | .003565 | .0002936 | .0000341 |
| %RSD | 10.09046 | 53.47326 | 1.771168 |
| | | | |
| #1 | -.032135 | .0008360 | .0018942 |
| #2 | -.039173 | .0005617 | .0019237 |
| #3 | -.034671 | .0002493 | .0019622 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2214.296 | 59428.69 | 13538.52 | 1642.441 | 4043.277 |
| Stddev | 6.531 | 103.33 | 122.90 | 6.133 | 6.900 |
| %RSD | .2949293 | .1738699 | .9077993 | .3734232 | .1706416 |
| | | | | | |
| #1 | 2220.854 | 59402.45 | 13622.98 | 1648.250 | 4050.061 |
| #2 | 2214.241 | 59542.61 | 13595.06 | 1643.045 | 4043.504 |
| #3 | 2207.794 | 59341.01 | 13397.52 | 1636.028 | 4036.267 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV05 Acquired: 12/6/2024 16:35:39 Type: Unk
Method: NON EPA-6010-200.7(v2504) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.808900** | **4.818442** | **4.887056** | **4.845994** | **4.734450** | **9.797142** | **9.512353** |
| Stddev | .025705 | .063305 | .036579 | .035195 | .015147 | .037731 | .057844 |
| %RSD | .5345266 | 1.313797 | .7484774 | .7262679 | .3199416 | .3851185 | .6080925 |
| #1 | 4.838304 | 4.891489 | 4.924535 | 4.886517 | 4.748907 | 9.755965 | 9.508266 |
| #2 | 4.797708 | 4.779573 | 4.885183 | 4.828404 | 4.735747 | 9.830057 | 9.572133 |
| #3 | 4.790690 | 4.784262 | 4.851450 | 4.823062 | 4.718695 | 9.805403 | 9.456662 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2500765** | **2.462236** | **24.45549** | **1.005357** | **2.442693** | **1.232115** | **4.848170** |
| Stddev | .0012737 | .014676 | .06171 | .001759 | .016618 | .008554 | .012439 |
| %RSD | .5093438 | .5960301 | .2523502 | .1749353 | .6803123 | .6942589 | .2565658 |
| #1 | .2500881 | 2.477492 | 24.40208 | 1.004426 | 2.459593 | 1.240788 | 4.835611 |
| #2 | .2513445 | 2.460996 | 24.52305 | 1.007385 | 2.442116 | 1.231871 | 4.860485 |
| #3 | .2487970 | 2.448219 | 24.44134 | 1.004259 | 2.426372 | 1.223685 | 4.848415 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.418867** | **24.48971** | **2.446564** | **1.222560** | **25.31137** | **2.468717** | **2.384496** |
| Stddev | .004770 | .18759 | .013225 | .003271 | .34814 | .006895 | .010459 |
| %RSD | .1971916 | .7659860 | .5405641 | .2675748 | 1.375430 | .2792796 | .4386280 |
| #1 | 2.417869 | 24.27672 | 2.459890 | 1.224588 | 25.69706 | 2.462616 | 2.385589 |
| #2 | 2.424057 | 24.63035 | 2.446360 | 1.224306 | 25.21668 | 2.476197 | 2.394366 |
| #3 | 2.414675 | 24.56206 | 2.433441 | 1.218786 | 25.02037 | 2.467339 | 2.373534 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.23568** | **4.909185** | **4.921135** | **4.878396** | **4.826850** | **5.012539** | **4.885792** |
| Stddev | .03630 | .016720 | .026047 | .034374 | .009375 | .011366 | .042655 |
| %RSD | .1562084 | .3405810 | .5292864 | .7046128 | .1942216 | .2267589 | .8730426 |
| #1 | 23.25815 | 4.912814 | 4.948260 | 4.915669 | 4.822064 | 5.006105 | 4.934246 |
| #2 | 23.19381 | 4.923792 | 4.918823 | 4.871573 | 4.837652 | 5.005850 | 4.869217 |
| #3 | 23.25509 | 4.890949 | 4.896321 | 4.847945 | 4.820836 | 5.025663 | 4.853912 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV05 Acquired: 12/6/2024 16:35:39 Type: Unk
Method: NON EPA-6010-200.7(v2504) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV05 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.787840** | **4.646205** | **4.873138** |
| Stddev | .039982 | .008017 | .021356 |
| %RSD | .8350730 | .1725435 | .4382413 |
| #1 | 4.834001 | 4.652411 | 4.895247 |
| #2 | 4.764134 | 4.649052 | 4.852625 |
| #3 | 4.765384 | 4.637154 | 4.871541 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2492.839** | **58609.91** | **13423.11** | **1703.552** | **3969.966** |
| Stddev | 10.197 | 82.28 | 47.90 | 6.392 | 20.305 |
| %RSD | .4090674 | .1403833 | .3568630 | .3752196 | .5114666 |
| #1 | 2483.904 | 58576.88 | 13427.59 | 1700.832 | 3951.279 |
| #2 | 2490.666 | 58549.29 | 13373.13 | 1698.969 | 3967.045 |
| #3 | 2503.948 | 58703.58 | 13468.62 | 1710.854 | 3991.573 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB05 Acquired: 12/6/2024 16:39:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0002278** | **-.001088** | **.0012933** | **-.001448** | **.0015053** | **.0053150** | **-.001748** |
| Stddev | .0023241 | .000840 | .0006449 | .001602 | .0005789 | .0041972 | .000201 |
| %RSD | 1020.380 | 77.23345 | 49.86318 | 110.6189 | 38.45877 | 78.96862 | 11.52205 |
| #1 | .0013032 | -.002040 | .0009706 | .000174 | .0013492 | .0082491 | -.001597 |
| #2 | .0018194 | -.000448 | .0020358 | -.001490 | .0010205 | .0071887 | -.001976 |
| #3 | -.002439 | -.000776 | .0008735 | -.003029 | .0021464 | .0005073 | -.001670 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000604** | **.0001375** | **-.000749** | **.0000783** | **.0001134** | **.0011229** | **.0062265** |
| Stddev | .0000276 | .0000131 | .001759 | .0001389 | .0001045 | .0001091 | .0035234 |
| %RSD | 45.68302 | 9.548612 | 234.8703 | 177.4254 | 92.21055 | 9.713310 | 56.58728 |
| #1 | .0000842 | .0001377 | .000107 | .0002251 | -.000006 | .0012451 | .0092746 |
| #2 | .0000667 | .0001242 | -.002772 | .0000607 | .000155 | .0010881 | .0023687 |
| #3 | .0000302 | .0001504 | .000418 | -.000051 | .000190 | .0010354 | .0070361 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0002440** | **.0102519** | **.0006829** | **.0008120** | **.3298239** | **-.000263** | **-.000908** |
| Stddev | .0002671 | .0086737 | .0001784 | .0001483 | .0150712 | .001231 | .000130 |
| %RSD | 109.4469 | 84.60548 | 26.12771 | 18.26615 | 4.569464 | 468.7302 | 14.33674 |
| #1 | -.000015 | .0199092 | .0006433 | .0007142 | .3124218 | .001147 | -.000903 |
| #2 | .000518 | .0031243 | .0008779 | .0009827 | .3386495 | -.001123 | -.000780 |
| #3 | .000229 | .0077222 | .0005277 | .0007392 | .3384004 | -.000811 | -.001041 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2121548** | **.0016860** | **.0007072** | **-.000219** | **.0002771** | **.0012241** | **-.002026** |
| Stddev | .0119418 | .0002943 | .0001944 | .000126 | .0001863 | .0030603 | .002004 |
| %RSD | 5.628828 | 17.45773 | 27.48925 | 57.56886 | 67.23119 | 250.0007 | 98.92227 |
| #1 | .1984799 | .0019275 | .0009187 | -.000126 | .0001158 | -.000428 | .000017 |
| #2 | .2174581 | .0013581 | .0006663 | -.000363 | .0002346 | -.000655 | -.003989 |
| #3 | .2205266 | .0017724 | .0005365 | -.000169 | .0004810 | .004755 | -.002106 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB05 Acquired: 12/6/2024 16:39:38 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB05 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.002062 | .0014000 | .0000800 |
| Stddev | .001851 | .0004204 | .0000330 |
| %RSD | 89.77912 | 30.02815 | 41.23153 |
| | | | |
| #1 | -.000657 | .0010092 | .0001169 |
| #2 | -.001370 | .0018448 | .0000532 |
| #3 | -.004160 | .0013462 | .0000700 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2671.607 | 62564.33 | 13676.24 | 1831.786 | 4598.440 |
| Stddev | 1.619 | 25.64 | 23.16 | 5.916 | 5.044 |
| %RSD | .0605968 | .0409792 | .1693747 | .3229712 | .1096881 |
| | | | | | |
| #1 | 2670.015 | 62547.43 | 13656.68 | 1830.095 | 4593.162 |
| #2 | 2673.252 | 62551.74 | 13701.82 | 1838.364 | 4598.948 |
| #3 | 2671.555 | 62593.83 | 13670.22 | 1826.900 | 4603.211 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P4997-07DLX5 Acquired: 12/6/2024 16:43:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0284195** | **-.011829** | **.0112602** | **.0030561** | **-.002431** | **294.5153** |
| Stddev | .0020950 | .004034 | .0010005 | .0016100 | .001149 | .4716 |
| %RSD | 7.371763 | 34.10425 | 8.885114 | 52.68198 | 47.27144 | .1601127 |
| #1 | .0260176 | -.010353 | .0104632 | .0044375 | -.002351 | 294.9559 |
| #2 | .0293712 | -.016393 | .0109343 | .0034429 | -.001324 | 294.5720 |
| #3 | .0298698 | -.008740 | .0123829 | .0012879 | -.003619 | 294.0179 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2222549** | **-.000065** | **.0007009** | **14.17993** | **.0090361** | **.0036322** |
| Stddev | .0006376 | .000008 | .0000826 | .05487 | .0000226 | .0002841 |
| %RSD | .2868664 | 12.44389 | 11.78004 | .3869202 | .2503538 | 7.822425 |
| #1 | .2229847 | -.000074 | .0006481 | 14.11679 | .0090239 | .0035536 |
| #2 | .2219739 | -.000058 | .0006585 | 14.21598 | .0090622 | .0033957 |
| #3 | .2218060 | -.000063 | .0007960 | 14.20703 | .0090222 | .0039474 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2541343** | **14.17633** | **9.055588** | **3.404317** | **.0090956** | **.0015619** |
| Stddev | .0005386 | .05469 | .012366 | .015424 | .0003730 | .0001903 |
| %RSD | .2119211 | .3857549 | .1365597 | .4530604 | 4.101411 | 12.18403 |
| #1 | .2537111 | 14.12069 | 9.041389 | 3.386546 | .0094060 | .0014059 |
| #2 | .2539513 | 14.17827 | 9.063994 | 3.412192 | .0086818 | .0015059 |
| #3 | .2547405 | 14.23001 | 9.061381 | 3.414214 | .0091991 | .0017739 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **10.89646** | **.0146606** | **.0525818** | **1.201253** | **.0112907** | **.0009389** |
| Stddev | .05206 | .0006964 | .0000960 | .025409 | .0002572 | .0003694 |
| %RSD | .4777429 | 4.750283 | .1825340 | 2.115173 | 2.277843 | 39.34453 |
| #1 | 10.95175 | .0154505 | .0525294 | 1.209507 | .0113892 | .0011291 |
| #2 | 10.84838 | .0141352 | .0526925 | 1.172743 | .0109988 | .0005131 |
| #3 | 10.88924 | .0143961 | .0525234 | 1.221508 | .0114841 | .0011744 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P4997-07DLX5 Acquired: 12/6/2024 16:43:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0001659 | .0722371 | 8.189712 | 5.394280 | F 12.00496 | -.000192 |
| Stddev | .0002432 | .0001373 | .066407 | .025286 | .05555 | .000501 |
| %RSD | 146.5932 | .1900369 | .8108529 | .4687620 | .4627369 | 261.6469 |
| #1 | -.000088 | .0721887 | 8.174247 | 5.418510 | 12.05080 | -.000467 |
| #2 | .000397 | .0721305 | 8.132403 | 5.396275 | 12.02090 | -.000495 |
| #3 | .000189 | .0723920 | 8.262487 | 5.368055 | 11.94318 | .000387 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0403748 |
| Stddev | .0001417 |
| %RSD | .3509247 |
| #1 | .0404942 |
| #2 | .0402183 |
| #3 | .0404120 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2535.803 | 59451.15 | 13935.08 | 1751.987 | 3941.414 |
| Stddev | 2.420 | 137.22 | 12.11 | 4.807 | 2.521 |
| %RSD | .0954457 | .2308116 | .0868724 | .2743901 | .0639699 |
| #1 | 2537.183 | 59448.16 | 13930.26 | 1754.583 | 3941.213 |
| #2 | 2537.217 | 59589.85 | 13926.12 | 1754.937 | 3944.030 |
| #3 | 2533.008 | 59315.45 | 13948.85 | 1746.439 | 3939.000 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5051-07DLX5 Acquired: 12/6/2024 16:48:19 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0267984** | **-.013294** | **.0112955** | **.0040464** | **-.002927** | **303.6090** |
| Stddev | .0025633 | .003440 | .0003948 | .0009325 | .000401 | .5036 |
| %RSD | 9.565062 | 25.87857 | 3.494749 | 23.04406 | 13.70215 | .1658612 |
| #1 | .0253404 | -.009344 | .0117239 | .0041615 | -.002678 | 303.4638 |
| #2 | .0252967 | -.015635 | .0112163 | .0030617 | -.003390 | 304.1692 |
| #3 | .0297581 | -.014903 | .0109464 | .0049160 | -.002713 | 303.1940 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2333589** | **-.000134** | **.0007805** | **14.86402** | **.0084238** | **.0033814** |
| Stddev | .0012210 | .000036 | .0000902 | .01740 | .0000247 | .0001662 |
| %RSD | .5232395 | 27.01707 | 11.55847 | .1170600 | .2927759 | 4.913683 |
| #1 | .2320252 | -.000173 | .0008805 | 14.87967 | .0083954 | .0035001 |
| #2 | .2336296 | -.000101 | .0007051 | 14.86709 | .0084396 | .0034526 |
| #3 | .2344218 | -.000129 | .0007560 | 14.84528 | .0084365 | .0031915 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2244941** | **13.31050** | **9.380927** | **3.599760** | **.0094994** | **.0012376** |
| Stddev | .0003591 | .03818 | .020453 | .013757 | .0002052 | .0002486 |
| %RSD | .1599371 | .2868358 | .2180261 | .3821703 | 2.159797 | 20.08712 |
| #1 | .2242083 | 13.29511 | 9.367907 | 3.586555 | .0095968 | .0009510 |
| #2 | .2248971 | 13.28242 | 9.370373 | 3.614010 | .0096378 | .0013675 |
| #3 | .2243770 | 13.35397 | 9.404501 | 3.598716 | .0092637 | .0013944 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.25434** | **.0138807** | **.0476065** | **1.241447** | **.0116785** | **.0006696** |
| Stddev | .04622 | .0003599 | .0001630 | .026928 | .0004358 | .0001091 |
| %RSD | .3771648 | 2.593128 | .3422811 | 2.169049 | 3.731988 | 16.28935 |
| #1 | 12.24514 | .0140289 | .0476565 | 1.223899 | .0113602 | .0005890 |
| #2 | 12.21340 | .0134703 | .0474245 | 1.227992 | .0121752 | .0006261 |
| #3 | 12.30446 | .0141428 | .0477387 | 1.272450 | .0115000 | .0007937 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5051-07DLX5 Acquired: 12/6/2024 16:48:19 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001049 | .0685058 | 8.697867 | 5.349038 | F 12.50973 | -.000818 |
| Stddev | .000772 | .0002846 | .035268 | .010338 | .02465 | .000086 |
| %RSD | 73.54862 | .4155031 | .4054808 | .1932612 | .1970100 | 10.56000 |
| #1 | -.001648 | .0682353 | 8.661382 | 5.337188 | 12.48528 | -.000891 |
| #2 | -.001322 | .0688028 | 8.700441 | 5.356210 | 12.53457 | -.000723 |
| #3 | -.000178 | .0684794 | 8.731778 | 5.353716 | 12.50934 | -.000840 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0432229 |
| Stddev | .0002379 |
| %RSD | .5504438 |
| #1 | .0429912 |
| #2 | .0432108 |
| #3 | .0434666 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2518.668 | 59252.60 | 13933.80 | 1757.494 | 3929.258 |
| Stddev | 2.651 | 58.21 | 20.65 | 3.771 | 5.096 |
| %RSD | .1052419 | .0982375 | .1481947 | .2145568 | .1296930 |
| #1 | 2515.780 | 59262.34 | 13911.09 | 1761.091 | 3923.804 |
| #2 | 2520.989 | 59305.32 | 13938.88 | 1757.820 | 3930.070 |
| #3 | 2519.234 | 59190.13 | 13951.44 | 1753.571 | 3933.898 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DLX5 Acquired: 12/6/2024 16:52:40 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0311929** | **-.015769** | **.0125213** | **.0030393** | **-.003643** | **354.3691** |
| Stddev | .0011462 | .003236 | .0019855 | .0042228 | .001326 | .8227 |
| %RSD | 3.674584 | 20.51774 | 15.85708 | 138.9373 | 36.40982 | .2321482 |
| #1 | .0324061 | -.015198 | .0117715 | -.001164 | -.002973 | 354.3764 |
| #2 | .0301282 | -.012858 | .0110199 | .007281 | -.002785 | 353.5428 |
| #3 | .0310443 | -.019253 | .0147726 | .003001 | -.005170 | 355.1880 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2578532** | **-.000165** | **.0008877** | **15.65939** | **.0088917** | **.0033490** |
| Stddev | .0014690 | .000056 | .0003190 | .03469 | .0005729 | .0001123 |
| %RSD | .5697079 | 34.22473 | 35.93437 | .2215120 | 6.443611 | 3.353111 |
| #1 | .2565331 | -.000107 | .0012479 | 15.62142 | .0082600 | .0032565 |
| #2 | .2594358 | -.000168 | .0007744 | 15.68942 | .0093780 | .0034739 |
| #3 | .2575907 | -.000220 | .0006408 | 15.66732 | .0090370 | .0033165 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2558729** | **14.12898** | **10.36935** | **3.504942** | **.0107667** | **.0017673** |
| Stddev | .0001968 | .06186 | .04847 | .012561 | .0001121 | .0002760 |
| %RSD | .0768927 | .4378573 | .4673958 | .3583759 | 1.040932 | 15.61507 |
| #1 | .2560933 | 14.05765 | 10.31506 | 3.490665 | .0107865 | .0020832 |
| #2 | .2558105 | 14.16120 | 10.40826 | 3.509866 | .0106461 | .0015728 |
| #3 | .2557150 | 14.16808 | 10.38473 | 3.514295 | .0108677 | .0016460 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **11.73892** | **.0146416** | **.0529799** | **1.223763** | **.0114920** | **.0006788** |
| Stddev | .07961 | .0004885 | .0004123 | .018387 | .0008115 | .0003127 |
| %RSD | .6782137 | 3.336253 | .7782186 | 1.502465 | 7.061861 | 46.06272 |
| #1 | 11.69023 | .0144936 | .0525072 | 1.215780 | .0105572 | .0005159 |
| #2 | 11.83079 | .0151870 | .0531675 | 1.210716 | .0120165 | .0010393 |
| #3 | 11.69572 | .0142443 | .0532651 | 1.244791 | .0119023 | .0004812 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DLX5 Acquired: 12/6/2024 16:52:40 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0008400 | .0499521 | 9.708939 | 5.841091 | F 13.64739 | -.001252 |
| Stddev | .0010443 | .0002848 | .024218 | .019768 | .04900 | .000284 |
| %RSD | 124.3234 | .5701597 | .2494417 | .3384298 | .3590591 | 22.68021 |
| #1 | -.000333 | .0496237 | 9.692128 | 5.862381 | 13.69556 | -.001440 |
| #2 | .001186 | .0501012 | 9.697992 | 5.837575 | 13.64901 | -.001391 |
| #3 | .001667 | .0501313 | 9.736699 | 5.823317 | 13.59759 | -.000925 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0466785 |
| Stddev | .0003172 |
| %RSD | .6795794 |
| #1 | .0463930 |
| #2 | .0470200 |
| #3 | .0466225 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2480.022 | 57938.00 | 13622.41 | 1718.416 | 3824.132 |
| Stddev | 3.251 | 43.76 | 14.46 | .710 | 1.941 |
| %RSD | .1311008 | .0755312 | .1061349 | .0412905 | .0507672 |
| #1 | 2477.160 | 57980.68 | 13638.95 | 1717.619 | 3824.061 |
| #2 | 2479.349 | 57940.09 | 13612.20 | 1718.979 | 3822.227 |
| #3 | 2483.557 | 57893.23 | 13616.07 | 1718.651 | 3826.108 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DUPDLX5 Acquired: 12/6/2024 16:57:02 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0313609** | **-.013818** | **.0113473** | **.0040585** | **-.002722** | **367.2116** |
| Stddev | .0012044 | .003492 | .0015156 | .0009857 | .001376 | 2.0785 |
| %RSD | 3.840295 | 25.27179 | 13.35626 | 24.28686 | 50.53081 | .5660093 |
| #1 | .0325753 | -.009831 | .0101759 | .0051866 | -.003613 | 367.5081 |
| #2 | .0313406 | -.016333 | .0130590 | .0036254 | -.001138 | 369.1258 |
| #3 | .0301668 | -.015289 | .0108069 | .0033635 | -.003416 | 365.0008 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2694211** | **-.000152** | **.0007841** | **16.16872** | **.0093863** | **.0036332** |
| Stddev | .0014338 | .000040 | .0000809 | .12955 | .0001456 | .0000729 |
| %RSD | .5321657 | 26.11920 | 10.32302 | .8012486 | 1.551125 | 2.007625 |
| #1 | .2697015 | -.000192 | .0007137 | 16.17304 | .0092185 | .0036730 |
| #2 | .2706940 | -.000153 | .0008726 | 16.29606 | .0094792 | .0036775 |
| #3 | .2678679 | -.000112 | .0007660 | 16.03707 | .0094612 | .0035490 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2661596** | **14.73696** | **10.79212** | **3.608128** | **.0110264** | **.0015554** |
| Stddev | .0004704 | .10545 | .07479 | .035333 | .0004674 | .0000476 |
| %RSD | .1767435 | .7155390 | .6930371 | .9792746 | 4.238566 | 3.062119 |
| #1 | .2657840 | 14.61803 | 10.77245 | 3.593930 | .0104868 | .0015557 |
| #2 | .2666872 | 14.77380 | 10.87478 | 3.648352 | .0112891 | .0015076 |
| #3 | .2660076 | 14.81905 | 10.72913 | 3.582101 | .0113032 | .0016029 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.32072** | **.0148656** | **.0560208** | **1.260906** | **.0124253** | **.0008272** |
| Stddev | .01145 | .0015213 | .0004552 | .005949 | .0006107 | .0004855 |
| %RSD | .0929649 | 10.23361 | .8125300 | .4718400 | 4.915089 | 58.68950 |
| #1 | 12.33390 | .0163153 | .0555027 | 1.256172 | .0122667 | .0013437 |
| #2 | 12.31507 | .0132817 | .0562036 | 1.258962 | .0119095 | .0003804 |
| #3 | 12.31319 | .0149999 | .0563562 | 1.267585 | .0130996 | .0007574 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07DUPDLX5 Acquired: 12/6/2024 16:57:02 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000603 | .0522932 | F 10.09215 | 6.085883 | F 14.22582 | -.001526 |
| Stddev | .001108 | .0005608 | .11682 | .024908 | .04142 | .000274 |
| %RSD | 183.6724 | 1.072439 | 1.157489 | .4092791 | .2911888 | 17.93716 |
| #1 | -.000378 | .0529082 | 10.04794 | 6.058179 | 14.21010 | -.001841 |
| #2 | -.001807 | .0521613 | 10.00390 | 6.093042 | 14.19457 | -.001383 |
| #3 | .000375 | .0518101 | 10.22462 | 6.106427 | 14.27281 | -.001353 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0486256 |
| Stddev | .0003544 |
| %RSD | .7287309 |
| #1 | .0488118 |
| #2 | .0488480 |
| #3 | .0482169 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2449.375 | 57550.87 | 13591.45 | 1706.866 | 3774.327 |
| Stddev | 1.998 | 267.10 | 93.69 | 6.553 | 1.348 |
| %RSD | .0815680 | .4641171 | .6893414 | .3839308 | .0357034 |
| #1 | 2447.250 | 57710.30 | 13561.18 | 1711.758 | 3775.012 |
| #2 | 2449.660 | 57699.81 | 13516.64 | 1709.419 | 3775.194 |
| #3 | 2451.215 | 57242.50 | 13696.54 | 1699.420 | 3772.774 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07LDLX25 Acquired: 12/6/2024 17:01:23 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0061236 | -.003280 | .0027829 | .0006179 | -.000276 | 71.88705 | .0511384 |
| Stddev | .0014651 | .001042 | .0008507 | .0021410 | .000425 | .35270 | .0004712 |
| %RSD | 23.92547 | 31.77372 | 30.56725 | 346.4693 | 153.7231 | .4906348 | .9213616 |
| #1 | .0078107 | -.002976 | .0020764 | .0013851 | -.000634 | 71.48595 | .0506129 |
| #2 | .0051725 | -.004441 | .0025451 | -.001801 | -.000388 | 72.14871 | .0512791 |
| #3 | .0053874 | -.002424 | .0037272 | .002270 | .000193 | 72.02650 | .0515232 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.000015 | .0001799 | 3.201961 | .0016945 | .0008070 | .0546722 | 2.837342 |
| Stddev | .000040 | .0000420 | .033302 | .0001385 | .0000552 | .0001872 | .021326 |
| %RSD | 261.5627 | 23.31929 | 1.040065 | 8.174095 | 6.840578 | .3423105 | .7516221 |
| #1 | -.000007 | .0002282 | 3.165476 | .0015345 | .0008669 | .0546729 | 2.823143 |
| #2 | -.000058 | .0001527 | 3.209684 | .0017739 | .0007582 | .0544847 | 2.827018 |
| #3 | .000020 | .0001589 | 3.230723 | .0017750 | .0007958 | .0548590 | 2.861866 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 2.149676 | .7249424 | .0023615 | .0007217 | 2.418831 | .0031987 | .0098450 |
| Stddev | .017854 | .0059982 | .0001445 | .0001678 | .008398 | .0011654 | .0001519 |
| %RSD | .8305379 | .8274029 | 6.119991 | 23.24570 | .3471925 | 36.43316 | 1.542939 |
| #1 | 2.130885 | .7180747 | .0022472 | .0008771 | 2.428301 | .0020729 | .0097416 |
| #2 | 2.151728 | .7275989 | .0023133 | .0007442 | 2.412287 | .0044000 | .0097741 |
| #3 | 2.166416 | .7291537 | .0025239 | .0005439 | 2.415906 | .0031232 | .0100194 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .2329840 | -.000070 | .0002125 | -.000431 | .0103921 | 1.912902 | 1.118905 |
| Stddev | .0039765 | .000230 | .0000833 | .000531 | .0002403 | .010994 | .003475 |
| %RSD | 1.706773 | 330.6339 | 39.21359 | 123.1026 | 2.312355 | .5747392 | .3105366 |
| #1 | .2313558 | -.000192 | .0002388 | .000176 | .0101160 | 1.900337 | 1.114899 |
| #2 | .2375161 | -.000213 | .0002794 | -.000662 | .0105057 | 1.920757 | 1.121101 |
| #3 | .2300799 | .000196 | .0001192 | -.000808 | .0105545 | 1.917611 | 1.120716 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07LDLX25 Acquired: 12/6/2024 17:01:23 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **2.626147** | **-.001117** | **.0098215** |
| Stddev | .010176 | .000463 | .0000783 |
| %RSD | .3875021 | 41.42741 | .7970668 |
| #1 | 2.620628 | -.000722 | .0097485 |
| #2 | 2.637891 | -.001004 | .0099042 |
| #3 | 2.619923 | -.001626 | .0098118 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2565.829** | **60634.82** | **13793.09** | **1796.841** | **4194.219** |
| Stddev | 1.156 | 96.26 | 68.63 | 7.914 | 4.627 |
| %RSD | .0450469 | .1587607 | .4975666 | .4404595 | .1103148 |
| #1 | 2564.964 | 60536.78 | 13871.43 | 1792.654 | 4190.977 |
| #2 | 2567.142 | 60729.20 | 13743.58 | 1805.970 | 4192.163 |
| #3 | 2565.381 | 60638.47 | 13764.27 | 1791.900 | 4199.518 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSDLX5 Acquired: 12/6/2024 17:05:40 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1846994** | **.3566106** | **.2009735** | **.3887596** | **.1094116** | **366.3757** |
| Stddev | .0028779 | .0050479 | .0010024 | .0015641 | .0003294 | 2.4470 |
| %RSD | 1.558152 | 1.415515 | .4987755 | .4023402 | .3010703 | .6678807 |
| #1 | .1818716 | .3531546 | .1998976 | .3904645 | .1091910 | 367.8247 |
| #2 | .1846018 | .3542739 | .2018811 | .3873908 | .1092537 | 363.5505 |
| #3 | .1876249 | .3624035 | .2011417 | .3884237 | .1097903 | 367.7519 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3031764** | **.0397485** | **.0404283** | **16.26261** | **.0883990** | **.0432724** |
| Stddev | .0015407 | .0003453 | .0001390 | .10286 | .0005039 | .0002883 |
| %RSD | .5081910 | .8687755 | .3437392 | .6324806 | .5699792 | .6662757 |
| #1 | .3026145 | .0394869 | .0403276 | 16.24201 | .0884683 | .0429940 |
| #2 | .3019955 | .0396186 | .0405868 | 16.17161 | .0878641 | .0432533 |
| #3 | .3049192 | .0401399 | .0403705 | 16.37420 | .0888647 | .0435697 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3179637** | **15.00622** | **10.63326** | **3.982199** | **.1089075** | **.0166738** |
| Stddev | .0003278 | .10152 | .07824 | .036636 | .0002692 | .0001278 |
| %RSD | .1030780 | .6765319 | .7358358 | .9199963 | .2472027 | .7667996 |
| #1 | .3176408 | 14.93188 | 10.60748 | 3.952380 | .1086072 | .0165264 |
| #2 | .3179543 | 14.96488 | 10.57116 | 3.971121 | .1089882 | .0167405 |
| #3 | .3182961 | 15.12188 | 10.72114 | 4.023095 | .1091272 | .0167545 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.60975** | **.0729381** | **.0957543** | **3.193057** | **.0664645** | **.0632217** |
| Stddev | .04543 | .0014010 | .0001455 | .027631 | .0003497 | .0001954 |
| %RSD | .3602975 | 1.920815 | .1519503 | .8653531 | .5262117 | .3090806 |
| #1 | 12.66214 | .0738387 | .0956832 | 3.193734 | .0664505 | .0632971 |
| #2 | 12.58591 | .0736517 | .0956580 | 3.165094 | .0661219 | .0633682 |
| #3 | 12.58120 | .0713240 | .0959217 | 3.220344 | .0668210 | .0629998 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSDLX5 Acquired: 12/6/2024 17:05:40 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0931055 | .0830171 | F 10.14714 | 7.170334 | F 13.93935 | .0384373 |
| Stddev | .0006997 | .0008079 | .04016 | .030682 | .03717 | .0010670 |
| %RSD | .7514735 | .9731151 | .3958109 | .4279083 | .2666241 | 2.775963 |
| #1 | .0937399 | .0823956 | 10.10155 | 7.159911 | 13.93948 | .0392611 |
| #2 | .0932216 | .0827255 | 10.17729 | 7.146221 | 13.90212 | .0388189 |
| #3 | .0923551 | .0839303 | 10.16259 | 7.204870 | 13.97645 | .0372320 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0879951 |
| Stddev | .0004538 |
| %RSD | .5156916 |
| #1 | .0880613 |
| #2 | .0875119 |
| #3 | .0884122 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2474.224 | 58364.63 | 13736.33 | 1705.575 | 3835.650 |
| Stddev | 4.348 | 127.29 | 60.59 | 2.387 | 1.744 |
| %RSD | .1757468 | .2180955 | .4410947 | .1399340 | .0454613 |
| #1 | 2477.153 | 58261.28 | 13722.45 | 1705.502 | 3835.823 |
| #2 | 2469.228 | 58506.82 | 13802.65 | 1703.226 | 3837.301 |
| #3 | 2476.291 | 58325.79 | 13683.88 | 1707.998 | 3833.826 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSDDLX5 Acquired: 12/6/2024 17:09:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1815168** | **.3604473** | **.2032777** | **.3841036** | **.1081729** | **367.5062** |
| Stddev | .0023043 | .0030465 | .0006184 | .0045856 | .0010438 | .5578 |
| %RSD | 1.269476 | .8452086 | .3042259 | 1.193834 | .9649779 | .1517662 |
| #1 | .1795112 | .3575310 | .2025956 | .3832796 | .1078665 | 367.8317 |
| #2 | .1840339 | .3602017 | .2034359 | .3890453 | .1093356 | 367.8247 |
| #3 | .1810054 | .3636092 | .2038017 | .3799859 | .1073165 | 366.8621 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3019224** | **.0407944** | **.0411690** | **16.47705** | **.0904131** | **.0439726** |
| Stddev | .0013878 | .0002639 | .0000342 | .03302 | .0005505 | .0001624 |
| %RSD | .4596399 | .6468489 | .0830205 | .2004242 | .6089099 | .3694317 |
| #1 | .3016168 | .0406040 | .0412082 | 16.47941 | .0905157 | .0437954 |
| #2 | .3034375 | .0410956 | .0411457 | 16.44291 | .0909052 | .0441146 |
| #3 | .3007129 | .0406836 | .0411531 | 16.50883 | .0898185 | .0440077 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3179077** | **15.00731** | **10.71570** | **4.049003** | **.1108155** | **.0163765** |
| Stddev | .0010123 | .04261 | .01113 | .008365 | .0002399 | .0002768 |
| %RSD | .3184331 | .2839320 | .1038942 | .2065852 | .2165161 | 1.690433 |
| #1 | .3181155 | 15.02356 | 10.71368 | 4.042912 | .1108582 | .0165396 |
| #2 | .3168077 | 14.95897 | 10.70572 | 4.045556 | .1105570 | .0165329 |
| #3 | .3188001 | 15.03941 | 10.72771 | 4.058540 | .1110311 | .0160568 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.37437** | **.0742120** | **.0962241** | **3.128559** | **.0683143** | **.0632817** |
| Stddev | .07389 | .0011538 | .0003954 | .007107 | .0010799 | .0000955 |
| %RSD | .5971485 | 1.554701 | .4109486 | .2271672 | 1.580783 | .1509472 |
| #1 | 12.44120 | .0741228 | .0957676 | 3.123189 | .0672565 | .0631722 |
| #2 | 12.38690 | .0754078 | .0964419 | 3.125869 | .0694150 | .0633257 |
| #3 | 12.29501 | .0731054 | .0964627 | 3.136618 | .0682714 | .0633474 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07MSDDLX5 Acquired: 12/6/2024 17:09:58 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0963989 | .0836229 | F 10.13086 | 7.333606 | F 14.18595 | .0379695 |
| Stddev | .0010689 | .0004959 | .02482 | .041409 | .03921 | .0002259 |
| %RSD | 1.108868 | .5930442 | .2449709 | .5646469 | .2764008 | .5950717 |
| #1 | .0974692 | .0838285 | 10.10226 | 7.301239 | 14.15433 | .0380432 |
| #2 | .0953314 | .0839830 | 10.14679 | 7.319311 | 14.17370 | .0381495 |
| #3 | .0963961 | .0830572 | 10.14352 | 7.380269 | 14.22982 | .0377160 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0875700 |
| Stddev | .0003735 |
| %RSD | .4265560 |
| #1 | .0875950 |
| #2 | .0879304 |
| #3 | .0871846 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2552.445 | 58681.61 | 13674.62 | 1736.599 | 3895.765 |
| Stddev | 5.806 | 25.35 | 7.44 | 10.081 | 7.809 |
| %RSD | .2274578 | .0431943 | .0543984 | .5805176 | .2004500 |
| #1 | 2547.038 | 58654.43 | 13675.11 | 1724.960 | 3890.756 |
| #2 | 2558.581 | 58704.61 | 13666.94 | 1742.598 | 3904.763 |
| #3 | 2551.716 | 58685.79 | 13681.79 | 1742.239 | 3891.775 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07ADLX5 Acquired: 12/6/2024 17:14:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1817518** | **.3572662** | **.2006852** | **.3792209** | **.1059194** | **359.7719** |
| Stddev | .0024879 | .0084864 | .0022430 | .0026914 | .0033355 | 1.3798 |
| %RSD | 1.368863 | 2.375385 | 1.117649 | .7097248 | 3.149058 | .3835304 |
| #1 | .1820349 | .3488210 | .1989211 | .3762772 | .1045036 | 360.0350 |
| #2 | .1840860 | .3571842 | .1999249 | .3798300 | .1035253 | 358.2794 |
| #3 | .1791344 | .3657933 | .2032094 | .3815556 | .1097292 | 361.0012 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3036537** | **.0409109** | **.0409574** | **16.46147** | **.0882630** | **.0438303** |
| Stddev | .0015068 | .0001003 | .0005655 | .04869 | .0005896 | .0004351 |
| %RSD | .4962148 | .2451476 | 1.380818 | .2957929 | .6680046 | .9926343 |
| #1 | .3053930 | .0407979 | .0406209 | 16.41190 | .0876679 | .0434283 |
| #2 | .3028226 | .0409455 | .0406410 | 16.46328 | .0888470 | .0437704 |
| #3 | .3027455 | .0409894 | .0416103 | 16.50924 | .0882741 | .0442922 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3150541** | **14.96523** | **10.81871** | **4.028165** | **.1098298** | **.0161803** |
| Stddev | .0039686 | .01701 | .02715 | .018991 | .0015141 | .0004801 |
| %RSD | 1.259645 | .1136725 | .2509868 | .4714623 | 1.378560 | 2.967099 |
| #1 | .3122831 | 14.98483 | 10.83905 | 4.006545 | .1089494 | .0158907 |
| #2 | .3132789 | 14.95439 | 10.78787 | 4.035797 | .1089620 | .0159158 |
| #3 | .3196004 | 14.95646 | 10.82920 | 4.042153 | .1115781 | .0167345 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **12.28694** | **.0733537** | **.0946289** | **3.025315** | **.0681767** | **.0619446** |
| Stddev | .08991 | .0012474 | .0004403 | .003228 | .0007497 | .0013018 |
| %RSD | .7317827 | 1.700506 | .4652979 | .1066860 | 1.099631 | 2.101514 |
| #1 | 12.39063 | .0738614 | .0947558 | 3.025702 | .0689693 | .0610486 |
| #2 | 12.23054 | .0742672 | .0949918 | 3.021912 | .0674789 | .0613474 |
| #3 | 12.23965 | .0719326 | .0941391 | 3.028333 | .0680819 | .0634378 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5068-07ADLX5 Acquired: 12/6/2024 17:14:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0978458 | .0838979 | 9.955646 | 7.351416 | F 14.08296 | .0365314 |
| Stddev | .0003658 | .0002943 | .021631 | .104063 | .17844 | .0004748 |
| %RSD | .3738125 | .3507973 | .2172723 | 1.415556 | 1.267073 | 1.299676 |
| #1 | .0981387 | .0835953 | 9.930687 | 7.281660 | 13.95307 | .0369904 |
| #2 | .0979629 | .0839152 | 9.968968 | 7.301560 | 14.00938 | .0360422 |
| #3 | .0974359 | .0841832 | 9.967281 | 7.471027 | 14.28642 | .0365616 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0871206 |
| Stddev | .0003580 |
| %RSD | .4109758 |
| #1 | .0875244 |
| #2 | .0869956 |
| #3 | .0868419 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2573.460 | 59809.87 | 13692.00 | 1817.415 | 3922.258 |
| Stddev | 21.593 | 22.33 | 23.41 | 4.642 | 37.560 |
| %RSD | .8390743 | .0373347 | .1709543 | .2554012 | .9576204 |
| #1 | 2585.750 | 59803.31 | 13677.40 | 1812.161 | 3944.198 |
| #2 | 2586.104 | 59791.56 | 13719.00 | 1819.125 | 3943.688 |
| #3 | 2548.527 | 59834.75 | 13679.60 | 1820.960 | 3878.888 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5069-01DLX5 Acquired: 12/6/2024 17:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0535769** | **.0232369** | **1.186723** | **-.084973** | **.0196947** | **112.8544** |
| Stddev | .0030465 | .0016144 | .001650 | .004869 | .0015150 | .1114 |
| %RSD | 5.686204 | 6.947707 | .1390429 | 5.729671 | 7.692555 | .0987442 |
| #1 | .0562548 | .0222332 | 1.188466 | -.087140 | .0195364 | 112.7408 |
| #2 | .0502624 | .0250992 | 1.185185 | -.079397 | .0182651 | 112.8590 |
| #3 | .0542134 | .0223783 | 1.186519 | -.088383 | .0212827 | 112.9635 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.7156373** | **.0068697** | **.0244606** | **97.85033** | **.4632160** | **.0856012** |
| Stddev | .0018293 | .0001635 | .0002913 | .10140 | .0011726 | .0003759 |
| %RSD | .2556129 | 2.379968 | 1.190784 | .1036265 | .2531490 | .4391196 |
| #1 | .7171638 | .0070134 | .0247058 | 97.95255 | .4644890 | .0857498 |
| #2 | .7161384 | .0069037 | .0241386 | 97.84866 | .4629789 | .0858800 |
| #3 | .7136097 | .0066918 | .0245373 | 97.74978 | .4621800 | .0851737 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.035713** | **430.5567** | **7.959865** | **102.6429** | **.2165228** | **-.004264** |
| Stddev | .006676 | 1.4783 | .018262 | .0366 | .0005569 | .000592 |
| %RSD | .1654316 | .3433436 | .2294248 | .0356552 | .2571812 | 13.88276 |
| #1 | 4.038783 | 429.1284 | 7.971471 | 102.6195 | .2171604 | -.004946 |
| #2 | 4.028054 | 432.0803 | 7.969309 | 102.6240 | .2161319 | -.003889 |
| #3 | 4.040302 | 430.4615 | 7.938815 | 102.6850 | .2162761 | -.003956 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **8.894423** | **.2317209** | **14.08915** | **4.632091** | **.1459807** | **.0172073** |
| Stddev | .023881 | .0010566 | .03987 | .021084 | .0024328 | .0002912 |
| %RSD | .2684970 | .4559750 | .2829814 | .4551686 | 1.666514 | 1.692500 |
| #1 | 8.912681 | .2328984 | 14.13264 | 4.608051 | .1449488 | .0173849 |
| #2 | 8.903191 | .2308555 | 14.08048 | 4.640781 | .1487594 | .0168712 |
| #3 | 8.867397 | .2314087 | 14.05433 | 4.647441 | .1442340 | .0173658 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5069-01DLX5 Acquired: 12/6/2024 17:18:34 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0913048 | 1.668897 | 7.603714 | 5.234623 | F 21.65322 | .0547055 |
| Stddev | .0008497 | .002782 | .005749 | .007562 | .01455 | .0002670 |
| %RSD | .9305849 | .1667118 | .0756028 | .1444628 | .0671873 | .4879718 |
| #1 | .0916832 | 1.672086 | 7.609914 | 5.242438 | 21.66956 | .0549820 |
| #2 | .0903316 | 1.667645 | 7.602668 | 5.227342 | 21.64167 | .0544493 |
| #3 | .0918995 | 1.666961 | 7.598560 | 5.234089 | 21.64844 | .0546854 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .0552685 |
| Stddev | .0018199 |
| %RSD | 3.292774 |
| #1 | .0573500 |
| #2 | .0539777 |
| #3 | .0544779 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2411.657 | 58971.83 | 13895.27 | 1670.990 | 3614.450 |
| Stddev | 2.405 | 122.82 | 49.21 | 8.810 | 2.497 |
| %RSD | .0997348 | .2082681 | .3541577 | .5272460 | .0690850 |
| #1 | 2411.734 | 58838.11 | 13840.33 | 1664.029 | 3616.045 |
| #2 | 2414.023 | 58997.78 | 13910.20 | 1668.046 | 3615.733 |
| #3 | 2409.214 | 59079.60 | 13935.29 | 1680.896 | 3611.573 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-01 Acquired: 12/6/2024 17:22:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0072985 | .0029974 | .0481344 | -.004799 | .0019549 | 2.997321 | .0703239 |
| Stddev | .0012833 | .0017004 | .0007228 | .002650 | .0013428 | .006939 | .0003361 |
| %RSD | 17.58359 | 56.72860 | 1.501548 | 55.22098 | 68.68900 | .2315228 | .4779096 |
| #1 | .0064016 | .0039563 | .0481504 | -.006681 | .0030501 | 3.004819 | .0704060 |
| #2 | .0067253 | .0010341 | .0488490 | -.005949 | .0004568 | 2.991124 | .0706114 |
| #3 | .0087685 | .0040017 | .0474038 | -.001768 | .0023579 | 2.996020 | .0699545 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003575 | .0006442 | 81.54811 | .0111399 | .0032060 | .0320635 | 10.50906 |
| Stddev | .0000279 | .0000625 | .08828 | .0004002 | .0000639 | .0002193 | .02588 |
| %RSD | 7.815339 | 9.696215 | .1082544 | 3.592332 | 1.992588 | .6839153 | .2462777 |
| #1 | .0003468 | .0007154 | 81.64891 | .0113930 | .0031767 | .0318106 | 10.53330 |
| #2 | .0003892 | .0005986 | 81.51086 | .0106786 | .0032793 | .0321784 | 10.48181 |
| #3 | .0003364 | .0006187 | 81.48457 | .0113482 | .0031621 | .0322014 | 10.51208 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3680804 | 8.021411 | .0097818 | .0008750 | 23.17245 | .0095940 | .4713514 |
| Stddev | .0003643 | .031413 | .0000962 | .0001371 | .06634 | .0010314 | .0024195 |
| %RSD | .0989730 | .3916091 | .9833982 | 15.67012 | .2862732 | 10.75072 | .5133086 |
| #1 | .3680903 | 8.014936 | .0096928 | .0009106 | 23.20245 | .0086172 | .4688549 |
| #2 | .3677112 | 8.055557 | .0097686 | .0007236 | 23.09641 | .0094922 | .4715136 |
| #3 | .3684396 | 7.993741 | .0098839 | .0009908 | 23.21848 | .0106725 | .4736857 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.230866 | .0456405 | .0023834 | -.001946 | .1397083 | 8.996992 | 1.967896 |
| Stddev | .004258 | .0001320 | .0003847 | .000521 | .0050754 | .046185 | .008010 |
| %RSD | .0588866 | .2892691 | 16.14093 | 26.76197 | 3.632856 | .5133404 | .4070442 |
| #1 | 7.235731 | .0454890 | .0019550 | -.002347 | .1451758 | 9.050318 | 1.977145 |
| #2 | 7.227817 | .0457016 | .0024957 | -.001357 | .1388017 | 8.970936 | 1.963369 |
| #3 | 7.229049 | .0457309 | .0026994 | -.002132 | .1351472 | 8.969723 | 1.963174 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-01 Acquired: 12/6/2024 17:22:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 3.812659 | -.004150 | .2390047 |
| Stddev | .004484 | .000494 | .0011710 |
| %RSD | .1176211 | 11.91200 | .4899449 |
| #1 | 3.817754 | -.004709 | .2380921 |
| #2 | 3.810914 | -.003769 | .2385969 |
| #3 | 3.809310 | -.003973 | .2403250 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2464.942 | 60003.07 | 14183.53 | 1727.833 | 4078.462 |
| Stddev | 14.773 | 30.15 | 39.76 | 2.232 | 20.099 |
| %RSD | .5993322 | .0502536 | .2803014 | .1291700 | .4928052 |
| #1 | 2477.773 | 60008.99 | 14227.95 | 1730.408 | 4097.115 |
| #2 | 2468.260 | 60029.83 | 14171.33 | 1726.468 | 4081.095 |
| #3 | 2448.791 | 59970.40 | 14151.30 | 1726.622 | 4057.177 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV06 Acquired: 12/6/2024 17:27:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.952131** | **4.931534** | **5.022080** | **4.995331** | **4.842304** | **9.977582** | **9.675508** |
| Stddev | .004678 | .089942 | .006512 | .018262 | .008029 | .017800 | .022794 |
| %RSD | .0944705 | 1.823806 | .1296607 | .3655887 | .1658111 | .1783967 | .2355876 |
| #1 | 4.957446 | 5.025266 | 5.014665 | 5.016387 | 4.851540 | 9.957629 | 9.649245 |
| #2 | 4.948640 | 4.923400 | 5.024706 | 4.985811 | 4.838380 | 9.983285 | 9.690143 |
| #3 | 4.950306 | 4.845936 | 5.026868 | 4.983796 | 4.836991 | 9.991830 | 9.687137 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2531141** | **2.536276** | **24.92670** | **1.027187** | **2.513581** | **1.264648** | **4.908105** |
| Stddev | .0006492 | .002190 | .08800 | .002339 | .002050 | .001834 | .044276 |
| %RSD | .2565015 | .0863304 | .3530402 | .2277034 | .0815599 | .1450241 | .9021047 |
| #1 | .2538521 | 2.537233 | 24.82554 | 1.024494 | 2.513633 | 1.263311 | 4.856996 |
| #2 | .2526308 | 2.533771 | 24.96889 | 1.028705 | 2.511506 | 1.263894 | 4.934774 |
| #3 | .2528595 | 2.537824 | 24.98565 | 1.028363 | 2.515605 | 1.266738 | 4.932546 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.440163** | **24.97744** | **2.516768** | **1.246611** | **22.50983** | **2.516092** | **2.483741** |
| Stddev | .009071 | .05718 | .001886 | .001610 | .06641 | .009557 | .006395 |
| %RSD | .3717231 | .2289144 | .0749333 | .1291708 | .2950306 | .3798454 | .2574911 |
| #1 | 2.429841 | 24.91285 | 2.516627 | 1.244915 | 22.55821 | 2.506467 | 2.476799 |
| #2 | 2.446861 | 24.99786 | 2.514957 | 1.248119 | 22.53717 | 2.525579 | 2.489394 |
| #3 | 2.443788 | 25.02160 | 2.518721 | 1.246800 | 22.43411 | 2.516229 | 2.485029 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.69641** | **4.958328** | **5.080704** | **5.017787** | **4.888522** | **5.179105** | **5.020684** |
| Stddev | .09508 | .014891 | .010934 | .007288 | .005752 | .052955 | .020220 |
| %RSD | .4012623 | .3003156 | .2152113 | .1452498 | .1176561 | 1.022475 | .4027296 |
| #1 | 23.58809 | 4.975290 | 5.092123 | 5.026158 | 4.883713 | 5.118157 | 5.043971 |
| #2 | 23.76610 | 4.947409 | 5.079658 | 5.012849 | 4.894893 | 5.205305 | 5.007593 |
| #3 | 23.73504 | 4.952285 | 5.070330 | 5.014354 | 4.886960 | 5.213853 | 5.010486 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV06 Acquired: 12/6/2024 17:27:43 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV06 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.927041** | **4.701146** | **4.972100** |
| Stddev | .026492 | .011012 | .007126 |
| %RSD | .5376884 | .2342445 | .1433139 |
| #1 | 4.956171 | 4.712048 | 4.979792 |
| #2 | 4.904389 | 4.701363 | 4.965724 |
| #3 | 4.920562 | 4.690027 | 4.970784 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2459.075** | **58287.31** | **13464.23** | **1689.341** | **3919.202** |
| Stddev | 2.107 | 101.29 | 50.57 | 4.508 | 3.381 |
| %RSD | .0857025 | .1737830 | .3755628 | .2668721 | .0862746 |
| #1 | 2460.144 | 58399.67 | 13408.19 | 1689.673 | 3923.029 |
| #2 | 2460.434 | 58202.99 | 13478.03 | 1684.676 | 3917.956 |
| #3 | 2456.647 | 58259.27 | 13506.46 | 1693.674 | 3916.620 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB06 Acquired: 12/6/2024 17:31:52 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0014075** | **.0003098** | **-.000854** | **-.001757** | **.0022123** | **-.001575** | **-.002207** |
| Stddev | .0021014 | .0007822 | .000120 | .000162 | .0007357 | .003141 | .000380 |
| %RSD | 149.3021 | 252.5256 | 14.11357 | 9.223112 | 33.25702 | 199.4892 | 17.19501 |
| #1 | .0015983 | .0012105 | -.000752 | -.001611 | .0022165 | .002046 | -.001774 |
| #2 | .0034070 | -.000199 | -.000987 | -.001727 | .0014745 | -.003574 | -.002366 |
| #3 | -.000783 | -.000082 | -.000821 | -.001931 | .0029460 | -.003196 | -.002482 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000303** | **.0001188** | **-.008728** | **-.000017** | **.0001763** | **-.000225** | **.0010300** |
| Stddev | .0000531 | .0000050 | .005627 | .000309 | .0001084 | .000160 | .0026365 |
| %RSD | 175.3339 | 4.182771 | 64.47299 | 1786.959 | 61.44736 | 70.84692 | 255.9578 |
| #1 | .0000694 | .0001171 | -.008278 | .000052 | .0002762 | -.000190 | .0032729 |
| #2 | .0000517 | .0001148 | -.014566 | -.000356 | .0000611 | -.000400 | -.001874 |
| #3 | -.000030 | .0001244 | -.003339 | .000251 | .0001917 | -.000086 | .001691 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000083** | **-.005547** | **.0004444** | **.0008925** | **.0749656** | **.0002772** | **-.000980** |
| Stddev | .0001755 | .013385 | .0000991 | .0004178 | .0148034 | .0001169 | .000075 |
| %RSD | 2124.761 | 241.3023 | 22.30877 | 46.81501 | 19.74695 | 42.18596 | 7.626323 |
| #1 | .0001956 | .006808 | .0003450 | .0012341 | .0584777 | .0002606 | -.000985 |
| #2 | -.000018 | -.019766 | .0004450 | .0004266 | .0793041 | .0001695 | -.001051 |
| #3 | -.000152 | -.003682 | .0005432 | .0010166 | .0871150 | .0004016 | -.000902 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.052644** | **.0021520** | **.0011229** | **.0002326** | **.0004188** | **.0072958** | **-.002206** |
| Stddev | .016734 | .0002334 | .0001043 | .0005815 | .0002609 | .0045624 | .002237 |
| %RSD | 31.78628 | 10.84592 | 9.286313 | 250.0170 | 62.28676 | 62.53448 | 101.3808 |
| #1 | -.070490 | .0023887 | .0012416 | -.000400 | .0007020 | .0091220 | -.004609 |
| #2 | -.050137 | .0019221 | .0010814 | .000744 | .0001883 | .0106623 | -.000183 |
| #3 | -.037306 | .0021451 | .0010458 | .000353 | .0003662 | .0021032 | -.001827 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB06 Acquired: 12/6/2024 17:31:52 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB06 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000627 | -.000685 | .0001058 |
| Stddev | .001968 | .000400 | .0000670 |
| %RSD | 314.1195 | 58.30839 | 63.33912 |
| #1 | .001646 | -.000254 | .0001695 |
| #2 | -.001736 | -.000758 | .0001121 |
| #3 | -.001790 | -.001044 | .0000359 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2625.087 | 62269.68 | 13857.63 | 1808.337 | 4543.636 |
| Stddev | .901 | 225.94 | 157.58 | 16.312 | 2.282 |
| %RSD | .0343115 | .3628331 | 1.137148 | .9020179 | .0502343 |
| #1 | 2624.054 | 62013.71 | 13786.60 | 1789.572 | 4543.430 |
| #2 | 2625.500 | 62354.01 | 14038.22 | 1816.320 | 4546.014 |
| #3 | 2625.708 | 62441.33 | 13748.06 | 1819.120 | 4541.462 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165430BL Acquired: 12/6/2024 17:36:13 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000279** | **-.000548** | **-.001109** | **-.000374** | **-.000388** | **-.001278** | **-.002730** |
| Stddev | .000662 | .000303 | .000091 | .001210 | .000795 | .002312 | .000394 |
| %RSD | 237.2463 | 55.23672 | 8.225236 | 322.9773 | 204.6825 | 180.9215 | 14.44415 |
| #1 | -.000971 | -.000571 | -.001152 | -.001767 | .000241 | -.001958 | -.002308 |
| #2 | -.000213 | -.000235 | -.001004 | .000232 | -.001282 | -.003173 | -.002795 |
| #3 | .000347 | -.000839 | -.001171 | .000412 | -.000124 | .001298 | -.003088 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000221** | **.0000402** | **-.001948** | **.0000893** | **.0001182** | **-.000393** | **-.002192** |
| Stddev | .0000608 | .0000949 | .004355 | .0003062 | .0000222 | .000108 | .004323 |
| %RSD | 275.0953 | 235.9561 | 223.4979 | 343.0623 | 18.79100 | 27.50154 | 197.2483 |
| #1 | -.000033 | .0001444 | -.003499 | .0004006 | .0001176 | -.000365 | .002497 |
| #2 | .000011 | -.000041 | .002969 | .0000788 | .0000962 | -.000512 | -.003052 |
| #3 | .000088 | .000017 | -.005316 | -.000212 | .0001406 | -.000301 | -.006020 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000218** | **-.003938** | **.0002339** | **.0009068** | **.0664166** | **.0000786** | **-.001195** |
| Stddev | .000075 | .007601 | .0002612 | .0002615 | .0113185 | .0007022 | .000098 |
| %RSD | 34.21523 | 193.0248 | 111.6348 | 28.84319 | 17.04164 | 893.3250 | 8.217562 |
| #1 | -.000299 | -.005602 | .0001459 | .0011873 | .0543645 | -.000703 | -.001084 |
| #2 | -.000204 | -.010569 | .0000282 | .0006696 | .0680646 | .000655 | -.001235 |
| #3 | -.000151 | .004358 | .0005278 | .0008634 | .0768209 | .000284 | -.001268 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.065938** | **-.001278** | **.0001913** | **-.000928** | **.0002401** | **.0040139** | **-.002805** |
| Stddev | .008074 | .000615 | .0003388 | .000394 | .0002150 | .0007780 | .001169 |
| %RSD | 12.24491 | 48.15028 | 177.1062 | 42.48197 | 89.55602 | 19.38272 | 41.67651 |
| #1 | -.069623 | -.000588 | -.000200 | -.001222 | .0004517 | .0047757 | -.001460 |
| #2 | -.071513 | -.001476 | .000372 | -.000480 | .0002466 | .0032207 | -.003578 |
| #3 | -.056679 | -.001769 | .000401 | -.001082 | .0000219 | .0040452 | -.003377 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165430BL Acquired: 12/6/2024 17:36:13 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.002047 | -.000368 | -.000004 |
| Stddev | .001442 | .000150 | .000014 |
| %RSD | 70.41725 | 40.77640 | 342.0463 |
| | | | |
| #1 | -.003710 | -.000540 | .000012 |
| #2 | -.001281 | -.000263 | -.000016 |
| #3 | -.001150 | -.000302 | -.000008 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2639.311 | 62503.65 | 13688.83 | 1814.853 | 4554.687 |
| Stddev | 1.948 | 72.59 | 47.96 | 1.812 | 6.038 |
| %RSD | .0738077 | .1161370 | .3503544 | .0998612 | .1325631 |
| | | | | | |
| #1 | 2640.880 | 62437.11 | 13637.67 | 1815.001 | 4556.460 |
| #2 | 2639.921 | 62492.77 | 13696.07 | 1812.971 | 4559.640 |
| #3 | 2637.130 | 62581.06 | 13732.76 | 1816.587 | 4547.961 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165430BS Acquired: 12/6/2024 17:40:34 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.7473945** | **1.977913** | **.9571412** | **1.893666** | **.7399291** | **1.956051** |
| Stddev | .0009963 | .009041 | .0009379 | .002943 | .0027836 | .007484 |
| %RSD | .1333060 | .4571137 | .0979854 | .1553965 | .3761964 | .3826286 |
| #1 | .7485395 | 1.980665 | .9567907 | 1.894938 | .7427062 | 1.948490 |
| #2 | .7469190 | 1.985259 | .9582038 | 1.895760 | .7371391 | 1.956207 |
| #3 | .7467251 | 1.967816 | .9564291 | 1.890302 | .7399419 | 1.963456 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.1905112** | **.2064044** | **.1926246** | **1.046577** | **.4018501** | **.1948912** |
| Stddev | .0009128 | .0001250 | .0001164 | .005042 | .0011144 | .0001754 |
| %RSD | .4791088 | .0605750 | .0604250 | .4817443 | .2773138 | .0899939 |
| #1 | .1895003 | .2063022 | .1925392 | 1.041578 | .4027341 | .1950602 |
| #2 | .1907584 | .2063672 | .1927572 | 1.046493 | .4005983 | .1949031 |
| #3 | .1912749 | .2065438 | .1925774 | 1.051660 | .4022178 | .1947101 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3046948** | **2.844173** | **.2025787** | **1.975158** | **.4887939** | **.0725653** |
| Stddev | .0005493 | .018450 | .0012030 | .007963 | .0006764 | .0000960 |
| %RSD | .1802793 | .6486883 | .5938253 | .4031406 | .1383707 | .1323221 |
| #1 | .3051140 | 2.830256 | .2013239 | 1.966320 | .4888367 | .0726746 |
| #2 | .3040729 | 2.837162 | .2026899 | 1.977381 | .4880971 | .0725271 |
| #3 | .3048973 | 2.865101 | .2037221 | 1.981773 | .4894478 | .0724943 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | F **2.520770** | **.3012711** | **.1996046** | **8.788343** | **.2936544** | **.4010910** |
| Stddev | .005039 | .0017266 | .0002057 | .033652 | .0003120 | .0005199 |
| %RSD | .1999131 | .5731074 | .1030396 | .3829162 | .1062590 | .1296294 |
| #1 | 2.515392 | .2992916 | .1995001 | 8.752436 | .2932975 | .4016470 |
| #2 | 2.525384 | .3020545 | .1994722 | 8.793430 | .2937903 | .4010090 |
| #3 | 2.521533 | .3024670 | .1998416 | 8.819161 | .2938755 | .4006169 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: PB165430BS Acquired: 12/6/2024 17:40:34 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6726834 | .1944422 | F .6869290 | 5.553554 | F -.011910 | .1960027 |
| Stddev | .0011075 | .0003473 | .0082720 | .008431 | .002645 | .0001853 |
| %RSD | .1646401 | .1786179 | 1.204203 | .1518053 | 22.20770 | .0945396 |
| #1 | .6734406 | .1940432 | .6783326 | 5.558769 | -.008970 | .1959159 |
| #2 | .6731972 | .1946767 | .6876211 | 5.558066 | -.014097 | .1958768 |
| #3 | .6714123 | .1946068 | .6948332 | 5.543828 | -.012662 | .1962155 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2023423 |
| Stddev | .0007443 |
| %RSD | .3678566 |
| #1 | .2014828 |
| #2 | .2027718 |
| #3 | .2027723 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2614.276 | 61975.81 | 13416.49 | 1801.003 | 4370.397 |
| Stddev | 4.421 | 34.70 | 15.43 | 4.013 | 6.821 |
| %RSD | .1690988 | .0559968 | .1150150 | .2228291 | .1560829 |
| #1 | 2609.208 | 61980.71 | 13408.82 | 1798.203 | 4362.532 |
| #2 | 2617.341 | 62007.81 | 13406.40 | 1805.601 | 4373.956 |
| #3 | 2616.279 | 61938.92 | 13434.26 | 1799.206 | 4374.703 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02 Acquired: 12/6/2024 17:44:35 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0061069 | .0027642 | .0470209 | -.004608 | .0020457 | 3.066716 | .0708831 |
| Stddev | .0008761 | .0003182 | .0002486 | .001305 | .0011339 | .012657 | .0005674 |
| %RSD | 14.34604 | 11.50970 | .5286015 | 28.31460 | 55.42827 | .4127094 | .8005256 |
| #1 | .0051143 | .0024737 | .0469506 | -.005842 | .0008189 | 3.057986 | .0702344 |
| #2 | .0064342 | .0031042 | .0472970 | -.003243 | .0022629 | 3.060930 | .0711274 |
| #3 | .0067722 | .0027147 | .0468150 | -.004740 | .0030552 | 3.081231 | .0712875 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003868 | .0006056 | 80.63847 | .0135389 | .0035228 | .0310671 | 10.42212 |
| Stddev | .0000336 | .0000842 | .30195 | .0001106 | .0001139 | .0005526 | .03179 |
| %RSD | 8.685697 | 13.90194 | .3744521 | .8169910 | 3.233802 | 1.778621 | .3050117 |
| #1 | .0003768 | .0005274 | 80.29060 | .0135792 | .0036136 | .0308882 | 10.38550 |
| #2 | .0004242 | .0006947 | 80.79203 | .0136236 | .0035598 | .0306262 | 10.44262 |
| #3 | .0003593 | .0005946 | 80.83277 | .0134137 | .0033950 | .0316870 | 10.43824 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3611631 | 7.916587 | .0121471 | .0008122 | 23.23702 | .0083157 | .4605268 |
| Stddev | .0020296 | .033674 | .0003434 | .0001538 | .07630 | .0009892 | .0015091 |
| %RSD | .5619734 | .4253562 | 2.826730 | 18.93586 | .3283460 | 11.89572 | .3276995 |
| #1 | .3590431 | 7.878303 | .0124450 | .0007089 | 23.17623 | .0087015 | .4605609 |
| #2 | .3613581 | 7.941617 | .0117715 | .0007387 | 23.21218 | .0071917 | .4590009 |
| #3 | .3630883 | 7.929841 | .0122249 | .0009889 | 23.32264 | .0090539 | .4620186 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.237201 | .0466082 | .0025285 | -.002082 | .1478472 | 9.437967 | 1.905849 |
| Stddev | .007686 | .0000255 | .0001042 | .000917 | .0007504 | .019839 | .012034 |
| %RSD | .1061951 | .0546813 | 4.119862 | 44.04039 | .5075488 | .2102042 | .6314248 |
| #1 | 7.232831 | .0466358 | .0026394 | -.002046 | .1469891 | 9.439674 | 1.919269 |
| #2 | 7.232697 | .0466032 | .0024327 | -.001184 | .1481721 | 9.417330 | 1.902261 |
| #3 | 7.246075 | .0465856 | .0025135 | -.003016 | .1483805 | 9.456898 | 1.896017 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02 Acquired: 12/6/2024 17:44:35 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.451140** | **-.003693** | **.2394911** |
| Stddev | .021830 | .000100 | .0014846 |
| %RSD | .4904419 | 2.705413 | .6199018 |
| #1 | 4.472049 | -.003680 | .2380984 |
| #2 | 4.428492 | -.003600 | .2393217 |
| #3 | 4.452878 | -.003798 | .2410531 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2448.925** | **60089.06** | **14143.34** | **1726.240** | **4062.965** |
| Stddev | 10.411 | 86.90 | 49.06 | 7.502 | 11.802 |
| %RSD | .4251175 | .1446171 | .3468956 | .4345773 | .2904719 |
| #1 | 2460.225 | 60181.65 | 14188.40 | 1732.206 | 4076.460 |
| #2 | 2446.827 | 60076.26 | 14150.55 | 1728.696 | 4057.864 |
| #3 | 2439.722 | 60009.27 | 14091.07 | 1717.818 | 4054.572 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02DUP Acquired: 12/6/2024 17:48:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0061120** | **.0015864** | **.0475465** | **-.004017** | **.0020536** | **3.424812** |
| Stddev | .0025035 | .0013629 | .0009231 | .000871 | .0004040 | .016749 |
| %RSD | 40.96116 | 85.90843 | 1.941537 | 21.67523 | 19.67223 | .4890351 |
| #1 | .0032978 | .0030185 | .0484055 | -.003410 | .0023914 | 3.420308 |
| #2 | .0069463 | .0003053 | .0476636 | -.003628 | .0016061 | 3.410777 |
| #3 | .0080918 | .0014355 | .0465704 | -.005015 | .0021634 | 3.443352 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0731390** | **.0003763** | **.0006129** | **80.10683** | **.0136341** | **.0034470** |
| Stddev | .0003530 | .0000408 | .0001099 | .25910 | .0002130 | .0001175 |
| %RSD | .4825869 | 10.84770 | 17.93073 | .3234430 | 1.562282 | 3.407551 |
| #1 | .0731176 | .0003303 | .0004885 | 79.83354 | .0135100 | .0035186 |
| #2 | .0735021 | .0003903 | .0006533 | 80.34892 | .0135123 | .0033114 |
| #3 | .0727972 | .0004083 | .0006968 | 80.13802 | .0138801 | .0035110 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0310004** | **10.53551** | **.3604550** | **7.903741** | **.0125631** | **.0008029** |
| Stddev | .0002375 | .04085 | .0014841 | .030954 | .0001878 | .0003931 |
| %RSD | .7660631 | .3877042 | .4117155 | .3916333 | 1.495140 | 48.95954 |
| #1 | .0310295 | 10.49662 | .3587431 | 7.871727 | .0124985 | .0004435 |
| #2 | .0307497 | 10.57806 | .3612432 | 7.933512 | .0127747 | .0012226 |
| #3 | .0312220 | 10.53184 | .3613786 | 7.905983 | .0124161 | .0007424 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **23.80218** | **.0097428** | **.4627604** | **7.502590** | **.0462055** | **.0023429** |
| Stddev | .13517 | .0008996 | .0007457 | .044043 | .0004485 | .0000863 |
| %RSD | .5679080 | 9.233573 | .1611310 | .5870369 | .9707745 | 3.684099 |
| #1 | 23.75435 | .0103160 | .4627581 | 7.488009 | .0457629 | .0022675 |
| #2 | 23.69743 | .0087059 | .4620159 | 7.467687 | .0466598 | .0024371 |
| #3 | 23.95477 | .0102064 | .4635072 | 7.552075 | .0461938 | .0023243 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02DUP Acquired: 12/6/2024 17:48:47 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | -.001927 | .1782157 | F 10.55720 | 1.925397 | 4.524180 | -.003760 |
| Stddev | .000218 | .0026140 | .06853 | .011014 | .019000 | .000306 |
| %RSD | 11.30378 | 1.466766 | .6491679 | .5720292 | .4199668 | 8.129755 |
| #1 | -.001679 | .1773842 | 10.56230 | 1.919409 | 4.502242 | -.003545 |
| #2 | -.002085 | .1761185 | 10.48626 | 1.918675 | 4.534958 | -.004110 |
| #3 | -.002018 | .1811443 | 10.62304 | 1.938108 | 4.535340 | -.003625 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .2407050 |
| Stddev | .0010444 |
| %RSD | .4338707 |
| #1 | .2401503 |
| #2 | .2400551 |
| #3 | .2419097 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2412.647 | 59214.77 | 14045.12 | 1686.557 | 4010.296 |
| Stddev | .217 | 131.56 | 30.07 | 4.000 | 4.548 |
| %RSD | .0090051 | .2221734 | .2141279 | .2371878 | .1133997 |
| #1 | 2412.890 | 59321.48 | 14079.75 | 1689.711 | 4013.057 |
| #2 | 2412.472 | 59255.06 | 14030.03 | 1687.904 | 4012.784 |
| #3 | 2412.578 | 59067.78 | 14025.58 | 1682.057 | 4005.047 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02LX5 Acquired: 12/6/2024 17:52:59 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003934 | .0005008 | .0084169 | .0005266 | .0004088 | .7186412 | .0116258 |
| Stddev | .0016732 | .0013393 | .0005543 | .0002835 | .0007518 | .0046212 | .0005548 |
| %RSD | 425.3041 | 267.4504 | 6.585486 | 53.83219 | 183.8962 | .6430517 | 4.772615 |
| #1 | -.001055 | -.000949 | .0090264 | .0008233 | -.000394 | .7222983 | .0115215 |
| #2 | .002225 | .000759 | .0079429 | .0002586 | .000523 | .7201779 | .0111305 |
| #3 | .000010 | .001692 | .0082814 | .0004977 | .001097 | .7134474 | .0122254 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0000985 | .0000573 | 16.36063 | .0025653 | .0005841 | .0060699 | 2.083161 |
| Stddev | .0000478 | .0000059 | .04401 | .0000511 | .0001211 | .0000183 | .015458 |
| %RSD | 48.53535 | 10.31095 | .2690018 | 1.991281 | 20.72233 | .3012501 | .7420652 |
| #1 | .0000541 | .0000638 | 16.31047 | .0026019 | .0005671 | .0060605 | 2.068510 |
| #2 | .0000922 | .0000521 | 16.37863 | .0025069 | .0004725 | .0060910 | 2.081655 |
| #3 | .0001491 | .0000561 | 16.39278 | .0025871 | .0007128 | .0060582 | 2.099317 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0739616 | 1.620060 | .0026035 | .0008144 | 4.218150 | .0014360 | .0865497 |
| Stddev | .0001296 | .010232 | .0002310 | .0002044 | .017896 | .0007353 | .0001976 |
| %RSD | .1752435 | .6315753 | 8.873411 | 25.10158 | .4242526 | 51.20487 | .2283502 |
| #1 | .0740900 | 1.612184 | .0025978 | .0006237 | 4.206860 | .0022826 | .0863859 |
| #2 | .0738308 | 1.631625 | .0023753 | .0007894 | 4.238783 | .0009563 | .0864939 |
| #3 | .0739640 | 1.616371 | .0028372 | .0010303 | 4.208806 | .0010692 | .0867692 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 1.337800 | .0066391 | .0005399 | -.000848 | .0412625 | 2.145252 | .3612426 |
| Stddev | .016060 | .0002041 | .0002457 | .000493 | .0013931 | .007083 | .0028644 |
| %RSD | 1.200499 | 3.074072 | 45.50287 | 58.17197 | 3.376221 | .3301796 | .7929252 |
| #1 | 1.320656 | .0064153 | .0008223 | -.001354 | .0397418 | 2.149182 | .3595723 |
| #2 | 1.352496 | .0066868 | .0003753 | -.000368 | .0415686 | 2.149500 | .3596053 |
| #3 | 1.340247 | .0068151 | .0004221 | -.000821 | .0424771 | 2.137075 | .3645500 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02LX5 Acquired: 12/6/2024 17:52:59 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | .8413468 | -.001710 | .0485381 |
| Stddev | .0040517 | .000280 | .0002009 |
| %RSD | .4815686 | 16.37375 | .4138954 |
| | | | |
| #1 | .8398192 | -.001394 | .0485718 |
| #2 | .8459401 | -.001812 | .0487200 |
| #3 | .8382809 | -.001925 | .0483225 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2522.287 | 60722.88 | 13752.35 | 1737.314 | 4277.064 |
| Stddev | 9.258 | 110.12 | 19.76 | 10.226 | 4.974 |
| %RSD | .3670367 | .1813535 | .1436748 | .5885889 | .1163023 |
| | | | | | |
| #1 | 2514.451 | 60846.77 | 13737.57 | 1748.354 | 4272.258 |
| #2 | 2532.502 | 60636.14 | 13744.69 | 1735.419 | 4282.191 |
| #3 | 2519.907 | 60685.71 | 13774.79 | 1728.168 | 4276.742 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02MS Acquired: 12/6/2024 17:57:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.8403905** | **2.053275** | **1.030910** | **1.055152** | **.8070126** | **5.759613** |
| Stddev | .0025288 | .014833 | .002072 | .003197 | .0042223 | .015406 |
| %RSD | .3009122 | .7224200 | .2009588 | .3029495 | .5232005 | .2674799 |
| #1 | .8432661 | 2.068627 | 1.033013 | 1.053851 | .8029491 | 5.749521 |
| #2 | .8385132 | 2.039022 | 1.030845 | 1.052811 | .8067111 | 5.777345 |
| #3 | .8393921 | 2.052178 | 1.028871 | 1.058794 | .8113775 | 5.751972 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2783260** | **.2114636** | **.1992372** | **86.29310** | **.4127123** | **.2054459** |
| Stddev | .0005796 | .0004675 | .0001205 | .29767 | .0011745 | .0000925 |
| %RSD | .2082404 | .2210569 | .0604826 | .3449503 | .2845936 | .0450319 |
| #1 | .2780003 | .2112688 | .1992692 | 86.61767 | .4115063 | .2053393 |
| #2 | .2779826 | .2111251 | .1993385 | 86.22881 | .4127780 | .2054932 |
| #3 | .2789952 | .2119970 | .1991039 | 86.03284 | .4138527 | .2055052 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3519709** | **13.88454** | **.5868877** | **10.35750** | **.5146500** | **.0775149** |
| Stddev | .0011535 | .08563 | .0021242 | .03521 | .0002035 | .0003027 |
| %RSD | .3277194 | .6167290 | .3619493 | .3399355 | .0395323 | .3905262 |
| #1 | .3514643 | 13.97040 | .5891659 | 10.38015 | .5145002 | .0778639 |
| #2 | .3511575 | 13.88407 | .5865360 | 10.37541 | .5148816 | .0773579 |
| #3 | .3532910 | 13.79914 | .5849613 | 10.31694 | .5145681 | .0773230 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **27.99743** | **.3203624** | **.6883735** | **18.05576** | **.3392216** | **.4233285** |
| Stddev | .11616 | .0015938 | .0012240 | .02508 | .0007899 | .0015760 |
| %RSD | .4148797 | .4975009 | .1778088 | .1388941 | .2328670 | .3722885 |
| #1 | 27.87519 | .3193593 | .6871770 | 18.03258 | .3392017 | .4224804 |
| #2 | 28.01075 | .3195276 | .6883201 | 18.05234 | .3384419 | .4223582 |
| #3 | 28.10635 | .3222002 | .6896233 | 18.08238 | .3400214 | .4251470 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02MS Acquired: 12/6/2024 17:57:17 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6679086 | .3788041 | F 11.77095 | 8.091753 | 6.425091 | .2108526 |
| Stddev | .0005862 | .0039827 | .03908 | .060110 | .023859 | .0010478 |
| %RSD | .0877597 | 1.051394 | .3320159 | .7428597 | .3713447 | .4969327 |
| #1 | .6683451 | .3814885 | 11.79093 | 8.158877 | 6.450610 | .2101855 |
| #2 | .6672424 | .3742281 | 11.79601 | 8.073488 | 6.403341 | .2103122 |
| #3 | .6681384 | .3806958 | 11.72592 | 8.042893 | 6.421322 | .2120603 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4701252 |
| Stddev | .0012771 |
| %RSD | .2716470 |
| #1 | .4693061 |
| #2 | .4694728 |
| #3 | .4715967 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2379.026 | 59106.94 | 13737.26 | 1666.942 | 3931.369 |
| Stddev | 7.521 | 59.93 | 4.30 | 5.975 | 4.850 |
| %RSD | .3161219 | .1013925 | .0312813 | .3584475 | .1233617 |
| #1 | 2383.157 | 59144.04 | 13740.13 | 1672.324 | 3936.379 |
| #2 | 2383.577 | 59037.81 | 13739.33 | 1660.512 | 3931.033 |
| #3 | 2370.346 | 59138.98 | 13732.32 | 1667.988 | 3926.697 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02MSD Acquired: 12/6/2024 18:01:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.8435221** | **2.054176** | **1.035906** | **1.060813** | **.8078777** | **5.799297** |
| Stddev | .0039928 | .011818 | .003013 | .003189 | .0040020 | .019827 |
| %RSD | .4733497 | .5753302 | .2908312 | .3005767 | .4953727 | .3418947 |
| #1 | .8480829 | 2.059902 | 1.032461 | 1.057192 | .8055182 | 5.822167 |
| #2 | .8418263 | 2.062041 | 1.037211 | 1.062050 | .8124985 | 5.786933 |
| #3 | .8406571 | 2.040586 | 1.038046 | 1.063199 | .8056165 | 5.788792 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2783937** | **.2121232** | **.2007759** | **86.01438** | **.4156527** | **.2069019** |
| Stddev | .0008565 | .0005042 | .0000731 | .28720 | .0009594 | .0001967 |
| %RSD | .3076672 | .2376796 | .0364034 | .3338931 | .2308230 | .0950907 |
| #1 | .2774103 | .2115607 | .2008070 | 85.82655 | .4148299 | .2070192 |
| #2 | .2787940 | .2125346 | .2006924 | 85.87161 | .4167065 | .2066747 |
| #3 | .2789768 | .2122741 | .2008283 | 86.34498 | .4154216 | .2070116 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3538155** | **13.89279** | **.5852747** | **10.34337** | **.5180253** | **.0778117** |
| Stddev | .0015935 | .04608 | .0022094 | .01072 | .0004097 | .0002572 |
| %RSD | .4503884 | .3316527 | .3775033 | .1036271 | .0790889 | .3305348 |
| #1 | .3524377 | 13.86192 | .5838334 | 10.33299 | .5178583 | .0776407 |
| #2 | .3555607 | 13.87069 | .5841722 | 10.34272 | .5177254 | .0781075 |
| #3 | .3534481 | 13.94575 | .5878184 | 10.35440 | .5184921 | .0776870 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **28.30798** | **.3200328** | **.6909890** | **18.19493** | **.3404622** | **.4250605** |
| Stddev | .05691 | .0019917 | .0065795 | .00961 | .0013983 | .0008992 |
| %RSD | .2010368 | .6223378 | .9521923 | .0528257 | .4107156 | .2115528 |
| #1 | 28.32124 | .3190343 | .6854164 | 18.20070 | .3388697 | .4242032 |
| #2 | 28.24561 | .3187379 | .6893031 | 18.18384 | .3414892 | .4259965 |
| #3 | 28.35709 | .3223263 | .6982474 | 18.20026 | .3410277 | .4249817 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02MSD Acquired: 12/6/2024 18:01:16 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6719700 | .3810315 | F 11.91094 | 8.113739 | 6.454377 | .2127225 |
| Stddev | .0020687 | .0041116 | .06118 | .025259 | .001486 | .0003795 |
| %RSD | .3078640 | 1.079062 | .5136413 | .3113155 | .0230230 | .1784067 |
| #1 | .6721838 | .3857638 | 11.95876 | 8.127696 | 6.452910 | .2123368 |
| #2 | .6698027 | .3783353 | 11.84200 | 8.128940 | 6.455881 | .2130955 |
| #3 | .6739236 | .3789953 | 11.93208 | 8.084581 | 6.454339 | .2127352 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4712611 |
| Stddev | .0012234 |
| %RSD | .2595971 |
| #1 | .4701277 |
| #2 | .4710976 |
| #3 | .4725580 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2366.356 | 58183.05 | 13584.97 | 1639.490 | 3894.523 |
| Stddev | 10.479 | 71.54 | 31.04 | 13.074 | 12.298 |
| %RSD | .4428465 | .1229609 | .2285160 | .7974417 | .3157718 |
| #1 | 2377.959 | 58260.41 | 13618.39 | 1647.319 | 3904.001 |
| #2 | 2357.580 | 58169.49 | 13579.50 | 1646.753 | 3898.942 |
| #3 | 2363.530 | 58119.26 | 13557.03 | 1624.397 | 3880.627 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02A Acquired: 12/6/2024 18:05:15 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.8371096** | **2.032445** | **1.025590** | **1.058592** | **.7993870** | **5.925502** |
| Stddev | .0047918 | .029919 | .003013 | .003253 | .0025950 | .024839 |
| %RSD | .5724213 | 1.472077 | .2938073 | .3073396 | .3246197 | .4191947 |
| #1 | .8401766 | 2.004781 | 1.029040 | 1.059157 | .8007218 | 5.947143 |
| #2 | .8315878 | 2.028356 | 1.024254 | 1.055093 | .7963963 | 5.930983 |
| #3 | .8395643 | 2.064198 | 1.023475 | 1.061526 | .8010429 | 5.898380 |

| Elem | Ba4934 | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2744774** | **.2103020** | **.1994754** | **85.70383** | **.4127822** | **.2046911** |
| Stddev | .0009403 | .0008916 | .0003618 | .09161 | .0007989 | .0008063 |
| %RSD | .3425738 | .4239714 | .1813671 | .1068866 | .1935342 | .3939198 |
| #1 | .2741740 | .2092758 | .1995814 | 85.76000 | .4120723 | .2045840 |
| #2 | .2755319 | .2107434 | .1990725 | 85.75337 | .4126269 | .2039438 |
| #3 | .2737263 | .2108869 | .1997723 | 85.59812 | .4136473 | .2055457 |

| Elem | Cu2247 | Fe2404 | Mn2576 | Mg2790 | Ni2316 | Ag3280 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.3520330** | **13.84304** | **.5808629** | **10.33875** | **.5128719** | **.0775045** |
| Stddev | .0015365 | .04803 | .0016865 | .01911 | .0005120 | .0004218 |
| %RSD | .4364538 | .3469916 | .2903516 | .1848525 | .0998345 | .5441933 |
| #1 | .3525804 | 13.89279 | .5819427 | 10.35595 | .5133196 | .0776039 |
| #2 | .3502977 | 13.83938 | .5789194 | 10.31817 | .5123136 | .0770419 |
| #3 | .3532207 | 13.79693 | .5817265 | 10.34213 | .5129825 | .0778677 |

| Elem | Na5895 | V_2924 | Zn2138 | K_7664 | B_2496 | Mo2020 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **27.76916** | **.3171963** | **.6888184** | **17.99267** | **.3371864** | **.4238859** |
| Stddev | .05196 | .0005718 | .0024797 | .03343 | .0014193 | .0010069 |
| %RSD | .1871183 | .1802626 | .3599978 | .1858107 | .4209233 | .2375342 |
| #1 | 27.81546 | .3176077 | .6861475 | 18.01990 | .3364944 | .4240910 |
| #2 | 27.77907 | .3174379 | .6892599 | 18.00276 | .3362458 | .4227923 |
| #3 | 27.71296 | .3165434 | .6910476 | 17.95535 | .3388190 | .4247745 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5138-02A Acquired: 12/6/2024 18:05:15 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | Sn1899 | Ti3361 | Si2881 | P_1774 | S_1820 | Li6707 |
|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .6683732 | .3916243 | F 12.27442 | 8.065768 | 6.416547 | .2099731 |
| Stddev | .0015334 | .0081393 | .14253 | .038112 | .028611 | .0010078 |
| %RSD | .2294232 | 2.078347 | 1.161189 | .4725145 | .4458903 | .4799615 |
| #1 | .6676308 | .4009407 | 12.43876 | 8.032546 | 6.388127 | .2088290 |
| #2 | .6673523 | .3858927 | 12.18458 | 8.057385 | 6.416170 | .2107294 |
| #3 | .6701365 | .3880396 | 12.19992 | 8.107374 | 6.445345 | .2103609 |

| Elem | Sr4077 |
|---|---|
| Units | ppm |
| Avg | .4669337 |
| Stddev | .0010926 |
| %RSD | .2339950 |
| #1 | .4658021 |
| #2 | .4679826 |
| #3 | .4670165 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2377.802 | 58609.54 | 13653.48 | 1639.050 | 3925.632 |
| Stddev | 8.870 | 23.86 | 38.59 | 5.065 | 6.498 |
| %RSD | .3730249 | .0407108 | .2826548 | .3090252 | .1655191 |
| #1 | 2373.079 | 58597.00 | 13697.69 | 1644.096 | 3919.401 |
| #2 | 2388.034 | 58637.06 | 13636.26 | 1639.088 | 3932.367 |
| #3 | 2372.293 | 58594.57 | 13626.50 | 1633.966 | 3925.126 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5139-01 Acquired: 12/6/2024 18:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0070342 | .0017278 | .0470808 | -.007179 | .0015302 | 3.014583 | .0696967 |
| Stddev | .0017622 | .0018478 | .0004577 | .000802 | .0006860 | .034167 | .0003303 |
| %RSD | 25.05132 | 106.9467 | .9721807 | 11.17283 | 44.82971 | 1.133383 | .4739857 |
| #1 | .0055172 | .0023169 | .0470785 | -.006712 | .0007645 | 3.050129 | .0697283 |
| #2 | .0066184 | .0032093 | .0466242 | -.008105 | .0017376 | 3.011634 | .0700101 |
| #3 | .0089672 | -.000343 | .0475396 | -.006719 | .0020886 | 2.981987 | .0693517 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0004162 | .0005910 | 79.67939 | .0104747 | .0032918 | .0304100 | 10.17726 |
| Stddev | .0000316 | .0000232 | .08896 | .0000203 | .0001206 | .0000644 | .02490 |
| %RSD | 7.601447 | 3.932465 | .1116499 | .1941727 | 3.662497 | .2116666 | .2447024 |
| #1 | .0003796 | .0005724 | 79.77167 | .0104617 | .0032784 | .0304782 | 10.15524 |
| #2 | .0004341 | .0006171 | 79.67233 | .0104981 | .0034185 | .0303502 | 10.17225 |
| #3 | .0004347 | .0005836 | 79.59417 | .0104643 | .0031786 | .0304017 | 10.20429 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3591204 | 7.831226 | .0097883 | .0007131 | 23.05721 | .0085655 | .4579050 |
| Stddev | .0014127 | .019953 | .0001466 | .0003489 | .10049 | .0007283 | .0018239 |
| %RSD | .3933896 | .2547873 | 1.497150 | 48.93228 | .4358192 | 8.502587 | .3983116 |
| #1 | .3575840 | 7.852348 | .0098592 | .0003336 | 22.94837 | .0080438 | .4558117 |
| #2 | .3594140 | 7.828636 | .0098860 | .0010201 | 23.07678 | .0093975 | .4587515 |
| #3 | .3603633 | 7.812695 | .0096198 | .0007855 | 23.14647 | .0082552 | .4591518 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.035808 | .0465456 | .0021107 | -.001427 | .1567976 | 9.014876 | 1.874137 |
| Stddev | .022841 | .0002390 | .0001493 | .000770 | .0043171 | .089677 | .002518 |
| %RSD | .3246364 | .5134087 | 7.074201 | 53.96158 | 2.753311 | .9947651 | .1343398 |
| #1 | 7.029697 | .0468152 | .0019742 | -.001194 | .1606721 | 9.109235 | 1.872835 |
| #2 | 7.016645 | .0464621 | .0022701 | -.000801 | .1521439 | 9.004634 | 1.872536 |
| #3 | 7.061083 | .0463597 | .0020877 | -.002288 | .1575766 | 8.930761 | 1.877039 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5139-01 Acquired: 12/6/2024 18:09:13 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 3.944275 | -.004058 | .2353666 |
| Stddev | .004772 | .000373 | .0003170 |
| %RSD | .1209759 | 9.187505 | .1346914 |
| #1 | 3.946267 | -.004475 | .2350121 |
| #2 | 3.947728 | -.003756 | .2354649 |
| #3 | 3.938830 | -.003943 | .2356229 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2513.185 | 60566.21 | 14105.76 | 1770.134 | 4131.507 |
| Stddev | 5.347 | 156.42 | 5.74 | 11.652 | 4.528 |
| %RSD | .2127432 | .2582673 | .0406774 | .6582276 | .1095939 |
| #1 | 2518.039 | 60681.64 | 14107.60 | 1782.675 | 4136.166 |
| #2 | 2507.454 | 60628.81 | 14110.35 | 1768.082 | 4131.230 |
| #3 | 2514.063 | 60388.18 | 14099.32 | 1759.644 | 4127.123 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5139-02 Acquired: 12/6/2024 18:13:25 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0065607 | .0008483 | .0486087 | -.003829 | .0026522 | 3.133721 | .0747570 |
| Stddev | .0030899 | .0015937 | .0004998 | .001176 | .0005224 | .016461 | .0002782 |
| %RSD | 47.09733 | 187.8739 | 1.028153 | 30.69853 | 19.69604 | .5252824 | .3720937 |
| #1 | .0038849 | .0024890 | .0487640 | -.002666 | .0031001 | 3.119580 | .0744522 |
| #2 | .0058547 | .0007496 | .0490125 | -.003806 | .0027781 | 3.151791 | .0748214 |
| #3 | .0099425 | -.000694 | .0480498 | -.005016 | .0020783 | 3.129794 | .0749972 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .0003975 | .0006214 | 83.92574 | .0110994 | .0033553 | .0319471 | 10.63611 |
| Stddev | .0000317 | .0000189 | .18169 | .0002521 | .0002045 | .0004288 | .04071 |
| %RSD | 7.966662 | 3.043471 | .2164881 | 2.271288 | 6.095654 | 1.342197 | .3827315 |
| #1 | .0004336 | .0006419 | 83.87776 | .0113682 | .0033393 | .0321017 | 10.63218 |
| #2 | .0003848 | .0006178 | 84.12660 | .0110618 | .0035674 | .0314625 | 10.59751 |
| #3 | .0003742 | .0006046 | 83.77285 | .0108683 | .0031593 | .0322772 | 10.67864 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | .3833058 | 8.204962 | .0098804 | .0004733 | 24.35283 | .0093629 | .4746606 |
| Stddev | .0012011 | .012353 | .0000579 | .0001312 | .09428 | .0007635 | .0024025 |
| %RSD | .3133476 | .1505538 | .5856478 | 27.72142 | .3871270 | 8.154257 | .5061568 |
| #1 | .3846094 | 8.200140 | .0098539 | .0004101 | 24.31646 | .0085262 | .4753249 |
| #2 | .3830640 | 8.218998 | .0099468 | .0003857 | 24.28215 | .0100218 | .4719959 |
| #3 | .3822440 | 8.195747 | .0098406 | .0006242 | 24.45987 | .0095405 | .4766611 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | 7.409884 | .0484357 | .0026737 | -.002386 | .1559503 | 9.462053 | 1.973876 |
| Stddev | .005541 | .0004011 | .0000713 | .000557 | .0081147 | .015583 | .003074 |
| %RSD | .0747808 | .8281209 | 2.667047 | 23.35896 | 5.203414 | .1646841 | .1557219 |
| #1 | 7.405403 | .0482129 | .0025974 | -.001857 | .1495365 | 9.474190 | 1.976526 |
| #2 | 7.408169 | .0481955 | .0026849 | -.002968 | .1650730 | 9.467489 | 1.970506 |
| #3 | 7.416080 | .0488988 | .0027387 | -.002332 | .1532414 | 9.444481 | 1.974597 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: P5139-02 Acquired: 12/6/2024 18:13:25 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | 4.320731 | -.003967 | .2475951 |
| Stddev | .007601 | .000243 | .0009854 |
| %RSD | .1759241 | 6.118543 | .3979711 |
| #1 | 4.319216 | -.003744 | .2464803 |
| #2 | 4.314002 | -.003933 | .2479551 |
| #3 | 4.328976 | -.004225 | .2483498 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2495.740 | 60538.02 | 14035.17 | 1763.534 | 4088.680 |
| Stddev | 14.785 | 115.32 | 26.99 | 10.084 | 21.353 |
| %RSD | .5924172 | .1904958 | .1923352 | .5718047 | .5222499 |
| #1 | 2511.669 | 60491.03 | 14065.10 | 1762.665 | 4109.690 |
| #2 | 2493.095 | 60669.42 | 14012.66 | 1774.024 | 4089.351 |
| #3 | 2482.456 | 60453.62 | 14027.76 | 1753.912 | 4067.000 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV07 Acquired: 12/6/2024 18:21:23 Type: Unk
Method: NON EPA-6010-200.7(v2505) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **4.814468** | **4.869133** | **4.928786** | **4.857109** | **4.708813** | **9.727758** | **9.301593** |
| Stddev | .006901 | .031494 | .010026 | .011567 | .009647 | .044866 | .039091 |
| %RSD | .1433492 | .6468103 | .2034223 | .2381481 | .2048713 | .4612145 | .4202650 |
| #1 | 4.822336 | 4.879355 | 4.917978 | 4.870213 | 4.719948 | 9.675985 | 9.275640 |
| #2 | 4.811630 | 4.894245 | 4.930597 | 4.852796 | 4.703524 | 9.755254 | 9.346554 |
| #3 | 4.809438 | 4.833797 | 4.937783 | 4.848318 | 4.702967 | 9.752036 | 9.282586 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.2513872** | **2.491675** | **24.42824** | **1.006162** | **2.466690** | **1.232693** | **4.761653** |
| Stddev | .0003440 | .004802 | .15226 | .001605 | .004476 | .002128 | .022155 |
| %RSD | .1368429 | .1927048 | .6232908 | .1595357 | .1814470 | .1726366 | .4652714 |
| #1 | .2509945 | 2.486360 | 24.30747 | 1.004783 | 2.462186 | 1.233934 | 4.751645 |
| #2 | .2515313 | 2.492967 | 24.37797 | 1.005778 | 2.466747 | 1.233910 | 4.746268 |
| #3 | .2516357 | 2.495699 | 24.59927 | 1.007924 | 2.471137 | 1.230236 | 4.787046 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **2.395449** | **24.51502** | **2.469459** | **1.220495** | **25.96325** | **2.455130** | **2.444796** |
| Stddev | .011846 | .17624 | .004037 | .000852 | .14163 | .012149 | .005241 |
| %RSD | .4945283 | .7189086 | .1634595 | .0697776 | .5454942 | .4948588 | .2143682 |
| #1 | 2.385819 | 24.37824 | 2.465470 | 1.221280 | 26.02459 | 2.441255 | 2.440423 |
| #2 | 2.391850 | 24.45293 | 2.469364 | 1.220617 | 26.06386 | 2.460268 | 2.443361 |
| #3 | 2.408677 | 24.71391 | 2.473542 | 1.219589 | 25.80129 | 2.463866 | 2.450606 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **22.80809** | **4.908463** | **4.953673** | **4.929295** | **4.758315** | **5.057334** | **4.956383** |
| Stddev | .11074 | .014115 | .003394 | .008302 | .018058 | .024761 | .010406 |
| %RSD | .4855171 | .2875711 | .0685185 | .1684223 | .3795023 | .4896014 | .2099478 |
| #1 | 22.76935 | 4.898066 | 4.956987 | 4.919838 | 4.741280 | 5.030076 | 4.953605 |
| #2 | 22.93299 | 4.902792 | 4.950204 | 4.932665 | 4.756418 | 5.063489 | 4.967897 |
| #3 | 22.72193 | 4.924532 | 4.953826 | 4.935382 | 4.777246 | 5.078436 | 4.947649 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCV07 Acquired: 12/6/2024 18:21:23 Type: Unk
Method: NON EPA-6010-200.7(v2505) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCV07 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | **4.829987** | **4.563844** | **4.808080** |
| Stddev | .017337 | .024047 | .052157 |
| %RSD | .3589526 | .5269068 | 1.084768 |
| | | | |
| #1 | 4.819773 | 4.550784 | 4.748945 |
| #2 | 4.850005 | 4.591595 | 4.827770 |
| #3 | 4.820183 | 4.549152 | 4.847525 |

| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | **2502.867** | **59017.19** | **13476.43** | **1724.623** | **3966.721** |
| Stddev | 3.365 | 12.67 | 23.32 | 4.613 | 3.943 |
| %RSD | .1344601 | .0214648 | .1730473 | .2674775 | .0993906 |
| | | | | | |
| #1 | 2499.804 | 59027.34 | 13491.72 | 1729.230 | 3967.762 |
| #2 | 2506.469 | 59003.00 | 13487.98 | 1724.636 | 3970.039 |
| #3 | 2502.328 | 59021.24 | 13449.58 | 1720.004 | 3962.363 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB07 Acquired: 12/6/2024 18:27:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

| Elem | As1890 | Tl1908 | Pb2203 | Se1960 | Sb2068 | Al3961 | Ba4934 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000223** | **.0000722** | **-.000863** | **-.000524** | **.0009386** | **.0035495** | **-.002104** |
| Stddev | .001676 | .0010936 | .000616 | .000890 | .0007066 | .0041255 | .000450 |
| %RSD | 750.3985 | 1514.965 | 71.35591 | 169.8054 | 75.27571 | 116.2289 | 21.39649 |
| #1 | -.002148 | -.000670 | -.001496 | -.000645 | .0016685 | -.001196 | -.001757 |
| #2 | .000915 | .001328 | -.000828 | .000420 | .0008895 | .006280 | -.002612 |
| #3 | .000564 | -.000442 | -.000266 | -.001348 | .0002579 | .005565 | -.001942 |

| Elem | Be2348 | Cd2265 | Ca3736 | Cr2677 | Co2286 | Cu2247 | Fe2404 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **.0000401** | **.0000944** | **-.002733** | **-.000144** | **.0000173** | **-.000128** | **-.001730** |
| Stddev | .0000474 | .0000750 | .001847 | .000150 | .0000186 | .000333 | .002082 |
| %RSD | 118.0496 | 79.40003 | 67.58345 | 104.3079 | 107.8461 | 259.9621 | 120.3492 |
| #1 | .0000327 | .0000079 | -.004865 | -.000022 | .0000250 | -.000362 | .000666 |
| #2 | -.000003 | .0001343 | -.001638 | -.000312 | .0000308 | -.000276 | -.002752 |
| #3 | .000091 | .0001410 | -.001695 | -.000099 | -.000004 | .000253 | -.003105 |

| Elem | Mn2576 | Mg2790 | Ni2316 | Ag3280 | Na5895 | V_2924 | Zn2138 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.000106** | **.0058144** | **.0002606** | **.0007982** | **.0029714** | **.0002924** | **-.001077** |
| Stddev | .000111 | .0021879 | .0002425 | .0001725 | .0153413 | .0005993 | .000142 |
| %RSD | 104.3828 | 37.62978 | 93.08510 | 21.61303 | 516.2960 | 204.9655 | 13.14384 |
| #1 | -.000215 | .0061410 | .0005185 | .0008956 | -.012853 | .0006614 | -.001157 |
| #2 | .000006 | .0078206 | .0002259 | .0009000 | .003988 | .0006149 | -.000914 |
| #3 | -.000108 | .0034815 | .0000372 | .0005990 | .017779 | -.000399 | -.001162 |

| Elem | K_7664 | B_2496 | Mo2020 | Sn1899 | Ti3361 | Si2881 | P_1774 |
|---|---|---|---|---|---|---|---|
| Units | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| Avg | **-.069426** | **.0018533** | **.0003441** | **-.000366** | **.0003751** | **.0026980** | **-.004966** |
| Stddev | .018123 | .0004846 | .0003297 | .000299 | .0002411 | .0059361 | .000384 |
| %RSD | 26.10414 | 26.14689 | 95.81916 | 81.53875 | 64.26620 | 220.0194 | 7.738836 |
| #1 | -.085171 | .0023698 | .0002944 | -.000711 | .0002405 | .0083709 | -.004663 |
| #2 | -.073490 | .0014087 | .0000421 | -.000186 | .0002314 | .0031933 | -.004837 |
| #3 | -.049616 | .0017816 | .0006959 | -.000202 | .0006535 | -.003470 | -.005398 |

Reviewed By:jaswal
On:12/11/2024
11:12:35 PM
Inst Id :P4
LB :LB133790

Sample Name: CCB07 Acquired: 12/6/2024 18:27:49 Type: Unk
Method: NON EPA-6010-200.7(v2499) Mode: CONC Corr. Factor: 1.000000
User: Kareem Custom ID1: CCB07 Custom ID2: Custom ID3:
Comment:

| Elem | S_1820 | Li6707 | Sr4077 |
|---|---|---|---|
| Units | ppm | ppm | ppm |
| Avg | -.000945 | -.000397 | -.000015 |
| Stddev | .001858 | .000135 | .000015 |
| %RSD | 196.7063 | 34.04996 | 100.3067 |
| #1 | -.001273 | -.000547 | -.000031 |
| #2 | -.002616 | -.000286 | -.000004 |
| #3 | .001056 | -.000358 | -.000009 |

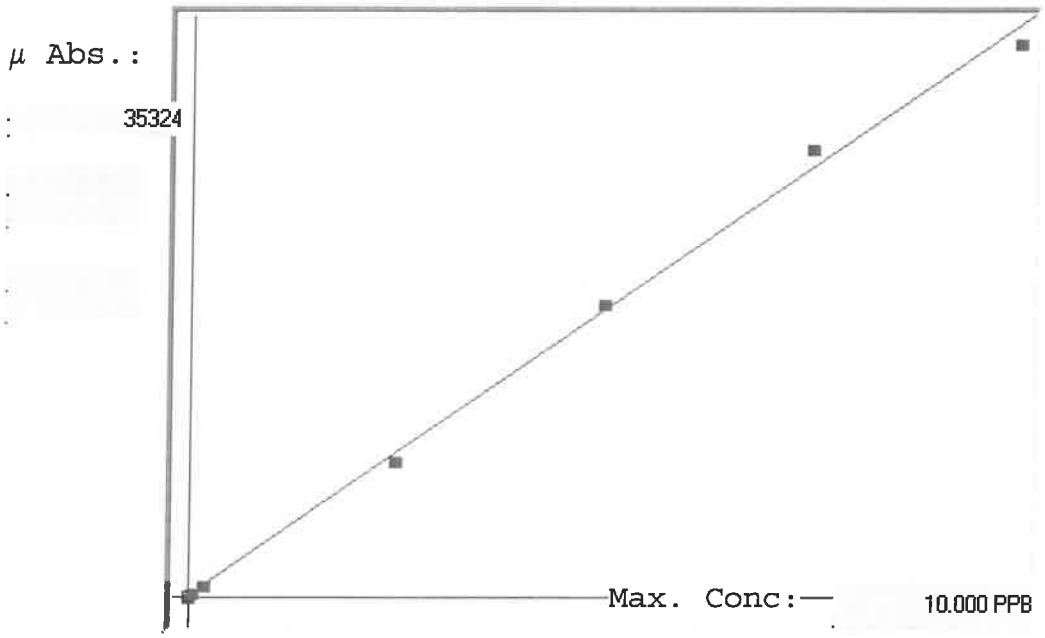
| Int. Std. | Y_2243 | Y_3600 | Y_3710 | Y_2243 | In2306 |
|---|---|---|---|---|---|
| Units | Cts/S | Cts/S | Cts/S | Cts/S | Cts/S |
| Avg | 2623.920 | 61907.66 | 13571.10 | 1810.339 | 4506.301 |
| Stddev | 2.360 | 89.41 | 13.75 | 9.900 | 6.365 |
| %RSD | .0899381 | .1444270 | .1013110 | .5468475 | .1412473 |
| #1 | 2624.254 | 61849.59 | 13571.08 | 1819.804 | 4505.050 |
| #2 | 2621.411 | 62010.62 | 13557.36 | 1811.158 | 4500.655 |
| #3 | 2626.095 | 61862.76 | 13584.86 | 1800.055 | 4513.199 |

Reviewed By:mohan
On:12/10/2024 8:52:42 PM
Inst Id :CV1
LB :LB133852

LB133852

245.1 INSTRUMENT ID: CVL

Linear




A= 0.0000e+000

B= 2.7480e-004

C= -3.0257e-002

Rho= 0.9986519

Accept=Accepted

| Std ID | Conc. | Calc. | Dev. | Mean | SD or %RSD | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | % D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.000 | -0.020 | -0.020 | 36 | 0.000 | 36 | | | | | 1 |
| 0.05 | 0.050 | 0.051 | 0.001 | 297 | 0.0 % | 297 | 0 | | | | 2 |
| 0.2 | 0.200 | 0.183 | -0.017 | 777 | 0.0 % | 777 | | | | | -9 |
| 2.5 | 2.500 | 2.383 | -0.117 | 8781 | 0.0 % | 8781 | | | | | -5 |
| 5.0 | 5.000 | 5.121 | 0.121 | 18746 | 0.0 % | 18746 | | | | | 2 |
| 7.5 | 7.500 | 7.855 | 0.355 | 28696 | 0.0 % | 28696 | | | | | 5 |
| 10.0 | 10.000 | 9.677 | -0.323 | 35324 | 0.0 % | 35324 | | | | | -3 |

Reviewed By:mohan
On:12/10/2024 8:52:42 PM
Inst Id :CV1
LB :LB133852

# LB133852 INSTRUMENT ID : CV1

Method: 245.1 Operator: Admin Date of Analysis: 10 Dec 2024 09:29:03

| Sample ID | Extended ID | µ Abs | Conc | Stnd Conc | Method | Units | Date | Type | Type |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 - 1 | 50 | 36 | - | 0.0000 | 245.1 | PPB | 10 Dec 2024 09:37:35 | S | Std |
| 0.05 - 1 | 50.05 | 297 | - | 0.0500 | 245.1 | PPB | 10 Dec 2024 09:42:31 | S | Std |
| 0.2 - 1 | 50.2 | 777 | - | 0.2000 | 245.1 | PPB | 10 Dec 2024 09:44:48 | S | Std |
| 2.5 - 1 | 52.5 | 8781 | - | 2.5000 | 245.1 | PPB | 10 Dec 2024 09:47:04 | S | Std |
| 5.0 - 1 | 55 | 18746 | - | 5.0000 | 245.1 | PPB | 10 Dec 2024 09:49:20 | S | Std |
| 7.5 - 1 | 57.5 | 28696 | - | 7.5000 | 245.1 | PPB | 10 Dec 2024 09:51:37 | S | Std |
| 10.0 - 1 | 510 | 35324 | - | 10.0000 | 245.1 | PPB | 10 Dec 2024 09:59:28 | S | Std |
| ICV14 - 1 | ICV14 | 14778 | 4.0307 | - | 245.1 | PPB | 10 Dec 2024 10:09:31 | U | SMPL |
| ICB14 - 1 | ICB14 | -6 | -0.0319 | - | 245.1 | PPB | 10 Dec 2024 10:17:09 | U | SMPL |
| CCV10 - 1 | CCV10 | 19970 | 5.4574 | - | 245.1 | PPB | 10 Dec 2024 10:29:43 | U | SMPL |
| CCB10 - 1 | CCB10 | 48 | -0.0171 | - | 245.1 | PPB | 10 Dec 2024 10:34:42 | U | SMPL |
| CRA - 1 | CRA | 248 | 0.0379 | - | 245.1 | PPB | 10 Dec 2024 10:39:32 | U | SMPL |
| HighStd - 1 | HighStd | 31722 | 8.6868 | - | 245.1 | PPB | 10 Dec 2024 10:49:15 | U | SMPL |
| ChkStd - 1 | ChkStd | 23934 | 6.5467 | - | 245.1 | PPB | 10 Dec 2024 10:51:31 | U | SMPL |
| PB165519BL - 1 | PBW | -208 | -0.0874 | - | 245.1 | PPB | 10 Dec 2024 10:53:49 | U | SMPL |
| PB165519BS - 1 | LCSW | 14515 | 3.9584 | - | 245.1 | PPB | 10 Dec 2024 11:02:20 | U | SMPL |
| P4368-10 - 1 | LOD-MDL-WATER-04-QT4-2024 | 233 | 0.0338 | - | 245.1 | PPB | 10 Dec 2024 11:12:18 | U | SMPL |
| P4368-11 - 1 | LOQ-WATER-05-QT4-2024 | 925 | 0.2239 | - | 245.1 | PPB | 10 Dec 2024 11:14:34 | U | SMPL |
| P5051-07 - 1 | 14B-(1-4)-COMP | 4142 | 1.1079 | - | 245.1 | PPB | 10 Dec 2024 11:16:51 | U | SMPL |
| P5068-07 - 1 | 14B-(1-4)-COMP | 3264 | 0.8667 | - | 245.1 | PPB | 10 Dec 2024 11:19:08 | U | SMPL |
| P5192-02 - 1 | EFF-WASTE WATER | 98 | -0.0033 | - | 245.1 | PPB | 10 Dec 2024 11:21:26 | U | SMPL |
| CCV11 - 1 | CCV11 | 17194 | 4.6946 | - | 245.1 | PPB | 10 Dec 2024 11:26:17 | U | SMPL |
| CCB11 - 1 | CCB11 | 6 | -0.0286 | - | 245.1 | PPB | 10 Dec 2024 11:31:06 | U | SMPL |
| P5192-02DUP - 1 | EFF-WASTE WATERDUP | 73 | -0.0102 | - | 245.1 | PPB | 10 Dec 2024 11:33:20 | U | SMPL |
| P5192-02MS - 1 | EFF-WASTE WATERMS | 13290 | 3.6218 | - | 245.1 | PPB | 10 Dec 2024 11:35:35 | U | SMPL |
| P5192-02MSD - 1 | EFF-WASTE WATERMSD | 14418 | 3.9318 | - | 245.1 | PPB | 10 Dec 2024 11:37:51 | U | SMPL |
| P5192-02LX5 - 1 | | -187 | -0.0816 | - | 245.1 | PPB | 10 Dec 2024 11:40:09 | U | SMPL |
| P5192-02A - 1 | | 13463 | 3.6693 | - | 245.1 | PPB | 10 Dec 2024 11:42:27 | U | SMPL |
| CCV12 - 1 | CCV12 | 19587 | 5.3522 | - | 245.1 | PPB | 10 Dec 2024 11:44:43 | U | SMPL |
| CCB12 - 1 | CCB12 | 2 | -0.0297 | - | 245.1 | PPB | 10 Dec 2024 11:49:38 | U | SMPL |

Alliance TECHNICAL GROUP

**Water Metals Preparation Sheet**

PB165365

**SOP ID :** M200.7-Trace Elements-22

**SDG No :** N/A

**Matrix :** WATER

**Pippete ID:** ICP A

**Balance ID :** N/A

**Filter paper ID :** N/A

**pH Strip ID :** M6069

**Hood ID :** #3

**Block ID:** 1. HOT BLOCK #1 2. N/A

**Start Digest Date:** 12/04/2024 **Time :** 11:35 **Temp :** 95 °C

**End Digest Date:** 12/04/2024 **Time :** 14:40 **Temp :** 95 °C

**Digestion tube ID:** M5595

**Block thermometer ID:** MET-DIG. #1

**Dig Technician Signature:** jgp

**Supervisor Signature:**

**Temp :** 1. 95°C 2. N/A

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| LFS-1 | 0.25 | M6000 |
| LFS-2 | 0.25 | M6009 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---|---|---|
| Conc. HNO3 | 1.00 | M6126 |
| 1:1 HCL | 0.50 | MP83105 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

Hot Block # 1 Cell # 50 Temp: 95 C

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 12/4/24 15:00 | jgp Met Dig | Metals Lab |
| | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

**Water Metals Preparation Sheet**

**PB165365**

| Lab Sample ID | Client Sample ID | pH | Initial Vol (ml) | Final Vol (ml) | Color Before | Color After | Clarity Before | Clarity After | Comment | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|---|
| P5051-07 | 14B-(1-4)-COMP | <2 | 50 | 25 | Brown | Yellow | Clear | Clear | N/A | 1 |
| P5068-07 | 14B-(1-4)-COMP | <2 | 50 | 25 | Brown | Yellow | Clear | Clear | N/A | 2 |
| P5068-07MS | 14B-(1-4)-COMPMS | <2 | 50 | 25 | Brown | Yellow | Clear | Clear | M6000,M6009 | 4 |
| P5068-07MSD | 14B-(1-4)-COMPMSD | <2 | 50 | 25 | Brown | Yellow | Clear | Clear | M6000,M6009 | 5 |
| P5068-07DUP | 14B-(1-4)-COMPDUP | <2 | 50 | 25 | Brown | Yellow | Clear | Clear | N/A | 3 |
| PB165365BL | PBW365 | <2 | 50 | 25 | Colorless | Colorless | Clear | Clear | N/A | 6 |
| PB165365BS | LCS365 | <2 | 50 | 25 | Colorless | Colorless | Clear | Clear | M6000,M6009 | 7 |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** PB165365 **WorkList ID :** 185959 **Department :** Digestion **Date :** 12-04-2024 09:50:09

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| P5051-07 | 14B-(1-4)-COMP | Water | Metals ICP-Group1 | 1:1 HNO3 to pH < 2 | NEWY17 | M11 | 12/02/2024 | 200.7 |
| P5068-07 | 14B-(1-4)-COMP | Water | Metals ICP-Group1 | 1:1 HNO3 to pH < 2 | NEWY17 | L61 | 12/03/2024 | 200.7 |

**Date/Time** 12/04/2024 11:20

**Raw Sample Received by:** JSP (Met Dig)

**Raw Sample Relinquished by:**



**Date/Time** 12/04/2024 11:45

**Raw Sample Received by:**

**Raw Sample Relinquished by:** JSP (Met Dig)

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133769

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/6/2024 3:36:51 PM |
| Supervise By | | Supervise On | |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83078 MP83079 MP73080 MP83081 MP83082 MP83084 |
| ICV Standard | MP83085 |
| CCV Standard | MP83088 |
| ICSA Standard | MP83086 MP83087 |
| CRI Standard | MP83084 |
| LCS Standard | |
| Chk Standard | MP83091 MP83092 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | S0 | S0 | CAL1 | 12/05/24 13:21 | | Kareem | OK |
| 2 | S1 | S1 | CAL2 | 12/05/24 13:25 | | Kareem | OK |
| 3 | S2 | S2 | CAL3 | 12/05/24 13:30 | | Kareem | OK |
| 4 | S3 | S3 | CAL4 | 12/05/24 13:34 | | Kareem | OK |
| 5 | S4 | S4 | CAL5 | 12/05/24 13:38 | | Kareem | OK |
| 6 | S5 | S5 | CAL6 | 12/05/24 13:42 | | Kareem | OK |
| 7 | ICV01 | ICV01 | ICV | 12/05/24 13:53 | | Kareem | OK |
| 8 | LLICV01 | LLICV01 | LLICV | 12/05/24 14:05 | | Kareem | OK |
| 9 | ICB01 | ICB01 | ICB | 12/05/24 14:10 | | Kareem | OK |
| 10 | CRI01 | CRI01 | CRDL | 12/05/24 14:14 | | Kareem | OK |
| 11 | ICSA01 | ICSA01 | ICSA | 12/05/24 14:18 | | Kareem | OK |
| 12 | ICSAB01 | ICSAB01 | ICSAB | 12/05/24 14:33 | | Kareem | OK |
| 13 | ICSADL | ICSADL | ICSA | 12/05/24 14:37 | | Kareem | OK |
| 14 | ICSABDL | ICSABDL | ICSAB | 12/05/24 14:41 | | Kareem | OK |
| 15 | CCV01 | CCV01 | CCV | 12/05/24 14:45 | | Kareem | OK |
| 16 | CCB01 | CCB01 | CCB | 12/05/24 14:50 | | Kareem | OK |
| 17 | P5052-02 | OR-640-COMP-50 | SAM | 12/05/24 14:54 | | Kareem | OK |
| 18 | P5052-08 | OR-640-COMP-51 | SAM | 12/05/24 14:58 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133769

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/6/2024 3:36:51 PM |
| Supervise By | | Supervise On | |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83078 MP83079 MP73080 MP83081 MP83082 MP83084 |
| ICV Standard | MP83085 |
| CCV Standard | MP83088 |
| ICSA Standard | MP83086 MP83087 |
| CRI Standard | MP83084 |
| LCS Standard | |
| Chk Standard | MP83091 MP83092 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | P5052-20 | OR-640-COMP-63 | SAM | 12/05/24 15:17 | | Kareem | OK |
| 20 | P5052-14 | OR-640-COMP-62 | SAM | 12/05/24 15:21 | | Kareem | OK |
| 21 | CCV02 | CCV02 | CCV | 12/05/24 15:34 | | Kareem | OK |
| 22 | CCB02 | CCB02 | CCB | 12/05/24 15:41 | | Kareem | OK |
| 23 | PB165341TB | PB165341TB | MB | 12/05/24 15:46 | | Kareem | OK |
| 24 | PB165363BL | PB165363BL | MB | 12/05/24 15:50 | | Kareem | OK |
| 25 | PB165363BS | PB165363BS | LCS | 12/05/24 15:55 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 26 | PB165328BL | PB165328BL | MB | 12/05/24 15:59 | | Kareem | OK |
| 27 | PB165371BS | PB165371BS | LCS | 12/05/24 16:07 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 28 | PB165328BS | PB165328BS | LCS | 12/05/24 16:12 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 29 | PB165287BL | PB165287BL | MB | 12/05/24 16:16 | NOT USE | Kareem | Not Ok |
| 30 | PB165287BS | PB165287BS | LCS | 12/05/24 16:21 | NOT USE | Kareem | Not Ok |
| 31 | PB165370BL | PB165370BL | MB | 12/05/24 16:25 | | Kareem | OK |
| 32 | PB165370BS | PB165370BS | LCS | 12/05/24 16:29 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 33 | CCV03 | CCV03 | CCV | 12/05/24 16:42 | | Kareem | OK |
| 34 | CCB03 | CCB03 | CCB | 12/05/24 16:46 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133769

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/6/2024 3:36:51 PM |
| Supervise By | | Supervise On | |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83078 MP83079 MP73080 MP83081 MP83082 MP83084 |
| ICV Standard | MP83085 |
| CCV Standard | MP83088 |
| ICSA Standard | MP83086 MP83087 |
| CRI Standard | MP83084 |
| LCS Standard | |
| Chk Standard | MP83091 MP83092 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 35 | PB165371BL | PB165371BL | MB | 12/05/24 16:51 | | Kareem | OK |
| 36 | PB165344BL | PB165344BL | MB | 12/05/24 16:55 | | Kareem | OK |
| 37 | PB165344BS | PB165344BS | LCS | 12/05/24 16:59 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 38 | LR1 | LR1 | HIGH STD | 12/05/24 17:03 | | Kareem | OK |
| 39 | LR2 | LR2 | HIGH STD | 12/05/24 17:08 | | Kareem | OK |
| 40 | P5069-02 | A3988-SLUDGE | SAM | 12/05/24 17:12 | | Kareem | OK |
| 41 | P5072-04 | MH-737 | SAM | 12/05/24 17:17 | | Kareem | OK |
| 42 | P5072-08 | MH-738 | SAM | 12/05/24 17:21 | | Kareem | OK |
| 43 | P5072-08DUP | MH-738DUP | DUP | 12/05/24 17:25 | | Kareem | OK |
| 44 | P5072-08L | MH-738L | SD | 12/05/24 17:30 | | Kareem | OK |
| 45 | CCV04 | CCV04 | CCV | 12/05/24 17:41 | | Kareem | OK |
| 46 | CCB04 | CCB04 | CCB | 12/05/24 17:47 | | Kareem | OK |
| 47 | P5072-08MS | MH-738MS | MS | 12/05/24 17:52 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 48 | P5072-08MSD | MH-738MSD | MSD | 12/05/24 17:56 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 49 | P5072-08A | MH-738A | PS | 12/05/24 18:00 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 50 | P5044-01 | OUTFALL-DSN-001 | SAM | 12/05/24 18:04 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133769

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/6/2024 3:36:51 PM |
| Supervise By | | Supervise On | |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83078 MP83079 MP73080 MP83081 MP83082 MP83084 |
| ICV Standard | MP83085 |
| CCV Standard | MP83088 |
| ICSA Standard | MP83086 MP83087 |
| CRI Standard | MP83084 |
| LCS Standard | |
| Chk Standard | MP83091 MP83092 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 51 | P5044-02DUP | OUTFALL-DSN-002D | DUP | 12/05/24 18:08 | | Kareem | OK |
| 52 | P5044-02 | OUTFALL-DSN-002 | SAM | 12/05/24 18:13 | | Kareem | OK |
| 53 | P5044-02L | OUTFALL-DSN-002L | SD | 12/05/24 18:17 | | Kareem | OK |
| 54 | P5044-02MS | OUTFALL-DSN-002M | MS | 12/05/24 18:21 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 55 | P5044-02MSD | OUTFALL-DSN-002M | MSD | 12/05/24 18:25 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 56 | P5044-02A | OUTFALL-DSN-002A | PS | 12/05/24 18:29 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 57 | CCV05 | CCV05 | CCV | 12/05/24 18:39 | | Kareem | OK |
| 58 | CCB05 | CCB05 | CCB | 12/05/24 18:43 | | Kareem | OK |
| 59 | PB165365BL | PB165365BL | MB | 12/05/24 19:04 | | Kareem | OK |
| 60 | PB165365BS | PB165365BS | LCS | 12/05/24 19:08 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 61 | P5070-01 | OIL | SAM | 12/05/24 19:12 | | Kareem | OK |
| 62 | P5070-05 | OILY-DEBRIS | SAM | 12/05/24 19:17 | | Kareem | OK |
| 63 | P5072-01 | MH-737 | SAM | 12/05/24 19:21 | | Kareem | OK |
| 64 | P5072-05 | MH-738 | SAM | 12/05/24 19:25 | | Kareem | OK |
| 65 | P5072-05DUP | MH-738DUP | DUP | 12/05/24 19:29 | | Kareem | OK |
| 66 | P5072-05L | MH-738L | SD | 12/05/24 19:33 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133769

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/6/2024 3:36:51 PM |
| Supervise By | | Supervise On | |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83078 MP83079 MP73080 MP83081 MP83082 MP83084 |
| ICV Standard | MP83085 |
| CCV Standard | MP83088 |
| ICSA Standard | MP83086 MP83087 |
| CRI Standard | MP83084 |
| LCS Standard | |
| Chk Standard | MP83091 MP83092 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 67 | P5072-05MS | MH-738MS | MS | 12/05/24 19:38 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 68 | P5072-05MSD | MH-738MSD | MSD | 12/05/24 19:42 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 69 | CCV06 | CCV06 | CCV | 12/05/24 19:45 | | Kareem | OK |
| 70 | CCB06 | CCB06 | CCB | 12/05/24 19:50 | | Kareem | OK |
| 71 | P5072-05A | MH-738A | PS | 12/05/24 19:54 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 72 | P5070-03 | OIL-WATER | SAM | 12/05/24 19:58 | | Kareem | OK |
| 73 | P5070-03DUP | OIL-WATERDUP | DUP | 12/05/24 20:02 | | Kareem | OK |
| 74 | P5070-03L | OIL-WATERL | SD | 12/05/24 20:07 | | Kareem | OK |
| 75 | P5070-03MS | OIL-WATERMS | MS | 12/05/24 20:11 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 76 | P5070-03MSD | OIL-WATERMSD | MSD | 12/05/24 20:15 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 77 | P5070-03A | OIL-WATERA | PS | 12/05/24 20:19 | 0.1ML OF M6001 AND M6010 WERE ADDED TO 10ML OF SAMPLE | Kareem | OK |
| 78 | CCV07 | CCV07 | CCV | 12/05/24 20:23 | | Kareem | OK |
| 79 | CCB07 | CCB07 | CCB | 12/05/24 20:27 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133790

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/11/2024 6:00:03 PM |
| Supervise By | jaswal | Supervise On | 12/11/2024 11:12:35 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83552,MP83553,MP83554,MP83555,MP83556,MP83558 |
| ICV Standard | MP83559 |
| CCV Standard | MP83562 |
| ICSA Standard | MP83560,MP83561 |
| CRI Standard | MP83558 |
| LCS Standard | |
| Chk Standard | MP83565,MP83566 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | S0 | S0 | CAL1 | 12/06/24 11:48 | | Kareem | OK |
| 2 | S1 | S1 | CAL2 | 12/06/24 11:52 | | Kareem | OK |
| 3 | S2 | S2 | CAL3 | 12/06/24 11:57 | | Kareem | OK |
| 4 | S3 | S3 | CAL4 | 12/06/24 12:01 | | Kareem | OK |
| 5 | S4 | S4 | CAL5 | 12/06/24 12:05 | | Kareem | OK |
| 6 | S5 | S5 | CAL6 | 12/06/24 12:10 | | Kareem | OK |
| 7 | ICV01 | ICV01 | ICV | 12/06/24 12:14 | | Kareem | OK |
| 8 | LLICV01 | LLICV01 | LLICV | 12/06/24 12:20 | | Kareem | OK |
| 9 | ICB01 | ICB01 | ICB | 12/06/24 12:24 | | Kareem | OK |
| 10 | CRI01 | CRI01 | CRDL | 12/06/24 12:28 | | Kareem | OK |
| 11 | ICSA01 | ICSA01 | ICSA | 12/06/24 12:50 | | Kareem | OK |
| 12 | ICSAB01 | ICSAB01 | ICSAB | 12/06/24 12:55 | | Kareem | OK |
| 13 | ICSADL | ICSADL | ICSA | 12/06/24 13:00 | | Kareem | OK |
| 14 | ICSABDL | ICSABDL | ICSAB | 12/06/24 13:04 | | Kareem | OK |
| 15 | CCV01 | CCV01 | CCV | 12/06/24 13:09 | | Kareem | OK |
| 16 | CCB01 | CCB01 | CCB | 12/06/24 13:13 | | Kareem | OK |
| 17 | PB165393BL | PB165393BL | MB | 12/06/24 13:17 | | Kareem | OK |
| 18 | PB165393BS | PB165393BS | LCS | 12/06/24 13:22 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133790

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/11/2024 6:00:03 PM |
| Supervise By | jaswal | Supervise On | 12/11/2024 11:12:35 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83552,MP83553,MP83554,MP83555,MP83556,MP83558 |
| ICV Standard | MP83559 |
| CCV Standard | MP83562 |
| ICSA Standard | MP83560,MP83561 |
| CRI Standard | MP83558 |
| LCS Standard | |
| Chk Standard | MP83565,MP83566 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | PB165328BL | PB165328BL | MB | 12/06/24 13:26 | NOT USE | Kareem | Not Ok |
| 20 | PB165328BS | PB165328BS | LCS | 12/06/24 13:30 | NOT USE | Kareem | Not Ok |
| 21 | P5026-05 | SOIL-1-HAM | SAM | 12/06/24 13:34 | | Kareem | OK |
| 22 | CCV02 | CCV02 | CCV | 12/06/24 13:38 | | Kareem | OK |
| 23 | CCB02 | CCB02 | CCB | 12/06/24 13:42 | | Kareem | OK |
| 24 | P4997-07 | 14B-(1-4)-COMP | SAM | 12/06/24 13:47 | | Kareem | OK |
| 25 | P5018-07 | 14B-(1-4)-COMP | SAM | 12/06/24 13:58 | | Kareem | OK |
| 26 | P5018-07DUP | 14B-(1-4)-COMPDUP | DUP | 12/06/24 14:04 | | Kareem | OK |
| 27 | P5018-07L | 14B-(1-4)-COMPL | SD | 12/06/24 14:08 | | Kareem | OK |
| 28 | P5018-07MS | 14B-(1-4)-COMPMS | MS | 12/06/24 14:12 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 29 | P5018-07MSD | 14B-(1-4)-COMPMSD | MSD | 12/06/24 14:17 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 30 | P5018-07A | 14B-(1-4)-COMPA | PS | 12/06/24 14:21 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 31 | P5051-07 | 14B-(1-4)-COMP | SAM | 12/06/24 14:25 | | Kareem | OK |
| 32 | P5068-07 | 14B-(1-4)-COMP | SAM | 12/06/24 14:29 | Mn high | Kareem | Dilution |
| 33 | P5068-07DUP | 14B-(1-4)-COMPDUP | DUP | 12/06/24 14:34 | Mn high | Kareem | Dilution |
| 34 | CCV03 | CCV03 | CCV | 12/06/24 14:42 | | Kareem | OK |
| 35 | CCB03 | CCB03 | CCB | 12/06/24 14:46 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133790

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/11/2024 6:00:03 PM |
| Supervise By | jaswal | Supervise On | 12/11/2024 11:12:35 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83552,MP83553,MP83554,MP83555,MP83556,MP83558 |
| ICV Standard | MP83559 |
| CCV Standard | MP83562 |
| ICSA Standard | MP83560,MP83561 |
| CRI Standard | MP83558 |
| LCS Standard | |
| Chk Standard | MP83565,MP83566 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 36 | P5068-07L | 14B-(1-4)-COMPL | SD | 12/06/24 14:50 | | Kareem | OK |
| 37 | P5068-07MS | 14B-(1-4)-COMPMS | MS | 12/06/24 14:55 | Mn high | Kareem | Dilution |
| 38 | P5068-07MSD | 14B-(1-4)-COMPMSD | MSD | 12/06/24 14:59 | Mn high | Kareem | Dilution |
| 39 | P5068-07A | 14B-(1-4)-COMPA | PS | 12/06/24 15:03 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 40 | P5069-01 | A3988-SLUDGE | SAM | 12/06/24 15:07 | Fe high | Kareem | Dilution |
| 41 | P5076-01 | TAPIAL2-SB02I-7.5-1 | SAM | 12/06/24 15:12 | | Kareem | OK |
| 42 | P5076-01DUP | TAPIAL2-SB02I-7.5-1 | DUP | 12/06/24 15:16 | | Kareem | OK |
| 43 | P5076-01L | TAPIAL2-SB02I-7.5-1 | SD | 12/06/24 15:21 | | Kareem | OK |
| 44 | P5076-01MS | TAPIAL2-SB02I-7.5-1 | MS | 12/06/24 15:25 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 45 | P5076-01MSD | TAPIAL2-SB02I-7.5-1 | MSD | 12/06/24 15:29 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 46 | CCV04 | CCV04 | CCV | 12/06/24 15:40 | | Kareem | OK |
| 47 | CCB04 | CCB04 | CCB | 12/06/24 15:44 | | Kareem | OK |
| 48 | P5076-01A | TAPIAL2-SB02I-7.5-1 | PS | 12/06/24 15:48 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 49 | P5095-01 | MH-764 | SAM | 12/06/24 15:52 | | Kareem | OK |
| 50 | P5096-01 | MH-B | SAM | 12/06/24 15:56 | | Kareem | OK |
| 51 | P5096-05 | MH-A | SAM | 12/06/24 16:01 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133790

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/11/2024 6:00:03 PM |
| Supervise By | jaswal | Supervise On | 12/11/2024 11:12:35 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83552,MP83553,MP83554,MP83555,MP83556,MP83558 |
| ICV Standard | MP83559 |
| CCV Standard | MP83562 |
| ICSA Standard | MP83560,MP83561 |
| CRI Standard | MP83558 |
| LCS Standard | |
| Chk Standard | MP83565,MP83566 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 52 | P5098-01 | TR-04-12042024 | SAM | 12/06/24 16:05 | | Kareem | OK |
| 53 | P5100-01 | 324 | SAM | 12/06/24 16:09 | | Kareem | OK |
| 54 | P5105-01 | CTWK-COMP-1 | SAM | 12/06/24 16:13 | | Kareem | OK |
| 55 | P5108-01 | ASPHALT-COMP | SAM | 12/06/24 16:17 | | Kareem | OK |
| 56 | LR1 | LR1 | HIGH STD | 12/06/24 16:25 | | Kareem | OK |
| 57 | LR2 | LR2 | HIGH STD | 12/06/24 16:30 | | Kareem | OK |
| 58 | CCV05 | CCV05 | CCV | 12/06/24 16:35 | | Kareem | OK |
| 59 | CCB05 | CCB05 | CCB | 12/06/24 16:39 | | Kareem | OK |
| 60 | P4997-07DL | 14B-(1-4)-COMPDL | SAM | 12/06/24 16:43 | Not used | Kareem | Not Ok |
| 61 | P5051-07DL | 14B-(1-4)-COMPDL | SAM | 12/06/24 16:48 | Not used | Kareem | Not Ok |
| 62 | P5068-07DL | 14B-(1-4)-COMPDL | SAM | 12/06/24 16:52 | 5X for Mn | Kareem | Confirms |
| 63 | P5068-07DUPDL | 14B-(1-4)-COMPDUP | DUP | 12/06/24 16:57 | 5X for Mn | Kareem | Confirms |
| 64 | P5068-07LDL | 14B-(1-4)-COMPLDL | SD | 12/06/24 17:01 | Not Required | Kareem | Not Ok |
| 65 | P5068-07MSDL | 14B-(1-4)-COMPMSD | MS | 12/06/24 17:05 | 5X for Mn | Kareem | Confirms |
| 66 | P5068-07MSDDL | 14B-(1-4)-COMPMSD | MSD | 12/06/24 17:09 | 5X for Mn | Kareem | Confirms |
| 67 | P5068-07ADL | 14B-(1-4)-COMPADL | PS | 12/06/24 17:14 | Not used | Kareem | Not Ok |
| 68 | P5069-01DL | A3988-SLUDGEDL | SAM | 12/06/24 17:18 | 5X for Fe | Kareem | Confirms |
| 69 | P5138-01 | 001-WILLETS-PT-BL\ | SAM | 12/06/24 17:22 | | Kareem | OK |
| 70 | CCV06 | CCV06 | CCV | 12/06/24 17:27 | | Kareem | OK |
| 71 | CCB06 | CCB06 | CCB | 12/06/24 17:31 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** P4

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133790

| | | | |
|---|---|---|---|
| Review By | kareem | Review On | 12/11/2024 6:00:03 PM |
| Supervise By | jaswal | Supervise On | 12/11/2024 11:12:35 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83552,MP83553,MP83554,MP83555,MP83556,MP83558 |
| ICV Standard | MP83559 |
| CCV Standard | MP83562 |
| ICSA Standard | MP83560,MP83561 |
| CRI Standard | MP83558 |
| LCS Standard | |
| Chk Standard | MP83565,MP83566 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 72 | PB165430BL | PB165430BL | MB | 12/06/24 17:36 | | Kareem | OK |
| 73 | PB165430BS | PB165430BS | LCS | 12/06/24 17:40 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 74 | P5138-02 | 002-35TH-AVE(NOV) | SAM | 12/06/24 17:44 | | Kareem | OK |
| 75 | P5138-02DUP | 002-35TH-AVE(NOV)I | DUP | 12/06/24 17:48 | | Kareem | OK |
| 76 | P5138-02L | 002-35TH-AVE(NOV)I | SD | 12/06/24 17:52 | | Kareem | OK |
| 77 | P5138-02MS | 002-35TH-AVE(NOV)I | MS | 12/06/24 17:57 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 78 | P5138-02MSD | 002-35TH-AVE(NOV)I | MSD | 12/06/24 18:01 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 79 | P5138-02A | 002-35TH-AVE(NOV)A | PS | 12/06/24 18:05 | 0.1ml of m6010 and m6001 were added to 10ml of the sample | Kareem | OK |
| 80 | P5139-01 | 001-WILLETS-PT-BLV | SAM | 12/06/24 18:09 | | Kareem | OK |
| 81 | P5139-02 | 002-35TH-AVE(DEC) | SAM | 12/06/24 18:13 | | Kareem | OK |
| 82 | CCV07 | CCV07 | CCV | 12/06/24 18:21 | | Kareem | OK |
| 83 | CCB07 | CCB07 | CCB | 12/06/24 18:27 | | Kareem | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** CV1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133852

| | | | |
|---|---|---|---|
| Review By | jaswal | Review On | 12/10/2024 8:51:31 PM |
| Supervise By | mohan | Supervise On | 12/10/2024 8:52:42 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83534,MP83535,MP83536,MP835337,MP83538,MP83538,MP83540 |
| ICV Standard | MP83541 |
| CCV Standard | MP83543 |
| ICSA Standard | |
| CRI Standard | MP83545 |
| LCS Standard | |
| Chk Standard | MP83542,MP83544,MP83546,MP83548 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | S0 | S0 | CAL1 | 12/10/24 09:37 | | Mohan | OK |
| 2 | S0.05 | S0.05 | CAL2 | 12/10/24 09:42 | | Mohan | OK |
| 3 | S0.2 | S0.2 | CAL3 | 12/10/24 09:44 | | Mohan | OK |
| 4 | S2.5 | S2.5 | CAL4 | 12/10/24 09:47 | | Mohan | OK |
| 5 | S5 | S5 | CAL5 | 12/10/24 09:49 | | Mohan | OK |
| 6 | S7.5 | S7.5 | CAL6 | 12/10/24 09:51 | | Mohan | OK |
| 7 | S10 | S10 | CAL7 | 12/10/24 09:59 | | Mohan | OK |
| 8 | ICV14 | ICV14 | ICV | 12/10/24 10:09 | | Mohan | OK |
| 9 | ICB14 | ICB14 | ICB | 12/10/24 10:17 | | Mohan | OK |
| 10 | CCV10 | CCV10 | CCV | 12/10/24 10:29 | | Mohan | OK |
| 11 | CCB10 | CCB10 | CCB | 12/10/24 10:34 | | Mohan | OK |
| 12 | CRA | CRA | CRDL | 12/10/24 10:39 | | Mohan | OK |
| 13 | HighStd | HighStd | HIGH STD | 12/10/24 10:49 | | Mohan | OK |
| 14 | ChkStd | ChkStd | SAM | 12/10/24 10:51 | | Mohan | OK |
| 15 | PB165519BL | PB165519BL | MB | 12/10/24 10:53 | | Mohan | OK |
| 16 | PB165519BS | PB165519BS | LCS | 12/10/24 11:02 | | Mohan | OK |
| 17 | P4368-10 | LOD-MDL-WATER-04 | SAM | 12/10/24 11:12 | | Mohan | OK |
| 18 | P4368-11 | LOQ-WATER-05-QT4 | LOQ | 12/10/24 11:14 | true value - 0.2 | Mohan | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** CV1

## Daily Analysis Runlog For Sequence/QCBatch ID # LB133852

| | | | |
|---|---|---|---|
| Review By | jaswal | Review On | 12/10/2024 8:51:31 PM |
| Supervise By | mohan | Supervise On | 12/10/2024 8:52:42 PM |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | MP83534,MP83535,MP83536,MP835337,MP83538,MP83538,MP83540 |
| ICV Standard | MP83541 |
| CCV Standard | MP83543 |
| ICSA Standard | |
| CRI Standard | MP83545 |
| LCS Standard | |
| Chk Standard | MP83542,MP83544,MP83546,MP83548 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | P5051-07 | 14B-(1-4)-COMP | SAM | 12/10/24 11:16 | | Mohan | OK |
| 20 | P5068-07 | 14B-(1-4)-COMP | SAM | 12/10/24 11:19 | | Mohan | OK |
| 21 | P5192-02 | EFF-WASTE WATER | SAM | 12/10/24 11:21 | | Mohan | OK |
| 22 | CCV11 | CCV11 | CCV | 12/10/24 11:26 | | Mohan | OK |
| 23 | CCB11 | CCB11 | CCB | 12/10/24 11:31 | | Mohan | OK |
| 24 | P5192-02DUP | EFF-WASTE WATERI | DUP | 12/10/24 11:33 | | Mohan | OK |
| 25 | P5192-02MS | EFF-WASTE WATERI | MS | 12/10/24 11:35 | | Mohan | OK |
| 26 | P5192-02MSD | EFF-WASTE WATERI | MSD | 12/10/24 11:37 | | Mohan | OK |
| 27 | P5192-02L | EFF-WASTE WATERI | SD | 12/10/24 11:40 | | Mohan | OK |
| 28 | P5192-02A | EFF-WASTE WATERA | PS | 12/10/24 11:42 | | Mohan | OK |
| 29 | CCV12 | CCV12 | CCV | 12/10/24 11:44 | | Mohan | OK |
| 30 | CCB12 | CCB12 | CCB | 12/10/24 11:49 | | Mohan | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Prep Standard - Chemical Standard Summary

**Order ID :** P5068

**Test :** Mercury,Metals ICP-Group1

**Prepbatch ID :** PB165365,PB165519,

**Sequence ID/Qc Batch ID:** LB133769,LB133790,LB133852,

**Standard ID :**

MP83078 MP83079 MP73080 MP83081 MP83082 MP83084,MP83083,MP83085,MP83086 MP83087,MP83088,MP83091 MP83092,MP83105,MP83500,MP835337,MP83534,MP83535,MP83536,MP83538,MP83540,MP83541,MP83542,MP83543,MP83544,MP83545,MP83546,MP83548,MP83552,MP83553,MP83554,MP83555,MP83556,MP83557,MP83558,MP83559,MP83560,MP83561,MP83562,MP83565,MP83566,

**Chemical ID :**

M5062,M5130,M5192,M5218,M5223,M5288,M5295,M5296,M5390,M5393,M5394,M5429,M5466,M5467,M5497,M5498,M5515,M5658,M5697,M5698,M5747,M5748,M5768,M5769,M5798,M5799,M5800,M5801,M5802,M5806,M5814,M5815,M5816,M5817,M5818,M5819,M5820,M5875,M5882,M5953,M5959,M5962,M5970,M5978,M5982,M5985,M6000,M6009,M6021,M6023,M6028,M6030,M6033,M6111,M6117,M6121,M6126,W3112,

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2950 | ICP AES S1/CRI STOCK STD | MP83083 | 11/06/2024 | 12/06/2024 | Kareem Khairalla | None | None | Sarabjit Jaswal 11/07/2024 |

**FROM** 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5515 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.05000ml of M6033 + 0.06000ml of M5747 + 0.10000ml of M5697 + 0.10000ml of M5698 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M5982 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5819 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5467 + 0.25000ml of M5802 + 0.50000ml of M5390 + 0.50000ml of M5814 + 1.00000ml of M5192 + 1.00000ml of M5288 + 1.00000ml of M5498 + 1.00000ml of M5769 + 1.00000ml of M5806 + 1.00000ml of M5978 + 2.00000ml of M5816 + 2.00000ml of M5818 + 77.68000ml of MP83078 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 912 | ICP AES ICV SOLN | MP83085 | 11/06/2024 | 12/06/2024 | Kareem Khairalla | None | None | Sarabjit Jaswal 11/07/2024 |

**FROM** 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.25000ml of M5218 + 0.25000ml of M5982 + 10.00000ml of M5295 + 89.77500ml of MP83078 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 911 | ICP AES CCV SOLN | MP83088 | 11/06/2024 | 12/06/2024 | Kareem Khairalla | None | None | Sarabjit Jaswal 11/07/2024 |

**FROM** 50.00000ml of MP83078 + 50.00000ml of MP83079 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 170 | 1:1HCL | MP83105 | 11/07/2024 | 12/06/2024 | Janvi Patel | None | None | Sarabjit Jaswal 11/07/2024 |

**FROM** 1000.00000ml of M6111 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 902 | ICP AES CAL BLK ( SO/ICB/CCB) | MP83500 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/09/2024 |

**FROM** 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1340 | Hg 0.00 PPB STD | MP83534 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2750 | Hg 0.05ppb | MP83535 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 247.45000ml of W3112 + 0.05000ml of MP83533 = Final Quantity: 250.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1341 | Hg 0.2 PPB STD | MP83536 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83533 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1343 | Hg 5.0 PPB STD | MP83538 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP83533 = Final Quantity: 250.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1345 | Hg 10.0 PPB STD | MP83540 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP83533 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1346 | Hg ICV SOLUTION | MP83541 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M5953 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1351 | ICB (Hg 0.00 PPB SOLUTION) | MP83542 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1358 | CCV (Hg 5.0 PPB SOLUTION) | MP83543 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP83533 = Final Quantity: 500.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1352 | CCB (Hg 0.00 PPB SOLUTION) | MP83544 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1349 | CRA/CRI (Hg 0.2 PPB SOLUTION) | MP83545 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP83533 = Final Quantity: 250.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1350 | CHK STD (Hg 7.0 PPB SOLUTION) | MP83546 | 12/10/2024 | 12/11/2024 | Mohan Bera | None | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal 12/10/2024 |

**FROM** 2.50000ml of M6126 + 240.50000ml of W3112 + 7.00000ml of MP83533 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 68 | STANNOUS CHLORIDE SOLUTION | MP83548 | 12/10/2024 | 12/11/2024 | Mohan Bera | METALS_SCALE_3 (M SC-3) | None | Sarabjit Jaswal 12/10/2024 |

**FROM** 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = Final Quantity: 500.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 514 | CAL BLK (S0/ICB/CCB) | MP83552 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 125.00000ml of M6121 + 2350.00000ml of W3112 + 25.00000ml of M6126 = Final Quantity: 2500.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 907 | ICP AES STD S ( S5 ) | MP83553 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 5.00000ml of M5296 + 5.00000ml of M5393 + 5.00000ml of M5467 + 5.00000ml of M5802 + 5.00000ml of M5816 + 5.00000ml of M5820 + 5.00000ml of M5875 + 5.00000ml of M5970 + 5.00000ml of M5982 + 455.00000ml of MP83500 = Final Quantity: 500.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 910 | ICP AES STD S4 | MP83554 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 50.00000ml of MP83500 + 50.00000ml of MP83553 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 909 | ICP AES STD S3 | MP83555 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 25.00000ml of MP83553 + 75.00000ml of MP83500 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3913 | ICP AES STD S2 | MP83556 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 16.00000ml of MP83553 + 184.00000ml of MP83500 = Final Quantity: 200.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2950 | ICP AES S1/CRI STOCK STD | MP83557 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 0.00600ml of M5816 + 0.03000ml of M5798 + 0.03000ml of M6028 + 0.05000ml of M5515 + 0.05000ml of M5658 + 0.05000ml of M6030 + 0.05000ml of M6033 + 0.06000ml of M5747 + 0.10000ml of M5697 + 0.10000ml of M5698 + 0.10000ml of M5801 + 0.10000ml of M5820 + 0.10000ml of M5962 + 0.10000ml of M5970 + 0.10000ml of M5982 + 0.15000ml of M5800 + 0.20000ml of M5748 + 0.20000ml of M5799 + 0.20000ml of M5819 + 0.20000ml of M5978 + 0.20000ml of M6021 + 0.20000ml of M6023 + 0.25000ml of M5467 + 0.25000ml of M5802 + 0.50000ml of M5390 + 0.50000ml of M5814 + 1.00000ml of M5192 + 1.00000ml of M5288 + 1.00000ml of M5497 + 1.00000ml of M5768 + 1.00000ml of M5806 + 2.00000ml of M5818 + 77.68000ml of MP83500 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 2951 | ICP AES S1/CRI WORK STD | MP83558 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 2.00000ml of MP83557 + 98.00000ml of MP83500 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 912 | ICP AES ICV SOLN | MP83559 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 0.02500ml of M5429 + 0.02500ml of M5815 + 0.02500ml of M5817 + 0.10000ml of M5466 + 0.25000ml of M5218 + 0.25000ml of M5982 + 10.00000ml of M5295 + 89.77500ml of MP83500 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 904 | ICP AES ICSA SOLN | MP83560 | 12/06/2024 | 12/28/2024 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 25.00000ml of M5130 + 225.00000ml of MP83500 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3494 | ICP AES ICSAB SOLN-1 | MP83561 | 12/06/2024 | 12/28/2024 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 0.01000ml of M5815 + 0.01000ml of M5817 + 0.10000ml of M5296 + 0.10000ml of M5970 + 0.10000ml of M5982 + 10.00000ml of M5130 + 10.00000ml of M5223 + 79.50000ml of MP83500 = Final Quantity: 100.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 911 | ICP AES CCV SOLN | MP83562 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 50.00000ml of MP83500 + 50.00000ml of MP83553 = Final Quantity: 100.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Metals STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 919 | ICP AES INTERNAL STD | MP83565 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 1.00000ml of M5959 + 10.00000ml of M5985 + 1969.00000ml of W3112 + 20.00000ml of M6126 = Final Quantity: 2000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 903 | ICP AES RINSE SOLN | MP83566 | 12/06/2024 | 01/06/2025 | Kareem Khairalla | None | None | Sarabjit Jaswal 12/11/2024 |

**FROM** 200.00000ml of M6126 + 9800.00000ml of W3112 = Final Quantity: 10000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | MSHG-10PPM / MERCURY HCl 125mL 10ug/mL | S2-HG709270 | 09/22/2026 | 05/28/2022 / mohan | 01/27/2022 / mohan | M5062 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| EPA | PART A / ICSA ( ICP ) STOCK SOLN | ICSA-1211 | 12/28/2024 | 05/20/2024 / | 04/20/2021 / bin | M5130 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57042 / Mo, 1000 PPM, 125 ml | 051722 | 05/17/2025 | 07/01/2022 / bin | 06/17/2022 / jaswal | M5192 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CHEM-QC-4 / CHEM-QC-4, Second Source, 1000 ug/ml, B, Mo, Si, Sn, Ti | S2-MEB711674 | 11/02/2026 | 07/01/2022 / bin | 09/10/2021 / bin | M5218 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| EPA | PART B / ICSAB ( ICP ) STOCK SOLN | ICSB-0710 | 12/28/2024 | 05/20/2024 / | 04/20/2021 / bin | M5223 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58119 / K, 10000 PPM, 500 ml | 071122 | 07/11/2025 | 09/01/2022 / jaswal | 07/21/2022 / jaswal | M5288 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| EPA | ICV-1 / ICV ( ICP/ICPMS ) STOCK SOLN | ICV-1014 | 02/05/2025 | 08/07/2024 / jaswal | 02/20/2020 / bin | M5295 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | Z9651Q / CHEM-CLP-4/.25L | S2-MEB711673 | 11/02/2026 | 09/19/2022 / jaswal | 08/20/2022 / jaswal | M5296 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57056 / Ba, 1000 PPM, 125 ml | 072122 | 07/21/2025 | 08/07/2024 / jaswal | 09/18/2022 / bin | M5390 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL | T2-MEB714159 | 01/13/2027 | 10/12/2022 / bin | 09/19/2022 / bin | M5393 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CLPP-CAL-3 / CLP CAL SOLUTION #3, 125mL | T2-MEB714159 | 01/13/2027 | 11/28/2022 / bin | 09/19/2022 / bin | M5394 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57103 / Li, 10000 PPM, 125 ml | 070622 | 07/06/2025 | 01/30/2023 / bin | 01/26/2023 / bin | M5429 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57058 / Cerium, 1000PPM, 100ML | 061322 | 06/13/2025 | 03/06/2023 / bin | 03/01/2023 / bin | M5466 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57058 / Cerium, 1000PPM, 100ML | 020623 | 02/06/2026 | 03/06/2023 / bin | 03/01/2023 / bin | M5467 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58120 / Ca, 10000 PPM, 500 ml | 031523 | 03/15/2026 | 03/18/2023 / bin | 03/17/2023 / bin | M5497 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58120 / Ca, 10000 PPM, 500 ml | 031523 | 03/15/2026 | 08/15/2023 / jaswal | 03/17/2023 / bin | M5498 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58126 / Fe, 10000 PPM, 500 ml | 092122 | 09/21/2025 | 08/01/2024 / Jaswal | 03/17/2023 / bin | M5515 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58024 / Chromium, Cr, 500 ml, 1000 PPM | 060523 | 06/05/2026 | 08/28/2023 / jaswal | 08/25/2023 / jaswal | M5658 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58029 / Cu, 1000 PPM, 500 ml | 102523 | 10/25/2026 | 04/03/2024 / jaswal | 10/27/2023 / jaswal | M5697 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58025 / Mn, 1000 PPM, 500 ml | 102623 | 10/26/2026 | 04/18/2024 / jaswal | 10/27/2023 / jaswal | M5698 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / Lead (Pb) 1000PPM | 100923 | 10/09/2026 | 05/20/2024 / Jaswal | 12/20/2023 / jaswal | M5747 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | / Nickel (Ni) 1000PPM | 091223 | 09/12/2026 | 01/02/2024 / bin | 12/20/2023 / jaswal | M5748 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58112 / Mg, 10000 PPM, 500 ml | 091823 | 09/18/2026 | 01/08/2024 / bin | 01/03/2024 / bin | M5768 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58112 / Mg, 10000 PPM, 500 ml | 091823 | 09/18/2026 | 05/24/2024 / Jaswal | 01/03/2024 / bin | M5769 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57004 / Be, 1000 PPM, 125 ml | 102523 | 10/25/2026 | 02/09/2024 / bin | 02/09/2024 / bin | M5798 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57050 / Sn, 1000 PPM, 125 ml | 071123 | 07/11/2026 | 02/09/2024 / bin | 02/09/2024 / bin | M5799 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57027 / CO, 1000 PPM, 125 ml | 091923 | 09/19/2026 | 05/31/2024 / bin | 02/09/2024 / bin | M5800 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57033 / As, 1000 PPM, 125 ml | 111323 | 11/13/2026 | 02/09/2024 / bin | 02/09/2024 / bin | M5801 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57051 / Sb, 1000 PPM, 125 ml | 120523 | 12/05/2026 | 08/07/2024 / jaswal | 01/03/2024 / jaswal | M5802 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58111 / Na, 10000 PPM, 500 ml | 122223 | 12/22/2026 | 08/01/2024 / Jaswal | 01/03/2024 / jaswal | M5806 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57005 / B, 1000 PPM, 125 ml | 071123 | 07/11/2026 | 03/26/2024 / Sohil | 01/03/2024 / jaswal | M5814 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57115 / P, 10000 PPM, 125 ml | 041723 | 04/17/2026 | 05/21/2024 / Jaswal | 02/09/2024 / jaswal | M5815 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57016 / S, 1000 PPM, 125 ml | 122923 | 12/29/2026 | 05/20/2024 / Jaswal | 02/09/2024 / jaswal | M5816 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57116 / S, 10000 PPM, 125 ml | 071123 | 07/11/2026 | 03/01/2024 / jaswal | 02/09/2024 / jaswal | M5817 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57014 / Si, 1000 PPM, 125 ml | 122023 | 12/20/2026 | 03/06/2024 / jaswal | 02/09/2024 / jaswal | M5818 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58030 / Zinc, Zn, 500 ml, 1000 PPM | 111623 | 11/16/2026 | 03/20/2024 / jaswal | 02/09/2024 / jaswal | M5819 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57015 / P, 1000 PPM, 125 ml | 091123 | 09/11/2026 | 05/01/2024 / jaswal | 02/09/2024 / jaswal | M5820 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CLPP-CAL-1 / CLP CAL SOLUTION #1, 125mL | T2-MEB714417 | 01/27/2027 | 04/19/2024 / jaswal | 02/22/2024 / jaswal | M5875 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-3980-01 / Stannous Chloride (cs/4x500g) | 232820 | 08/31/2028 | 04/30/2024 / mohan | 04/25/2024 / mohan | M5882 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| EPA | ICV-5 / ICV ( HG ) STOCK SOLN | ICV5-0415 | 01/01/2025 | 07/01/2024 / mohan | 03/30/2023 / mohan | M5953 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CGY10-1 / YTTRIUM 125mL 10,000ug/mL | V2-Y740548 | 02/20/2029 | 07/01/2024 / Jaswal | 06/14/2024 / Jaswal | M5959 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57034 / Se, 1000 PPM, 125 ml | 060624 | 06/06/2027 | 07/02/2024 / Jaswal | 06/14/2024 / Jaswal | M5962 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57003 / Li, 1000 PPM, 125 ml | 061224 | 06/21/2027 | 07/01/2024 / Jaswal | 07/01/2024 / Jaswal | M5970 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CGTI1-1 / TITANIUM 125mL 1000ug/mL | T2-TI719972 | 06/17/2027 | 08/07/2024 / jaswal | 02/22/2024 / Jaswal | M5978 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57038 / Sr, 1000 PPM, 125 ml | 031524 | 03/15/2027 | 07/01/2024 / Jaswal | 06/11/2024 / Jaswal | M5982 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | CGIN10-5 / INDIUM 1 x 500 ml | U2-IN729349 | 02/21/2028 | 10/08/2024 / Jaswal | 06/14/2024 / Jaswal | M5985 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | WW-LFS-1 / Laboratory Fortified Stock Solution 1, 125 ml | T2-MEB723367 | 08/30/2026 | 08/13/2024 / Jaswal | 05/14/2024 / Jaswal | M6000 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Inorganic Ventures | WW-LFS-2 / Laboratory Fortified Stock Solution 2, 125 ml | U2-MEB731108 | 03/17/2028 | 08/13/2024 / Jaswal | 05/14/2024 / Jaswal | M6009 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57023 / V, 1000 PPM, 125 ml | 062424 | 06/24/2027 | 09/28/2024 / jaswal | 08/05/2024 / Jaswal | M6021 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57081 / Tl, 1000 PPM, 125 ml | 0624724 | 06/27/2027 | 08/05/2024 / kareem | 08/05/2024 / Jaswal | M6023 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57048 / Cd, 1000 PPM, 125 ml | 070124 | 07/01/2027 | 08/05/2024 / kareem | 01/25/2019 / Jaswal | M6028 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 57047 / Ag, 1000 PPM, 125 ml | 122823 | 12/28/2026 | 08/05/2024 / kareem | 08/05/2024 / Jaswal | M6030 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Absolute Standards, Inc. | 58113 / Al, 10000 PPM, 500 ml | 011623 | 01/16/2026 | 08/07/2024 / Jaswal | 01/03/2024 / Jaswal | M6033 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L) | 22F0762009 | 05/09/2027 | 11/04/2024 / Eman | 09/29/2024 / Janvi | M6111 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L) | 24B1362001 | 05/06/2025 | 11/06/2024 / Janvi | 09/29/2024 / Eman | M6117 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L) | 0000275677 | 05/13/2025 | 11/13/2024 / Eman | 10/13/2024 / Eman | M6121 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L) | 24D1062002 | 06/03/2025 | 12/03/2024 / Janvi | 11/12/2024 / Janvi | M6126 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | DIW / DI Water | Daily Lab-Certified | 07/03/2029 | 07/03/2024 / Iwona | 07/03/2024 / Iwona | W3112 |

Certificate of Analysis

ThermoFisher SCIENTIFIC

M5882 M3



# Certificate of Analysis

1 Reagent Lane
Fair Lawn, NJ 07410
201.796.7100 tel
201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

| | | | |
|---|---|---|---|
| Catalog Number | T142 | Quality Test / Release Date | 08/17/2023 |
| Lot Number | 232820 | | |
| Description | STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination) | | |
| Country of Origin | United States | Suggested Retest Date | Aug/2028 |
| Chemical Origin | Inorganic-non animal | | |
| BSE/TSE Comment | No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product. | | |

| N/A | | | |
|---|---|---|---|
| Result Name | Units | Specifications | Test Value |
| APPEARANCE | | REPORT | Clear crystals |
| ASSAY | % | Inclusive Between 98 - 103 | 100.65 |
| CALCIUM | % | <= 0.005 | 0.0017 |
| IDENTIFICATION | PASS/FAIL | = PASS TEST | PASS TEST |
| IRON (Fe) | % | <= 0.003 | 0.0011 |
| LEAD (Pb) | % | <= 0.01 | 0.0006 |
| MERCURY (Hg) | ppm | <= 0.05 | <0.05 |
| POTASSIUM (K) | % | <= 0.005 | 0.0001 |
| SODIUM (Na) | % | <= 0.01 | <0.01 |
| SOLUBILITY IN HCL | PASS/FAIL | = PASS TEST | PASS TEST |
| SULFATE (SO4) | PASS/FAIL | = P.T. (ABOUT 0.003%) | P.T. (ABOUT 0.003%) |

Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.
*Based on suggested storage condition.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M6028

R 8/5/24

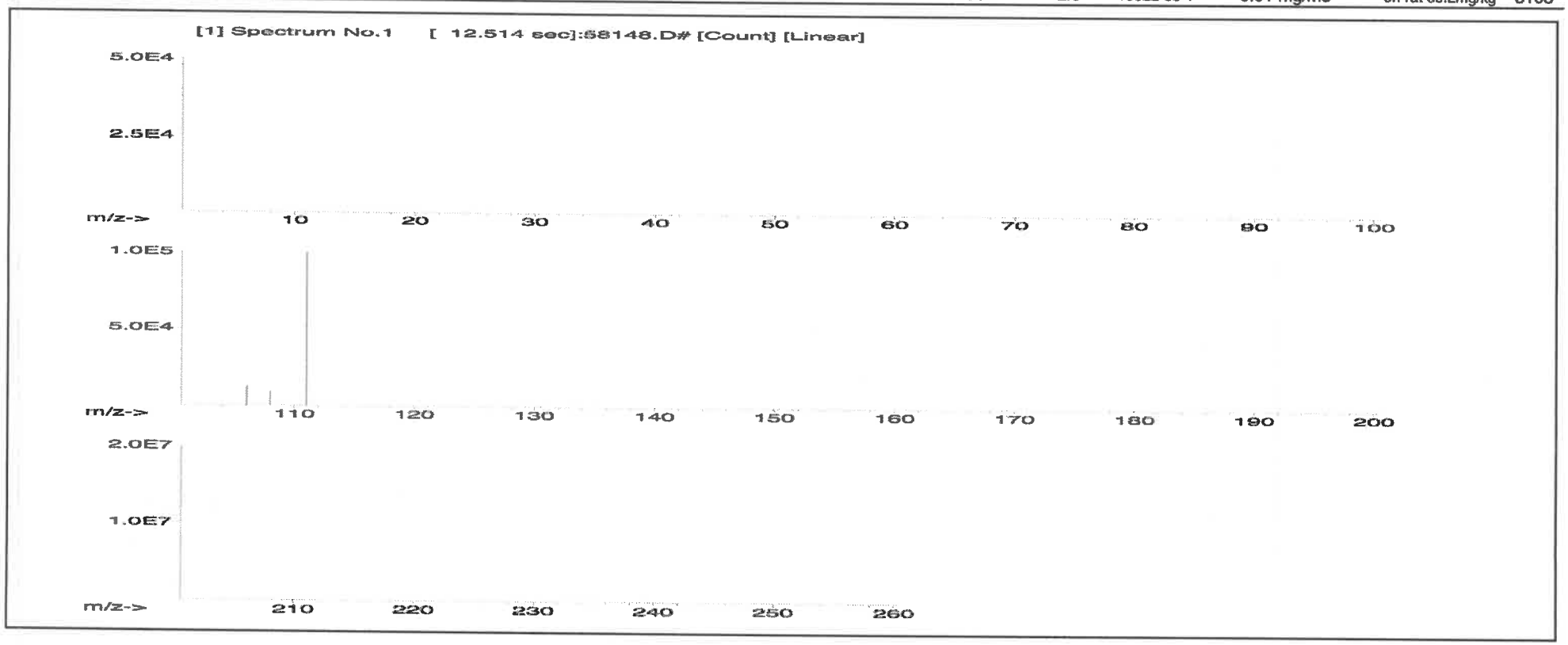
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57048** | | **Lot #** | | |
| **Lot Number:** | **070124** | **Solvent:** | 24002546 | Nitric Acid | |
| **Description:** | **Cadmium (Cd)** | 2% | 40.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 070127 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 2000.07 | 0.100 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Aleah O'Brady | | |
| Formulated By: | Aleah O'Brady | 070124 |
| Pedro Rentas | | |
| Reviewed By: | Pedro L. Rentas | 070124 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cadmium nitrate tetrahydrate (Cd) | IN024 | CDM092021A1 | 1000 | 99.999 | 0.10 | 36.5 | 5.4797 | 5.4804 | **1000.1** | **2.0** | 10022-68-1 | 0.01 mg/m3 | orl-rat 60.2mg/kg | 3108 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | T | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

M5296 OP: 09/19/2022 BH

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CHEM-CLP-4 |
| Lot Number: | S2-MEB711673 |
| Matrix: | 3% (v/v) HNO3<br>3% (v/v) HF |
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Boron, Molybdenum,<br>Silicon, Tin,<br>Titanium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Boron, B** | **1 000 ± 6 µg/mL** | **Molybdenum, Mo** | **1 000 ± 6 µg/mL** |
| **Silicon, Si** | **1 000 ± 7 µg/mL** | **Tin, Sn** | **1 000 ± 6 µg/mL** |
| **Titanium, Ti** | **1 000 ± 7 µg/mL** | | |

**Density:** 1.030 g/mL (measured at 20 ± 4 ºC)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| B | ICP Assay | 3107 | 110830 |
| Mo | ICP Assay | 3134 | 130418 |
| Si | ICP Assay | 3150 | 130912 |
| Sn | ICP Assay | 3161a | 140917 |
| Ti | ICP Assay | 3162a | 130925 |

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 or More Methods**

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

**k** = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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.

## 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

November 02, 2021

- 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 02, 2026**

- 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 Approved By:**

Michael Booth
Director, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CLPP-CAL-1 |
| Lot Number: | T2-MEB714417 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 5 000 µg/mL ea:<br>Calcium, Potassium,<br>Magnesium, Sodium,<br>2 000 µg/mL ea:<br>Aluminum, Barium,<br>1 000 µg/mL ea:<br>Iron,<br>500 µg/mL ea:<br>Nickel, Vanadium,<br>Zinc, Cobalt,<br>Manganese,<br>250 µg/mL ea:<br>Silver, Copper,<br>200 µg/mL ea:<br>Chromium,<br>50 µg/mL ea:<br>Beryllium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Aluminum, Al** | **2 000 ± 7 µg/mL** | **Barium, Ba** | **2 000 ± 9 µg/mL** |
| **Beryllium, Be** | **50.00 ± 0.26 µg/mL** | **Calcium, Ca** | **5 000 ± 22 µg/mL** |
| **Chromium, Cr** | **200.0 ± 1.0 µg/mL** | **Cobalt, Co** | **500.0 ± 2.4 µg/mL** |
| **Copper, Cu** | **250.0 ± 1.0 µg/mL** | **Iron, Fe** | **1 000 ± 4 µg/mL** |
| **Magnesium, Mg** | **5 000 ± 20 µg/mL** | **Manganese, Mn** | **500.0 ± 2.0 µg/mL** |
| **Nickel, Ni** | **500.0 ± 2.2 µg/mL** | **Potassium, K** | **5 000 ± 19 µg/mL** |
| **Silver, Ag** | **250.0 ± 1.1 µg/mL** | **Sodium, Na** | **5 000 ± 18 µg/mL** |
| **Vanadium, V** | **499.7 ± 2.2 µg/mL** | **Zinc, Zn** | **500.0 ± 2.2 µg/mL** |

**Density:** 1.118 g/mL (measured at 20 ± 4 ºC)

## Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 160729 |
| Ag | Volhard | 999c | 999c |
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| 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 |
| Co | ICP Assay | 3113 | 190630 |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 170630 |
| 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 |
| 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 |
| V | IC 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 or More Methods**

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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**

**Note**: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

## 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

January 27, 2022

- 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

- **January 27, 2027**

- 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

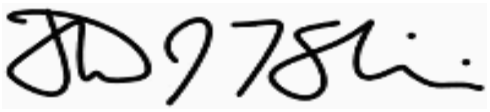
- Sealed TCT Bag Open Date: _____

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control



**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CLPP-CAL-3 |
| Lot Number: | T2-MEB714159 |
| Matrix: | 7% (v/v) HNO3 |
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Arsenic, Lead,<br>Selenium, Thallium,<br><br>500 µg/mL ea:<br>Cadmium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Arsenic, As** | **1 000 ± 8 µg/mL** | **Cadmium, Cd** | **500.0 ± 2.1 µg/mL** |
| **Lead, Pb** | **1 000 ± 5 µg/mL** | **Selenium, Se** | **1 000 ± 8 µg/mL** |
| **Thallium, Tl** | **1 000 ± 7 µg/mL** | | |

**Density:** 1.043 g/mL (measured at 20 ± 4 ºC)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| As | ICP Assay | 3103a | 100818 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Tl | ICP Assay | 3158 | 151215 |

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 or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

**k** = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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

January 13, 2022

- 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

- **January 13, 2027**

- 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

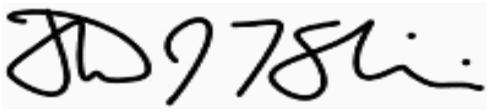
- Sealed TCT Bag Open Date: _____

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control



**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CLPP-CAL-3 |
| Lot Number: | T2-MEB714159 |
| Matrix: | 7% (v/v) HNO3 |
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Arsenic, Lead,<br>Selenium, Thallium,<br><br>500 µg/mL ea:<br>Cadmium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Arsenic, As** | **1 000 ± 8 µg/mL** | **Cadmium, Cd** | **500.0 ± 2.1 µg/mL** |
| **Lead, Pb** | **1 000 ± 5 µg/mL** | **Selenium, Se** | **1 000 ± 8 µg/mL** |
| **Thallium, Tl** | **1 000 ± 7 µg/mL** | | |

**Density:** 1.043 g/mL (measured at 20 ± 4 ºC)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| As | ICP Assay | 3103a | 100818 |
| Cd | ICP Assay | 3108 | 130116 |
| Cd | EDTA | 928 | 928 |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Tl | ICP Assay | 3158 | 151215 |

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 or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

**k** = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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

January 13, 2022

- 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

- **January 13, 2027**

- 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

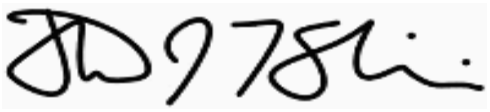
- Sealed TCT Bag Open Date: _____

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control



**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™

Refine your results. Redefine your industry.

# Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | WW-LFS-1 |
| Lot Number: | T2-MEB723367 |
| Matrix: | 5% (v/v) HNO3 |

| | | |
|---|---|---|
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Potassium, | |
| | 600 µg/mL ea:<br>Phosphorus, | |
| | 300 µg/mL ea:<br>Sodium, | Iron, |
| | 200 µg/mL ea:<br>Magnesium,<br>Cerium,<br>Thallium, | Aluminum,<br>Selenium, |
| | 100 µg/mL ea:<br>Lead, | Calcium, |
| | 80 µg/mL ea:<br>Arsenic, | |
| | 70 µg/mL ea:<br>Mercury, | |
| | 50 µg/mL ea:<br>Nickel, | |
| | 40 µg/mL ea:<br>Chromium, | |
| | 30 µg/mL ea:<br>Copper,<br>Vanadium, | Boron, |
| | 20 µg/mL ea:<br>Zinc,<br>Barium,<br>Cadmium,<br>Manganese, | Strontium,<br>Beryllium,<br>Cobalt,<br>Lithium, |
| | 7.5 µg/mL ea:<br>Silver | |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Aluminum, Al | 200.0 ± 0.7 µg/mL | Arsenic, As | 80.0 ± 0.7 µg/mL |
| Barium, Ba | 20.00 ± 0.09 µg/mL | Beryllium, Be | 20.00 ± 0.13 µg/mL |
| Boron, B | 30.00 ± 0.18 µg/mL | Cadmium, Cd | 20.00 ± 0.09 µg/mL |
| Calcium, Ca | 100.0 ± 0.4 µg/mL | Cerium, Ce | 200.0 ± 0.8 µg/mL |
| Chromium, Cr | 40.00 ± 0.30 µg/mL | Cobalt, Co | 20.00 ± 0.10 µg/mL |
| Copper, Cu | 30.00 ± 0.13 µg/mL | Iron, Fe | 300.0 ± 1.3 µg/mL |
| Lead, Pb | 100.0 ± 0.4 µg/mL | Lithium, Li | 20.00 ± 0.08 µg/mL |
| Magnesium, Mg | 200.0 ± 0.8 µg/mL | Manganese, Mn | 20.00 ± 0.08 µg/mL |
| Mercury, Hg | 70.0 ± 0.3 µg/mL | Nickel, Ni | 50.00 ± 0.22 µg/mL |
| Phosphorus, P | 600.0 ± 2.7 µg/mL | Potassium, K | 1 000 ± 4 µg/mL |
| Selenium, Se | 200.0 ± 1.3 µg/mL | Silver, Ag | 7.50 ± 0.03 µg/mL |
| Sodium, Na | 300.0 ± 1.4 µg/mL | Strontium, Sr | 20.01 ± 0.08 µg/mL |
| Thallium, Tl | 200.0 ± 1.4 µg/mL | Vanadium, V | 30.00 ± 0.13 µg/mL |
| Zinc, Zn | 20.00 ± 0.09 µg/mL | | |

**Density:** 1.034 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Ag | ICP Assay | 3151 | 160729 |
| Ag | Volhard | 999c | 999c |
| Ag | Calculated | | See Sec. 4.2 |
| Al | ICP Assay | 3101a | 140903 |
| Al | EDTA | 928 | 928 |
| As | ICP Assay | 3103a | 100818 |
| B | ICP Assay | 3107 | 190605 |
| 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 |
| Ce | ICP Assay | 3110 | 090504 |
| Ce | EDTA | 928 | 928 |
| Co | ICP Assay | 3113 | 190630 |
| Co | EDTA | 928 | 928 |
| Cr | ICP Assay | 3112a | 170630 |
| Cu | ICP Assay | 3114 | 121207 |
| Cu | EDTA | 928 | 928 |
| Fe | ICP Assay | 3126a | 140812 |
| Fe | EDTA | 928 | 928 |
| Hg | ICP Assay | 3133 | 160921 |
| Hg | 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 | Traceable to 3152A | S2-NA700842 |
| Na | Gravimetric | | See Sec. 4.2 |
| Ni | ICP Assay | 3136 | 120619 |
| Ni | EDTA | 928 | 928 |
| P | ICP Assay | 3139a | 060717 |
| P | Acidimetric | 84L | 84L |
| Pb | ICP Assay | 3128 | 101026 |
| Pb | EDTA | 928 | 928 |
| Se | ICP Assay | 3149 | 100901 |
| Sr | EDTA | 928 | 928 |
| Sr | ICP Assay | Traceable to 3153a | K2-SR650985 |
| Tl | ICP Assay | 3158 | 151215 |
| V | IC 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 or More Methods**

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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 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

August 30, 2022

- 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 30, 2026**

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES

Refine your results. Redefine your industry.

# Certificate of Analysis

RD:05/14/2024

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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 863.01 ACCREDITED Reference Material Producer Certificate 863.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Multi Analyte Custom Grade Solution |
| Catalog Number: | WW-LFS-2 |
| Lot Number: | U2-MEB731108 |
| Matrix: | 5% (v/v) HNO3<br>tr. HF |
| Value / Analyte(s): | 200 µg/mL ea:<br>Silica,<br>80 µg/mL ea:<br>Antimony,<br>70 µg/mL ea:<br>Tin,<br>40 µg/mL ea:<br>Molybdenum,<br>20 µg/mL ea:<br>Titanium |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| Antimony, Sb | 80.1 ± 0.6 µg/mL | Molybdenum, Mo | 40.03 ± 0.18 µg/mL |
| Silica, SiO2 | 200.2 ± 1.3 µg/mL | Tin, Sn | 70.0 ± 0.4 µg/mL |
| Titanium, Ti | 20.01 ± 0.13 µg/mL | | |

**Density:** 1.025 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Mo | ICP Assay | 3134 | 130418 |
| Mo | Calculated | | See Sec. 4.2 |
| Sb | ICP Assay | 3102a | 140911 |
| SiO2 | ICP Assay | 3150 | 130912 |
| 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/RM by Two or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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

**6.1** This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

**6.2** For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

## 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.

## 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

March 17, 2023

- 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

**- March 17, 2028**

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

M5062
M5063
M3

## 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 Mass Spec Solution |
| Catalog Number: | MSHG-10PPM |
| Lot Number: | S2-HG709270 |
| Matrix: | 10% (v/v) HCl |
| Value / Analyte(s): | 10 µg/mL ea: Mercury |
| Starting Material: | Hg metal |
| Starting Material Lot#: | 1959 |
| Starting Material Purity: | 99.9994% |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 10.001 ± 0.053 µg/mL

**Density:** 1.020 g/mL (measured at 20 ± 4 °C)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| Hg | ICP Assay | 3133 | 160921 |
| Hg | EDTA | 928 | 928 |
| Hg | 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/RM by Two or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance.

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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.

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| O | Ag | | 0.000011 | M | Eu | < | 0.000201 | O | Na | | 0.000004 | M | Se | < | 0.015915 | O | Zn | < | 0.001510 |
| O | Al | | 0.000001 | O | Fe | | 0.000001 | M | Nb | < | 0.000201 | O | Si | | 0.000005 | M | Zr | < | 0.000201 |
| M | As | < | 0.000402 | M | Ga | < | 0.000201 | M | Nd | < | 0.000201 | M | Sm | < | 0.000201 | | | | |
| M | Au | < | 0.003631 | M | Gd | < | 0.000201 | M | Ni | < | 0.000402 | M | Sn | < | 0.001007 | | | | |
| M | B | < | 0.001208 | M | Ge | < | 0.000201 | M | Os | < | 0.000605 | M | Sr | < | 0.000201 | | | | |
| M | Ba | < | 0.000201 | M | Hf | < | 0.000201 | O | P | < | 0.032370 | M | Ta | < | 0.000201 | | | | |
| M | Be | < | 0.000201 | s | Hg | < | | M | Pb | < | 0.000201 | M | Tb | < | 0.000201 | | | | |
| M | Bi | < | 0.000201 | M | Ho | < | 0.000201 | M | Pd | < | 0.000403 | M | Te | < | 0.002216 | | | | |
| O | Ca | | 0.000007 | M | In | < | 0.000201 | M | Pr | < | 0.000201 | M | Th | < | 0.000201 | | | | |
| M | Cd | < | 0.000201 | M | Ir | < | 0.000201 | M | Pt | < | 0.000402 | M | Ti | < | 0.000402 | | | | |
| M | Ce | < | 0.000201 | O | K | | 0.000020 | M | Rb | < | 0.000201 | O | Tl | < | 0.016508 | | | | |
| M | Co | < | 0.000201 | M | La | < | 0.000201 | M | Re | < | 0.000201 | M | Tm | < | 0.000201 | | | | |
| O | Cr | < | 0.003021 | O | Li | < | 0.000107 | M | Rh | < | 0.000201 | M | U | < | 0.008058 | | | | |
| M | Cs | < | 0.001208 | M | Lu | < | 0.000201 | M | Ru | < | 0.000201 | M | V | < | 0.000201 | | | | |
| M | Cu | < | 0.000402 | O | Mg | | 0.000001 | O | S | < | 0.053950 | M | W | < | 0.000604 | | | | |
| M | Dy | < | 0.000201 | M | Mn | < | 0.000604 | M | Sb | < | 0.001208 | M | Y | < | 0.000201 | | | | |
| M | Er | < | 0.000201 | M | Mo | | 0.000009 | M | Sc | < | 0.000201 | M | Yb | < | 0.000201 | | | | |

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 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**

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution -** 200.59 +2 4 Hg(OH)(aq) 1+

**Chemical Compatibility -** Stable in $HNO_3$. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

**Stability -** 2-100 ppb levels not stable in 1% $HNO_3$ / LDPE container, stable in 10% $HNO_3$ packaged in borosilicate glass. 1-100 ppm levels stable in 7% $HNO_3$ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% $HNO_3$ / LDPE container.

**Hg Containing Samples (Preparation and Solution) -** Metal (soluble in $HNO_3$ ); Oxide ( Soluble in $HNO_3$); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

| **Technique/Line** | **Estimated D.L.** | **Order** | **Interferences** (underlined indicates severe) |
|---|---|---|---|
| ICP-MS 202 amu | 9 ppt | n/a | 186W16O |
| ICP-OES 184.950 nm | 0.03 / 0.005 µg/mL | 1 | |
| ICP-OES 194.227 nm | 0.03 / 0.005 µg/mL | 1 | V |
| ICP-OES 253.652 nm | 0.1 / 0.03 µg/mL | 1 | Ta, Co, Th ,Rh , Fe, U |

## 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



## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

September 22, 2021

- 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

**- September 22, 2026**

- 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:**

Uyen Truong
Supervisor, Product Documentation

**Certificate Approved By:**

Michael Booth
Director, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

## QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

***APPLICATION:*** For use with the CLP SFAM01.0 SOW and revisions.

***CAUTION:*** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
**HAZARDOUS MATERIAL**

Safety Data Sheets
Available Upon Request

### (A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

***CAUTION:*** The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

### (B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

**QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY**
**APTIM Federal Services, LLC**
**2700 Chandler Avenue - Building C**
**Las Vegas, NV 89120**

### (C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

**ICSA-1211, Interferents:** Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v $HNO_3$. Analyze this ICSA solution by ICP-AES.

**ICSB-0710, Analytes, mixed with ICSA-1211, Interferents:** Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v $HNO_3$. Analyze this ICSAB solution by ICP-AES.

## (D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

**Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710**

| Element | CRQL | Part A (µg/L) | Low Limit (µg/L) | High Limit (µg/L) | Part A +Part B (µg/L) | Low Limit (µg/L) | High Limit (µg/L) |
|---|---|---|---|---|---|---|---|
| Al | 200 | 255000 | 216000 | 294000 | 247000 | 209000 | 285000 |
| Sb | 60 | (0.0) | -60.0 | 60.0 | 618 | 525 | 711 |
| As | 10 | (0.0) | -10.0 | 10.0 | 104 | 88.4 | 120 |
| Ba | 200 | (6.0) | -194 | 206 | (537) | 337 | 737 |
| Be | 5.0 | (0.0) | -5.0 | 5.0 | 495 | 420 | 570 |
| Cd | 5.0 | (1.0) | -4.0 | 6.0 | 972 | 826 | 1120 |
| Ca | 5000 | 245000 | 208000 | 282000 | 235000 | 199000 | 271000 |
| Cr | 10 | (52.0) | 42.0 | 62.0 | 542 | 460 | 624 |
| Co | 50 | (0.0) | -50.0 | 50.0 | 476 | 404 | 548 |
| Cu | 25 | (2.0) | -23.0 | 27.0 | 511 | 434 | 588 |
| Fe | 100 | 101000 | 85600 | 116500 | 99300 | 84400 | 114500 |
| Pb | 10 | (0.0) | -10.0 | 10.0 | (49.0) | 39.0 | 59.0 |
| Mg | 5000 | 255000 | 216000 | 294000 | 248000 | 210000 | 286000 |
| Mn | 15 | (7.0) | -8.0 | 22.0 | 507 | 430 | 584 |
| Ni | 40 | (2.0) | -38.0 | 42.0 | 954 | 810 | 1100 |
| Se | 35 | (0.0) | -35.0 | 35.0 | (46.0) | 11.0 | 81.0 |
| Ag | 10 | (0.0) | -10.0 | 10.0 | 201 | 170 | 232 |
| Tl | 25 | (0.0) | -25.0 | 25.0 | (108) | 83.0 | 133 |
| V | 50 | (0.0) | -50.0 | 50.0 | 491 | 417 | 565 |
| Zn | 60 | (0.0) | -60.0 | 60.0 | 952 | 809 | 1095 |

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5192 R: 06/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

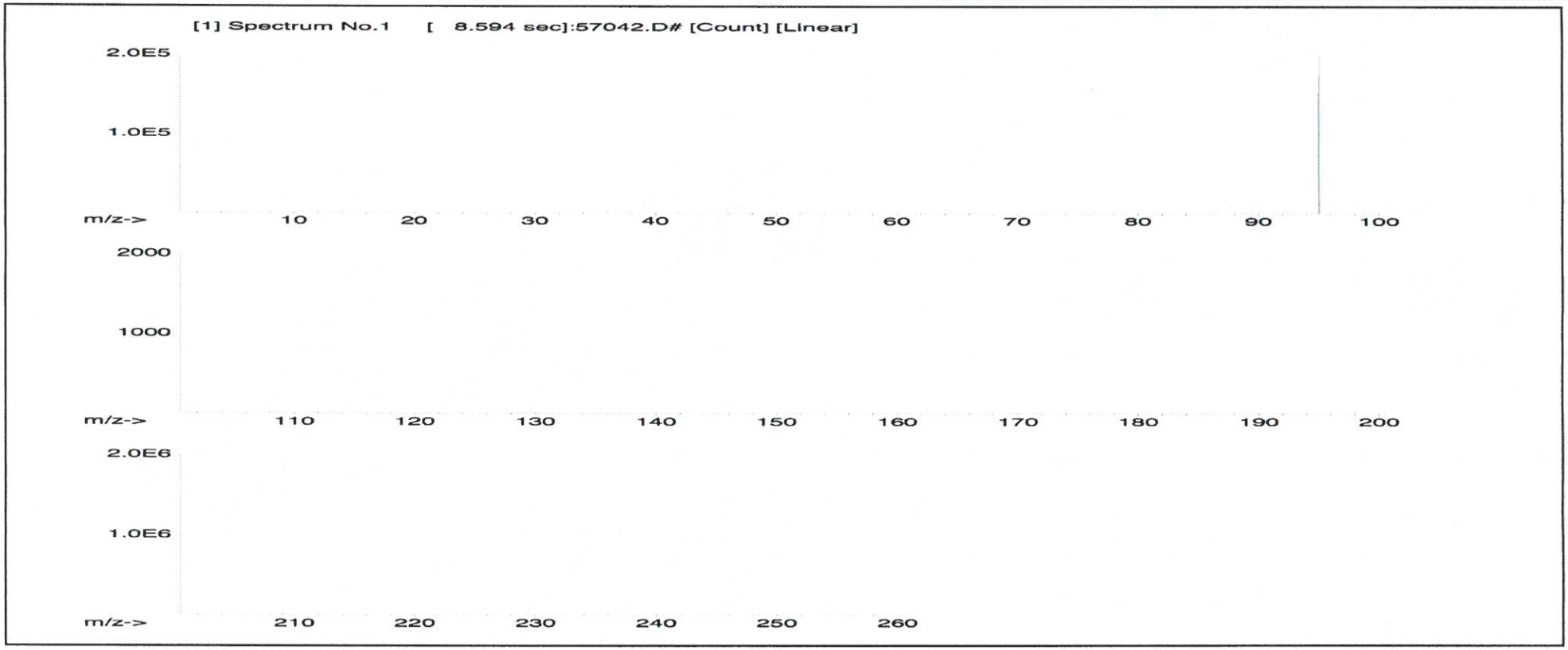
**Part Number:** 57042
**Lot Number:** 051722
**Description:** Molybdenum (Mo)
**Expiration Date:** 051725
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB
**Volume shown below was diluted to (mL):** 3000.41

| Lot # | Solvent: | | |
|---|---|---|---|
| MKBQ8597V | Ammonium hydroxide | | |
| 0.5% | 15.0 (mL) | Ammonium hydroxide | |
| | 5E-05 | Balance Uncertainty | |
| | 0.058 | Flask Uncertainty | |

Formulated By: Lawrence Barry 051722

Reviewed By: Pedro L. Rentas 051722

| | Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Ammonium molybdate (Mo) | 58142 | 022222 | 0.1000 | 300.0 | 0.084 | 1000 | 10001.0 | **1000.0** | **2.1** | 13106-76-8 | 5 mg(Mo)/m3 | orl-rat 333 mg/kg | 3134 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | T | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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: | Multi Analyte Custom Grade Solution |
| Catalog Number: | CHEM-QC-4 |
| Lot Number: | S2-MEB711674 |
| Matrix: | 3% (v/v) HNO3<br>3% (v/v) HF |
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Boron, Molybdenum,<br>Silicon, Tin,<br>Titanium |

**Second Source**: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE | CERTIFIED VALUE | ANALYTE | CERTIFIED VALUE |
|---|---|---|---|
| **Boron, B** | **1 000 ± 7 µg/mL** | **Molybdenum, Mo** | **1 000 ± 5 µg/mL** |
| **Silicon, Si** | **1 000 ± 7 µg/mL** | **Tin, Sn** | **1 000 ± 5 µg/mL** |
| **Titanium, Ti** | **1 001 ± 6 µg/mL** | | |

**Density:** 1.032 g/mL (measured at 20 ± 4 ºC)

### Assay Information:

| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---|---|---|---|
| B | ICP Assay | 3107 | 110830 |
| Mo | ICP Assay | 3134 | 130418 |
| Si | ICP Assay | 3150 | 130912 |
| Sn | ICP Assay | 3161a | 140917 |
| Ti | ICP Assay | 3162a | 130925 |

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 or More Methods**

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

**k** = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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.

## 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

November 02, 2021

- 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 02, 2026**

- 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 Approved By:**

Michael Booth
Director, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

## QATS LABORATORY INORGANIC REFERENCE MATERIAL INTERFERENCE CHECK SAMPLE SET FOR ICP-AES (ICSA WITH ICSB)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

***APPLICATION:*** For use with the CLP SFAM01.0 SOW and revisions.

***CAUTION:*** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Heavy Metals
**HAZARDOUS MATERIAL**

Safety Data Sheets
Available Upon Request

### (A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more bottles of Aqueous Reference Material, each composed of metals at various concentrations and prepared with nitrate salts and oxy-acids of the respective elements in a 5% nitric acid matrix. **For the reference material source in reporting ICSA and ICSAB mixture use "USEPA". For the reference material lot number for the ICSA use "ICSA-1211" and for the ICSAB mixture use "ICSA-1211+ICSB-0710".**

***CAUTION:*** The bottle(s) should be protected from light during storage to ensure the stability of silver which is contained in the ICSB solution. The bottle(s) should be stored at room temperature. **Do not allow the solution(s) to freeze.**

### (B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

**QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY**
**APTIM Federal Services, LLC**
**2700 Chandler Avenue - Building C**
**Las Vegas, NV 89120**

### (C) *ANALYSIS OF SAMPLES*

The interference check sample set is to be used to verify inter-element and background correction factors of inductively-coupled plasma (ICP) spectrometers. This reference material set consists of two (2) concentrated solutions. The ICSA solution contains the four (4) interferent elements: Al, Ca, Fe, and Mg. The ICSB solution contains the analytes: Ag, As, Sb, Ba, Be,

Cd, Co, Cr, Cu, Mn, Ni, Pb, Tl, Se, V, and Zn. This instruction sheet provides the nominal values for ICP-AES Part A and Part B target analytes when diluted as directed.

Using Class "A" glassware, preparation and analysis must be performed according to the following instructions:

**ICSA-1211, Interferents:** Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v $HNO_3$. Analyze this ICSA solution by ICP-AES.

**ICSB-0710, Analytes, mixed with ICSA-1211, Interferents:** Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v $HNO_3$. Analyze this ICSAB solution by ICP-AES.

## (D) *"CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-AES ICS SOLUTION(S)*

The "Certified Value" concentrations of the elements, listed in Table 1 below, were derived from statistically pooled analysis results from the following sources, if available: QATS Laboratory, CLP laboratories, Quarterly Blind (QB)/Proficiency Testing (PT) events, CLP pre-award events, and external referee laboratories.

**Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1211, AND ICSA-1211 MIXED WITH ICSB-0710**

| Element | CRQL | Part A (µg/L) | Low Limit (µg/L) | High Limit (µg/L) | Part A +Part B (µg/L) | Low Limit (µg/L) | High Limit (µg/L) |
|---|---|---|---|---|---|---|---|
| Al | 200 | 255000 | 216000 | 294000 | 247000 | 209000 | 285000 |
| Sb | 60 | (0.0) | -60.0 | 60.0 | 618 | 525 | 711 |
| As | 10 | (0.0) | -10.0 | 10.0 | 104 | 88.4 | 120 |
| Ba | 200 | (6.0) | -194 | 206 | (537) | 337 | 737 |
| Be | 5.0 | (0.0) | -5.0 | 5.0 | 495 | 420 | 570 |
| Cd | 5.0 | (1.0) | -4.0 | 6.0 | 972 | 826 | 1120 |
| Ca | 5000 | 245000 | 208000 | 282000 | 235000 | 199000 | 271000 |
| Cr | 10 | (52.0) | 42.0 | 62.0 | 542 | 460 | 624 |
| Co | 50 | (0.0) | -50.0 | 50.0 | 476 | 404 | 548 |
| Cu | 25 | (2.0) | -23.0 | 27.0 | 511 | 434 | 588 |
| Fe | 100 | 101000 | 85600 | 116500 | 99300 | 84400 | 114500 |
| Pb | 10 | (0.0) | -10.0 | 10.0 | (49.0) | 39.0 | 59.0 |
| Mg | 5000 | 255000 | 216000 | 294000 | 248000 | 210000 | 286000 |
| Mn | 15 | (7.0) | -8.0 | 22.0 | 507 | 430 | 584 |
| Ni | 40 | (2.0) | -38.0 | 42.0 | 954 | 810 | 1100 |
| Se | 35 | (0.0) | -35.0 | 35.0 | (46.0) | 11.0 | 81.0 |
| Ag | 10 | (0.0) | -10.0 | 10.0 | 201 | 170 | 232 |
| Tl | 25 | (0.0) | -25.0 | 25.0 | (108) | 83.0 | 133 |
| V | 50 | (0.0) | -50.0 | 50.0 | 491 | 417 | 565 |
| Zn | 60 | (0.0) | -60.0 | 60.0 | 952 | 809 | 1095 |

ICSA M5126 M5127 M5128 M5129 M5130

ICSB M5219 M5220 M5221 M5222 M5223

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value ± 1 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value ± 15 percent of the listed certified value.

V15200 R: 04/24/22 (BP)

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58119
**Lot Number:** 071122
**Description:** Potassium (K)

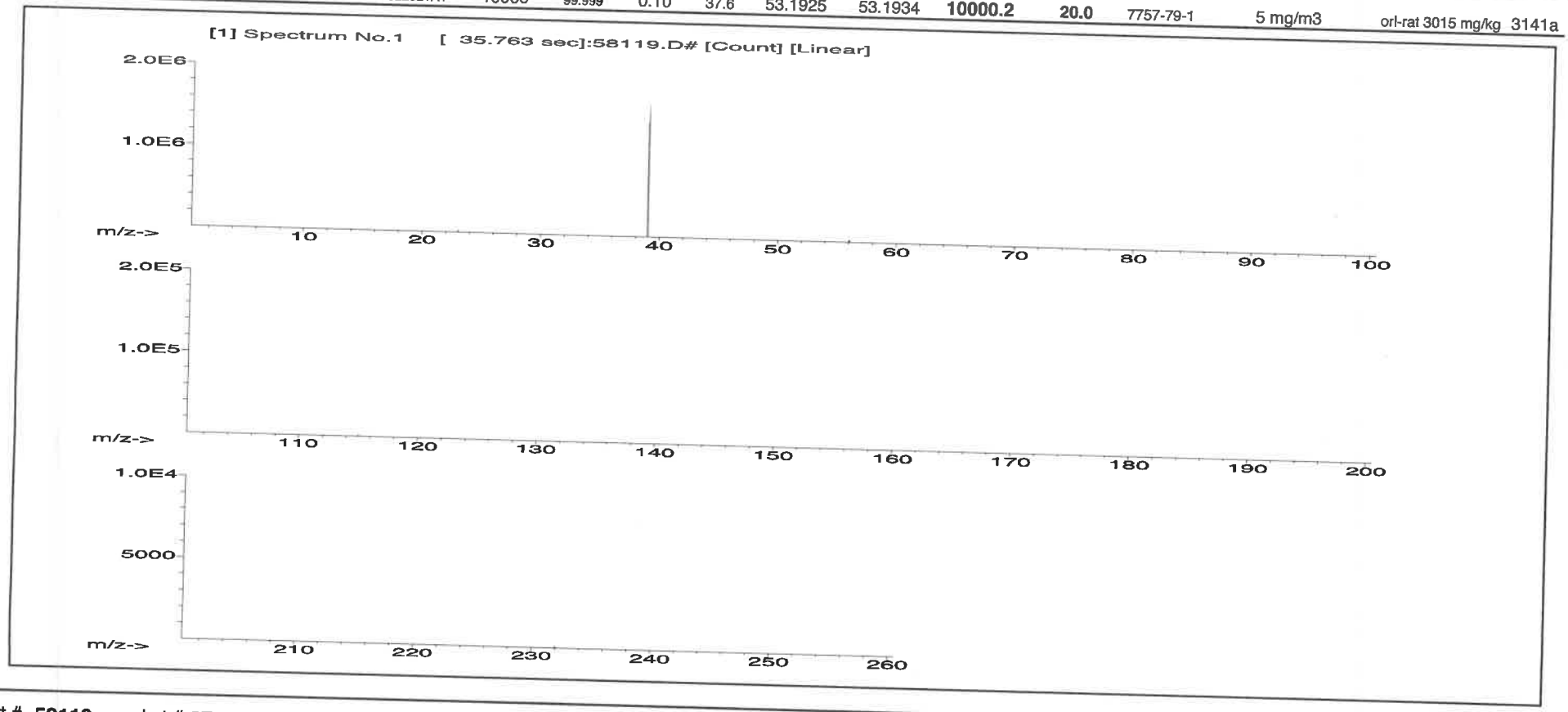
**Expiration Date:** 071125
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 2000.02

| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 20510011 | Nitric Acid | |
| 2% | 40.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 071122 |
| Reviewed By: | Pedro L. Rentas | 071122 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Potassium nitrate (K) | IN034 | KD022021A1 | 10000 | 99.999 | 0.10 | 37.6 | 53.1925 | 53.1934 | **10000.2** | **20.0** | 7757-79-1 | 5 mg/m3 | orl-rat 3015 mg/kg | 3141a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | T | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

## QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

***APPLICATION:*** For use with the CLP SFAM01.0 SOW and revisions.

***CAUTION:*** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
**HAZARDOUS MATERIAL**

Safety Data Sheets Available Upon Request

M5291
M5292
M5293
M5294
M5295

### (A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

### (B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

**QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY**
**APTIM Federal Services, LLC**
**2700 Chandler Avenue - Building C**
**Las Vegas, NV 89120**

### (C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

**ICV1-1014** For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.



*The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.*

**ICV1-1014** For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

**ICV5-0415** For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

**ICV6-0400** For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

**NOTE:** USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

## (D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

| ICV1-1014 | | |
|---|---|---|
| **Element** | **Concentration (µg/L) (after 10-fold dilution)** | **Concentration (µg/L) (after 50-fold dilution)** |
| **Al** | 2500 | 500 |
| **Sb** | 1000 | 200 |
| **As** | 1000 | 200 |
| **Ba** | 520 | 100 |
| **Be** | 510 | 100 |
| **Cd** | 510 | 100 |
| **Ca** | 10000 | 2000 |
| **Cr** | 520 | 100 |
| **Co** | 520 | 100 |
| **Cu** | 510 | 100 |
| **Fe** | 10000 | 2000 |
| **Pb** | 1000 | 200 |
| **Mg** | 6000 | 1200 |
| **Mn** | 520 | 100 |
| **Ni** | 530 | 110 |
| **K** | 9900 | 2000 |
| **Se** | 1000 | 200 |
| **Ag** | 250 | 50 |
| **Na** | 10000 | 2000 |
| **Tl** | 1000 | 210 |
| **V** | 500 | 100 |
| **Zn** | 1000 | 200 |

| ICV5-0415 | | ICV6-0400 | |
|---|---|---|---|
| **Element** | **Concentration (µg/L) (after 100-fold dilution)** | **Analyte** | **Concentration (µg/L) (after 100-fold dilution)** |
| **Hg** | 4.0 | **$CN^-$** | 99 |

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

R: 09/08/22 (BH)

*Certified Reference Material CRM*

M5387 . M5389 . M5390 . M5391 . M5392

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

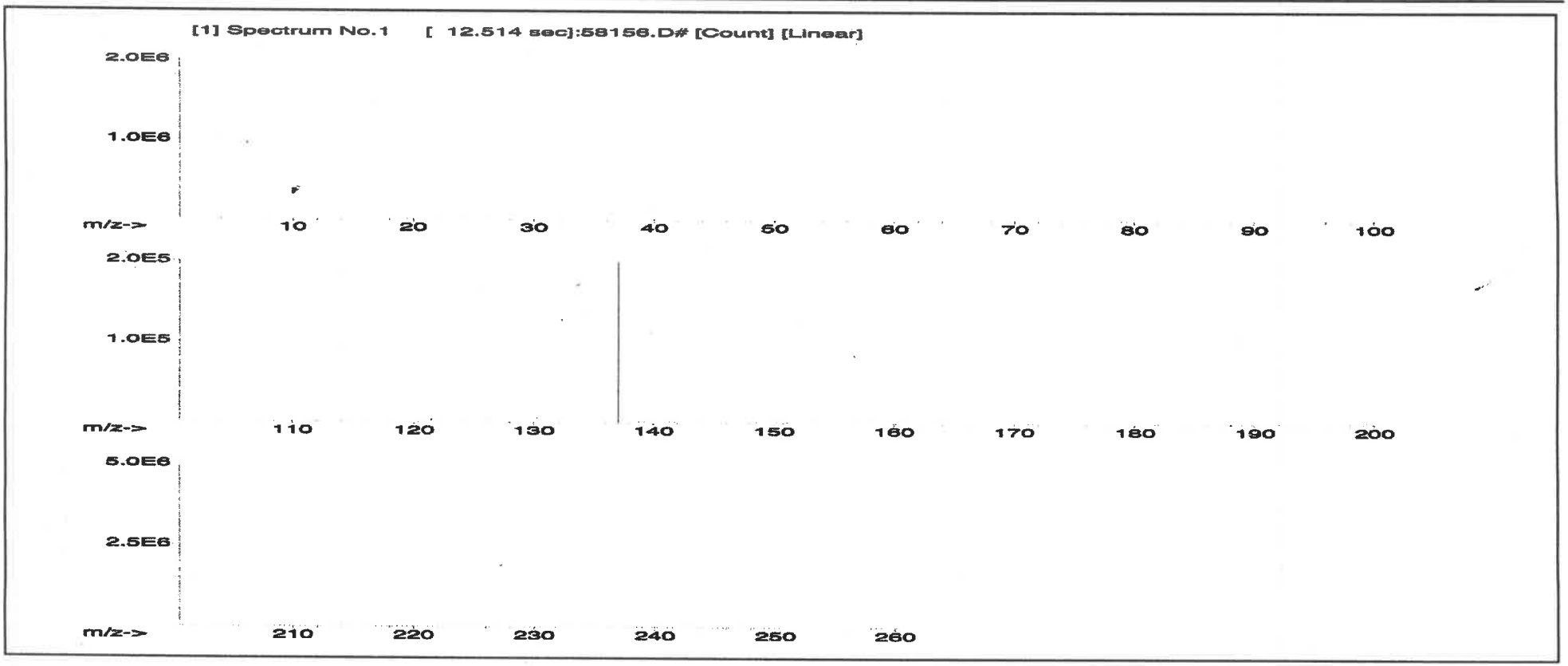
## CERTIFIED WEIGHT REPORT:

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57056** | | **Lot #** | | |
| **Lot Number:** | **072122** | **Solvent:** | 20510011 | Nitric Acid | |
| **Description:** | **Barium (Ba)** | 2% | 40.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 072125 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | | |

Giovanni Esposito

| | | |
|---|---|---|
| Formulated By: | Giovanni Esposito | 072122 |
| Reviewed By: | Pedro L. Rentas | 072122 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Barium nitrate (Ba) | IN023 | BAD022019A1 | 1000 | 99.999 | 0.10 | 52.3 | 3.82417 | 3.82426 | **1000.0** | 2.0 | 10022-31-8 | 0.5 mg/m3 | orl-rat 355 mg/kg | 3104a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | T | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

M5429 R1 01/26/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 57103
**Lot Number:** 070622
**Description:** Lithium (Li)

**Expiration Date:** 070625
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 1000.12 | 0.058 Flask Uncertainty

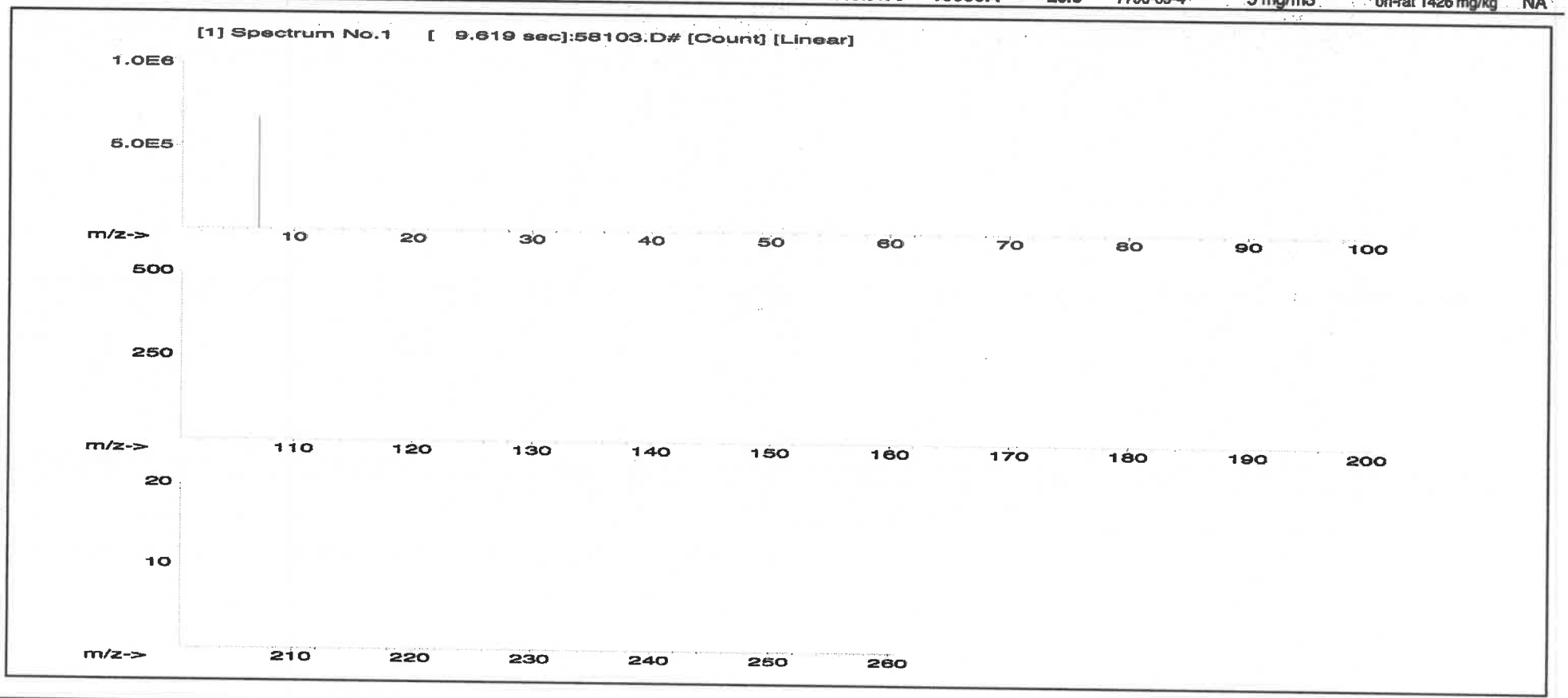
| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 20510011 | Nitric Acid | |
| 2% | 20.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

Formulated By: Lawrence Barry 070622

Reviewed By: Pedro L. Rentas 070622

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Lithium nitrate (Li) | IN019 | LIZ042018A1 | 10000 | 99.999 | 0.10 | 10.0 | 100.0134 | 100.0173 | **10000.4** | **20.0** | 7790-69-4 | 5 mg/m3 | orl-rat 1426 mg/kg | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

## Trace Metals Verification by ICP-MS (µg/mL)

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | T | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

N 5466

***Certified Reference Material CRM***

R: 03/01/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

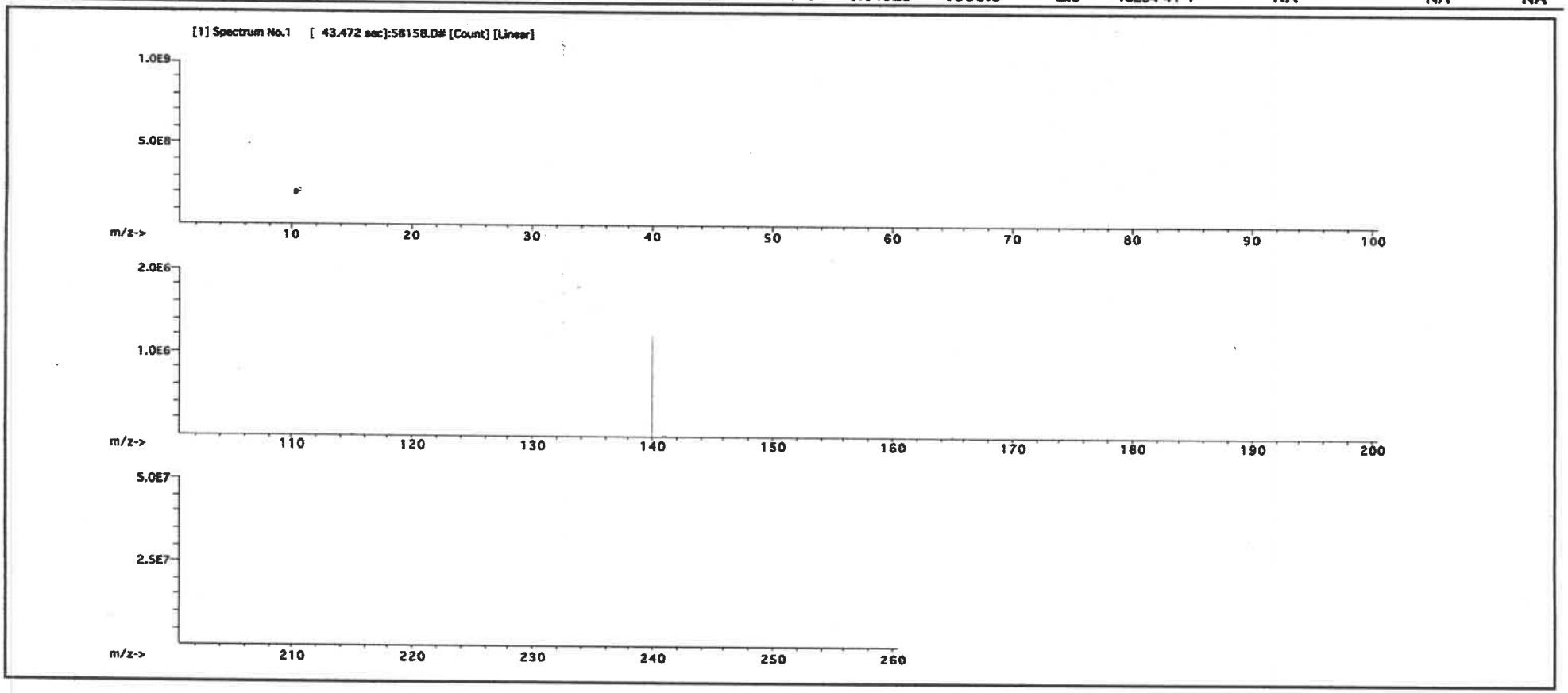
**Part Number:** 57058
**Lot Number:** 061322
**Description:** Cerium (Ce)

**Expiration Date:** 061325
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB 5E-05 Balance Uncertainty
**Weight shown below was diluted to (mL):** 1000.12 0.058 Flask Uncertainty

| | Lot # | |
|---|---|---|
| **Solvent:** | 20510011 | Nitric Acid |
| 2% | 20.0 (mL) | Nitric Acid |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 061322 |
| Reviewed By: | Pedro L. Rentas | 061322 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cerium nitrate hexahydrate (Ce) | IN146 | Z512CEB1 | 1000 | 99.999 | 0.10 | 32.8 | 3.04919 | 3.04923 | 1000.0 | 2.0 | 10294-41-4 | NA | NA | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | T | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5467 R: 03/01/23 (LA)

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT:

**Part Number:** 57058
**Lot Number:** 020623
**Description:** Cerium (Ce)

**Expiration Date:** 020626
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB

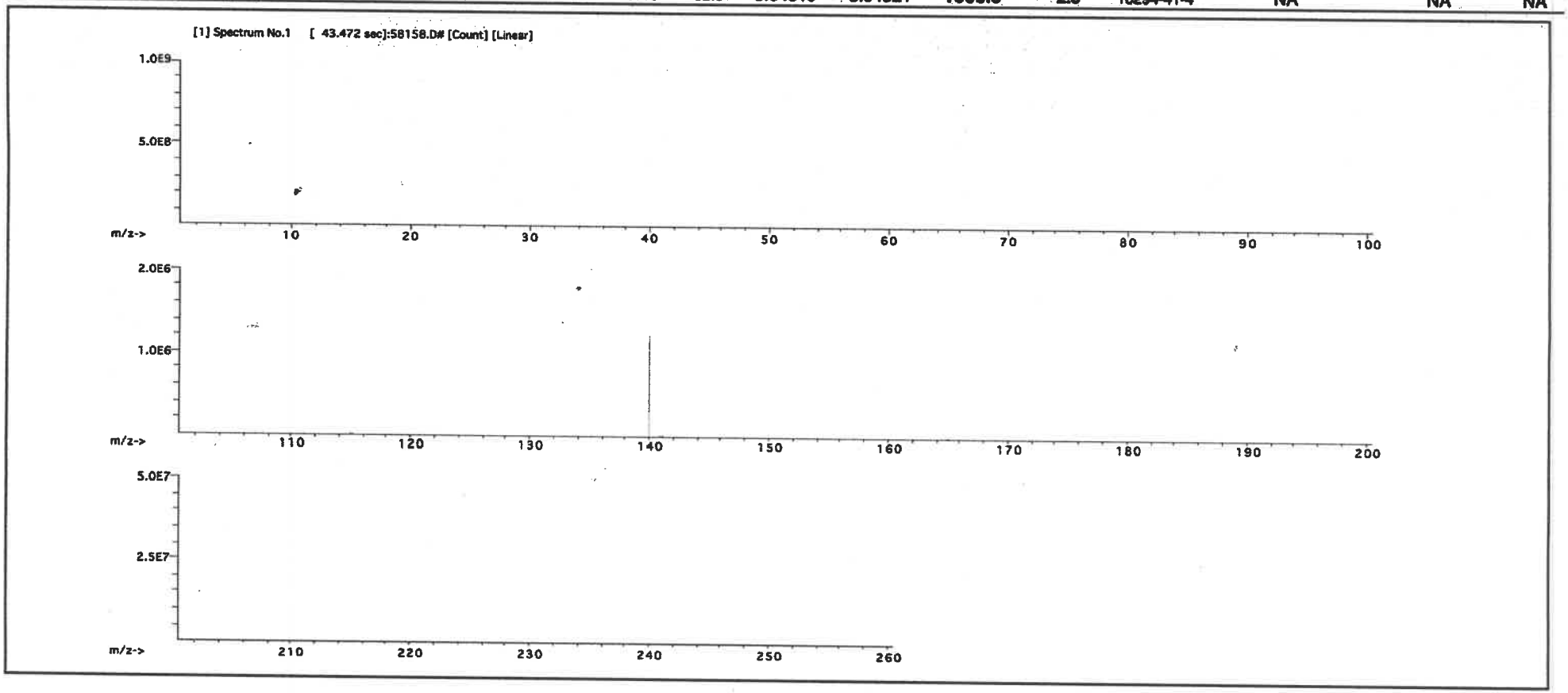
**Weight shown below was diluted to (mL):** 1000.12 0.058 Flask Uncertainty

| | | Lot # | |
|---|---|---|---|
| **Solvent:** | 21110221 | Nitric Acid | |
| 2% | 20.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 020623 |
| Reviewed By: | Pedro L. Rentas | 020623 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cerium nitrate hexahydrate (Ce) | IN146 | Z512CEB1 | 1000 | 99.999 | 0.10 | 32.8 | 3.04919 | 3.04921 | **1000.0** | **2.0** | 10294-41-4 | NA | NA | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | T | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

IN5497 - IN5498 R: 03/17/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58120
**Lot Number:** 031523
**Description:** Calcium (Ca)

**Expiration Date:** 031526
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 3000.41 ± 0.058 Flask Uncertainty

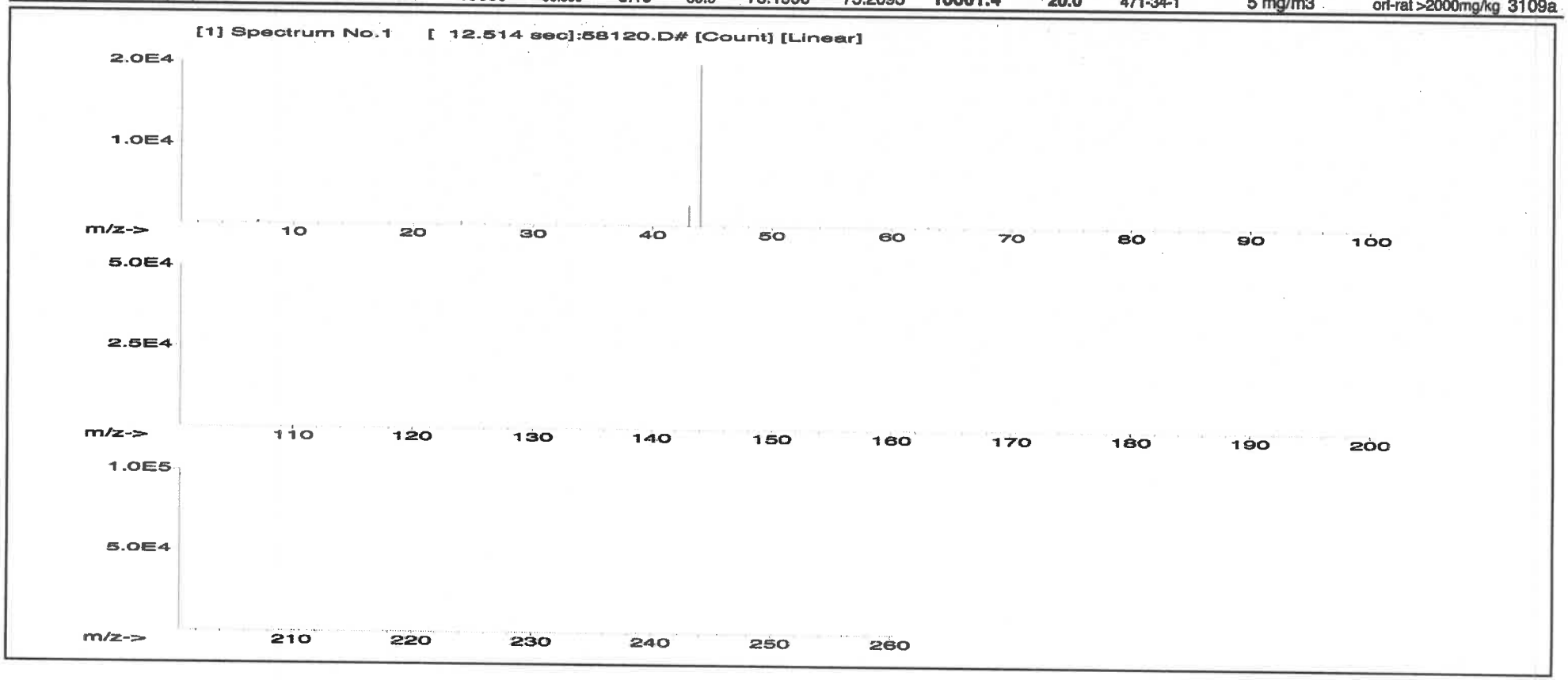
| | | Lot # | |
|---|---|---|---|
| **Solvent:** | 21110221 | | Nitric Acid |
| | 2% | 60.0 (mL) | Nitric Acid |

5E-05 Balance Uncertainty

Giovanni Esposito

| | | |
|---|---|---|
| Formulated By: | Giovanni Esposito | 031523 |
| Reviewed By: | Pedro L. Rentas | 031523 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Calcium carbonate (Ca) | IN014 | CAD072022A1 | 10000 | 99.999 | 0.10 | 39.9 | 75.1990 | 75.2093 | **10001.4** | **20.0** | 471-34-1 | 5 mg/m3 | orl-rat >2000mg/kg | 3109a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | T | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

IN5497 - IN5498 R: 03/17/23 BH

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58120
**Lot Number:** 031523
**Description:** Calcium (Ca)

**Expiration Date:** 031526
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 3000.41 ± 0.058 Flask Uncertainty

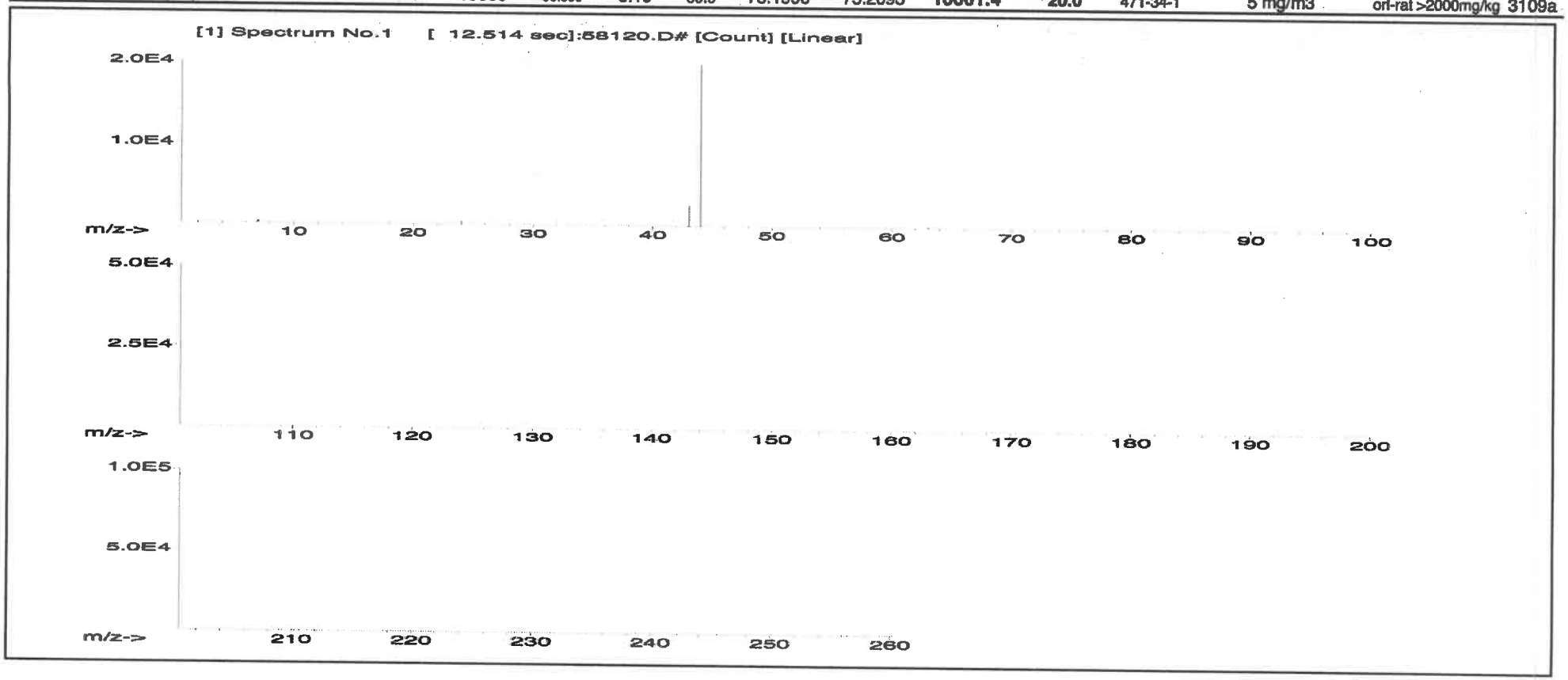
| | | Lot # | |
|---|---|---|---|
| **Solvent:** | 21110221 | | Nitric Acid |
| | 2% | 60.0 (mL) | Nitric Acid |

5E-05 Balance Uncertainty

Giovanni Esposito

| | | |
|---|---|---|
| Formulated By: | Giovanni Esposito | 031523 |
| Reviewed By: | Pedro L. Rentas | 031523 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Calcium carbonate (Ca) | IN014 | CAD072022A1 | 10000 | 99.999 | 0.10 | 39.9 | 75.1990 | 75.2093 | **10001.4** | **20.0** | 471-34-1 | 5 mg/m3 | orl-rat >2000mg/kg | 3109a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | T | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5514 - M5515 R: 03/17/22

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58126
**Lot Number:** 092122
**Description:** Iron (Fe)

**Expiration Date:** 092125
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 5000.1 ± 0.12 Flask Uncertainty

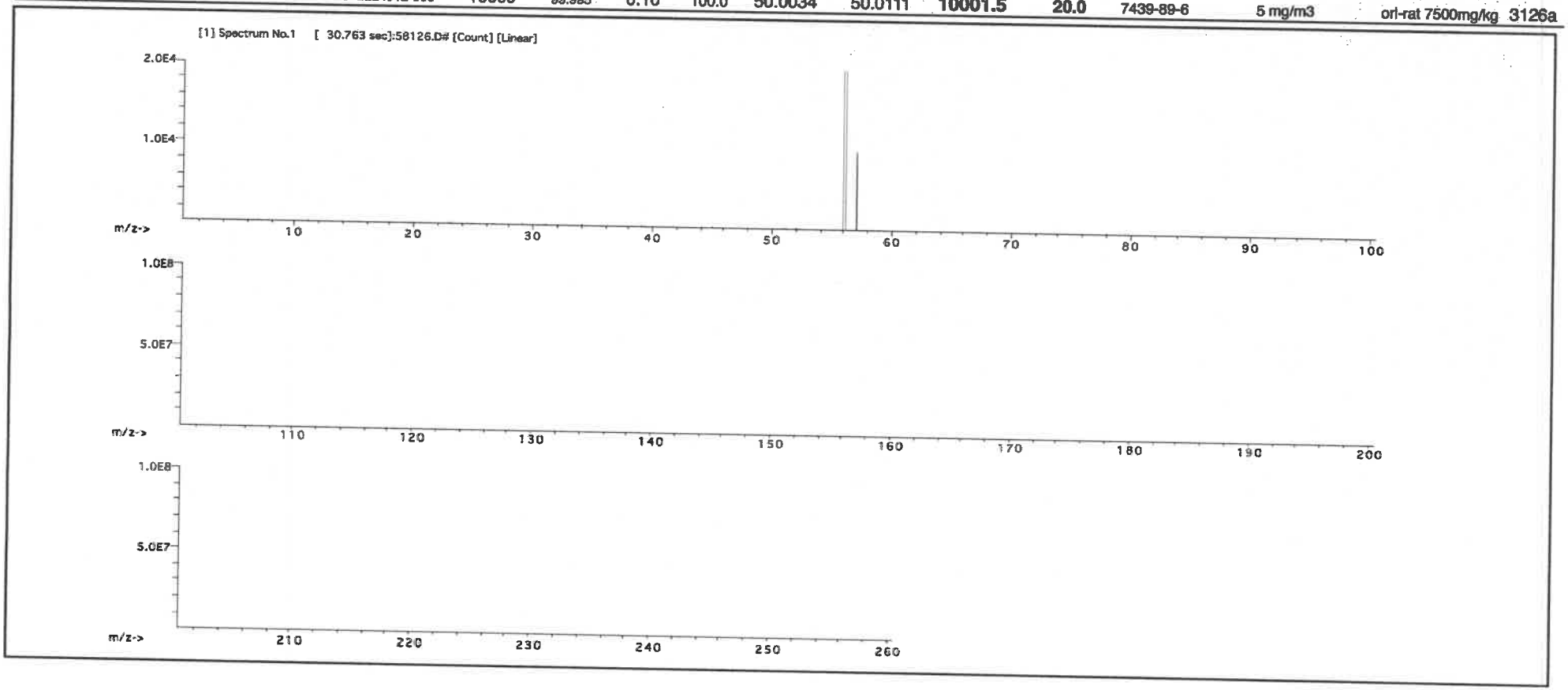
| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 20510011 | Nitric Acid | |
| 7.0% | 350.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

Giovanni Esposito

| | | |
|---|---|---|
| Formulated By: | Giovanni Esposito | 092122 |
| Reviewed By: | Pedro L. Rentas | 092122 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Iron (Fe) | IN346 | 2224912-500 | 10000 | 99.995 | 0.10 | 100.0 | 50.0034 | 50.0111 | **10001.5** | **20.0** | 7439-89-6 | 5 mg/m3 | orl-rat 7500mg/kg | 3126a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.10 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.10 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.05 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.10 | Ge | <0.10 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.05 |
| B | <0.02 | Cu | <0.10 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

M5658 R! 8/25/23

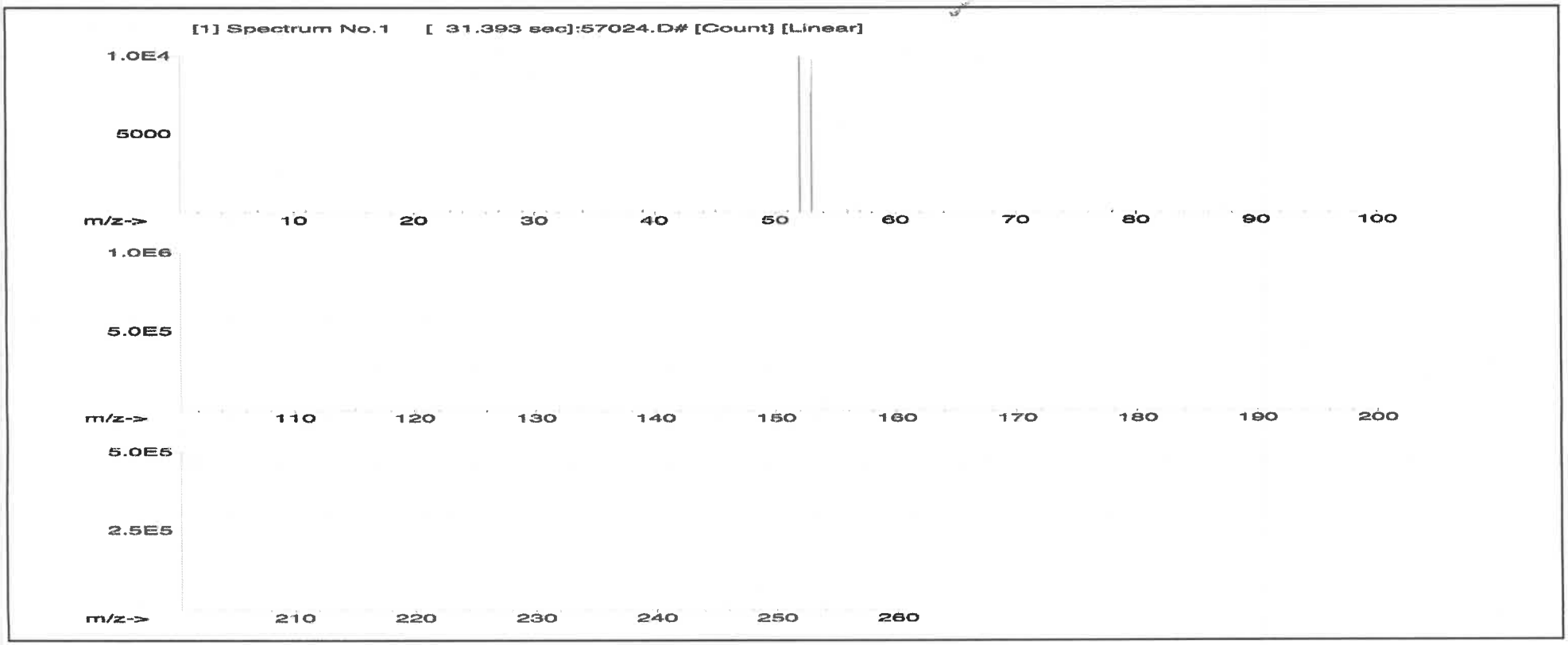
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **58024** | 21110221 | Nitric Acid | |
| **Lot Number:** | **060523** | | | |
| **Description:** | **Chromium (Cr)** | | | |
| | | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 060526 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 060523 |
| Reviewed By: | Pedro L. Rentas | 060523 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Chromium(III) nitrate nonahydrate (Cr) | 58124 | 071122 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.1 | **1000.0** | **2.2** | 7789-02-8 | 0.5 mg(Cr)/m3 | orl-rat 3250 mg/kg | 3112a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | T | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5697 R: 10/27/23

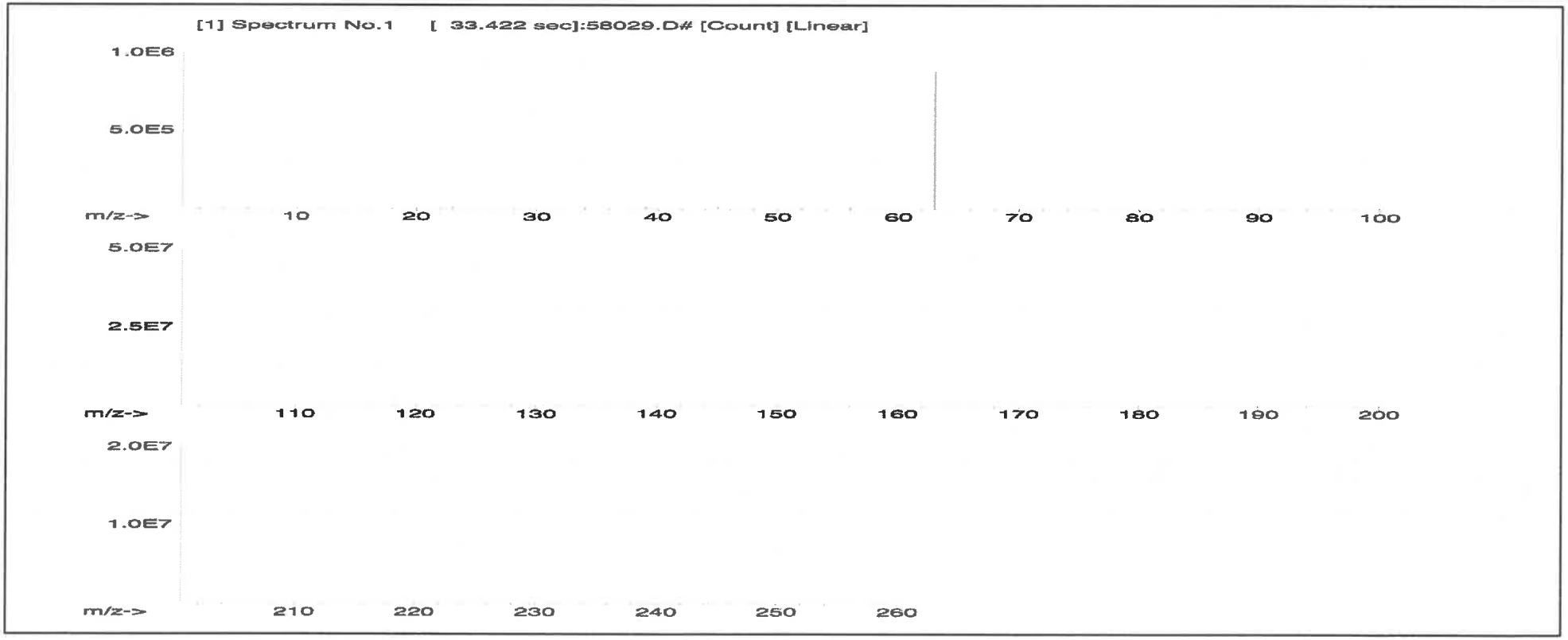
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **58029** | 24002546 | Nitric Acid | |
| **Lot Number:** | **102523** | | | |
| **Description:** | **Copper (Cu)** | | | |
| | | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 102526 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 102523 |
| Reviewed By: | Pedro L. Rentas | 102523 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Copper(II) nitrate trihydrate (Cu) | 58129 | 100223 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.1 | **1000.0** | **2.2** | 10031-43-3 | 1 mg/m3 | orl-rat 794 mg/kg | 3114 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | T | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5648 R: 10/27/23

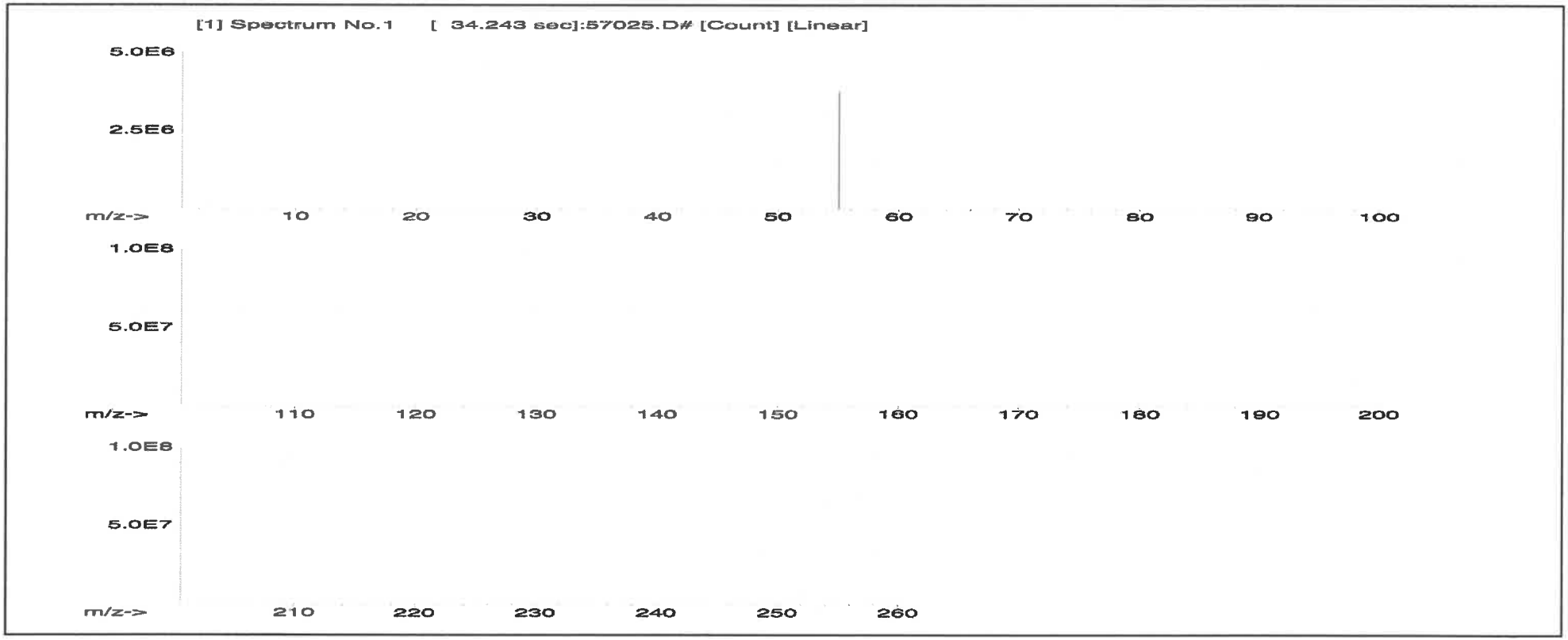
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **58025** | 24002546 | Nitric Acid | |
| **Lot Number:** | **102623** | | | |
| **Description:** | **Manganese (Mn)** | | | |
| | | 2.0% | 60.0 (mL) | Nitric Acid |
| **Expiration Date:** | 102626 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 3000.41 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 102623 |
| Reviewed By: | Pedro L. Rentas | 102623 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Manganese(II) nitrate tetrahydrate (Mn) | 58125 | 071123 | 0.1000 | 300.0 | 0.084 | 1000 | 10000.1 | **1000.0** | **2.1** | 20694-39-7 | 5 mg/m3 | orl-rat >300mg/kg | 3132 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | T | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 12/20/23 M5747

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 57082
**Lot Number:** 100923
**Description:** Lead (Pb)

**Expiration Date:** 100926
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB

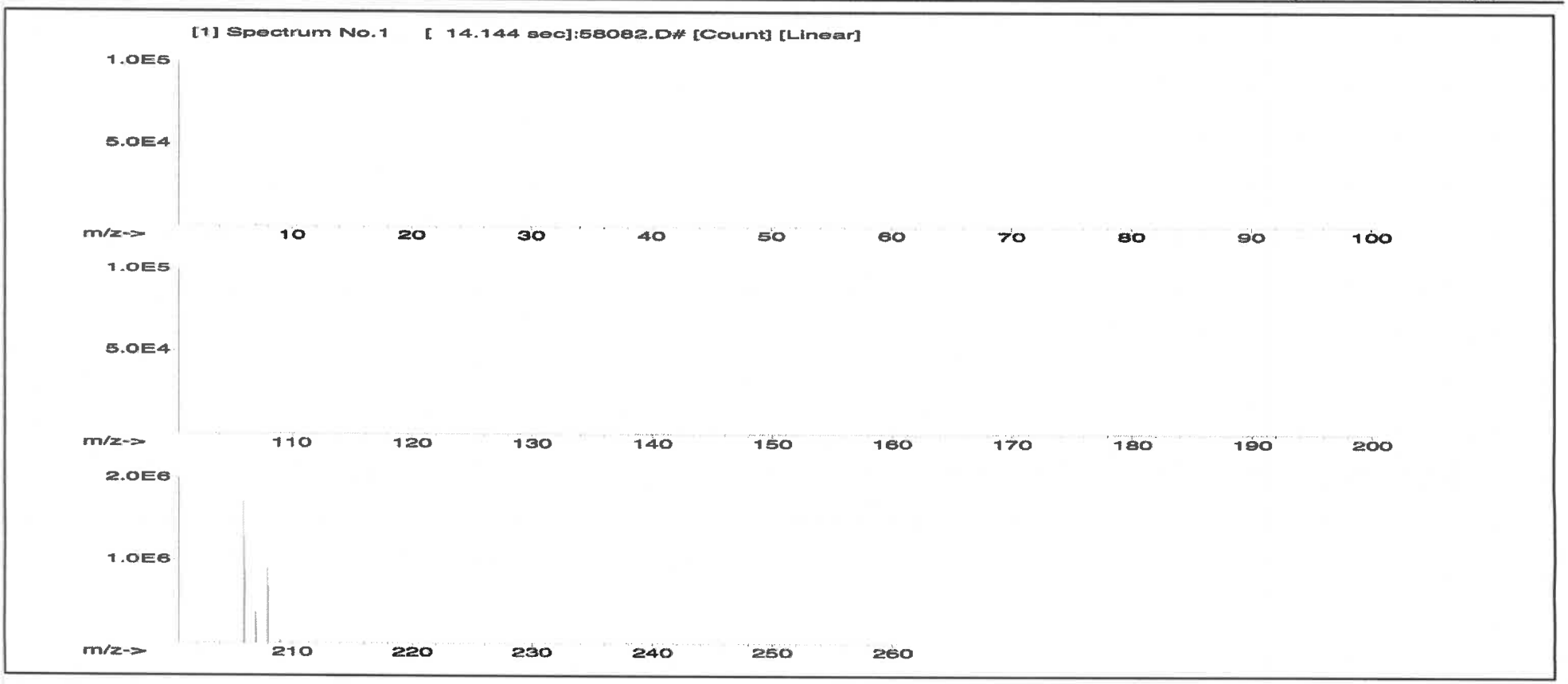
**Weight shown below was diluted to (mL):** 3000.41 ± 0.06 Flask Uncertainty

| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | |
| 2% | 60.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 100923 |
| Reviewed By: | Pedro L. Rentas | 100923 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Lead(II) nitrate (Pb) | IN029 | PBD122016A1 | 1000 | 99.999 | 0.10 | 62.5 | 4.80071 | 4.80077 | **1000.0** | **2.0** | 10099-74-8 | 0.05 mg/m3 | intrvns-rat 93 mg/kg | 3128 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | T | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 12/20/23 M5748

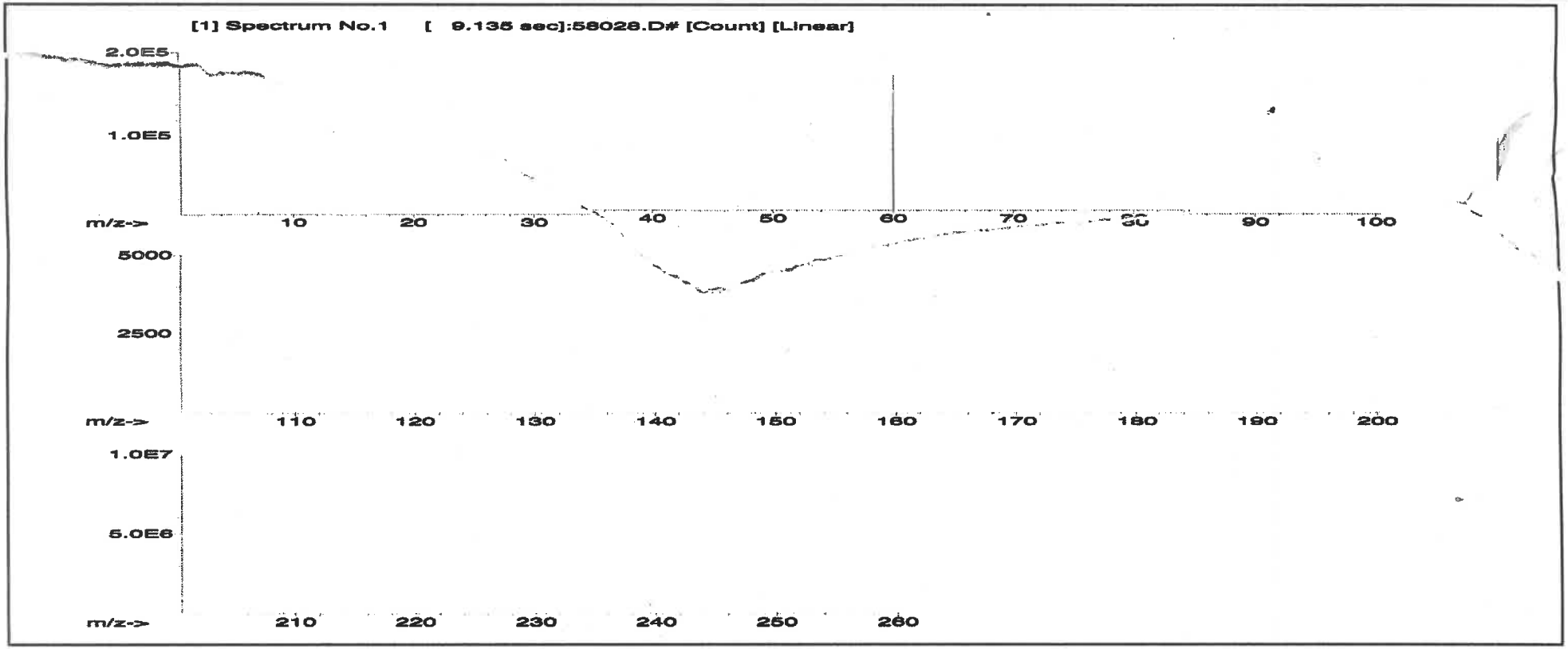
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

**CERTIFIED WEIGHT REPORT:**

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **57028** | 24002546 | Nitric Acid | |
| **Lot Number:** | **091223** | | | |
| **Description:** | **Nickel (Ni)** | | | |
| | | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 091226 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 091223 |
| Reviewed By: | Pedro L. Rentas | 091223 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Nickel(II) nitrate hexahydrate (Ni) | 58128 | 062023 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.4 | **1000.0** | 2.2 | 13478-00-7 | 1 mg/m3 | orl-rat 1620 mg/kg | 3136 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | T | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

M5768 M5769 (BP) R:1/3/24

*Certified Reference Material CRM*

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58112
**Lot Number:** 091823
**Description:** Magnesium (Mg)

**Expiration Date:** 091826
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB

**Weight shown below was diluted to (mL):** 2000.02 0.058 Flask Uncertainty

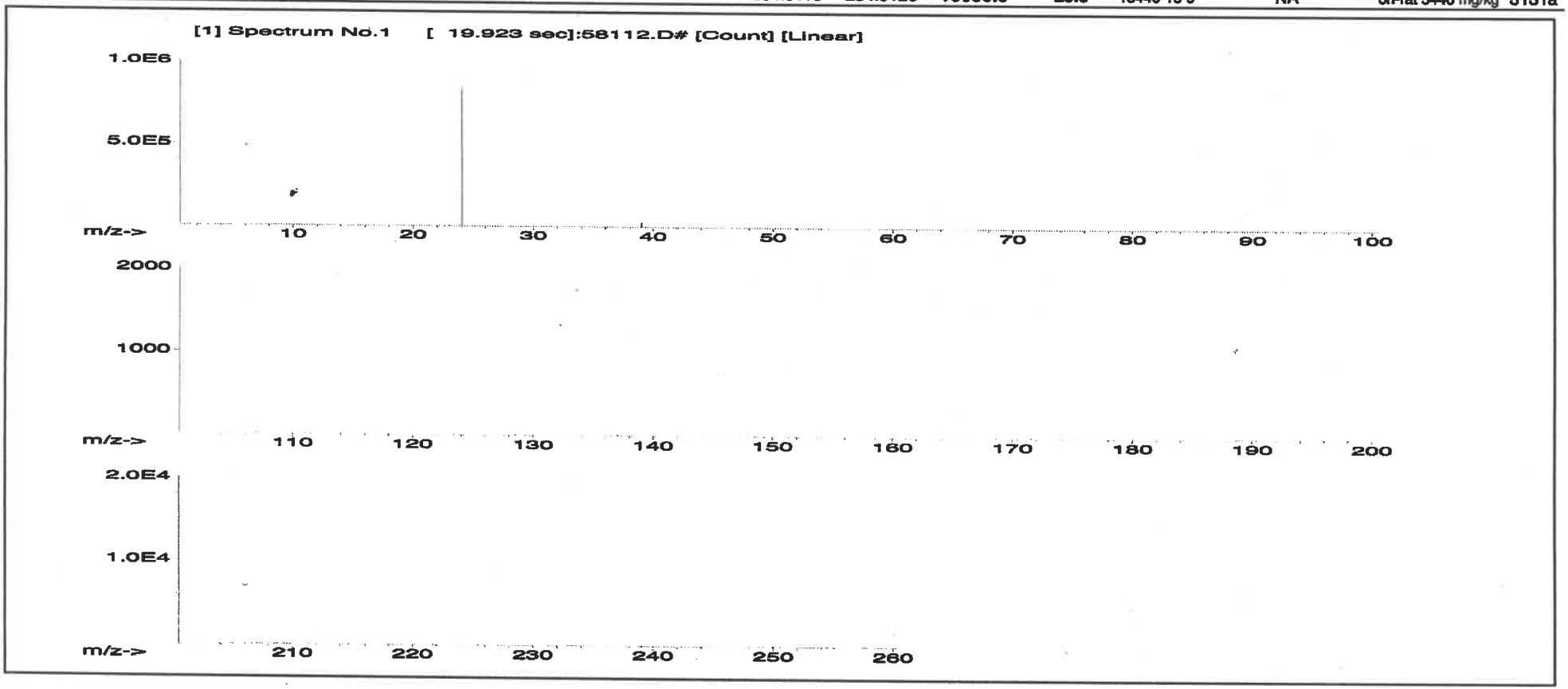
| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | |
| 2% | 40.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 091823 |
| Reviewed By: | Pedro L. Rentas | 091823 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Magnesium nitrate hexahydrate (Mg) | IN030 | MGD052023A1 | 10000 | 99.999 | 0.10 | 8.51 | 234.9118 | 234.9126 | **10000.0** | **20.0** | 13446-18-9 | NA | orl-rat 5440 mg/kg | 3131a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | T | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

M5768 M5769 (BP) R:1/3/24

*Certified Reference Material CRM*

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58112
**Lot Number:** 091823
**Description:** Magnesium (Mg)

**Expiration Date:** 091826
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB

**Weight shown below was diluted to (mL):** 2000.02 0.058 Flask Uncertainty

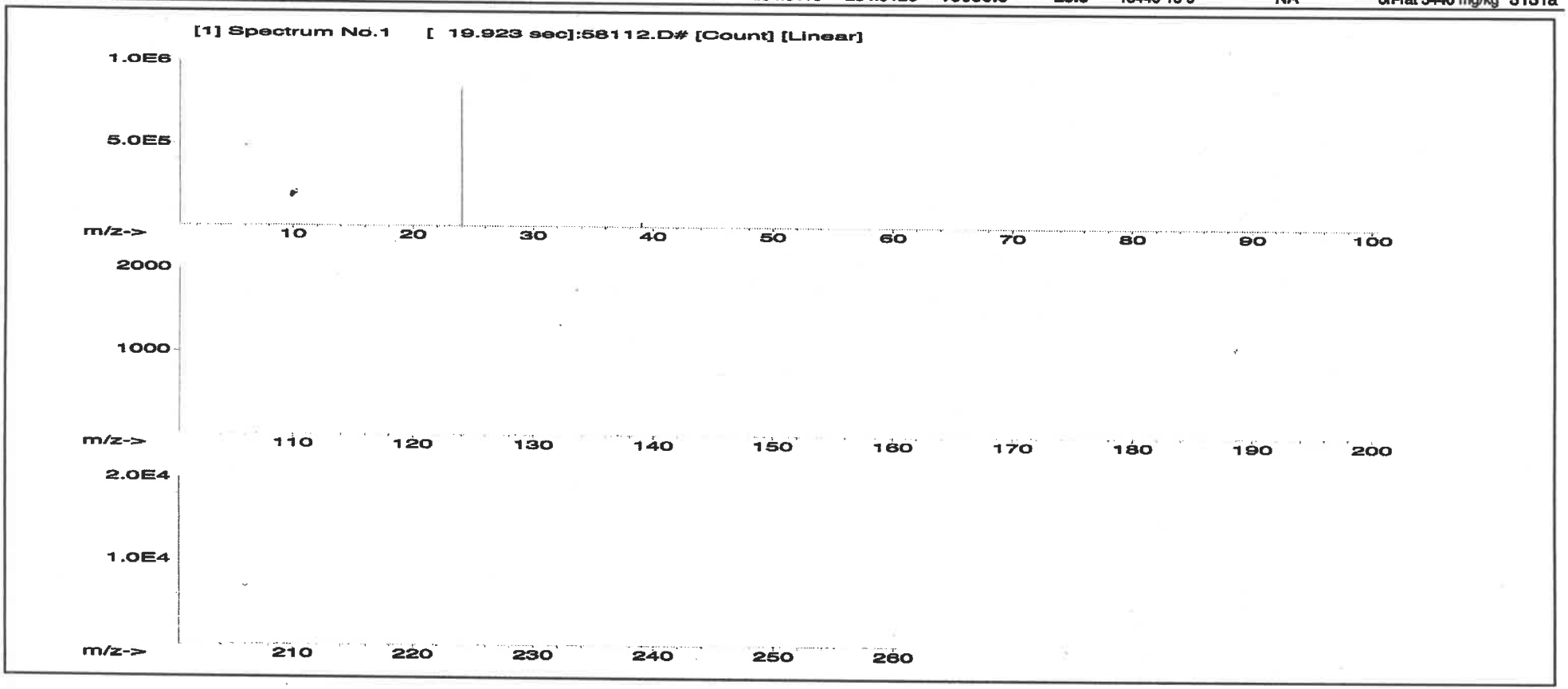
| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | |
| 2% | 40.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

M5768, M5769 (BP) R: 1/3/24

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 091823 |
| Reviewed By: | Pedro L. Rentas | 091823 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Magnesium nitrate hexahydrate (Mg) | IN030 | MGD052023A1 | 10000 | 99.999 | 0.10 | 8.51 | 234.9118 | 234.9126 | **10000.0** | **20.0** | 13446-18-9 | NA | orl-rat 5440 mg/kg | 3131a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | T | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M5798

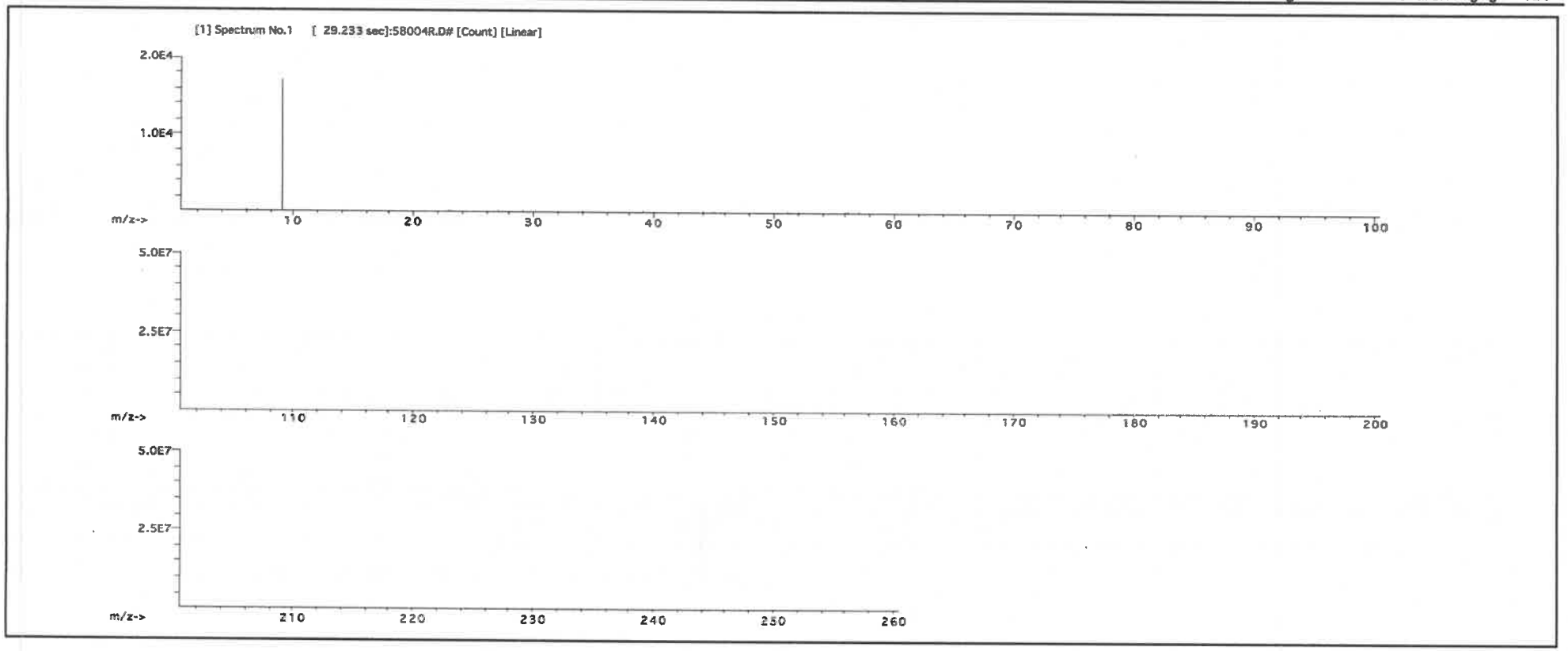
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **57004** | 24002546 | Nitric Acid | |
| **Lot Number:** | **102523** | | | |
| **Description:** | **Beryllium (Be)** | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 102526 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 102523 |
| Reviewed By: | Pedro L. Rentas | 102523 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Beryllium nitrate (Be) | 58104 | 091423 | 0.1000 | 200.0 | 0.084 | 1000 | 10001.5 | **1000.0** | **2.2** | 13597-99-4 | 0.2ug/m3 | intrvns-rat 3.16mg/kg | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | T | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

## *Certified Reference Material CRM*

R? 02/09/24 IV15799

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57050
**Lot Number:** 071123
**Description:** Tin (Sn)

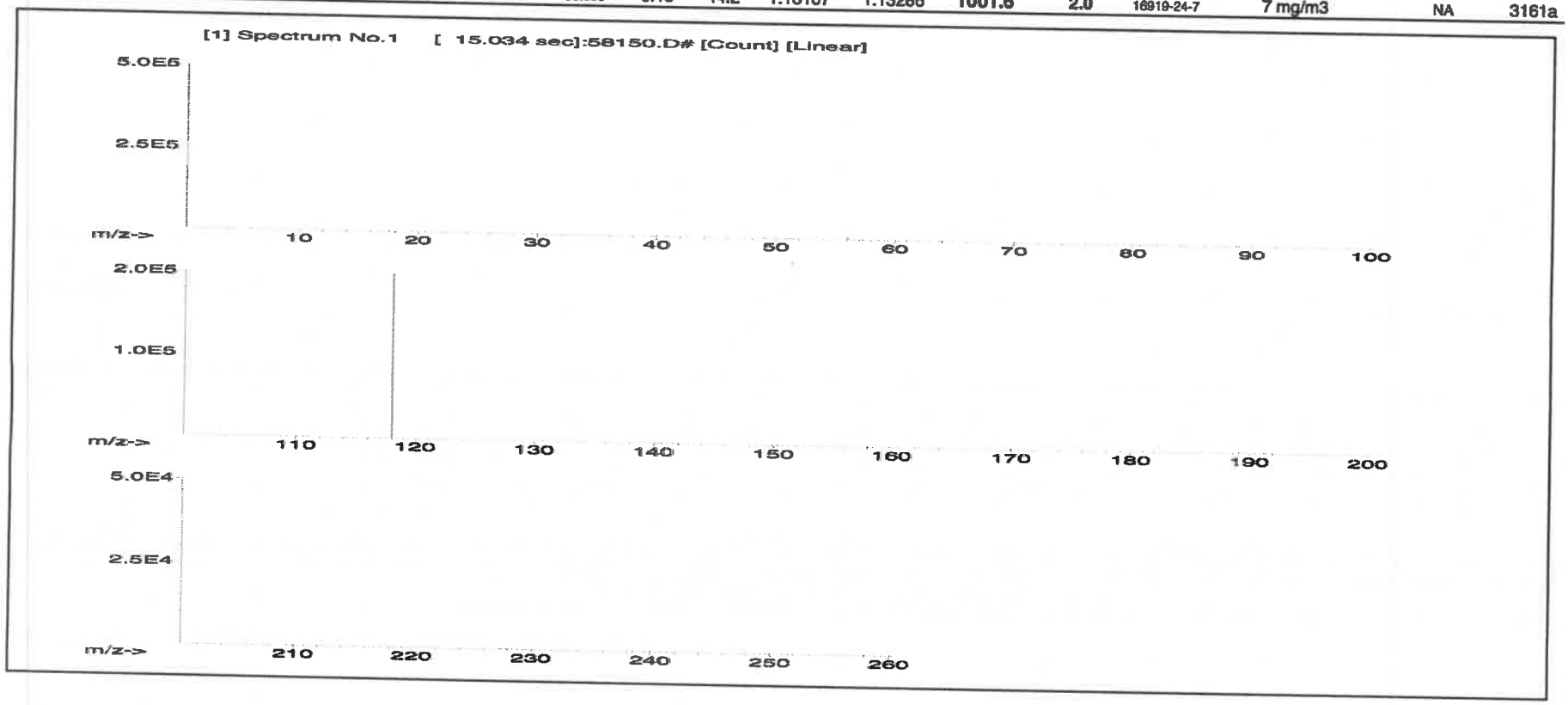
**Expiration Date:** 071126
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 499.93

| | Lot # | |
|---|---|---|
| **Solvents:** | 21110221 | Nitric Acid |
| | 22D0562008 | Hydrochloric acid |
| 2% | 10.0 | Nitric Acid |
| 6% | 30.0 | Hydrochloric acid |
| | (mL) | |

5E-05 Balance Uncertainty
0.058 Flask Uncertainty

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 071123 |
| Reviewed By: | Pedro L. Rentas | 071123 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium hexafluorostannate(IV) (Sn) | IN010 | SND042023A1 | 1000 | 99.999 | 0.10 | 44.2 | 1.13107 | 1.13286 | **1001.6** | **2.0** | 16919-24-7 | 7 mg/m3 | NA | 3161a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <500 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | T | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 IM5800 BH

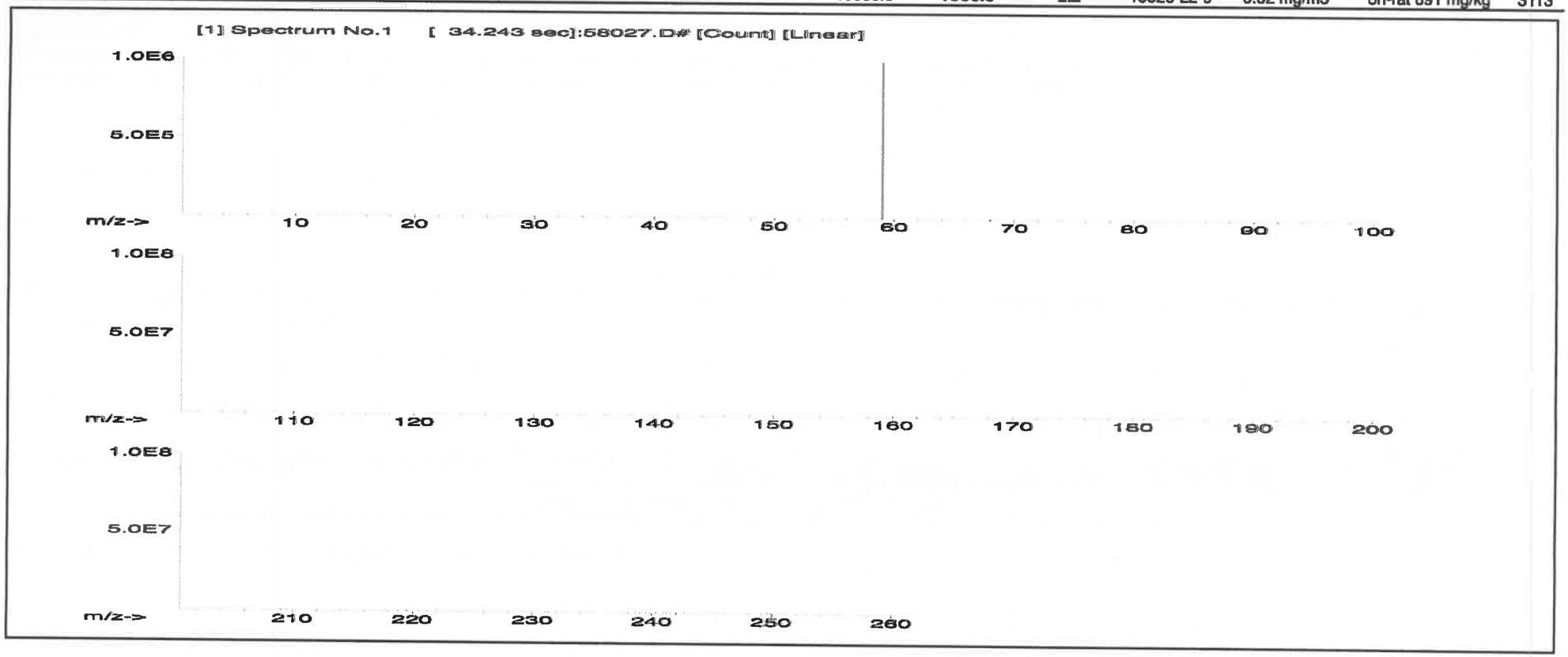
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | | |
|---|---|---|---|---|---|
| **Part Number:** | **57027** | 24002546 | Nitric Acid | | |
| **Lot Number:** | **091923** | | | | |
| **Description:** | **Cobalt (Co)** | | | | |
| | | 2.0% | 40.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 091926 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Volume shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 091923 |
| Reviewed By: | Pedro L. Rentas | 091923 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Cobalt(II) nitrate hexahydrate (Co) | 58127 | 050923 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.0 | **1000.0** | **2.2** | 10026-22-9 | 0.02 mg/m3 | orl-rat 691 mg/kg | 3113 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | T | Gé | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 IM5801 BH

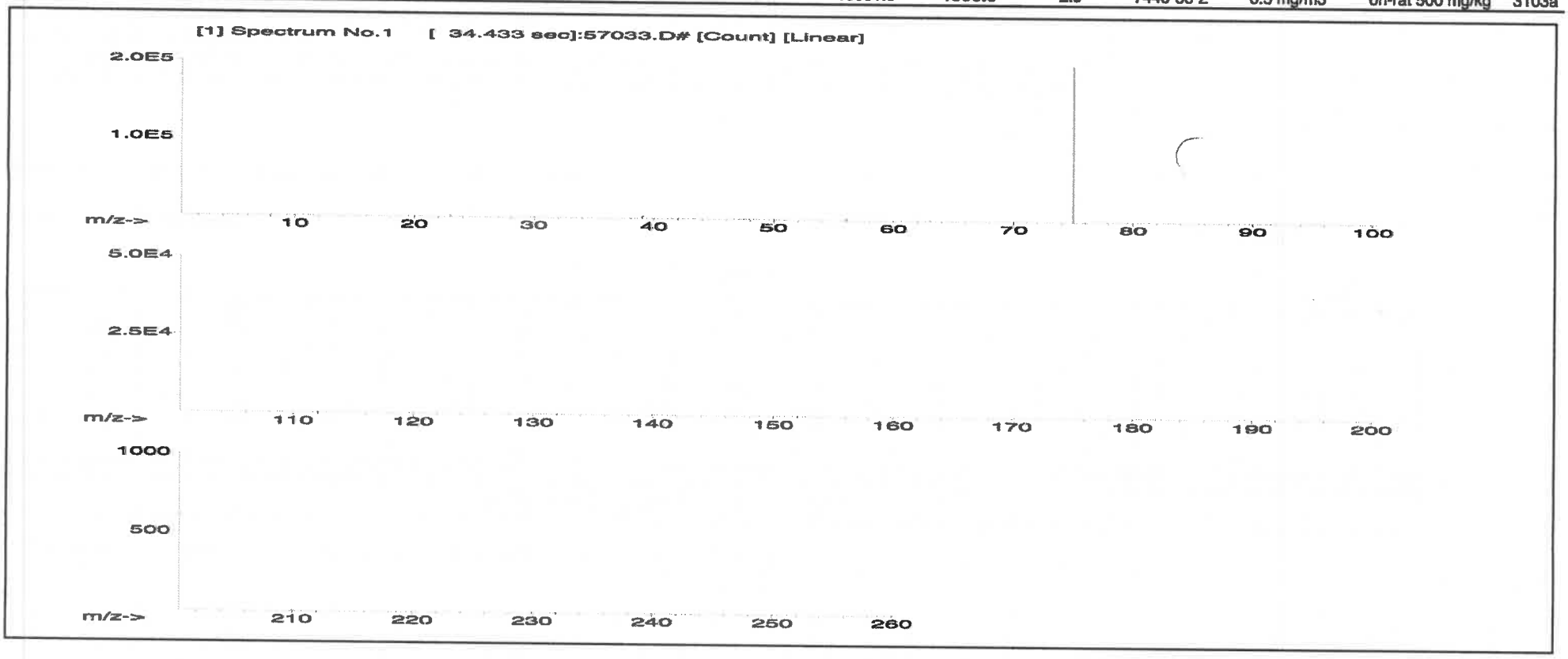
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED **WEIGHT** REPORT:

| | | Lot # | Solvent: | | |
|---|---|---|---|---|---|
| **Part Number:** | **57033** | 24002546 | Nitric Acid | | |
| **Lot Number:** | **111323** | | | | |
| **Description:** | **Arsenic (As)** | 2.0% | 80.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 111326 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Volume shown below was diluted to (mL):** | 4000.0 | 0.06 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 111323 |
| Reviewed By: | Pedro L. Rentas | 111323 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Arsenic (As) | 58133 | 020522 | 0.1000 | 400.0 | 0.084 | 1000 | 10001.0 | **1000.0** | **2.0** | 7440-38-2 | 0.5 mg/m3 | orl-rat 500 mg/kg | 3103a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | T | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge* | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

A: 02/09/24 M.5814

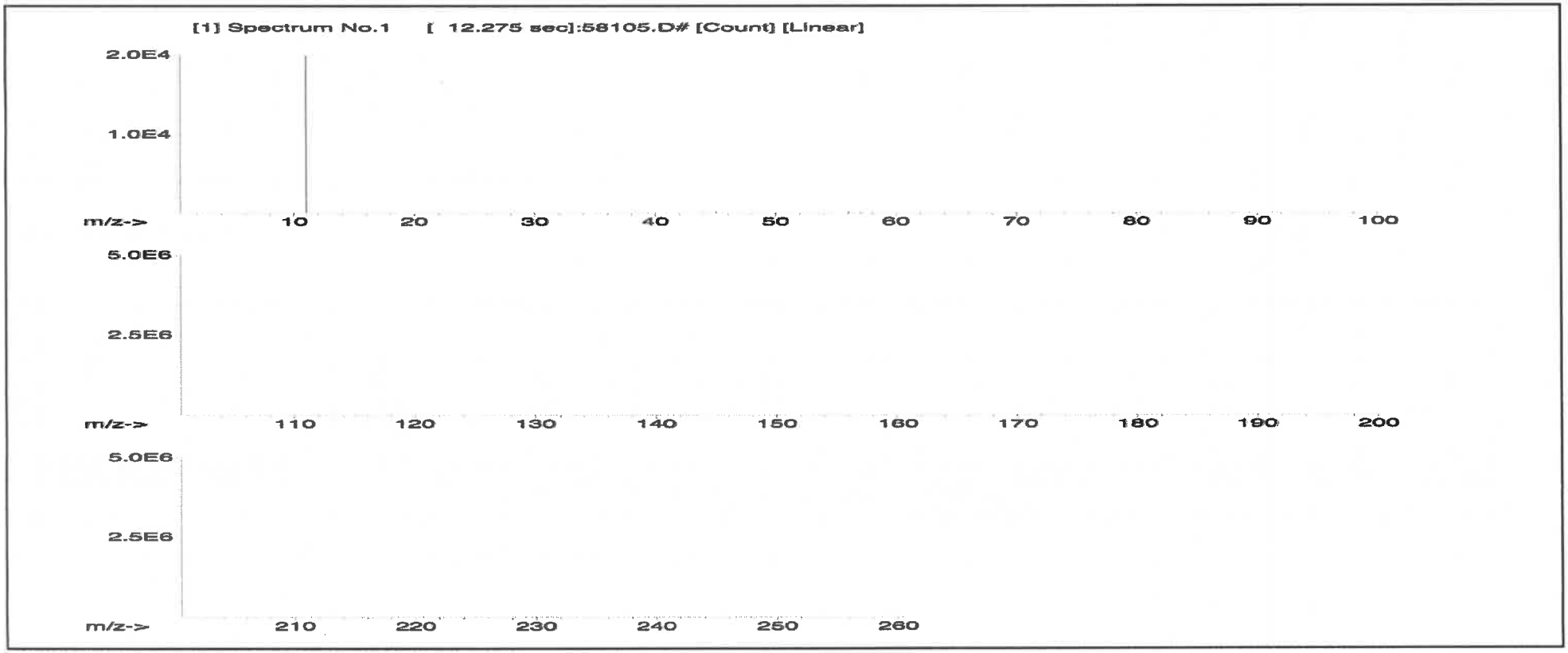
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

**CERTIFIED WEIGHT REPORT:**

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57005** | | **Solvent:** | MKBQ8597V | Ammonium hydroxide |
| **Lot Number:** | **071123** | | | | |
| **Description:** | **Boron (B)** | | 2.0% | 40.0 (mL) | Ammonium hydroxide |
| **Expiration Date:** | 071126 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 1999.48 | 0.058 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 071123 |
| Reviewed By: | Pedro L. Rentas | 071123 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Boric acid (B) | IN018 | BV092016A1 | 1000 | 99.9999 | 0.10 | 17.3 | 11.55772 | 11.56201 | **1000.4** | **2.0** | 10043-35-3 | 2 mg/m3 | orl-rat 2660 mg/kg | 3107 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | T | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R1 02/09/24. M58165

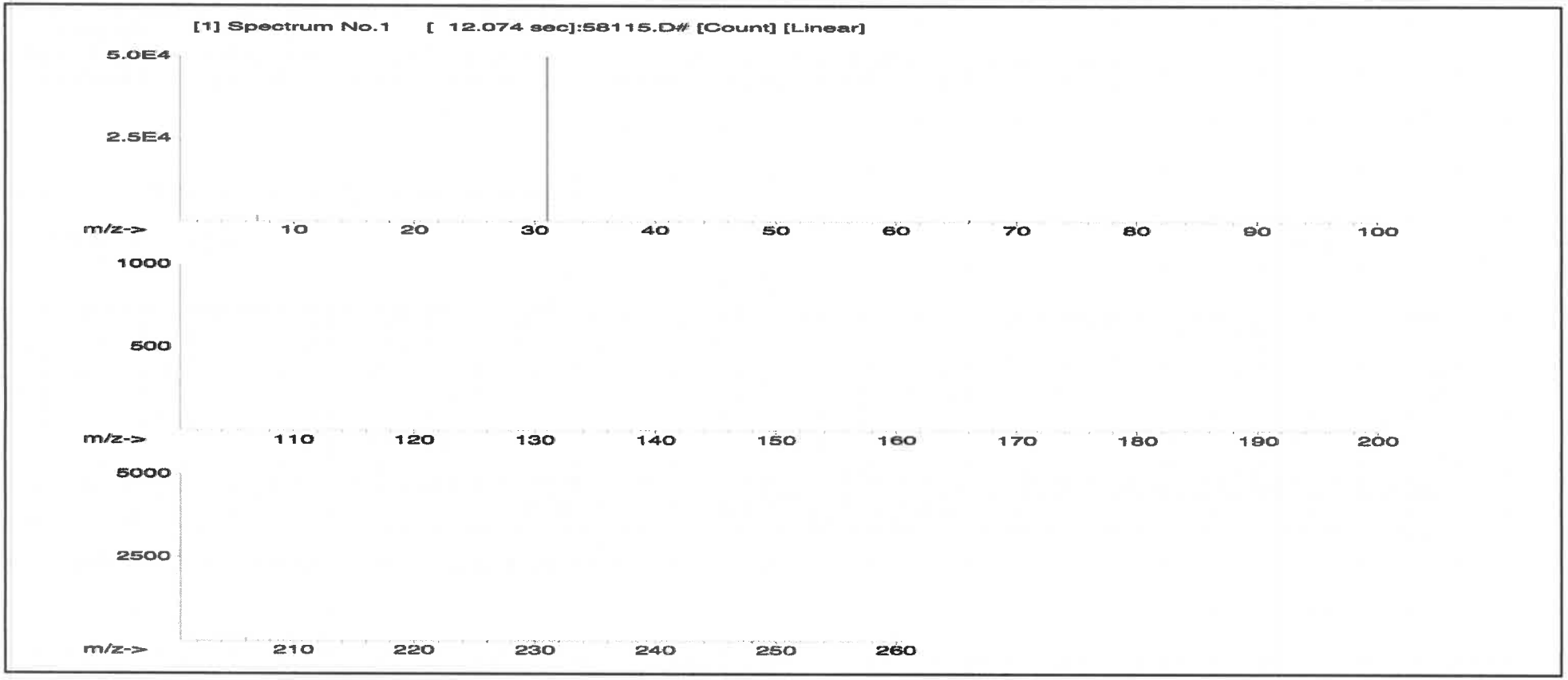
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | Lot # | |
|---|---|---|---|---|
| **Part Number:** | **57115** | **Solvent:** | 21110221 | Nitric Acid |
| **Lot Number:** | **041723** | | | |
| **Description:** | **Phosphorous (P)** | 2% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 041726 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **10000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Weight shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 041723 |
| Reviewed By: | Pedro L. Rentas | 041723 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium dihydrogen phosphate (P) | IN008 | PV082019A1 | 10000 | 99.999 | 0.10 | 27.5 | 72.7287 | 72.7289 | **10000.0** | **20.0** | 7722-76-1 | 5 mg/m3 | orl-rat >2000mg/kg | 3186 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectroscopy (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | T | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M5816

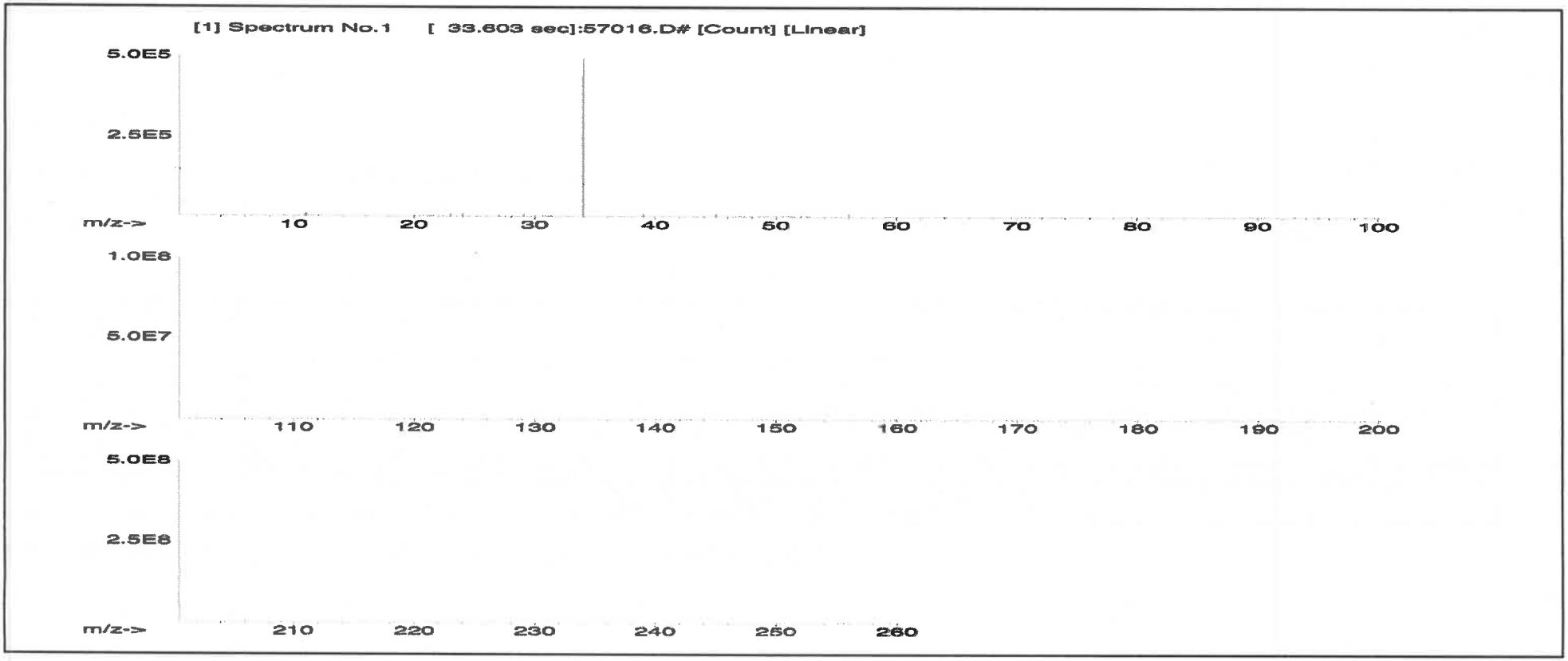
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | | |
|---|---|---|---|---|
| **Part Number:** | **57016** | **Solvent:** | **Lot #** 122923 | ASTM Type 1 Water |
| **Lot Number:** | **122923** | | | |
| **Description:** | **Sulfur (S)** | | | |
| **Expiration Date:** | 122926 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Weight shown below was diluted to (mL):** | 4000.0 | 0.06 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 122923 |
| Reviewed By: | Pedro L. Rentas | 122923 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium sulfate (S) | IN117 | SLBR7225V | 1000 | 99.9 | 0.10 | 24.3 | 16.4979 | 16.4980 | **1000.0** | **2.0** | 7783-20-2 | NA | orl-rat 4250mg/kg | 3181 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | T | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M5817

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

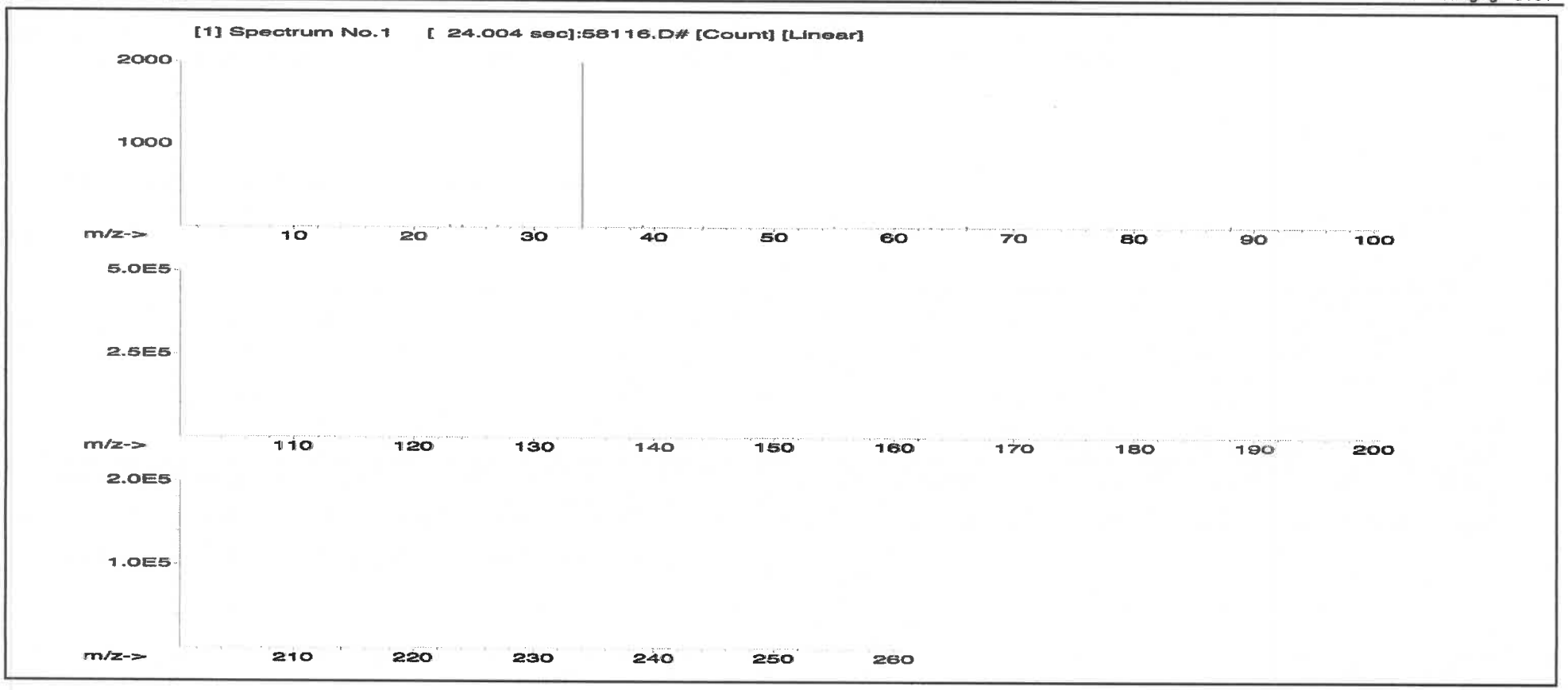
CERTIFIED WEIGHT REPORT:

| | | | | |
|---|---|---|---|---|
| **Part Number:** | **57116** | | | |
| **Lot Number:** | **071123** | **Solvent:** | 071123 | ASTM Type 1 Water |
| **Description:** | **Sulfur (S)** | | | |
| **Expiration Date:** | 071126 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **10000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Weight shown below was diluted to (mL):** | 1999.48 | 0.058 | Flask Uncertainty | |

Lot #

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 071123 |
| Reviewed By: | Pedro L. Rentas | 071123 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium sulfate (S) | IN117 | SLBR7225V | 10000 | 99.9 | 0.10 | 24.3 | 82.4675 | 82.4682 | **10000.1** | **20.0** | 7783-20-2 | NA | orl-rat 4250mg/kg | 3181 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | T | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M.5818

Lot #

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

## CERTIFIED WEIGHT REPORT:

**Part Number:** 57014
**Lot Number:** 122023
**Description:** Silicon (Si)

**Expiration Date:** 122026
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 1999.48 ± 0.058 Flask Uncertainty

**Solvent:** 24002546 Nitric Acid

2% 40.0 (mL) Nitric Acid

5E-05 Balance Uncertainty

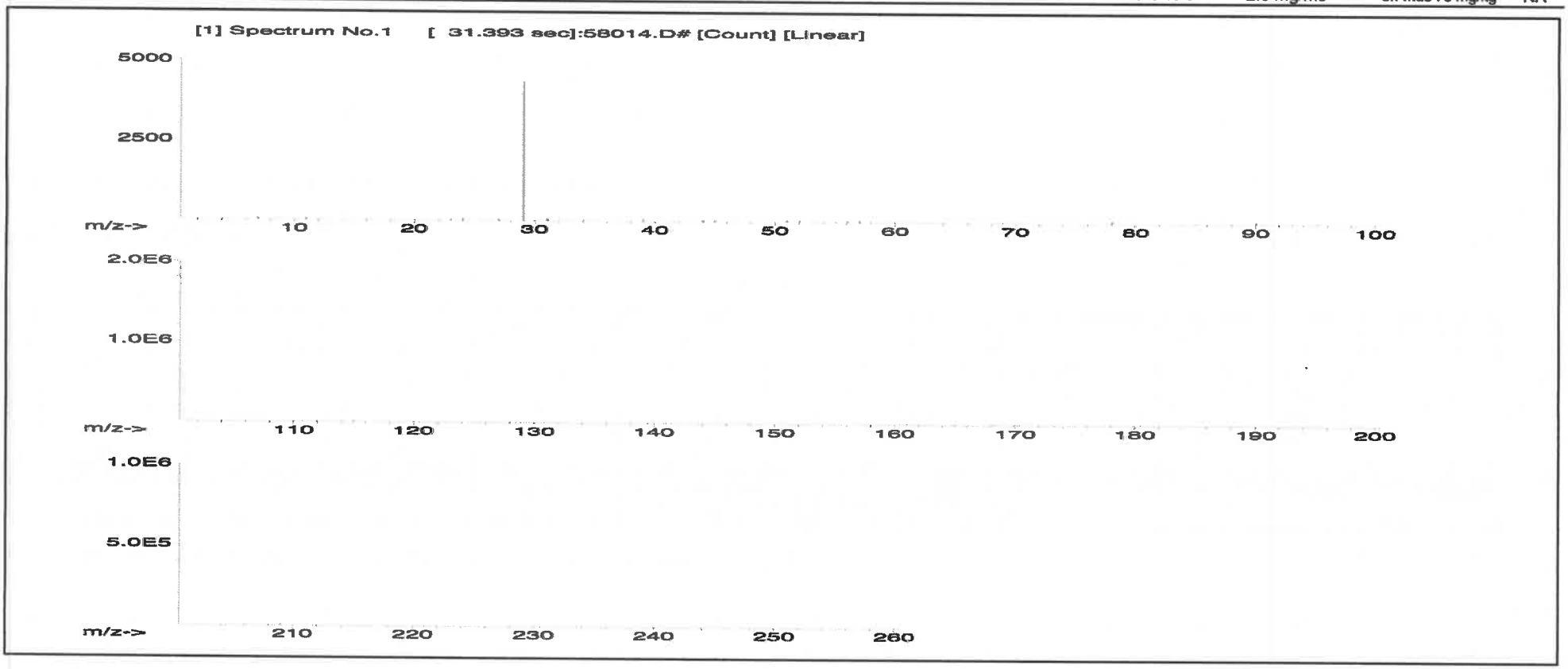
Aleah O'Brady

Formulated By: Aleah O'Brady 122023

Pedro Rentas

Reviewed By: Pedro L. Rentas 122023

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium hexafluorosilicate (Si) | IN009 | SID082022A1 | 1000 | 99.999 | 0.10 | 14.4 | 13.8854 | 13.8855 | **1000.0** | **2.0** | 16919-19-0 | 2.5 mg/m3 | orl-mus 70 mg/kg | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | T | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M5819

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58030
**Lot Number:** 111623
**Description:** Zinc (Zn)

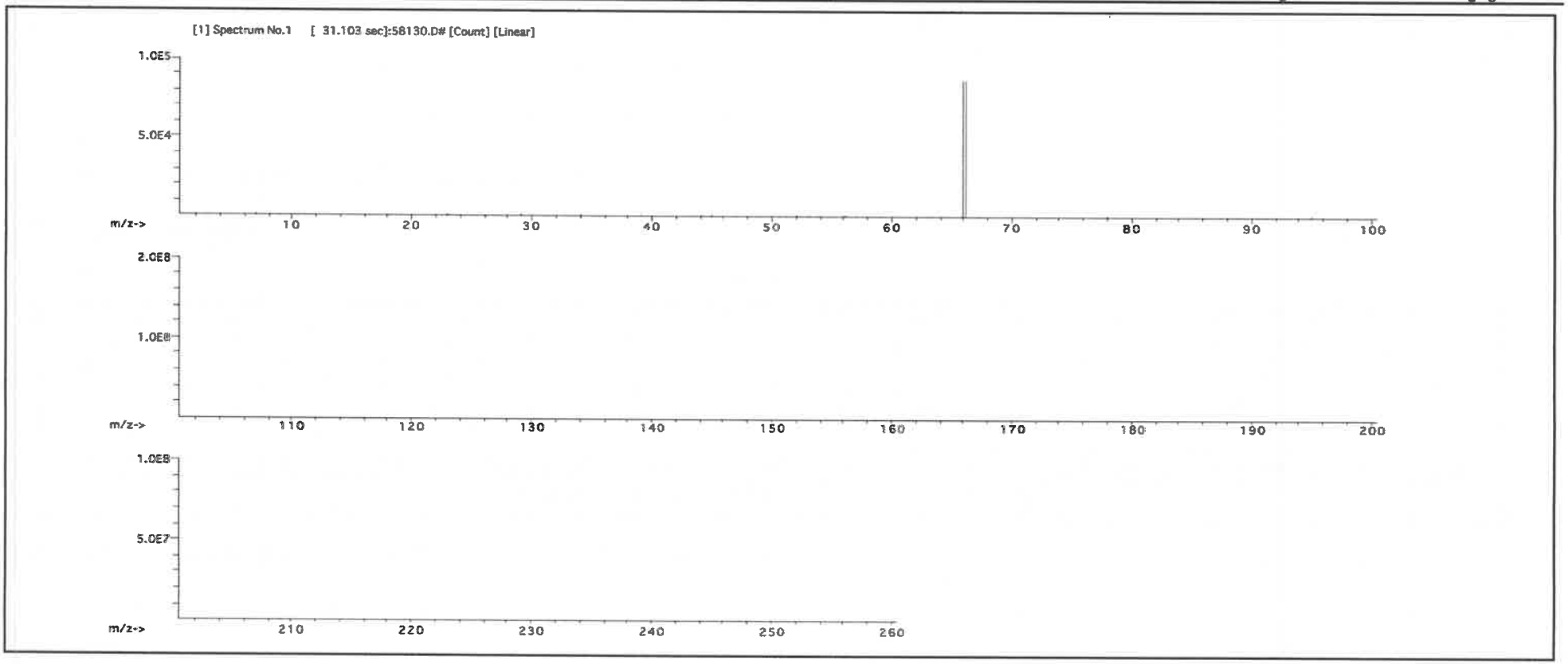
**Expiration Date:** 111626
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB

**Weight shown below was diluted to (mL):** 3000.4 0.06 Flask Uncertainty

| | | Lot # | | |
|---|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | | |
| 2% | 60.0 (mL) | Nitric Acid | | |
| | | | 5E-05 | Balance Uncertainty |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 111623 |
| Reviewed By: | Pedro L. Rentas | 111623 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Zinc nitrate hexahydrate (Zn) | IN016 | ZNE032021A1 | 1000 | 99.999 | 0.10 | 24.3 | 12.3475 | 12.3502 | **1000.2** | **2.0** | 10196-18-6 | 1 mg/m3 | orl-rat 1190mg/kg | 3168 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | T |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 02/09/24 M5820

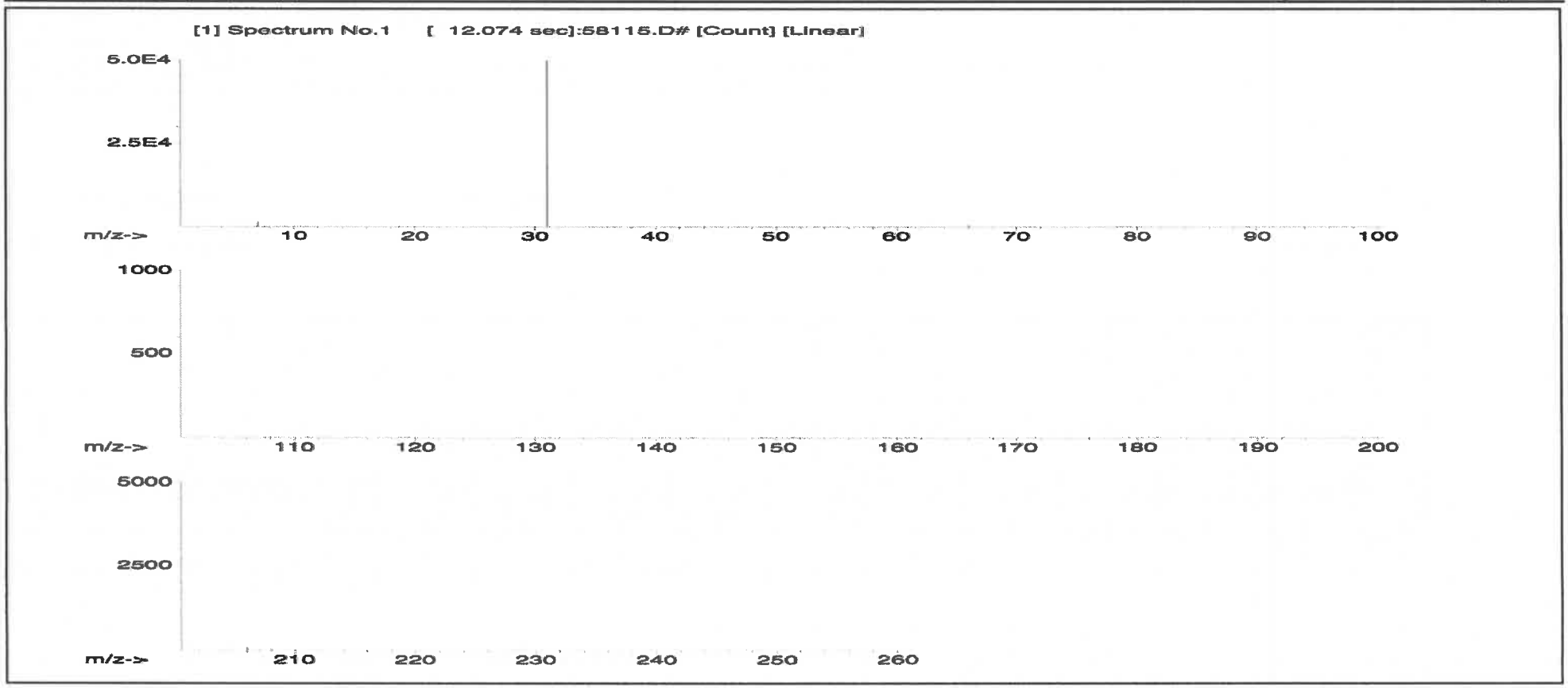
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57015** | | **Lot #** | | |
| **Lot Number:** | **091123** | **Solvent:** | 24002546 | Nitric Acid | |
| **Description:** | **Phosphorous (P)** | 2% | 40.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 091126 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 2000.02 | 0.058 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 091123 |
| Reviewed By: | Pedro L. Rentas | 091123 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium dihydrogen phosphate (P) | IN008 | PV082019A1 | 1000 | 99.999 | 0.10 | 27.5 | 7.2729 | 7.2730 | **1000.0** | **2.0** | 7722-76-1 | 5 mg/m3 | orl-rat >2000mg/k | 3186 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | T | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

**Certified by:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

## QATS LABORATORY INORGANIC REFERENCE MATERIAL INITIAL CALIBRATION VERIFICATION SOLUTIONS (ICV1, ICV5, AND ICV6)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

***APPLICATION:*** For use with the CLP SFAM01.0 SOW and revisions.

***CAUTION:*** Read instructions carefully before opening bottle(s) and proceeding with the analyses.

MTS28-37 MB
MTS53 MB 3/30/23

Contains Metals in Dilute Acidic or Cyanide in Basic Aqueous Solutions
**HAZARDOUS MATERIAL**

Safety Data Sheets Available Upon Request

### (A) *SAMPLE DESCRIPTION*

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

### (B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

**QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY**
**APTIM Federal Services, LLC**
**2700 Chandler Avenue - Building C**
**Las Vegas, NV 89120**

### (C) *ANALYSIS OF SAMPLES*

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

**ICV1-1014** For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.



*The Quality Assurance Technical Support (QATS) contract is operated by APTIM Federal Services, LLC.*

## Instructions for QATS Reference Material: *Inorganic ICV Solutions*

**ICV1-1014** For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

**ICV5-0415** For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

**ICV6-0400** For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

**NOTE:** USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

### (D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

| ICV1-1014 | | |
|---|---|---|
| **Element** | **Concentration (µg/L) (after 10-fold dilution)** | **Concentration (µg/L) (after 50-fold dilution)** |
| **Al** | 2500 | 500 |
| **Sb** | 1000 | 200 |
| **As** | 1000 | 200 |
| **Ba** | 520 | 100 |
| **Be** | 510 | 100 |
| **Cd** | 510 | 100 |
| **Ca** | 10000 | 2000 |
| **Cr** | 520 | 100 |
| **Co** | 520 | 100 |
| **Cu** | 510 | 100 |
| **Fe** | 10000 | 2000 |
| **Pb** | 1000 | 200 |
| **Mg** | 6000 | 1200 |
| **Mn** | 520 | 100 |
| **Ni** | 530 | 110 |
| **K** | 9900 | 2000 |
| **Se** | 1000 | 200 |
| **Ag** | 250 | 50 |
| **Na** | 10000 | 2000 |
| **Tl** | 1000 | 210 |
| **V** | 500 | 100 |
| **Zn** | 1000 | 200 |

| ICV5-0415 | | ICV6-0400 | |
|---|---|---|---|
| **Element** | **Concentration (µg/L) (after 100-fold dilution)** | **Analyte** | **Concentration (µg/L) (after 100-fold dilution)** |
| **Hg** | 4.0 | **$CN^-$** | 99 |

INORGANIC VENTURES
Refine your results. Redefine your industry.

# Certificate of Analysis

M5959 R: 6/14/24.

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 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 863.01
ACCREDITED Reference Material Producer Certificate 863.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Single Analyte Custom Grade Solution |
| Catalog Number: | CGY10 |
| Lot Number: | V2-Y740548 |
| Matrix: | 2% (v/v) HNO3 |
| Value / Analyte(s): | 10 000 µg/mL ea:<br>Yttrium |
| Starting Material: | Yttrium Oxide |
| Starting Material Lot#: | 2661 and 06230520YL |
| Starting Material Purity: | 99.9984% |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 10000 ± 30 µg/mL

**Density:** 1.032 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| | |
|---|---|
| **Assay Method #1** | **10011 ± 25 µg/mL**<br>EDTA NIST SRM 928 Lot Number: 928 |
| **Assay Method #2** | **9997 ± 50 µg/mL**<br>ICP Assay NIST SRM 3167a Lot Number: 190730 |
| **Assay Method #3** | **9984 ± 31 µg/mL**<br>Calculated NIST SRM Lot Number: See Sec. 4.2 |

- 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/RM by Two or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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 | < | 0.004600 | M | Eu | | 0.009037 | M | Na | | 0.086360 | M | Se | < | 0.005200 | M | Zn | | 0.030125 |
| M | Al | | 0.014862 | O | Fe | | 0.002410 | M | Nb | < | 0.000570 | O | Si | | 0.024100 | O | Zr | < | 0.002600 |
| M | As | < | 0.003500 | M | Ga | < | 0.000570 | M | Nd | | 0.000923 | M | Sm | | 0.000461 | | | | |
| M | Au | < | 0.001700 | M | Gd | < | 0.003500 | M | Ni | < | 0.005700 | M | Sn | < | 0.002300 | | | | |
| O | B | | 0.002209 | M | Ge | < | 0.005200 | M | Os | < | 0.001200 | M | Sr | < | 0.004600 | | | | |
| O | Ba | < | 0.002500 | M | Hf | < | 0.000570 | n | P | < | | M | Ta | < | 0.000570 | | | | |
| O | Be | < | 0.001400 | M | Hg | < | 0.000570 | M | Pb | | 0.005020 | M | Tb | | 0.001044 | | | | |
| M | Bi | < | 0.003500 | M | Ho | | 0.009037 | M | Pd | < | 0.005100 | M | Te | < | 0.002300 | | | | |
| O | Ca | | 0.009841 | M | In | < | 0.002300 | M | Pr | < | 0.002300 | M | Th | < | 0.000570 | | | | |
| M | Cd | < | 0.000570 | M | Ir | < | 0.000570 | M | Pt | < | 0.000570 | M | Ti | < | 0.003500 | | | | |
| M | Ce | < | 0.002300 | O | K | | 0.018677 | M | Rb | < | 0.000570 | M | Tl | < | 0.000570 | | | | |
| M | Co | < | 0.000570 | M | La | | 0.000461 | M | Re | < | 0.000570 | M | Tm | < | 0.003500 | | | | |
| M | Cr | < | 0.004000 | O | Li | < | 0.009300 | M | Rh | < | 0.008000 | M | U | < | 0.000570 | | | | |
| M | Cs | < | 0.000570 | M | Lu | | 0.000582 | M | Ru | < | 0.000570 | M | V | | 0.001265 | | | | |
| M | Cu | | 0.002610 | O | Mg | | 0.001486 | n | S | < | | M | W | < | 0.002300 | | | | |
| M | Dy | | 0.003815 | M | Mn | | 0.000582 | M | Sb | | 0.005422 | s | Y | < | | | | | |
| M | Er | | 0.003615 | M | Mo | < | 0.005700 | M | Sc | < | 0.001200 | M | Yb | | 0.001827 | | | | |

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

**6.1** This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

**6.2** For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

## 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**

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution -** 88.91 +3 6 Y(OH)(H2O)x+2

**Chemical Compatibility -**Soluble in HCl, H2SO4 and HNO3. Avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming an insoluble carbonate, oxide, oxalate, and fluoride. Avoid mixing with elements / solutions containing moderate amounts of fluoride.

**Stability -** 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

**Y Containing Samples (Preparation and Solution) -** Metal (Soluble in acids); Oxide (Dissolve by heating in H2O/ HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Dry ash and dissolve in 1:1 H2O / HCl or HNO3).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

| **Technique/Line** | **Estimated D.L.** | **Order** | **Interferences** (underlined indicates severe) |
|---|---|---|---|
| ICP-MS 89 amu | 0.8 ppt | N/A | 73Ge16O, 178Hf+2 |
| ICP-OES 360.073 nm | 0.005 / 0.000036 µg/mL | 1 | Ce, Th |
| ICP-OES 371.030 nm | 0.004 / 0.00007 µg/mL | 1 | Ce |
| ICP-OES 377.433 nm | 0.005 / 0.0009 µg/mL | 1 | Ta, Th |

## 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

February 20, 2024

- 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

**- February 20, 2029**

- 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:**

Uyen Truong
Custom Processing Supervisor

**Certificate Approved By:**

Muzzammil Khan
Stock Laboratory Supervisor

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5962 R! 06/14/24.

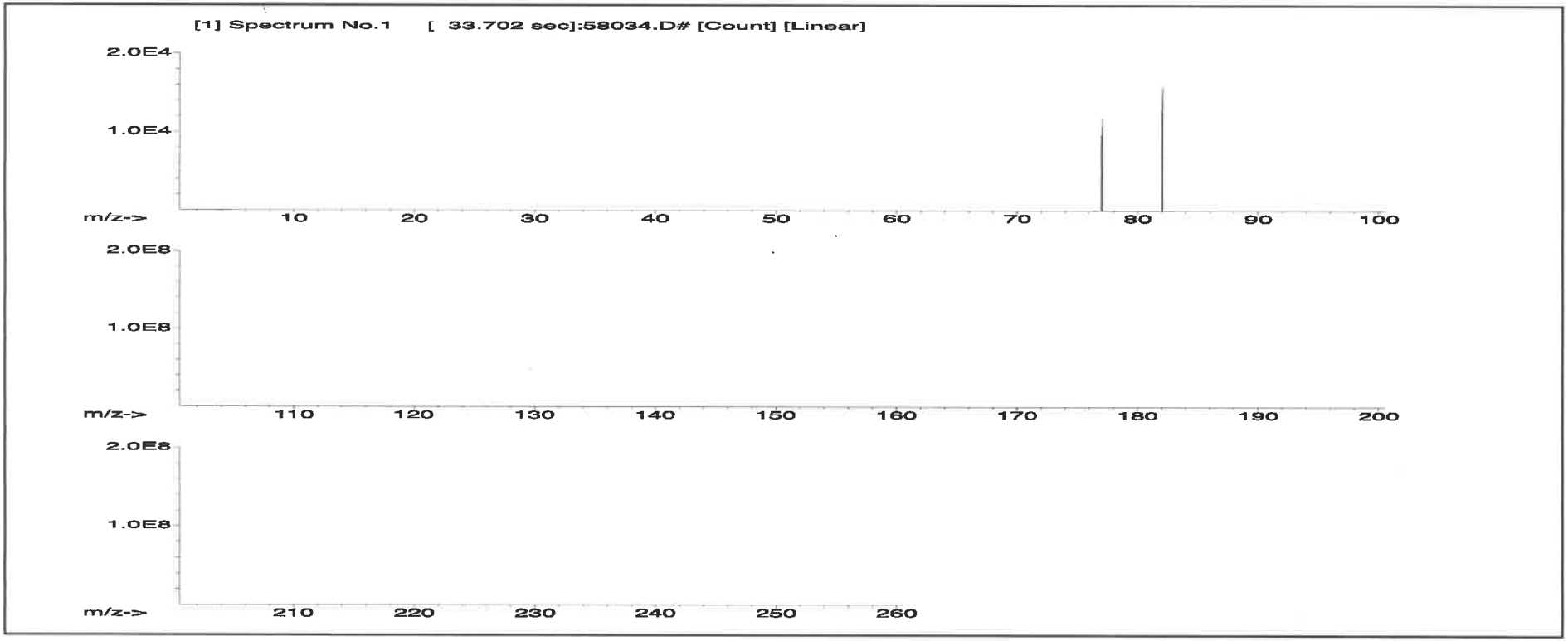
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **57034** | 24002546 | Nitric Acid | |
| **Lot Number:** | **060624** | | | |
| **Description:** | **Selenium (Se)** | | | |
| | | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 060627 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.07 | 0.100 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 060624 |
| Reviewed By: | Pedro L. Rentas | 060624 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Selenium (Se) | 58134 | 071223 | 0.1000 | 200.0 | 0.084 | 1000 | 10002.5 | **1000.0** | **2.2** | 7782-49-2 | 0.2 mg/m3 | orl-rat 6700 mg/kg | 3149 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | T | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M5970, M5971 R: 7/01/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

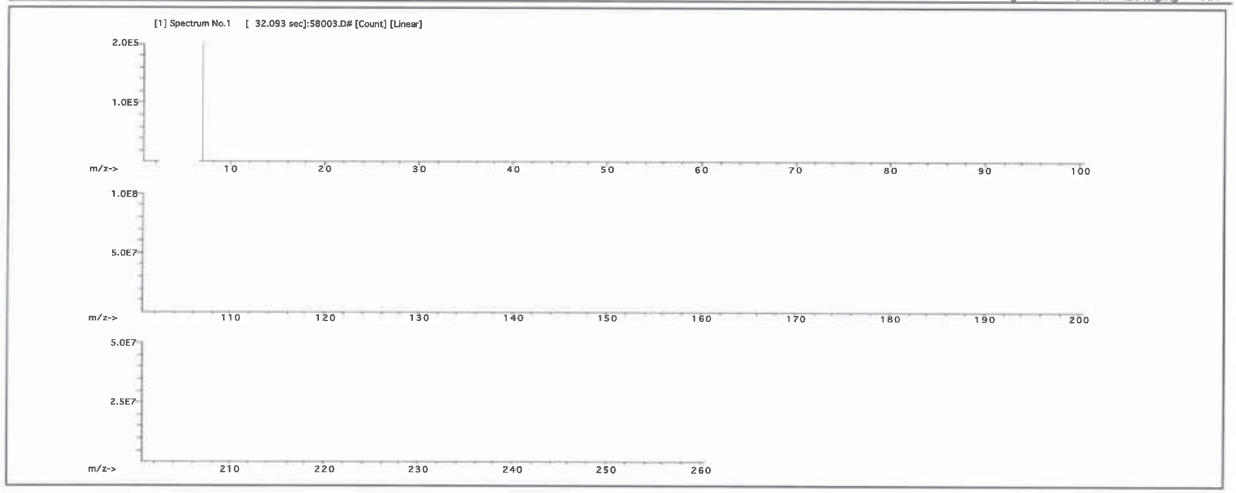
| | | Lot # | Solvent: |
|---|---|---|---|
| **Part Number:** | **57003** | 24002546 | Nitric Acid |
| **Lot Number:** | **062124** | | |
| **Description:** | **Lithium (Li)** | | |
| | | 2.0% | 5.0 (mL) Nitric Acid |
| **Expiration Date:** | 062127 | | |
| **Recommended Storage:** | Ambient (20 °C) | | |
| **Nominal Concentration (µg/mL):** | **1000** | | |
| **NIST Test Number:** | 6UTB | 5E-05 Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 250.11 | 0.016 Flask Uncertainty | |

Giovanni Esposito

Formulated By: Giovanni Esposito 062124

Reviewed By: Pedro L. Rentas 062124

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Lithium nitrate (Li) | 58103 | 070622 | 0.1000 | 25.0 | 0.004 | 1000 | 10000.4 | **1000.0** | **2.0** | 7790-69-4 | 5 mg/m3 | orl-rat 1426 mg/kg | NA |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

Trace Metals Verification by ICP-MS (µg/mL)

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | T | Ni | <0.02 | Pr | <0.02 | Sc | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

M5978, M5979

INORGANIC VENTURES
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

R: 2/22/24

P: 800-669-6799/540-585-3030
F: 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 Custom Grade Solution |
| Catalog Number: | CGTI1 |
| Lot Number: | T2-TI719972 |
| Matrix: | 2% (v/v) $HNO_3$<br>tr. HF |
| Value / Analyte(s): | 1 000 µg/mL ea:<br>Titanium |
| Starting Material: | Ti Metal |
| Starting Material Lot#: | 2094 |
| Starting Material Purity: | 99.9975% |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 1002 ± 5 µg/mL

**Density:** 1.012 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

**Assay Method #1** **1002 ± 4 µg/mL**
ICP Assay NIST SRM 3162a Lot Number: 130925

- 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/RM by Two or More Methods**

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

$X_{CRM/RM} = \Sigma(w_i)(\bar{x}_i)$

$\bar{x}_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance

$w_i = (1/u_{char\ i}^2) / (\Sigma(1/u_{char\ i}^2))$

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

k = coverage factor = 2

$u_{char} = (\Sigma(w_i)^2\,(u_{char\ i})^2)^{1/2}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (\bar{x}_a)\ (u_{char\ a})$

$\bar{x}_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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 | < | 0.000536 | M | Eu | < | 0.000268 | O | Na | < | 0.032670 | M | Se | | 0.001204 | O | Zn | < | 0.003267 |
| O | Al | | 0.000872 | O | Fe | | 0.003225 | O | Nb | < | 0.043560 | O | Si | | 0.004735 | O | Zr | < | 0.043560 |
| M | As | < | 0.008586 | M | Ga | < | 0.000268 | M | Nd | < | 0.000268 | M | Sm | < | 0.000268 | | | | |
| M | Au | < | 0.004577 | M | Gd | < | 0.000268 | O | Ni | < | 0.010890 | M | Sn | | 0.000096 | | | | |
| O | B | < | 0.008929 | M | Ge | < | 0.002146 | M | Os | < | 0.000269 | O | Sr | | 0.000096 | | | | |
| M | Ba | < | 0.002683 | M | Hf | | 0.002161 | O | P | < | 0.054450 | M | Ta | | 0.010560 | | | | |
| M | Be | < | 0.005366 | M | Hg | < | 0.003231 | M | Pb | < | 0.001073 | M | Tb | < | 0.000268 | | | | |
| M | Bi | < | 0.001609 | M | Ho | < | 0.000268 | M | Pd | < | 0.000268 | M | Te | < | 0.001341 | | | | |
| O | Ca | | 0.000676 | M | In | < | 0.002683 | M | Pr | < | 0.000268 | M | Th | < | 0.053663 | | | | |
| M | Cd | < | 0.000268 | M | Ir | < | 0.000269 | M | Pt | < | 0.000536 | s | Ti | < | | | | | |
| M | Ce | < | 0.000268 | M | K | | 0.001172 | M | Rb | < | 0.000268 | M | Tl | < | 0.000268 | | | | |
| M | Co | < | 0.004293 | M | La | < | 0.000268 | M | Re | < | 0.000268 | M | Tm | < | 0.000268 | | | | |
| M | Cr | | 0.000752 | O | Li | < | 0.027225 | M | Rh | < | 0.000268 | M | U | < | 0.000268 | | | | |
| M | Cs | < | 0.000268 | M | Lu | < | 0.000268 | M | Ru | < | 0.000269 | M | V | < | 0.019855 | | | | |
| O | Cu | < | 0.010890 | O | Mg | < | 0.005445 | i | S | < | | M | W | | 0.000473 | | | | |
| M | Dy | < | 0.000268 | O | Mn | < | 0.003267 | M | Sb | < | 0.006976 | M | Y | < | 0.002146 | | | | |
| M | Er | < | 0.000268 | M | Mo | | 0.000774 | O | Sc | < | 0.004900 | M | Yb | < | 0.000536 | | | | |

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 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**

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution -** 47.87 +4 6 Ti(F)6-2

**Chemical Compatibility -** Soluble in concentrated HCl, HF, H3PO4 H2SO4 and HNO3. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements unless they are fluorinated). Stable with most inorganic anions with a tendency to hydrolyze forming the hydrated oxide in all dilute acids except HF.

**Stability -** 2-100 ppb levels stable (Alone or mixed with all other metals) as the Ti(F)6-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)6-2 chemically stable for years in 2-5% HNO3 / trace HF in an LDPE container.

**Ti Containing Samples (Preparation and Solution) -** Metal (Soluble in H2O / HF caution -powder reacts violently); Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H2O / HF / H2SO4); Oxide - high temperature history (~800EC) brookite (fuse in Pt0 with K2S2O7); Ores ( fuse in Pt0 with KF + K2S2O7 - no KF if silica not present); Organic Matrices (Dry ash at 450EC in Pt0 and dissolve by heating with 1:1:1 H2O / HF / H2SO4 or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystalline form).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

| Technique/Line | Estimated D.L. | Order | Interferences (underlined indicates severe) |
|---|---|---|---|
| ICP-MS 48 amu | 14 ppt | N/A | 32S16O, 32S14N, 14N16O18O, 14N17N2, 36Ar12C, 48Ca, [96X=2 (where X = Zr, Mo, Ru)] |
| ICP-OES 323.452 nm | 0.0054 / 0.00092 µg/mL | 1 | Ce, Ar, Ni |
| ICP-OES 334.941 nm | 0.0038 / 0.000028 µg/mL | 1 | Nb, Ta, Cr, U |
| ICP-OES 336.121 nm | 0.0053 / 0.000034 µg/mL | 1 | W, Mo, Co |

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

## 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**

June 17, 2022

- 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 17, 2027**

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

45982 R: 6/11/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

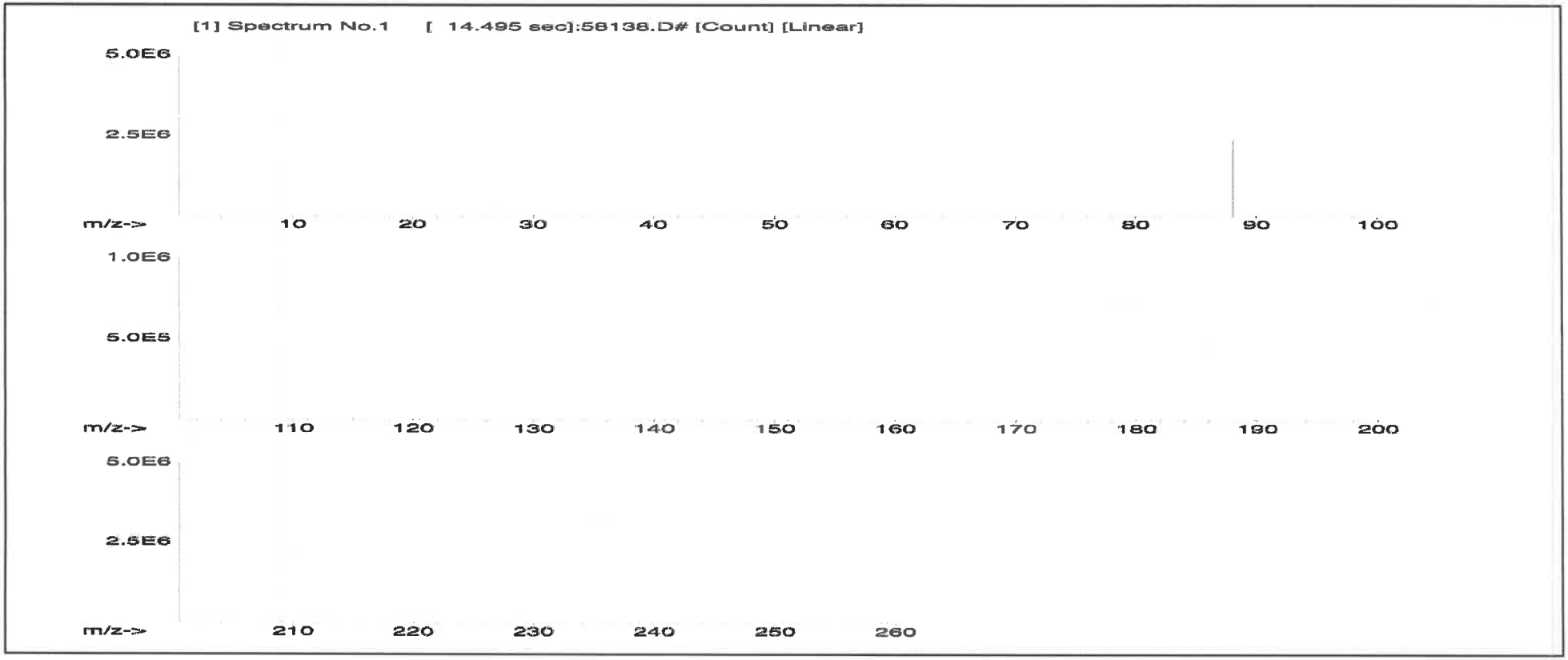
**Part Number:** 57038
**Lot Number:** 031524
**Description:** Strontium (Sr)

**Expiration Date:** 031527
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 1000
**NIST Test Number:** 6UTB
**Weight shown below was diluted to (mL):** 2000.07

| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | |
| 2% | 40.0 (mL) | Nitric Acid | |
| 5E-05 | Balance Uncertainty | | |
| 0.100 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 031524 |
| Reviewed By: | Pedro L. Rentas | 031524 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Strontium nitrate (Sr) | IN017 | SRZ022018A1 | 1000 | 99.997 | 0.10 | 41.2 | 4.85470 | 4.85502 | **1000.1** | **2.0** | 10042-76-9 | NA | orl-rat >2000mg/kg | 3153a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | T | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Certified by:

Homogeneity: No heterogeneity was observed in the preparation of this standard.

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

INORGANIC VENTURES™
Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

MS985
R: 6/14/24

## 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 863.01
ACCREDITED Reference Material Producer Certificate 863.02

## 2.0 PRODUCT DESCRIPTION

| | |
|---|---|
| Product Code: | Single Analyte Custom Grade Solution |
| Catalog Number: | CGIN10 |
| Lot Number: | U2-IN729349 |
| Matrix: | 5% (v/v) HNO3 |
| Value / Analyte(s): | 10 000 µg/mL ea:<br>Indium |
| Starting Material: | Indium Metal |
| Starting Material Lot#: | 2511 |
| Starting Material Purity: | 99.9995% |

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 10022 ± 30 µg/mL

**Density:** 1.044 g/mL (measured at 20 ± 4 °C)

**Assay Information:**

| | |
|---|---|
| **Assay Method #1** | **10021 ± 56 µg/mL**<br>ICP Assay NIST SRM 3124a Lot Number: 110516 |
| **Assay Method #2** | **10035 ± 25 µg/mL**<br>EDTA NIST SRM 928 Lot Number: 928 |
| **Assay Method #3** | **10001 ± 33 µg/mL**<br>Calculated NIST SRM Lot Number: See Sec. 4.2 |

- 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/RM by Two or More Methods

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

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

$X_i$ = mean of Assay Method i with standard uncertainty $u_{char\ i}$

$w_i$ = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

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

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

$u_{bb}$ = 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:**

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

$X_a$ = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method 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

$u_{char\ a}$ = the errors from characterization

$u_{bb}$ = 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 | < | 0.000760 | M | Eu | < | 0.000760 | O | Na | | 0.012771 | M | Se | < | 0.023000 | M | Zn | < | 0.006100 |
| M | Al | | 0.003385 | O | Fe | | 0.004462 | M | Nb | < | 0.000760 | O | Si | | 0.024619 | M | Zr | < | 0.000760 |
| M | As | < | 0.004600 | M | Ga | < | 0.000760 | M | Nd | < | 0.000760 | M | Sm | < | 0.000760 | | | | |
| M | Au | < | 0.002300 | M | Gd | < | 0.000760 | O | Ni | < | 0.005100 | M | Sn | < | 0.000760 | | | | |
| O | B | | 0.003692 | M | Ge | < | 0.001600 | M | Os | < | 0.000760 | O | Sr | < | 0.000610 | | | | |
| M | Ba | < | 0.001600 | M | Hf | < | 0.000760 | n | P | < | | M | Ta | < | 0.000760 | | | | |
| O | Be | < | 0.000130 | M | Hg | < | 0.003100 | M | Pb | | 0.001400 | M | Tb | < | 0.000760 | | | | |
| M | Bi | < | 0.000760 | M | Ho | < | 0.000760 | M | Pd | < | 0.001600 | M | Te | < | 0.000760 | | | | |
| O | Ca | | 0.004616 | s | In | < | | M | Pr | < | 0.000760 | M | Th | < | 0.000760 | | | | |
| M | Cd | < | 0.000760 | M | Ir | < | 0.000760 | M | Pt | < | 0.000760 | O | Ti | < | 0.001100 | | | | |
| M | Ce | < | 0.000760 | O | K | | 0.007078 | M | Rb | < | 0.000760 | M | Tl | < | 0.000760 | | | | |
| M | Co | < | 0.000760 | M | La | < | 0.000760 | M | Re | < | 0.000760 | M | Tm | < | 0.000760 | | | | |
| O | Cr | < | 0.001300 | O | Li | < | 0.000130 | M | Rh | < | 0.000760 | M | U | < | 0.000760 | | | | |
| M | Cs | < | 0.000760 | M | Lu | < | 0.000760 | M | Ru | < | 0.000760 | M | V | < | 0.001600 | | | | |
| M | Cu | < | 0.003800 | O | Mg | | 0.000707 | n | S | < | | M | W | < | 0.001600 | | | | |
| M | Dy | < | 0.000760 | O | Mn | | 0.000149 | M | Sb | < | 0.000760 | M | Y | < | 0.000760 | | | | |
| M | Er | < | 0.000760 | M | Mo | < | 0.002300 | M | Sc | < | 0.000760 | M | Yb | < | 0.000760 | | | | |

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

**6.1** This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

**6.2** For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale, https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

## 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**

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution -** 114.82 +3 6 In(H2O)6+3

**Chemical Compatibility -**Soluble in HCl, HNO3, and H2SO4. Avoid neutral and basic media. Stable with most metals and inorganic anions. The oxalate, sulfide, carbonate, hydroxide and phosphate are insoluble in water.

**Stability -** 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

**In Containing Samples (Preparation and Solution) -**Metal (Best dissolved in HCl / HNO3 ); Oxide (Soluble in mineral acids); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in dilute HCl).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

| **Technique/Line** | **Estimated D.L.** | **Order** | **Interferences** (underlined indicates severe) |
|---|---|---|---|
| ICP-MS 115 amu | 1 ppt | n/a | 115Sn, 99Ru16O |
| ICP-OES 158.583 nm | 0.05 / 0.002 µg/mL | 1 | |
| ICP-OES 230.606 nm | 0.1 / 0.03 µg/mL | 1 | Ni, Os |
| ICP-OES 325.609 nm | 0.2 / 0.05 µg/mL | 1 | Mn, Mo, Th |

## 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**

February 21, 2023

- 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**

**- February 21, 2028**

- 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 Approved By:**

Thomas Kozikowski
Manager, Quality Control

**Certifying Officer:**

Paul Gaines
Chairman / Senior Technical Director

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

R: 01/03/24 M6033

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

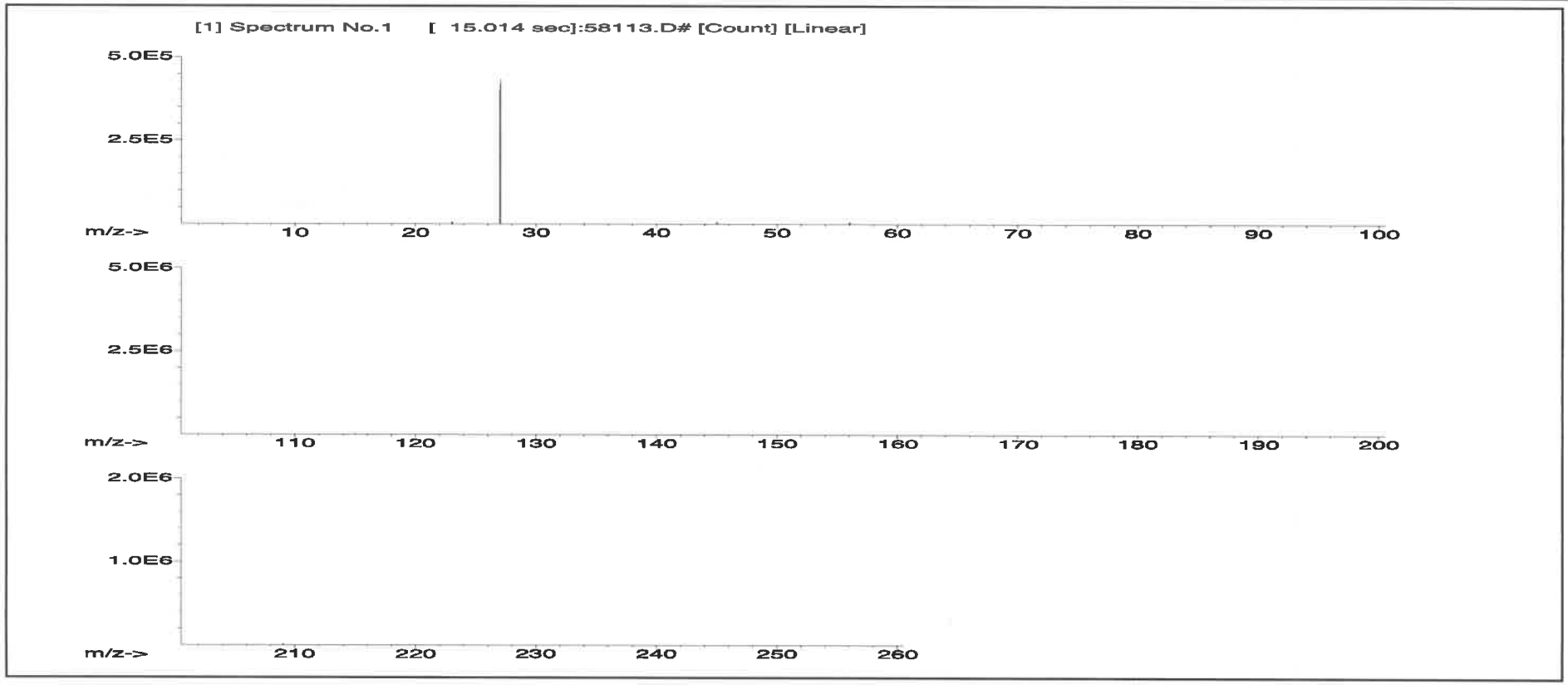
| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **58113** | | **Solvent:** | 20510011 | Nitric Acid |
| **Lot Number:** | **011623** | | | | |
| **Description:** | **Aluminum (Al)** | | | | |
| | | | 2% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 011626 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **10000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 Balance Uncertainty | | | |
| **Weight shown below was diluted to (mL):** | 2000.02 | 0.058 Flask Uncertainty | | | |

Lot #

Giovanni Esposito

| | | |
|---|---|---|
| Formulated By: | Giovanni Esposito | 011623 |
| Reviewed By: | Pedro L. Rentas | 011623 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Aluminum nitrate nonahydrate (Al) | IN022 | ALM112021A1 | 10000 | 99.999 | 0.10 | 7.30 | 273.9779 | 274.0078 | **10001.1** | **20.0** | 7784-27-2 | 2 mg/m3 | orl-rat 3671 mg/kg | 3101a |



Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

M6109
M6110
M6111

Received date 9/29/24 Met dig.

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009
Manufactured Date: 2022-05-10
Retest Date: 2027-05-09
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS – Assay (as HCl) (by acid-base titrn) | 36.5 – 38.0 % | 37.6 % |
| ACS – Color (APHA) | ≤ 10 | 5 |
| ACS – Residue after Ignition | ≤ 3 ppm | < 1 ppm |
| ACS – Specific Gravity at 60°/60°F | 1.185 – 1.192 | 1.190 |
| ACS – Bromide (Br) | ≤ 0.005 % | < 0.005 % |
| ACS – Extractable Organic Substances | ≤ 5 ppm | < 1 ppm |
| ACS – Free Chlorine (as $Cl_2$) | ≤ 0.5 ppm | < 0.5 ppm |
| Phosphate ($PO_4$) | ≤ 0.05 ppm | < 0.03 ppm |
| Sulfate ($SO_4$) | ≤ 0.5 ppm | < 0.3 ppm |
| Sulfite ($SO_3$) | ≤ 0.8 ppm | 0.3 ppm |
| Ammonium ($NH_4$) | ≤ 3 ppm | < 1 ppm |
| Trace Impurities – Arsenic (As) | ≤ 0.010 ppm | < 0.003 ppm |
| Trace Impurities – Aluminum (Al) | ≤ 10.0 ppb | 0.8 ppb |
| Arsenic and Antimony (as As) | ≤ 5.0 ppb | < 3.0 ppb |
| Trace Impurities – Barium (Ba) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities – Beryllium (Be) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities – Bismuth (Bi) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Boron (B) | ≤ 20.0 ppb | < 5.0 ppb |
| Trace Impurities – Cadmium (Cd) | ≤ 1.0 ppb | < 0.3 ppb |
| Trace Impurities – Calcium (Ca) | ≤ 50.0 ppb | 14.9 ppb |
| Trace Impurities – Chromium (Cr) | ≤ 1.0 ppb | < 0.4 ppb |
| Trace Impurities – Cobalt (Co) | ≤ 1.0 ppb | < 0.3 ppb |
| Trace Impurities – Copper (Cu) | ≤ 1.0 ppb | < 0.1 ppb |
| Trace Impurities – Gallium (Ga) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities – Germanium (Ge) | ≤ 3.0 ppb | < 2.0 ppb |
| Trace Impurities – Gold (Au) | ≤ 4.0 ppb | 0.2 ppb |
| Heavy Metals (as Pb) | ≤ 100 ppb | < 50 ppb |
| Trace Impurities – Iron (Fe) | ≤ 15 ppb | 6 ppb |

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Lead (Pb) | ≤ 1.0 ppb | < 0.5 ppb |
| Trace Impurities - Lithium (Li) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities - Magnesium (Mg) | ≤ 10.0 ppb | 0.8 ppb |
| Trace Impurities - Manganese (Mn) | ≤ 1.0 ppb | < 0.4 ppb |
| Trace Impurities - Mercury (Hg) | ≤ 0.5 ppb | 0.1 ppb |
| Trace Impurities - Molybdenum (Mo) | ≤ 10.0 ppb | < 3.0 ppb |
| Trace Impurities - Nickel (Ni) | ≤ 4.0 ppb | < 0.3 ppb |
| Trace Impurities - Niobium (Nb) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities - Potassium (K) | ≤ 9.0 ppb | < 2.0 ppb |
| Trace Impurities - Selenium (Se), For Information Only | | < 1.0 ppb |
| Trace Impurities - Silicon (Si) | ≤ 100.0 ppb | 1.0 ppb |
| Trace Impurities - Silver (Ag) | ≤ 1.0 ppb | < 0.3 ppb |
| Trace Impurities - Sodium (Na) | ≤ 100.0 ppb | 0.7 ppb |
| Trace Impurities - Strontium (Sr) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities - Tantalum (Ta) | ≤ 1.0 ppb | < 0.9 ppb |
| Trace Impurities - Thallium (Tl) | ≤ 5.0 ppb | < 2.0 ppb |
| Trace Impurities - Tin (Sn) | ≤ 5.0 ppb | < 0.8 ppb |
| Trace Impurities - Titanium (Ti) | ≤ 1.0 ppb | 0.2 ppb |
| Trace Impurities - Vanadium (V) | ≤ 1.0 ppb | < 0.2 ppb |
| Trace Impurities - Zinc (Zn) | ≤ 5.0 ppb | 0.8 ppb |
| Trace Impurities - Zirconium (Zr) | ≤ 1.0 ppb | < 0.1 ppb |

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22F0762009

| Test | Specification | Result |
|---|---|---|

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

M6112
M6113
M6114
M6115
M6116
M6117

Receive:
9/29/24
Met dig

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001
Manufactured Date: 2024-01-25
Retest Date: 2029-01-23
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($HNO_3$) | 69.0 - 70.0 % | 69.6 % |
| Appearance | Passes Test | Passes Test |
| Color (APHA) | ≤ 10 | 5 |
| Residue after Ignition | ≤ 2 ppm | < 1 ppm |
| Chloride (Cl) | ≤ 0.08 ppm | < 0.03 ppm |
| Phosphate ($PO_4$) | ≤ 0.10 ppm | < 0.03 ppm |
| Sulfate ($SO_4$) | ≤ 0.2 ppm | < 0.2 ppm |
| Trace Impurities - Aluminum (Al) | ≤ 40.0 ppb | < 1.0 ppb |
| Arsenic and Antimony (as As) | ≤ 5.0 ppb | < 2.0 ppb |
| Trace Impurities - Barium (Ba) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Beryllium (Be) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Bismuth (Bi) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities - Boron (B) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities - Cadmium (Cd) | ≤ 50 ppb | < 1 ppb |
| Trace Impurities - Calcium (Ca) | ≤ 50.0 ppb | < 0.2 ppb |
| Trace Impurities - Chromium (Cr) | ≤ 30.0 ppb | < 1.0 ppb |
| Trace Impurities - Cobalt (Co) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Copper (Cu) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Gallium (Ga) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Germanium (Ge) | ≤ 20 ppb | < 10 ppb |
| Trace Impurities - Gold (Au) | ≤ 20 ppb | < 5 ppb |
| Heavy Metals (as Pb) | ≤ 100 ppb | < 50 ppb |
| Trace Impurities - Iron (Fe) | ≤ 40.0 ppb | < 1.0 ppb |
| Trace Impurities - Lead (Pb) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities - Lithium (Li) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Magnesium (Mg) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities - Manganese (Mn) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Nickel (Ni) | ≤ 20.0 ppb | < 5.0 ppb |

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

| Test | Specification | Result |
|---|---|---|
| Trace Impurities – Niobium (Nb) | ≤ 50.0 ppb | < 1.0 ppb |
| Trace Impurities – Potassium (K) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Silicon (Si) | ≤ 50 ppb | < 10 ppb |
| Trace Impurities – Silver (Ag) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Sodium (Na) | ≤ 150.0 ppb | < 5.0 ppb |
| Trace Impurities – Strontium (Sr) | ≤ 30.0 ppb | < 1.0 ppb |
| Trace Impurities – Tantalum (Ta) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities – Thallium (Tl) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities – Tin (Sn) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities – Titanium (Ti) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Vanadium (V) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities – Zinc (Zn) | ≤ 20.0 ppb | < 1.0 ppb |
| Trace Impurities – Zirconium (Zr) | ≤ 10.0 ppb | < 1.0 ppb |
| Particle Count – 0.5 µm and greater | ≤ 60 par/ml | 3 par/ml |
| Particle Count – 1.0 µm and greater | ≤ 10 par/ml | 1 par/ml |

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24B1362001

| Test | Specification | Result |
|---|---|---|

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Ken Koehnlein
Sr. Manager, Quality Assurance

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6121

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS - Assay (as HCl) (by acid-base titrn) | 36.5 - 38.0 % | 37.6 |
| ACS - Color (APHA) | <= 10 | 5 |
| ACS - Residue after Ignition | <= 3 ppm | 1 |
| ACS - Specific Gravity at 60°/60°F | 1.185 - 1.192 | 1.190 |
| ACS - Bromide (Br) | <= 0.005 % | < 0.005 |
| ACS - Extractable Organic Substances | <= 5 ppm | 1 |
| ACS - Free Chlorine (as $Cl_2$) | <= 0.5 ppm | < 0.5 |
| Phosphate ($PO_4$) | <= 0.05 ppm | < 0.03 |
| Sulfate ($SO_4$) | <= 0.5 ppm | < 0.3 |
| Sulfite ($SO_3$) | <= 0.8 ppm | 0.3 |
| Ammonium ($NH_4$) | <= 3 ppm | < 1 |
| Trace Impurities - Arsenic (As) | <= 0.010 ppm | < 0.003 |
| Trace Impurities - Aluminum (Al) | <= 10.0 ppb | < 0.2 |
| Arsenic and Antimony (as As) | <= 5 ppb | < 3 |
| Trace Impurities - Barium (Ba) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Beryllium (Be) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Bismuth (Bi) | <= 10.0 ppb | < 1.0 |
| Trace Impurities - Boron (B) | <= 20.0 ppb | < 5.0 |
| Trace Impurities - Cadmium (Cd) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Calcium (Ca) | <= 50.0 ppb | 29.7 |
| Trace Impurities - Chromium (Cr) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Cobalt (Co) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Copper (Cu) | <= 1.0 ppb | < 0.1 |
| Trace Impurities - Gallium (Ga) | <= 1.0 ppb | < 0.2 |

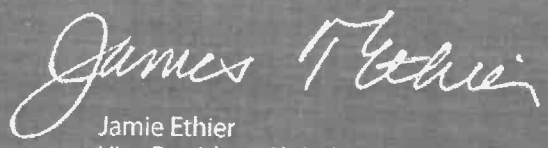
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Germanium (Ge) | <= 3.0 ppb | < 2.0 |
| Trace Impurities - Gold (Au) | <= 4.0 ppb | < 0.2 |
| Heavy Metals (as Pb) | <= 100 ppb | < 50 |
| Trace Impurities - Iron (Fe) | <= 15.0 ppb | <1 |
| Trace Impurities - Lead (Pb) | <= 1.0 ppb | < 0.5 |
| Trace Impurities - Lithium (Li) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Magnesium (Mg) | <= 10.0 ppb | 0.4 |
| Trace Impurities - Manganese (Mn) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Mercury (Hg) | <= 0.5 ppb | 0.1 |
| Trace Impurities - Molybdenum (Mo) | <= 10.0 ppb | < 5.0 |
| Trace Impurities - Nickel (Ni) | <= 4.0 ppb | < 0.3 |
| Trace Impurities - Niobium (Nb) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Potassium (K) | <= 9.0 ppb | < 2.0 |
| Trace Impurities - Selenium (Se), For Information Only | ppb | 1.0 |
| Trace Impurities - Silicon (Si) | <= 100.0 ppb | < 10.0 |
| Trace Impurities - Silver (Ag) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Sodium (Na) | <= 100.0 ppb | < 5.0 |
| Trace Impurities - Strontium (Sr) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Tantalum (Ta) | <= 1.0 ppb | < 0.9 |
| Trace Impurities - Thallium (Tl) | <= 5.0 ppb | < 2.0 |
| Trace Impurities - Tin (Sn) | <= 5.0 ppb | < 0.8 |
| Trace Impurities - Titanium (Ti) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Vanadium (V) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Zinc (Zn) | <= 5.0 ppb | 0.3 |
| Trace Impurities - Zirconium (Zr) | <= 1.0 ppb | < 0.1 |

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

R -> 11/12/24

M6126

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| Assay ($HNO_3$) | 69.0 - 70.0 % | 69.7 % |
| Appearance | Passes Test | Passes Test |
| Color (APHA) | ≤ 10 | 5 |
| Residue after Ignition | ≤ 2 ppm | 1 ppm |
| Chloride (Cl) | ≤ 0.08 ppm | < 0.03 ppm |
| Phosphate ($PO_4$) | ≤ 0.10 ppm | < 0.03 ppm |
| Sulfate ($SO_4$) | ≤ 0.2 ppm | < 0.2 ppm |
| Trace Impurities - Aluminum (Al) | ≤ 40.0 ppb | < 1.0 ppb |
| Arsenic and Antimony (as As) | ≤ 5.0 ppb | < 2.0 ppb |
| Trace Impurities - Barium (Ba) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Beryllium (Be) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Bismuth (Bi) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities - Boron (B) | ≤ 10.0 ppb | < 5.0 ppb |
| Trace Impurities - Cadmium (Cd) | ≤ 50 ppb | < 1 ppb |
| Trace Impurities - Calcium (Ca) | ≤ 50.0 ppb | 2.3 ppb |
| Trace Impurities - Chromium (Cr) | ≤ 30.0 ppb | < 1.0 ppb |
| Trace Impurities - Cobalt (Co) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Copper (Cu) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Gallium (Ga) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Germanium (Ge) | ≤ 20 ppb | < 10 ppb |
| Trace Impurities - Gold (Au) | ≤ 20 ppb | < 5 ppb |
| Heavy Metals (as Pb) | ≤ 100 ppb | 100 ppb |
| Trace Impurities - Iron (Fe) | ≤ 40.0 ppb | < 1.0 ppb |
| Trace Impurities - Lead (Pb) | ≤ 20.0 ppb | < 10.0 ppb |
| Trace Impurities - Lithium (Li) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Magnesium (Mg) | ≤ 20 ppb | < 1 ppb |
| Trace Impurities - Manganese (Mn) | ≤ 10.0 ppb | < 1.0 ppb |
| Trace Impurities - Nickel (Ni) | ≤ 20.0 ppb | < 5.0 ppb |

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

| Test | Specification | Result |
|---|---|---|

For Microelectronic Use

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 01/03/24 M5806, M5807

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

**Part Number:** 58111
**Lot Number:** 122223
**Description:** Sodium (Na)

**Expiration Date:** 122226
**Recommended Storage:** Ambient (20 °C)
**Nominal Concentration (µg/mL):** 10000
**NIST Test Number:** 6UTB

**Weight shown below was diluted to (mL):** 3000.4 0.06 Flask Uncertainty

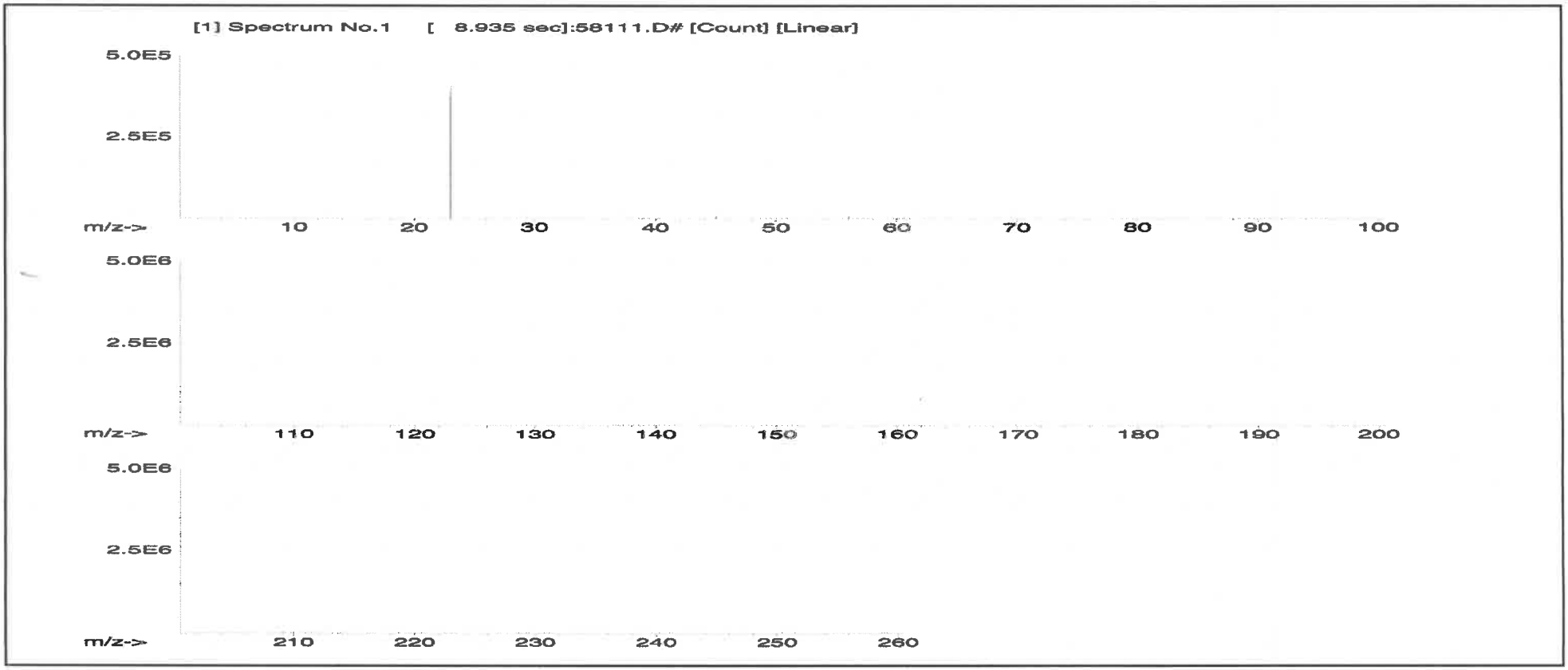
| | Lot # | | |
|---|---|---|---|
| **Solvent:** | 24002546 | Nitric Acid | |
| 2% | 60.0 (mL) | Nitric Acid | |

5E-05 Balance Uncertainty

Aleah O'Brady

| Formulated By: | Aleah O'Brady | 122223 |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 122223 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Sodium nitrate (Na) | IN036 | NAV012015I1 | 10000 | 99.999 | 0.10 | 26.9 | 111.5406 | 111.5479 | **10000.7** | **20.0** | 7631-99-4 | 5 mg/m3 | orl-rat 3430 mg/kg | 3152a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | T | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

*Certified Reference Material CRM*

R: 01/03/24 M5802, M5803

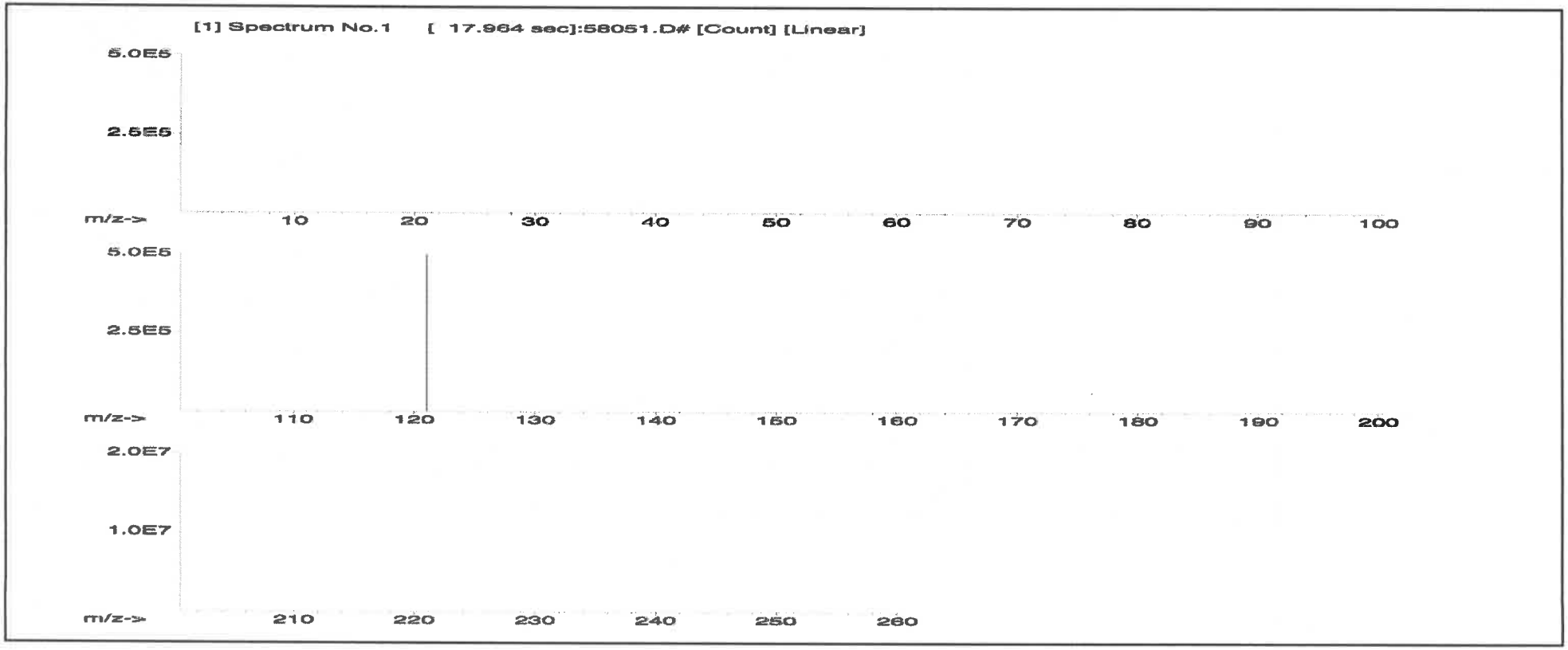
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **57051** | 24002546 | Nitric Acid | |
| **Lot Number:** | **120523** | | | |
| **Description:** | **Antimony (Sb)** | | | |
| | | 2.0% | 60.0 (mL) | Nitric Acid |
| **Expiration Date:** | 120526 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 3000.41 | 0.058 | Flask Uncertainty | |

| | | |
|---|---|---|
| Formulated By: | Lawrence Barry | 120523 |
| Reviewed By: | Pedro L. Rentas | 120523 |

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Antimony (Sb) | 58151 | 100923 | 0.1000 | 300.0 | 0.084 | 1000 | 10001.4 | **1000.0** | 2.1 | 7440-36-0 | 0.5 mg/m3 | orl-rat 7000 mg/kg | 3102a |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | T | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M6030

R: 8/5/24

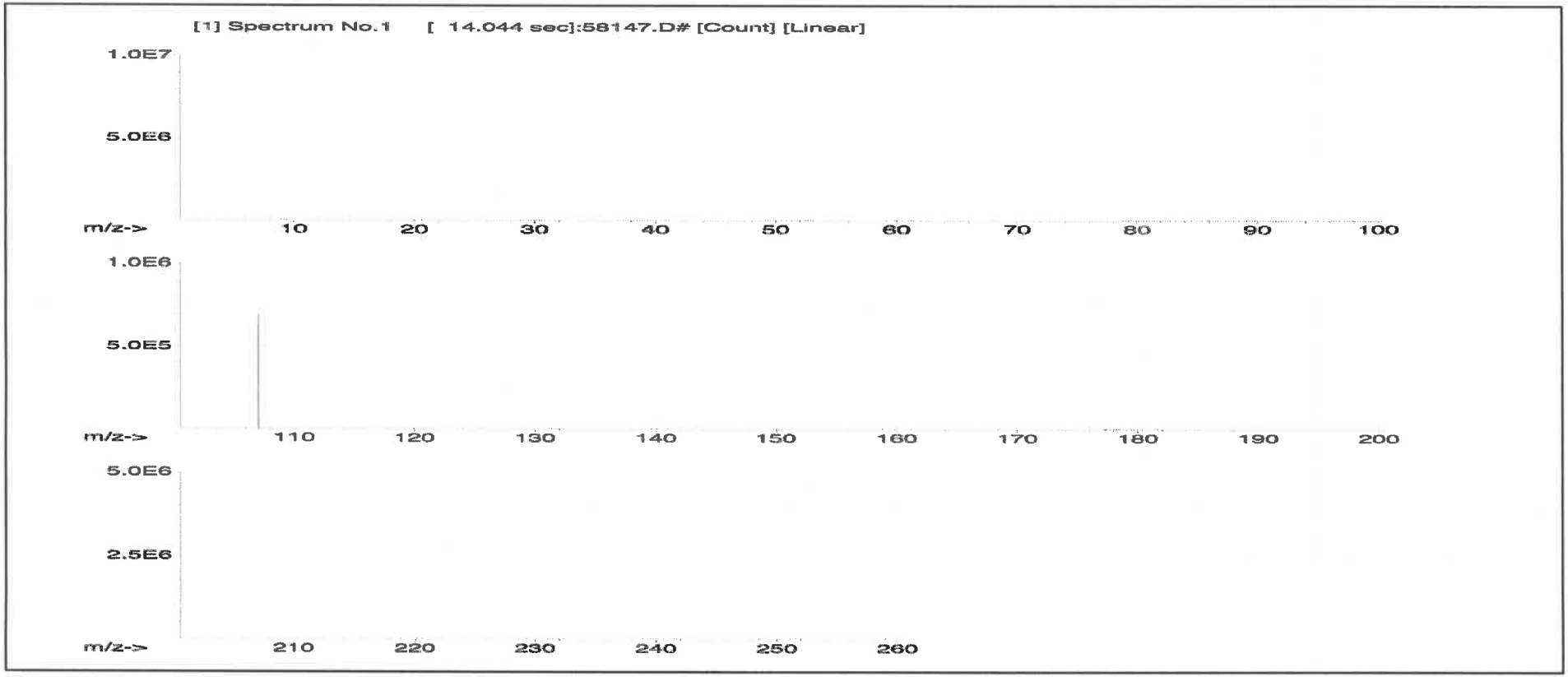
ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57047** | | | **Lot #** | |
| **Lot Number:** | **122823** | **Solvent:** | 24002546 | Nitric Acid | |
| **Description:** | **Silver (Ag)** | | | | |
| | | 2% | 80.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 122826 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 4000.30 | 0.058 | Flask Uncertainty | | |

| | | |
|---|---|---|
| Formulated By: | Benson Chan | 122823 |
| Reviewed By: | Pedro L. Rentas | 122823 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Silver nitrate (Ag) | IN035 | J0612AGA1 | 1000.0 | 99.9999 | 0.10 | 63.7 | 6.27992 | 6.27998 | **1000.0** | **2.0** | 7761-88-8 | 10 ug/m3 | NA | 3151 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | T | Tl | <0.02 | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T)= Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M6023

R ! 8/5/24

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

| | | | | | |
|---|---|---|---|---|---|
| **Part Number:** | **57081** | | **Lot #** | | |
| **Lot Number:** | **062724** | **Solvent:** | 24002546 | Nitric Acid | |
| **Description:** | **Thallium (Tl)** | 2% | 40.0 (mL) | Nitric Acid | |
| **Expiration Date:** | 062727 | | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | | |
| **Weight shown below was diluted to (mL):** | 2000.1 | 0.10 | Flask Uncertainty | | |

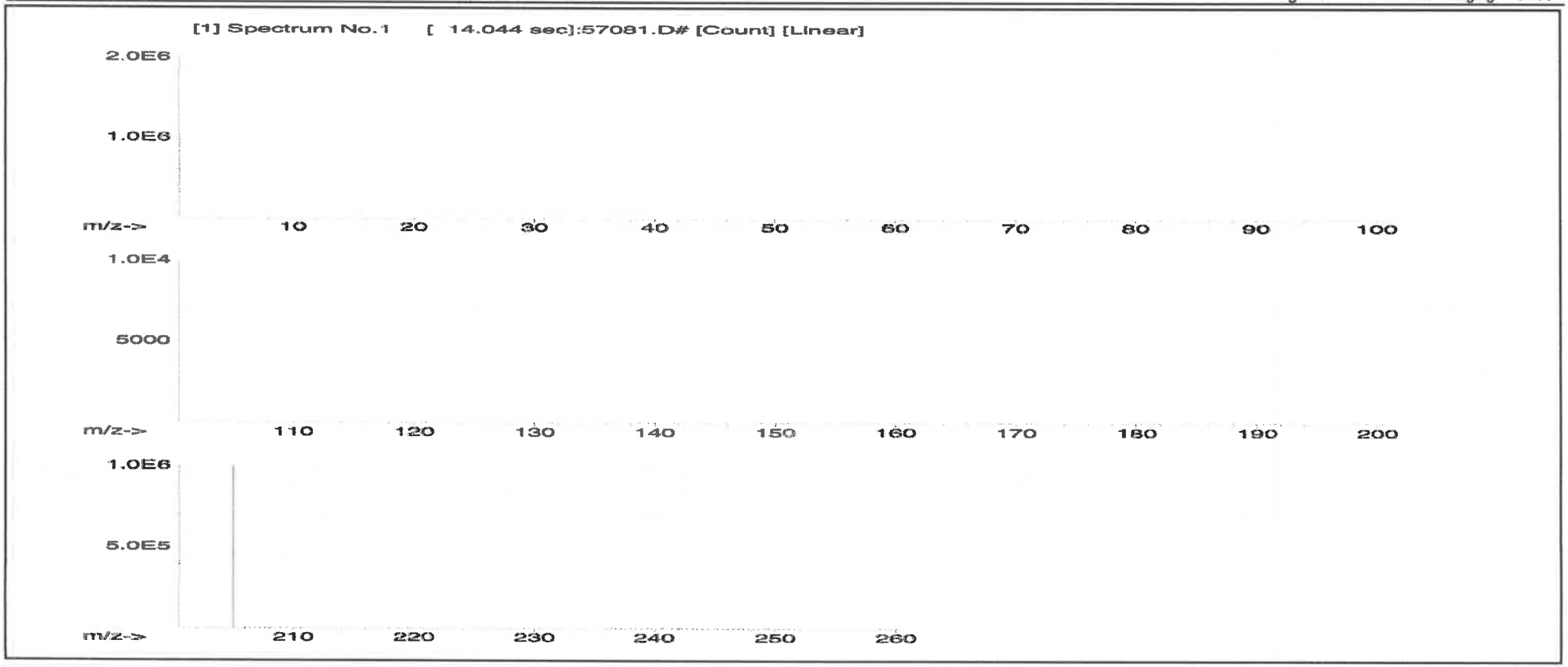
Aleah O'Brady

| | | |
|---|---|---|
| Formulated By: | Aleah O'Brady | 062724 |

Pedro Rentas

| | | |
|---|---|---|
| Reviewed By: | Pedro L. Rentas | 062724 |

| Compound | RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Thallium nitrate (Tl) | IN037 | BCCF4399 | 1000 | 99.999 | 0.10 | 77.0 | 2.5975 | 2.5977 | **1000.1** | **2.0** | 10102-45-1 | 0.1 mg/m3 | orl-mus 15mg/kg | 3158 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

| Trace Metals Verification by ICP-MS (µg/mL) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | T | V | <0.02 |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

Certified by:

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

**Absolute Standards, Inc.**
800-368-1131
www.absolutestandards.com

***Certified Reference Material CRM***

M6021

ANAB ISO 17034 Accredited
AR-1539 Certificate Number
https://Absolutestandards.com

Rc. 8/5/24

CERTIFIED WEIGHT REPORT:

| | | Lot # | Solvent: | |
|---|---|---|---|---|
| **Part Number:** | **57023** | | | |
| **Lot Number:** | **062424** | | | |
| **Description:** | **Vanadium (V)** | 24002546 | Nitric Acid | |
| | | 2.0% | 40.0 (mL) | Nitric Acid |
| **Expiration Date:** | 062427 | | | |
| **Recommended Storage:** | Ambient (20 °C) | | | |
| **Nominal Concentration (µg/mL):** | **1000** | | | |
| **NIST Test Number:** | 6UTB | 5E-05 | Balance Uncertainty | |
| **Volume shown below was diluted to (mL):** | 2000.3 | 0.06 | Flask Uncertainty | |

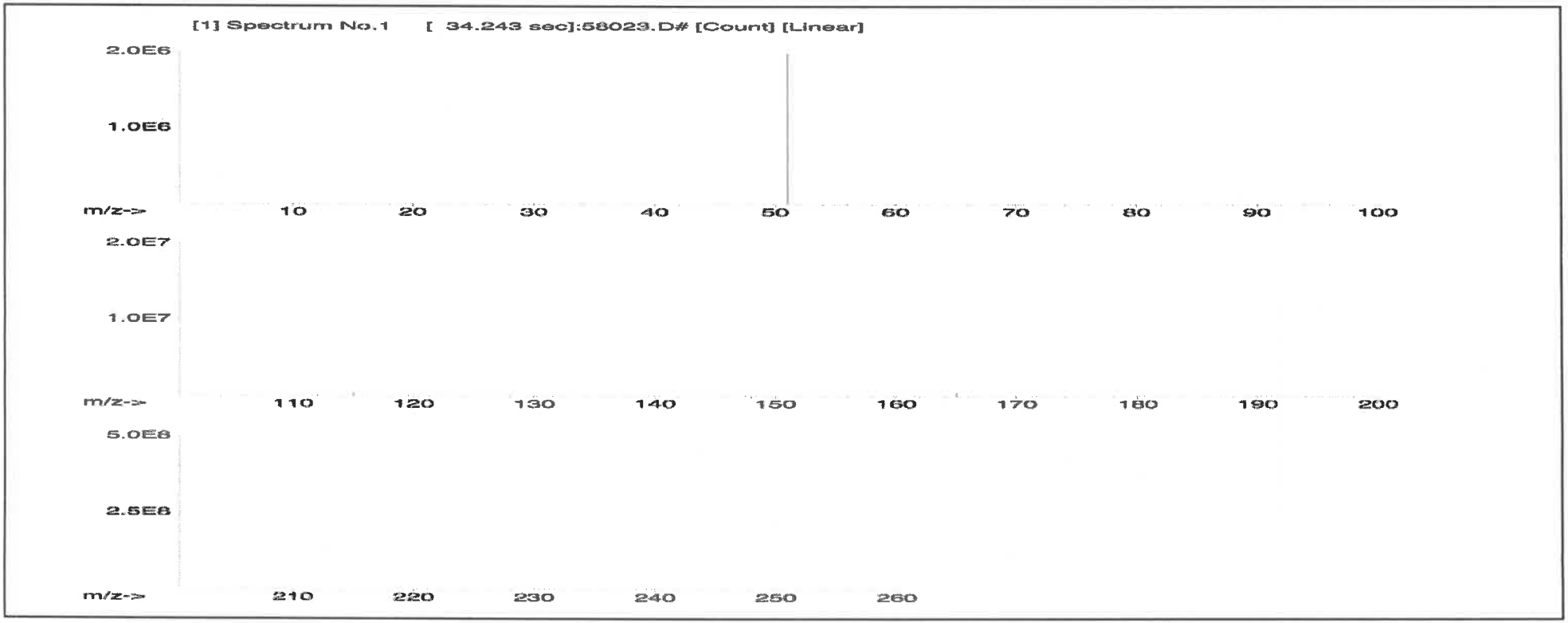
Aleah O'Brady

| Formulated By: | Aleah O'Brady | 062424 |
|---|---|---|

Pedro Rentas

| Reviewed By: | Pedro L. Rentas | 062424 |
|---|---|---|

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | SDS Information (Solvent Safety Info. On Attached pg.) CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Ammonium metavanadate (V) | 58123 | 021224 | 0.1000 | 200.0 | 0.084 | 1000 | 10000.3 | **1000.0** | **2.2** | 7803-55-6 | 0.05 mg/m3 | orl-rat 58.1mg/kg | 3165 |



**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS (µg/mL)**

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pr | <0.02 | Se | <0.2 | Tb | <0.02 | W | <0.02 |
| Sb | <0.02 | Ca | <0.2 | Er | <0.02 | Ho | <0.02 | Lu | <0.02 | Nb | <0.02 | Re | <0.02 | Si | <0.02 | Te | <0.02 | U | <0.02 |
| As | <0.2 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Tl | <0.02 | V | T |
| Ba | <0.02 | Cs | <0.02 | Gd | <0.02 | Ir | <0.02 | Mn | <0.02 | Pd | <0.02 | Rb | <0.02 | Na | <0.2 | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | <0.2 | Hg | <0.2 | P | <0.02 | Ru | <0.02 | Sr | <0.02 | Tm | <0.02 | Y | <0.02 |
| Bi | <0.02 | Co | <0.02 | Ge | <0.02 | La | <0.02 | Mo | <0.02 | Pt | <0.02 | Sm | <0.02 | S | <0.02 | Sn | <0.02 | Zn | <0.02 |
| B | <0.02 | Cu | <0.02 | Au | <0.02 | Pb | <0.02 | Nd | <0.02 | K | <0.2 | Sc | <0.02 | Ta | <0.02 | Ti | <0.02 | Zr | <0.02 |

(T) = Target analyte

**Physical Characterization:**

Homogeneity: No heterogeneity was observed in the preparation of this standard.

**Certified by:**

* The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
* Purified acids, 18.2 megohm deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
* All standard containers are meticulously cleaned prior to use.
* Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
* Standards are certifed (+/-) 0.5% of the stated value, unless otherwise stated.
* All Standards should be stored with caps tight and under appropriate laboratory conditions.
* Uncertainty Reference: Taylor, B.N. and Kuyat, C.E., "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Result," NIST Technical Note 1297, U.S. Government Printing Office, Washington, D.C. (1994).

# SHIPPING DOCUMENTS

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. QUOTE NO. P5068
COC Number 2042253

### CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: New York city Dep of Environmental
ADDRESS: 3701 Jerome Ave
CITY Bronx STATE: NY ZIP:
ATTENTION: Nicholas Prokopovics
PHONE: FAX:

### CLIENT PROJECT INFORMATION

PROJECT NAME: Industrial w/w Permit 2024 Discharge
PROJECT NO.: LOCATION:
PROJECT MANAGER:
e-mail:
PHONE: FAX:

### CLIENT BILLING INFORMATION

BILL TO: PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

### DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

- ❑ Level 1 (Results Only)
- ❑ Level 2 (Results + QC)
- ❑ Level 3 (Results + QC + Raw Data)
- ❑ EDD FORMAT _____
- ❑ Level 4 (QC + Full Raw Data)
- ❑ NJ Reduced ❑ US EPA CLP
- ❑ NYS ASP A ❑ NYS ASP B
- ❑ Other _____

### ANALYSIS

1 VOCs
2 Metals
3 Cyanide
4 OBG
5 TSS, Hex Chrom, pH
6
7
8
9

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # OF BOTTLES | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | 14B#1 | AQ | | X | 12-03-24 | 0740 | 6 | X | X | X | X | X | | | | | 6.62 / 11.01°C |
| 2. | 14B #2 | | | X | | 0840 | 6 | X | X | X | X | X | | | | | 6.66 / 12.15°C |
| 3. | 14B #3 | | | X | | 0940 | 6 | X | X | X | X | X | | | | | 6.57 / 12.30°C |
| 4. | 14B #4 | | | X | | 1040 | 6 | X | X | X | X | X | | | | | 6.51 / 11.83°C |
| 5. | 14B #4 MS/MSD | | | X | | 1042 | 2 | | | | X | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

PRESERVATIVES: A-HCl B-HN03 C-H2SO4 D-NaOH E-ICE F-OTHER

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER: | DATE/TIME: | RECEIVED BY: |
|---|---|---|
| 1. | 12-03-24 1130 | 1. |
| 2. | | 2. |
| 3. | 12-03-24 1350 | 3. |

Conditions of bottles or coolers at receipt: ☒ COMPLIANT ❑ NON COMPLIANT ☒ COOLER TEMP 2.6 °C
Comments:

Page 1 of 1

CLIENT: ❑ Hand Delivered ❑ Other _____
CHEMTECH: ❑ Picked Up ☒ Field Sampling

Shipment Complete ☒ YES ❑ NO

Copyright © 2023

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Alliance Technical Group, LLC-Newark

284 Sheffield Street, Mountainside, NJ 07092 Tel. 908-789-8900 Fax 908-789-8922

## FIELD SAMPLING LOG

Client Name: New York city Dep of Environmental

Client Address: 3701 Jerome Ave Bronx NY

Client Rep on Site: Nicholas Prokopovicz

Sampling Date: 12-03-24

Arrival Time: 0658 Departure Time: 1130

Project Name: Industrial W/W Discharge permit 2024

Project Location: Bronx NY

Cooler Custody Seal: N/A

Temperature Correction Factor (°C): N/A

## FIELD SAMPLING INFORMATION

| Sampling Location | Date/Time of sampling | Field Measurements | | | |
|---|---|---|---|---|---|
| | | Date/Time of Analysis | pH | Temperature °C | Specific Conductance (mS/cm) (99% -101%) |
| CCV (3071) | 12-03-24 0733 | 12-03-24 0736 | 7.00 | 12.97 | |
| 14B #1 | 0740 | 0744 | 6.62 | 11.01 | |
| 14B #2 | 0840 | 0843 | 6.66 | 12.15 | |
| 14B #3 | 0940 | 0946 | 6.57 | 12.30 | |
| 14B #4 | 1040 | 1044 | 6.51 | 11.53 | |
| DUP | 1048 | 1051 | 6.49 | 11.54 | |
| CCV (3071) | 1054 | 1059 | 6.99 | 12.92 | |

**Meter: YSI MPS, Model # 556, Serial # 085A0063**

**Sampler Signature/Date:** 12-03-24

**Supervisor Review/Date:** 12-3-24

QA Control# A2041249

# Laboratory Composite Sample log

Chemtech Project number: P5068 Date: 12-03-24

Client Name: New York Dep of Environmental Client Project Name : Industrial w/w Discharge permit 2024

Instructions: Composite Metals, Cyanide, Hex chrom samples 4:1

Sample Custodian:

| Client Sample ID | Weigh /Volume used | New ID | Sample Description | Sample Composite time | Comments |
|---|---|---|---|---|---|
| 14B #1 | 500mL - 125mL<br>1000mL - 250mL | 14B(1-4)Comp | Dark Brown water | 1420 | 125x4 = 500mL<br>250x4 = 1000mL<br>Volume used |
| 14B #2 | | | | | |
| 14B #3 | | | | | |
| 14B #4 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

QA Control # A3041240

Alliance Technical Group, LLC-Newark

284 Sheffield Street, Mountainside, NJ 07092 Tel. 908-789-8900 Fax 908-789-8922

# FIELD SAMPLING LOG

Client Name: New York City Dep of Environmental

Client Address: 3701 Jerome Ave, Bronx, NY

Client Rep on Site: Nicholas Prokopowics

Sampling Date: 12-03-24

Arrival Time: 0658 Departure Time: 1130

Project Name: Industrial W/W Discharge permit 2024

Project Location: Bronx NY

Cooler Custody Seal: N/A

Temperature Correction Factor (°C): N/A

## FIELD EQUIPMENT CALIBRATION

| pH Calibration (SM4500-H B/9040C) | | | | |
|---|---|---|---|---|
| | Calibration | | | ICV (± 0.1 pH unit) |
| | 7.00 Buffer W 3071 | 4.00 Buffer W 3107 | 10.00 Buffer W 3094 | 7.00 Buffer W 3093 |
| Time | 0710 | 0716 | 0720 | 0725 |
| Temp °C | 13.06 | 12.89 | 12.63 | 12.28 |
| pH | 6.99 | 3.99 | 9.98 | 7.01 |

## FIELD EQUIPMENT CALIBRATION

| Specific Conductance (mS/cm) (99% -101%)/(mmho/cm) (SM2510 B/120.1/9050A) | | |
|---|---|---|
| | Calibration (± 1%) (99% -101%) | ICV (± 1%) (99% -101%) |
| | WP | WP |
| Time | | |
| Temp °C | | |
| Reading (mS/cm) | | |

**Sampler Signature/Date:** JM 12-03-24

**Supervisor Review/Date:** 12-3-24

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

| Certified By | License No. |
|---|---|
| CAS EPA CLP Contract | 68HERH20D0011 |
| Connecticut | PH-0830 |
| DOD ELAP (ANAB) | L2219 |
| Maine | 2024021 |
| Maryland | 296 |
| New Hampshire | 255424 Rev 1 |
| New Jersey | 20012 |
| New York | 11376 |
| Pennsylvania | 68-00548 |
| Soil Permit | 525-24-234-08441 |
| Texas | T104704488 |

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# LOGIN REPORT/SAMPLE TRANSFER

**Order ID :** P5068 NEWY17
**Client Name :** New York City DEP of Env
**Client Contact :** Nicholas Prokopowicz
**Invoice Name :** New York City DEP of Env
**Invoice Contact :** Nicholas Prokopowicz

**Order Date :** 12/3/2024 11:32:00 AM
**Project Name :** Industrial Wastewater Disch
**Receive DateTime :** 12/3/2024 ~~12:00:00 AM~~ 13:50
**Purchase Order :**

**Project Mgr :**
**Report Type :** Level 2
**EDD Type :** EXCEL NOCLEANUP
**Hard Copy Date :**
**Date Signoff :**

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | FAX DATE | DUE DATES |
|---|---|---|---|---|---|---|---|---|---|
| P5068-01 | 14B-1 | Water | 12/03/2024 | 07:40 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |
| P5068-02 | 14B-2 | Water | 12/03/2024 | 08:40 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |
| P5068-03 | 14B-3 | Water | 12/03/2024 | 09:40 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |
| P5068-04 | 14B-4 | Water | 12/03/2024 | 10:40 | | | | | |
| | | | | | VOCMS Group1 | | 624.1 | | 10 Bus. Days |

**Relinguished By :**
**Date / Time :** 12-03-24 1447

**Received By :**
**Date / Time :** 12.03.24 14:47

**Storage Area :** **VOA Refridgerator Room**