

## **DATA PACKAGE METALS**

**PROJECT NAME : RAYMARK SUPERFUND SITE**

**NOBIS GROUP**

**585 Middlesex Street**

**Lowell, MA - 01851**

**Phone No: 978-683-0891**

**ORDER ID : Q2879**

**ATTENTION : Adam Roy**



**Laboratory Certification ID # 20012**



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## Cover Page

**Order ID :** Q2879

**Project ID :** Raymark Superfund Site

**Client :** Nobis Group

### Lab Sample Number

Q2879-01  
Q2879-02  
Q2879-03  
Q2879-04  
Q2879-05  
Q2879-06  
Q2879-07  
Q2879-08  
Q2879-09  
Q2879-10  
Q2879-11  
Q2879-12  
Q2879-13  
Q2879-14  
Q2879-15  
Q2879-16  
Q2879-17  
Q2879-18

### Client Sample Number

OU4-TS-GRILLO-TSCP03-081425  
OU4-TS-GRILLO-TSCP03-081425  
OU4-TS-GRILLO-TSCP04-081425  
OU4-TS-GRILLO-TSCP04-081425  
OU4-TS-GRILLO-TSCP05-081425  
OU4-TS-GRILLO-TSCP05-081425  
OU4-TS-GRILLO-TSCP06-081425  
OU4-TS-GRILLO-TSCP06-081425  
OU4-TS-GRILLO-TSCP07-081425  
OU4-TS-GRILLO-TSCP07-081425  
OU4-TS-GRILLO-TSCP08-081425  
OU4-TS-GRILLO-TSCP08-081425  
OU4-TS-GRILLO-TSCP09-081425  
OU4-TS-GRILLO-TSCP09-081425  
OU4-TS-GRILLO-TSCP10-081425  
OU4-TS-GRILLO-TSCP10-081425  
OU4-TS-GRILLO-TSCP11-081425  
OU4-TS-GRILLO-TSCP11-081425

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: 8/25/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name:** Raymark Superfund Site

**Project #** N/A

**Order ID #** Q2879

**Test Name:** SPLP Mercury,SPLP MetalGroup3

### **A. Number of Samples and Date of Receipt:**

18 Solid samples were received on 08/15/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for SPLP Mercury,SPLP MetalGroup3.

### **C. Analytical Techniques:**

The analysis of SPLP MetalGroup3 was based on method 6020B, digestion based on method 3010 (water). The analysis of SPLP Mercury was based on method 7470A and digestion was based on method 7470 (water).

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Blank Spike met requirements for all compounds.

The Duplicate analysis met criteria for all compounds.

The Matrix Spike (OU4-TS-GRILLO-TSCP11-081425MS) analysis met criteria for all compounds except for Arsenic, Barium and Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (OU4-TS-GRILLO-TSCP11-081425MSD) analysis met criteria for all compounds except for Arsenic and Silver due to Chemical interference during Digestion process.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

### **E. Additional Comments:**

The Post Digest Spike (OU4-TS-GRILLO-TSCP11-081425A) analysis met criteria for all compounds except for Arsenic, Barium and Silver due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.



Q2879 SPLP All samples analyzed with dilution because of SPLP fluid which has concentrated mix of acids can cause problem to the detector if analyzed straight.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

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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. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature\_\_\_\_\_

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## DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

|           |                                                                                                                                                                                                                                                                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>J</b>  | 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).                                                                                                                                                                                  |
| <b>U</b>  | Indicates the analyte was analyzed for, but not detected.                                                                                                                                                                                                                                                                                                                     |
| <b>ND</b> | Indicates the analyte was analyzed for, but not detected                                                                                                                                                                                                                                                                                                                      |
| <b>E</b>  | Indicates the reported value is estimated because of the presence of interference                                                                                                                                                                                                                                                                                             |
| <b>M</b>  | Indicates Duplicate injection precision not met.                                                                                                                                                                                                                                                                                                                              |
| <b>N</b>  | Indicates the spiked sample recovery is not within control limits.                                                                                                                                                                                                                                                                                                            |
| <b>S</b>  | Indicates the reported value was determined by the Method of Standard Addition (MSA).                                                                                                                                                                                                                                                                                         |
| <b>*</b>  | Indicates that the duplicate analysis is not within control limits.                                                                                                                                                                                                                                                                                                           |
| <b>+</b>  | Indicates the correlation coefficient for the MSA is less than 0.995.                                                                                                                                                                                                                                                                                                         |
| <b>D</b>  | Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.                                                                                                                                                                                                                                       |
| <b>M</b>  | 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 |
| <b>OR</b> | Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.                                                                                                                                                                                                                                                              |
| <b>Q</b>  | Indicates the LCS did not meet the control limits requirements                                                                                                                                                                                                                                                                                                                |
| <b>H</b>  | Sample Analysis Out Of Hold Time                                                                                                                                                                                                                                                                                                                                              |

**METALS CONFORMANCE/NON-CONFORMANCE SUMMARY**

ORDER ID: Q2879

MATRIX: Water

METHOD: 6020B,7470A

|                                                                                                                                                                                                                                                                                                                                                                                | NA | NO | YES |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----|
| 1. Calibration Summary met criteria.                                                                                                                                                                                                                                                                                                                                           |    |    | ✓   |
| 2. ICP Interference Check Sample Results Summary Submitted.                                                                                                                                                                                                                                                                                                                    |    |    | ✓   |
| 3. Serial Dilution Summary (if applicable) Submitted.                                                                                                                                                                                                                                                                                                                          |    |    | ✓   |
| 4. Laboratory Control Sample Summary (if applicable) Submitted.                                                                                                                                                                                                                                                                                                                |    |    | ✓   |
| 5. Blank Contamination - If yes, list compounds and concentrations in each blank:                                                                                                                                                                                                                                                                                              |    | ✓  |     |
| 6. Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria                                                                                                                                                                                                                                                                                                                 |    | ✓  |     |
| If not met, list those compounds and their recoveries which fall outside the acceptable range.                                                                                                                                                                                                                                                                                 |    |    |     |
| The Matrix Spike (OU4-TS-GRILLO-TSCP11-081425MS) analysis met criteria for all compounds except for Arsenic, Barium and Silver due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (OU4-TS-GRILLO-TSCP11-081425MSD) analysis met criteria for all compounds except for Arsenic and Silver due to Chemical interference during Digestion process. |    |    |     |
| 7. Sample Duplicate Analysis Met QC Criteria                                                                                                                                                                                                                                                                                                                                   |    |    | ✓   |
| If not met, list those compounds and their recoveries which fall outside the acceptable range.                                                                                                                                                                                                                                                                                 |    |    |     |
| 8. Digestion Holding Time Met                                                                                                                                                                                                                                                                                                                                                  |    |    | ✓   |
| If not met, list number of days exceeded for each sample:                                                                                                                                                                                                                                                                                                                      |    |    |     |
| 9. Analysis Holding Time Met                                                                                                                                                                                                                                                                                                                                                   |    |    | ✓   |
| If not met, list those compounds and their recoveries which fall outside the acceptable range.                                                                                                                                                                                                                                                                                 |    |    |     |

**ADDITIONAL COMMENTS:**

The Post Digest Spike (OU4-TS-GRILLO-TSCP11-081425ADL) analysis met criteria for all compounds except for Arsenic, Barium and Silver due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

**METALS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA NO YES

Q2879 SPLP All samples analyzed with dilution because of SPLP fluid which has concentrated mix of acids can cause problem to the detector if analyzed straight.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

\_\_\_\_\_  
QA REVIEW

\_\_\_\_\_  
Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q2879

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: SOHIL JODHANI

Date: 08/25/2025

## LAB CHRONICLE

|                 |             |                   |                        |
|-----------------|-------------|-------------------|------------------------|
| <b>OrderID:</b> | Q2879       | <b>OrderDate:</b> | 8/15/2025 9:15:00 AM   |
| <b>Client:</b>  | Nobis Group | <b>Project:</b>   | Raymark Superfund Site |
| <b>Contact:</b> | Adam Roy    | <b>Location:</b>  | J23,VOA Lab            |

| LabID           | ClientID                                | Matrix       | Test             | Method | Sample Date     | Prep Date | Anal Date | Received        |
|-----------------|-----------------------------------------|--------------|------------------|--------|-----------------|-----------|-----------|-----------------|
| <b>Q2879-01</b> | <b>OU4-TS-GRILLO-TSCP<br/>03-081425</b> | <b>SOIL</b>  |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B  |                 | 08/18/25  | 08/18/25  |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D  |                 | 08/18/25  | 08/19/25  |                 |
| <b>Q2879-02</b> | <b>OU4-TS-GRILLO-TSCP<br/>03-081425</b> | <b>Water</b> |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A  |                 | 08/19/25  | 08/19/25  |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B  |                 | 08/18/25  | 08/20/25  |                 |
| <b>Q2879-03</b> | <b>OU4-TS-GRILLO-TSCP<br/>04-081425</b> | <b>SOIL</b>  |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B  |                 | 08/18/25  | 08/18/25  |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D  |                 | 08/18/25  | 08/19/25  |                 |
| <b>Q2879-04</b> | <b>OU4-TS-GRILLO-TSCP<br/>04-081425</b> | <b>Water</b> |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A  |                 | 08/19/25  | 08/19/25  |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B  |                 | 08/18/25  | 08/20/25  |                 |
| <b>Q2879-05</b> | <b>OU4-TS-GRILLO-TSCP<br/>05-081425</b> | <b>SOIL</b>  |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B  |                 | 08/18/25  | 08/18/25  |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D  |                 | 08/18/25  | 08/19/25  |                 |
| <b>Q2879-06</b> | <b>OU4-TS-GRILLO-TSCP<br/>05-081425</b> | <b>Water</b> |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A  |                 | 08/19/25  | 08/19/25  |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B  |                 | 08/18/25  | 08/20/25  |                 |
| <b>Q2879-07</b> | <b>OU4-TS-GRILLO-TSCP<br/>06-081425</b> | <b>SOIL</b>  |                  |        | <b>08/14/25</b> |           |           | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B  |                 | 08/18/25  | 08/18/25  |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D  |                 | 08/18/25  | 08/19/25  |                 |

## LAB CHRONICLE

|                 |                                         |              |                  |       |                 |          |                 |
|-----------------|-----------------------------------------|--------------|------------------|-------|-----------------|----------|-----------------|
| <b>Q2879-08</b> | <b>OU4-TS-GRILLO-TSCP<br/>06-081425</b> | <b>Water</b> |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A | 08/19/25        | 08/19/25 |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25        | 08/20/25 |                 |
| <b>Q2879-09</b> | <b>OU4-TS-GRILLO-TSCP<br/>07-081425</b> | <b>SOIL</b>  |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B | 08/18/25        | 08/18/25 |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D | 08/18/25        | 08/19/25 |                 |
| <b>Q2879-10</b> | <b>OU4-TS-GRILLO-TSCP<br/>07-081425</b> | <b>Water</b> |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A | 08/19/25        | 08/19/25 |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25        | 08/20/25 |                 |
| <b>Q2879-11</b> | <b>OU4-TS-GRILLO-TSCP<br/>08-081425</b> | <b>SOIL</b>  |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B | 08/18/25        | 08/18/25 |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D | 08/18/25        | 08/19/25 |                 |
| <b>Q2879-12</b> | <b>OU4-TS-GRILLO-TSCP<br/>08-081425</b> | <b>Water</b> |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A | 08/19/25        | 08/19/25 |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25        | 08/20/25 |                 |
| <b>Q2879-13</b> | <b>OU4-TS-GRILLO-TSCP<br/>09-081425</b> | <b>SOIL</b>  |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B | 08/18/25        | 08/18/25 |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D | 08/18/25        | 08/19/25 |                 |
| <b>Q2879-14</b> | <b>OU4-TS-GRILLO-TSCP<br/>09-081425</b> | <b>Water</b> |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | SPLP Mercury     | 7470A | 08/19/25        | 08/19/25 |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25        | 08/20/25 |                 |
| <b>Q2879-15</b> | <b>OU4-TS-GRILLO-TSCP<br/>10-081425</b> | <b>SOIL</b>  |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |
|                 |                                         |              | Mercury          | 7471B | 08/18/25        | 08/18/25 |                 |
|                 |                                         |              | Metals ICP-TAL   | 6010D | 08/18/25        | 08/19/25 |                 |
| <b>Q2879-16</b> | <b>OU4-TS-GRILLO-TSCP<br/>10-081425</b> | <b>Water</b> |                  |       | <b>08/14/25</b> |          | <b>08/15/25</b> |



### LAB CHRONICLE

|                 |                                         |              |                  |       |          |          |                 |                 |
|-----------------|-----------------------------------------|--------------|------------------|-------|----------|----------|-----------------|-----------------|
| <b>Q2879-17</b> | <b>OU4-TS-GRILLO-TSCP<br/>11-081425</b> | <b>SOIL</b>  | SPLP Mercury     | 7470A | 08/19/25 | 08/19/25 | <b>08/14/25</b> | <b>08/15/25</b> |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25 | 08/20/25 |                 |                 |
| <b>Q2879-18</b> | <b>OU4-TS-GRILLO-TSCP<br/>11-081425</b> | <b>Water</b> | Mercury          | 7471B | 08/18/25 | 08/18/25 | <b>08/14/25</b> | <b>08/15/25</b> |
|                 |                                         |              | Metals ICP-TAL   | 6010D | 08/18/25 | 08/19/25 |                 |                 |
|                 |                                         |              | SPLP Mercury     | 7470A | 08/19/25 | 08/19/25 |                 |                 |
|                 |                                         |              | SPLP MetalGroup3 | 6020B | 08/18/25 | 08/20/25 |                 |                 |

### Hit Summary Sheet SW-846

**SDG No.:** Q2879 **Order ID:** Q2879  
**Client:** Nobis Group **Project ID:** Raymark Superfund Site

| Sample ID                                      | Client ID                 | Matrix | Parameter | Concentration | C  | MDL  | LOD  | RDL  | Units |
|------------------------------------------------|---------------------------|--------|-----------|---------------|----|------|------|------|-------|
| <b>Client ID : OU4-TS-GRILLO-TSCP03-081425</b> |                           |        |           |               |    |      |      |      |       |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Antimony  | 1.05          | JD | 0.55 | 1.25 | 10.0 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Arsenic   | 30.2          | D  | 0.45 | 1.25 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Barium    | 112           | D  | 1.05 | 6.25 | 50.0 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Beryllium | 14.4          | D  | 1.60 | 3.75 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Cadmium   | 11.1          | D  | 1.70 | 2.50 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Chromium  | 53.3          | D  | 1.05 | 3.75 | 10.0 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Copper    | 194           | D  | 1.50 | 7.50 | 10.0 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Lead      | 203           | D  | 1.05 | 3.75 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Nickel    | 103           | D  | 1.35 | 3.75 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Silver    | 0.30          | JD | 0.30 | 2.50 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Thallium  | 0.65          | JD | 0.30 | 2.50 | 5.00 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Vanadium  | 264           | D  | 0.39 | 1.25 | 25.0 | ug/L  |
| Q2879-02                                       | OU4-TS-GRILLO-TSCP03-0814 | Water  | Zinc      | 2440          | D  | 6.25 | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP04-081425</b> |                           |        |           |               |    |      |      |      |       |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Antimony  | 0.90          | JD | 0.55 | 1.25 | 10.0 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Arsenic   | 38.2          | D  | 0.45 | 1.25 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Barium    | 136           | D  | 1.05 | 6.25 | 50.0 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Beryllium | 13.8          | D  | 1.60 | 3.75 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Cadmium   | 11.1          | D  | 1.70 | 2.50 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Chromium  | 52.7          | D  | 1.05 | 3.75 | 10.0 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Copper    | 190           | D  | 1.50 | 7.50 | 10.0 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Lead      | 179           | D  | 1.05 | 3.75 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Nickel    | 103           | D  | 1.35 | 3.75 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Thallium  | 0.65          | JD | 0.30 | 2.50 | 5.00 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Vanadium  | 261           | D  | 0.39 | 1.25 | 25.0 | ug/L  |
| Q2879-04                                       | OU4-TS-GRILLO-TSCP04-0814 | Water  | Zinc      | 2010          | D  | 6.25 | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP05-081425</b> |                           |        |           |               |    |      |      |      |       |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Antimony  | 0.95          | JD | 0.55 | 1.25 | 10.0 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Arsenic   | 29.6          | D  | 0.45 | 1.25 | 5.00 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Barium    | 133           | D  | 1.05 | 6.25 | 50.0 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Beryllium | 14.3          | D  | 1.60 | 3.75 | 5.00 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Cadmium   | 11.4          | D  | 1.70 | 2.50 | 5.00 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Chromium  | 57.2          | D  | 1.05 | 3.75 | 10.0 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Copper    | 230           | D  | 1.50 | 7.50 | 10.0 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Lead      | 268           | D  | 1.05 | 3.75 | 5.00 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Nickel    | 97.0          | D  | 1.35 | 3.75 | 5.00 | ug/L  |

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** Q2879 **Order ID:** Q2879  
**Client:** Nobis Group **Project ID:** Raymark Superfund Site

| Sample ID                                      | Client ID                 | Matrix | Parameter | Concentration | C  | MDL   | LOD  | RDL  | Units |
|------------------------------------------------|---------------------------|--------|-----------|---------------|----|-------|------|------|-------|
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Thallium  | 0.70          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Vanadium  | 284           | D  | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-06                                       | OU4-TS-GRILLO-TSCP05-0814 | Water  | Zinc      | 1810          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP06-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Antimony  | 0.90          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Arsenic   | 33.8          | D  | 0.45  | 1.25 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Barium    | 124           | D  | 1.05  | 6.25 | 50.0 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Beryllium | 14.3          | D  | 1.60  | 3.75 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Cadmium   | 11.6          | D  | 1.70  | 2.50 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Chromium  | 60.5          | D  | 1.05  | 3.75 | 10.0 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Copper    | 216           | D  | 1.50  | 7.50 | 10.0 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Lead      | 210           | D  | 1.05  | 3.75 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Nickel    | 109           | D  | 1.35  | 3.75 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Mercury   | 0.20          | J  | 0.076 | 0.16 | 0.20 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Thallium  | 0.75          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Vanadium  | 282           | D  | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-08                                       | OU4-TS-GRILLO-TSCP06-0814 | Water  | Zinc      | 2000          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP07-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Antimony  | 0.75          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Arsenic   | 10.2          | D  | 0.45  | 1.25 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Barium    | 104           | D  | 1.05  | 6.25 | 50.0 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Beryllium | 4.80          | JD | 1.60  | 3.75 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Cadmium   | 7.35          | D  | 1.70  | 2.50 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Chromium  | 9.95          | JD | 1.05  | 3.75 | 10.0 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Copper    | 26.4          | D  | 1.50  | 7.50 | 10.0 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Lead      | 25.2          | D  | 1.05  | 3.75 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Nickel    | 59.7          | D  | 1.35  | 3.75 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Mercury   | 0.20          |    | 0.076 | 0.16 | 0.20 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Thallium  | 0.40          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Vanadium  | 15.8          | JD | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-10                                       | OU4-TS-GRILLO-TSCP07-0814 | Water  | Zinc      | 1610          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP08-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Antimony  | 0.75          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Arsenic   | 31.1          | D  | 0.45  | 1.25 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Barium    | 120           | D  | 1.05  | 6.25 | 50.0 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Beryllium | 13.2          | D  | 1.60  | 3.75 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Cadmium   | 10.6          | D  | 1.70  | 2.50 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Chromium  | 47.8          | D  | 1.05  | 3.75 | 10.0 | ug/L  |

### Hit Summary Sheet SW-846

**SDG No.:** Q2879 **Order ID:** Q2879  
**Client:** Nobis Group **Project ID:** Raymark Superfund Site

| Sample ID                                      | Client ID                 | Matrix | Parameter | Concentration | C  | MDL   | LOD  | RDL  | Units |
|------------------------------------------------|---------------------------|--------|-----------|---------------|----|-------|------|------|-------|
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Copper    | 168           | D  | 1.50  | 7.50 | 10.0 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Lead      | 175           | D  | 1.05  | 3.75 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Nickel    | 95.1          | D  | 1.35  | 3.75 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Mercury   | 0.41          |    | 0.076 | 0.16 | 0.20 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Thallium  | 0.70          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Vanadium  | 264           | D  | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-12                                       | OU4-TS-GRILLO-TSCP08-0814 | Water  | Zinc      | 1850          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP09-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Antimony  | 0.90          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Arsenic   | 27.0          | D  | 0.45  | 1.25 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Barium    | 122           | D  | 1.05  | 6.25 | 50.0 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Beryllium | 12.9          | D  | 1.60  | 3.75 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Cadmium   | 11.3          | D  | 1.70  | 2.50 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Chromium  | 46.5          | D  | 1.05  | 3.75 | 10.0 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Copper    | 144           | D  | 1.50  | 7.50 | 10.0 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Lead      | 179           | D  | 1.05  | 3.75 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Nickel    | 101           | D  | 1.35  | 3.75 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Mercury   | 0.26          |    | 0.076 | 0.16 | 0.20 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Thallium  | 0.55          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Vanadium  | 213           | D  | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-14                                       | OU4-TS-GRILLO-TSCP09-0814 | Water  | Zinc      | 2010          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP10-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Antimony  | 0.90          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Arsenic   | 30.4          | D  | 0.45  | 1.25 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Barium    | 115           | D  | 1.05  | 6.25 | 50.0 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Beryllium | 14.5          | D  | 1.60  | 3.75 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Cadmium   | 11.6          | D  | 1.70  | 2.50 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Chromium  | 56.9          | D  | 1.05  | 3.75 | 10.0 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Copper    | 204           | D  | 1.50  | 7.50 | 10.0 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Lead      | 263           | D  | 1.05  | 3.75 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Nickel    | 107           | D  | 1.35  | 3.75 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Mercury   | 0.21          |    | 0.076 | 0.16 | 0.20 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Thallium  | 0.60          | JD | 0.30  | 2.50 | 5.00 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Vanadium  | 288           | D  | 0.39  | 1.25 | 25.0 | ug/L  |
| Q2879-16                                       | OU4-TS-GRILLO-TSCP10-0814 | Water  | Zinc      | 2060          | D  | 6.25  | 7.50 | 25.0 | ug/L  |
| <b>Client ID : OU4-TS-GRILLO-TSCP11-081425</b> |                           |        |           |               |    |       |      |      |       |
| Q2879-18                                       | OU4-TS-GRILLO-TSCP11-0814 | Water  | Antimony  | 0.75          | JD | 0.55  | 1.25 | 10.0 | ug/L  |
| Q2879-18                                       | OU4-TS-GRILLO-TSCP11-0814 | Water  | Arsenic   | 31.9          | D  | 0.45  | 1.25 | 5.00 | ug/L  |

**Hit Summary Sheet**  
**SW-846**

**SDG No.:** Q2879      **Order ID:** Q2879  
**Client:** Nobis Group      **Project ID:** Raymark Superfund Site

| Sample ID | Client ID                 | Matrix | Parameter | Concentration | C  | MDL  | LOD  | RDL  | Units |
|-----------|---------------------------|--------|-----------|---------------|----|------|------|------|-------|
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Barium    | 132           | D  | 1.05 | 6.25 | 50.0 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Beryllium | 12.2          | D  | 1.60 | 3.75 | 5.00 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Cadmium   | 9.70          | D  | 1.70 | 2.50 | 5.00 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Chromium  | 64.5          | D  | 1.05 | 3.75 | 10.0 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Copper    | 248           | D  | 1.50 | 7.50 | 10.0 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Lead      | 280           | D  | 1.05 | 3.75 | 5.00 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Nickel    | 100           | D  | 1.35 | 3.75 | 5.00 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Thallium  | 0.65          | JD | 0.30 | 2.50 | 5.00 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Vanadium  | 302           | D  | 0.39 | 1.25 | 25.0 | ug/L  |
| Q2879-18  | OU4-TS-GRILLO-TSCP11-0814 | Water  | Zinc      | 1750          | D  | 6.25 | 7.50 | 25.0 | ug/L  |



# SAMPLE DATA

|    |
|----|
| 1  |
| 2  |
| 3  |
| 4  |
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| 17 |
| 18 |

## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP03-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-02                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 1.05  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 30.2  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 112   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 14.4  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.1  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 53.3  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 194   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 203   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.16  | U    | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:38 | 7470A    |           |
| 7440-02-0 | Nickel    | 103   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 0.30  | JDN  | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.65  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 264   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 2440  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:28 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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

## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP04-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-04                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.90  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 38.2  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 136   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 13.8  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.1  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 52.7  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 190   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 179   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.16  | U    | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:40 | 7470A    |           |
| 7440-02-0 | Nickel    | 103   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.65  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 261   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 2010  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:32 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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

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## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP05-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-06                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.95  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 29.6  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 133   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 14.3  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.4  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 57.2  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 230   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 268   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.16  | U    | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:43 | 7470A    |           |
| 7440-02-0 | Nickel    | 97.0  | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.70  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 284   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 1810  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:35 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

U = Not Detected  
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 LOD = Limit of Detection  
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 B = Analyte Found in Associated Method Blank  
 \* = indicates the duplicate analysis is not within control limits.  
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## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP06-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-08                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.90  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 33.8  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 124   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 14.3  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.6  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 60.5  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 216   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 210   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.20  | J    | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:50 | 7470A    |           |
| 7440-02-0 | Nickel    | 109   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.75  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 282   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 2000  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:38 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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 LOD = Limit of Detection  
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 Q = indicates LCS control criteria did not meet requirements

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 B = Analyte Found in Associated Method Blank  
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## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP07-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-10                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.75  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 10.2  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 104   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 4.80  | JD   | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 7.35  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 9.95  | JD   | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 26.4  | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 25.2  | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.20  |      | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:52 | 7470A    |           |
| 7440-02-0 | Nickel    | 59.7  | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.40  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 15.8  | JD   | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 1610  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:41 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP08-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-12                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.75  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 31.1  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 120   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 13.2  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 10.6  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 47.8  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 168   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 175   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.41  |      | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:54 | 7470A    |           |
| 7440-02-0 | Nickel    | 95.1  | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.70  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 264   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 1850  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:44 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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

## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP09-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-14                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.90  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 27.0  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 122   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 12.9  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.3  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 46.5  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 144   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 179   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.26  |      | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:57 | 7470A    |           |
| 7440-02-0 | Nickel    | 101   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.55  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 213   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 2010  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:56 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

U = Not Detected  
 LOQ = Limit of Quantitation  
 MDL = Method Detection Limit  
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J = Estimated Value  
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 \* = indicates the duplicate analysis is not within control limits.  
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 OR = Over Range  
 N = Spiked sample recovery not within control limits

## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP10-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-16                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.90  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 30.4  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 115   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 14.5  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 11.6  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 56.9  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 204   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 263   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.21  |      | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 14:59 | 7470A    |           |
| 7440-02-0 | Nickel    | 107   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.60  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 288   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 2060  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 12:59 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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 OR = Over Range  
 N = Spiked sample recovery not within control limits

## Report of Analysis

|                   |                             |                 |          |
|-------------------|-----------------------------|-----------------|----------|
| Client:           | Nobis Group                 | Date Collected: | 08/14/25 |
| Project:          | Raymark Superfund Site      | Date Received:  | 08/15/25 |
| Client Sample ID: | OU4-TS-GRILLO-TSCP11-081425 | SDG No.:        | Q2879    |
| Lab Sample ID:    | Q2879-18                    | Matrix:         | Water    |
| Level (low/med):  | low                         | % Solid:        | 0        |

| Cas       | Parameter | Conc. | Qua. | DF | MDL   | LOD  | LOQ / CRQL | Units | Prep Date      | Date Ana.      | Ana Met. | Prep Met. |
|-----------|-----------|-------|------|----|-------|------|------------|-------|----------------|----------------|----------|-----------|
| 7440-36-0 | Antimony  | 0.75  | JD   | 5  | 0.55  | 1.25 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-38-2 | Arsenic   | 31.9  | DN   | 5  | 0.45  | 1.25 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-39-3 | Barium    | 132   | DN   | 5  | 1.05  | 6.25 | 50.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-41-7 | Beryllium | 12.2  | D    | 5  | 1.60  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-43-9 | Cadmium   | 9.70  | D    | 5  | 1.70  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-47-3 | Chromium  | 64.5  | D    | 5  | 1.05  | 3.75 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-50-8 | Copper    | 248   | D    | 5  | 1.50  | 7.50 | 10.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7439-92-1 | Lead      | 280   | D    | 5  | 1.05  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7439-97-6 | Mercury   | 0.16  | U    | 1  | 0.076 | 0.16 | 0.20       | ug/L  | 08/19/25 11:30 | 08/19/25 15:01 | 7470A    |           |
| 7440-02-0 | Nickel    | 100   | D    | 5  | 1.35  | 3.75 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7782-49-2 | Selenium  | 22.5  | UD   | 5  | 14.5  | 22.5 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-22-4 | Silver    | 2.50  | UDN5 |    | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-28-0 | Thallium  | 0.65  | JD   | 5  | 0.30  | 2.50 | 5.00       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-62-2 | Vanadium  | 302   | D    | 5  | 0.39  | 1.25 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |
| 7440-66-6 | Zinc      | 1750  | D    | 5  | 6.25  | 7.50 | 25.0       | ug/L  | 08/18/25 12:30 | 08/20/25 13:02 | 6020B    | 3010A     |

|               |              |                 |       |            |
|---------------|--------------|-----------------|-------|------------|
| Color Before: | Light Yellow | Clarity Before: | Clear | Texture:   |
| Color After:  | Light Yellow | Clarity After:  | Clear | Artifacts: |
| Comments:     | SPLP Mercury |                 |       |            |

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# METAL CALIBRATION DATA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18



**Metals**

- 2a -

**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

**Client:** Nobis Group

**SDG No.:** Q2879

**Contract:** NOBI03

**Lab Code:** ACE

**Initial Calibration Source:** EPA

**Continuing Calibration Source:** PLASMA-PURE

| Sample ID | Analyte | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M  | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|---------|----------------|------------|---------------|---------------------------|----|------------------|------------------|---------------|
| ICV23     | Mercury | 4.11           | 4.0        | 103           | 90 - 110                  | CV | 08/19/2025       | 14:07            | LB136879      |

**Metals**

- 2a -

**INITIAL AND CONTINUING CALIBRATION VERIFICATION**

**Client:** Nobis Group  
**Contract:** NOBI03  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** PLASMA-PURE

**SDG No.:** Q2879  
**Lab Code:** ACE

| Sample ID | Analyte | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M  | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|---------|----------------|------------|---------------|---------------------------|----|------------------|------------------|---------------|
| CCV71     | Mercury | 4.71           | 5.0        | 94            | 90 - 110                  | CV | 08/19/2025       | 14:11            | LB136879      |
| CCV72     | Mercury | 4.70           | 5.0        | 94            | 90 - 110                  | CV | 08/19/2025       | 14:45            | LB136879      |
| CCV73     | Mercury | 4.75           | 5.0        | 95            | 90 - 110                  | CV | 08/19/2025       | 15:14            | LB136879      |
| CCV74     | Mercury | 5.24           | 5.0        | 105           | 90 - 110                  | CV | 08/19/2025       | 15:37            | LB136879      |

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group

SDG No.: Q2879

Contract: NOBI03

Lab Code: ACE

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

| Sample ID | Analyte   | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|------------|---------------|---------------------------|---|------------------|------------------|---------------|
| ICV01     | Antimony  | 408            | 400        | 102           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Arsenic   | 398            | 400        | 100           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Barium    | 1610           | 1600       | 101           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Beryllium | 39.7           | 40.0       | 99            | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Cadmium   | 206            | 200        | 103           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Chromium  | 162            | 160        | 102           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Copper    | 189            | 200        | 94            | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Lead      | 382            | 400        | 96            | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Nickel    | 409            | 400        | 102           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Selenium  | 412            | 400        | 103           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Silver    | 213            | 200        | 106           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Thallium  | 382            | 400        | 96            | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Vanadium  | 404            | 400        | 101           | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |
|           | Zinc      | 380            | 400        | 95            | 90 - 110                  | P | 08/20/2025       | 11:35            | LB136893      |

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group

SDG No.: Q2879

Contract: NOBI03

Lab Code: ACE

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

| Sample ID | Analyte   | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|------------|---------------|---------------------------|---|------------------|------------------|---------------|
| LLICV01   | Antimony  | 2.14           | 2.0        | 107           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Arsenic   | 0.99           | 1.0        | 99            | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Barium    | 10.1           | 10.0       | 101           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Beryllium | 1.11           | 1.0        | 111           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Cadmium   | 0.94           | 1.0        | 94            | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Chromium  | 2.08           | 2.0        | 104           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Copper    | 2.00           | 2.0        | 100           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Lead      | 0.91           | 1.0        | 91            | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Nickel    | 0.92           | 1.0        | 92            | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Selenium  | 5.07           | 5.0        | 101           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Silver    | 1.14           | 1.0        | 114           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Thallium  | 1.00           | 1.0        | 100           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Vanadium  | 5.25           | 5.0        | 105           | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |
|           | Zinc      | 4.04           | 5.0        | 81            | 80 - 120                  | P | 08/20/2025       | 11:50            | LB136893      |

## Metals

- 2a -

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

**Client:** Nobis Group  
**Contract:** NOBI03  
**Initial Calibration Source:** EPA  
**Continuing Calibration Source:** PLASMA-PURE

**SDG No.:** Q2879  
**Lab Code:** ACE

| Sample ID | Analyte   | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|------------|---------------|---------------------------|---|------------------|------------------|---------------|
| CCV01     | Antimony  | 514            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Arsenic   | 500            | 500        | 100           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Barium    | 2590           | 2500       | 104           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Beryllium | 523            | 500        | 105           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Cadmium   | 506            | 500        | 101           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Chromium  | 508            | 500        | 102           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Copper    | 5050           | 5000       | 101           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Lead      | 2570           | 2500       | 103           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Nickel    | 502            | 500        | 100           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Selenium  | 489            | 500        | 98            | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Silver    | 506            | 500        | 101           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Thallium  | 519            | 500        | 104           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Vanadium  | 515            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
|           | Zinc      | 4960           | 5000       | 99            | 90 - 110                  | P | 08/20/2025       | 12:06            | LB136893      |
| CCV02     | Antimony  | 529            | 500        | 106           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Arsenic   | 500            | 500        | 100           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Barium    | 2670           | 2500       | 107           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Beryllium | 531            | 500        | 106           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Cadmium   | 523            | 500        | 105           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Chromium  | 515            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Copper    | 5060           | 5000       | 101           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Lead      | 2570           | 2500       | 103           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Nickel    | 503            | 500        | 101           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Selenium  | 494            | 500        | 99            | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Silver    | 531            | 500        | 106           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Thallium  | 522            | 500        | 104           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Vanadium  | 515            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
|           | Zinc      | 5010           | 5000       | 100           | 90 - 110                  | P | 08/20/2025       | 12:47            | LB136893      |
| CCV03     | Antimony  | 529            | 500        | 106           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Arsenic   | 494            | 500        | 99            | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Barium    | 2680           | 2500       | 107           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Beryllium | 539            | 500        | 108           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Cadmium   | 517            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Chromium  | 524            | 500        | 105           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |

# Metals

- 2a -

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Nobis Group

SDG No.: Q2879

Contract: NOBI03

Lab Code: ACE

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

| Sample ID | Analyte  | Result<br>ug/L | True Value | %<br>Recovery | Acceptance<br>Window (%R) | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|----------|----------------|------------|---------------|---------------------------|---|------------------|------------------|---------------|
| CCV03     | Copper   | 5140           | 5000       | 103           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Lead     | 2610           | 2500       | 104           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Nickel   | 516            | 500        | 103           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Selenium | 484            | 500        | 97            | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Silver   | 519            | 500        | 104           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Thallium | 524            | 500        | 105           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Vanadium | 525            | 500        | 105           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |
|           | Zinc     | 5110           | 5000       | 102           | 90 - 110                  | P | 08/20/2025       | 13:27            | LB136893      |

**Metals**  
**- 2b -**  
**CRDL STANDARD FOR AA & ICP**

**Client:** Nobis Group

**SDG No.:** Q2879

**Contract:** NOBI03

**Lab Code:** ACE

**Initial Calibration Source:** \_\_\_\_\_

**Continuing Calibration Source:** \_\_\_\_\_

| Sample ID  | Analyte   | Result<br>ug/L | True Value<br>ug/L | %<br>Recovery | Acceptance<br>Window (%R) | M  | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|------------|-----------|----------------|--------------------|---------------|---------------------------|----|------------------|------------------|---------------|
| <b>CRA</b> | Mercury   | 0.21           | 0.2                | 103           | 70 - 130                  | CV | 08/19/2025       | 14:16            | LB136879      |
| <b>CRI</b> | Antimony  | 2.19           | 2.0                | 110           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Arsenic   | 1.04           | 1.0                | 104           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Barium    | 10.6           | 10.0               | 106           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Beryllium | 1.19           | 1.0                | 119           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Cadmium   | 0.71           | 1.0                | 71            | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Chromium  | 2.15           | 2.0                | 108           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Copper    | 2.09           | 2.0                | 104           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Lead      | 0.92           | 1.0                | 92            | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Nickel    | 1.02           | 1.0                | 102           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Selenium  | 4.95           | 5.0                | 99            | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Silver    | 1.19           | 1.0                | 119           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Thallium  | 1.03           | 1.0                | 103           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Vanadium  | 5.41           | 5.0                | 108           | 70 - 130                  | P  | 08/20/2025       | 12:15            | LB136893      |
|            | Zinc      | 4.29           | 5.0                | 86            | 50 - 150                  | P  | 08/20/2025       | 12:15            | LB136893      |



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

**Metals**

**- 3a -**

**INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

**Client:** Nobis Group

**SDG No.:** Q2879

**Contract:** NOBI03

**Lab Code:** ACE

| Sample ID | Analyte | Result<br>ug/L | Acceptance<br>Limit | Conc<br>Qual | LOD  | CRQL | M  | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|---------|----------------|---------------------|--------------|------|------|----|------------------|------------------|---------------|
| ICB23     | Mercury | 0.076          | +/-0.2              | U            | 0.16 | 0.20 | CV | 08/19/2025       | 14:09            | LB136879      |



**Metals**

**- 3a -**

**INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

**Client:** Nobis Group **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE

| Sample ID | Analyte | Result<br>ug/L | Acceptance<br>Limit | Conc<br>Qual | LOD  | CRQL | M  | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|---------|----------------|---------------------|--------------|------|------|----|------------------|------------------|---------------|
| CCB71     | Mercury | 0.076          | +/-0.2              | U            | 0.16 | 0.20 | CV | 08/19/2025       | 14:14            | LB136879      |
| CCB72     | Mercury | 0.076          | +/-0.2              | U            | 0.16 | 0.20 | CV | 08/19/2025       | 14:47            | LB136879      |
| CCB73     | Mercury | 0.076          | +/-0.2              | U            | 0.16 | 0.20 | CV | 08/19/2025       | 15:16            | LB136879      |
| CCB74     | Mercury | 0.076          | +/-0.2              | U            | 0.16 | 0.20 | CV | 08/19/2025       | 15:39            | LB136879      |

**Metals**

- 3a -

**INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

**Client:** Nobis Group **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE

| Sample ID | Analyte   | Result<br>ug/L | Acceptance<br>Limit | Conc<br>Qual | LOD  | CRQL | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|---------------------|--------------|------|------|---|------------------|------------------|---------------|
| ICB01     | Antimony  | 0.11           | +/-1                | U            | 0.25 | 2.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Arsenic   | 0.089          | +/-0.5              | U            | 0.25 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Barium    | 0.21           | +/-5                | U            | 1.25 | 10.0 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Beryllium | 0.32           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Cadmium   | 0.34           | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Chromium  | 0.21           | +/-1                | U            | 0.75 | 2.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Copper    | 0.30           | +/-1                | U            | 1.50 | 2.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Lead      | 0.21           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Nickel    | 0.27           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Selenium  | 2.90           | +/-2.5              | U            | 4.50 | 5.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Silver    | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Thallium  | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Vanadium  | 0.077          | +/-2.5              | U            | 0.25 | 5.00 | P | 08/20/2025       | 11:56            | LB136893      |
|           | Zinc      | 1.25           | +/-2.5              | U            | 1.50 | 5.00 | P | 08/20/2025       | 11:56            | LB136893      |

# Metals

- 3a -

## INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Nobis Group SDG No.: Q2879  
Contract: NOBI03 Lab Code: ACE

| Sample ID | Analyte   | Result<br>ug/L | Acceptance<br>Limit | Conc<br>Qual | LOD  | CRQL | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|---------------------|--------------|------|------|---|------------------|------------------|---------------|
| CCB01     | Antimony  | 0.11           | +/-1                | J            | 0.25 | 2.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Arsenic   | 0.089          | +/-0.5              | U            | 0.25 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Barium    | 0.21           | +/-5                | U            | 1.25 | 10.0 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Beryllium | 0.32           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Cadmium   | 0.34           | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Chromium  | 0.21           | +/-1                | U            | 0.75 | 2.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Copper    | 0.30           | +/-1                | U            | 1.50 | 2.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Lead      | 0.21           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Nickel    | 0.27           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Selenium  | 2.90           | +/-2.5              | U            | 4.50 | 5.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Silver    | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Thallium  | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Vanadium  | 0.077          | +/-2.5              | U            | 0.25 | 5.00 | P | 08/20/2025       | 12:09            | LB136893      |
|           | Zinc      | 1.25           | +/-2.5              | U            | 1.50 | 5.00 | P | 08/20/2025       | 12:09            | LB136893      |
| CCB02     | Antimony  | 0.11           | +/-1                | U            | 0.25 | 2.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Arsenic   | 0.089          | +/-0.5              | U            | 0.25 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Barium    | 0.21           | +/-5                | U            | 1.25 | 10.0 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Beryllium | 0.32           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Cadmium   | 0.34           | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Chromium  | 0.21           | +/-1                | U            | 0.75 | 2.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Copper    | 0.30           | +/-1                | U            | 1.50 | 2.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Lead      | 0.21           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Nickel    | 0.27           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Selenium  | 2.90           | +/-2.5              | U            | 4.50 | 5.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Silver    | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Thallium  | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Vanadium  | 0.077          | +/-2.5              | U            | 0.25 | 5.00 | P | 08/20/2025       | 12:52            | LB136893      |
|           | Zinc      | 1.25           | +/-2.5              | U            | 1.50 | 5.00 | P | 08/20/2025       | 12:52            | LB136893      |
| CCB03     | Antimony  | 0.14           | +/-1                | J            | 0.25 | 2.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Arsenic   | 0.089          | +/-0.5              | U            | 0.25 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Barium    | 0.21           | +/-5                | U            | 1.25 | 10.0 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Beryllium | 0.32           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Cadmium   | 0.34           | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Chromium  | 0.21           | +/-1                | U            | 0.75 | 2.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Copper    | 0.30           | +/-1                | U            | 1.50 | 2.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Lead      | 0.21           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Nickel    | 0.27           | +/-0.5              | U            | 0.75 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Selenium  | 2.90           | +/-2.5              | U            | 4.50 | 5.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Silver    | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |

**Metals**

- 3a -

**INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY**

**Client:** Nobis Group **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE

| Sample ID | Analyte  | Result<br>ug/L | Acceptance<br>Limit | Conc<br>Qual | LOD  | CRQL | M | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|----------|----------------|---------------------|--------------|------|------|---|------------------|------------------|---------------|
| CCB03     | Thallium | 0.060          | +/-0.5              | U            | 0.50 | 1.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Vanadium | 0.077          | +/-2.5              | U            | 0.25 | 5.00 | P | 08/20/2025       | 13:30            | LB136893      |
|           | Zinc     | 1.25           | +/-2.5              | U            | 1.50 | 5.00 | P | 08/20/2025       | 13:30            | LB136893      |

**Metals**  
**- 3b -**  
**PREPARATION BLANK SUMMARY**

**Client:** Nobis Group

**SDG No.:** Q2879

**Instrument:** CV1

| Sample ID         | Analyte | Result<br>(ug/L) | Acceptance<br>Limit | Conc<br>Qual         | LOD<br>ug/L | CRQL<br>ug/L    | M  | Analysis<br>Date  | Analysis<br>Time  | Run      |
|-------------------|---------|------------------|---------------------|----------------------|-------------|-----------------|----|-------------------|-------------------|----------|
| <b>PB169293BL</b> |         | <b>WATER</b>     |                     | <b>Batch Number:</b> |             | <b>PB169293</b> |    | <b>Prep Date:</b> | <b>08/19/2025</b> |          |
|                   | Mercury | 0.076            | <0.2                | U                    | 0.16        | 0.20            | CV | 08/19/2025        | 14:25             | LB136879 |
| Sample ID         | Analyte | Result<br>(ug/L) | Acceptance<br>Limit | Conc<br>Qual         | LOD<br>ug/L | CRQL<br>ug/L    | M  | Analysis<br>Date  | Analysis<br>Time  | Run      |
| <b>PB169293TB</b> |         | <b>WATER</b>     |                     | <b>Batch Number:</b> |             | <b>PB169293</b> |    | <b>Prep Date:</b> | <b>08/19/2025</b> |          |
|                   | Mercury | 0.076            | <0.2                | U                    | 0.16        | 0.20            | CV | 08/19/2025        | 15:26             | LB136879 |

**Metals**  
**- 3b -**  
**PREPARATION BLANK SUMMARY**

**Client:** Nobis Group

**SDG No.:** Q2879

**Instrument:** P7

| Sample ID         | Analyte   | Result<br>(ug/L) | Acceptance<br>Limit | Conc<br>Qual         | LOD<br>ug/L | CRQL<br>ug/L    | M | Analysis<br>Date  | Analysis<br>Time  | Run      |
|-------------------|-----------|------------------|---------------------|----------------------|-------------|-----------------|---|-------------------|-------------------|----------|
| <b>PB169300BL</b> |           | <b>WATER</b>     |                     | <b>Batch Number:</b> |             | <b>PB169300</b> |   | <b>Prep Date:</b> | <b>08/18/2025</b> |          |
|                   | Antimony  | 0.11             | <1                  | U                    | 0.25        | 2.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Arsenic   | 0.089            | <0.5                | U                    | 0.25        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Barium    | 0.21             | <5                  | U                    | 1.25        | 10.0            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Beryllium | 0.32             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Cadmium   | 0.34             | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Chromium  | 0.21             | <1                  | U                    | 0.75        | 2.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Copper    | 0.30             | <1                  | U                    | 1.50        | 2.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Lead      | 0.21             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Nickel    | 0.27             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Selenium  | 2.90             | <2.5                | U                    | 4.50        | 5.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Silver    | 0.060            | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Thallium  | 0.060            | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Vanadium  | 0.077            | <2.5                | U                    | 0.25        | 5.00            | P | 08/20/2025        | 12:19             | LB136893 |
|                   | Zinc      | 1.25             | <2.5                | U                    | 1.50        | 5.00            | P | 08/20/2025        | 12:19             | LB136893 |
| Sample ID         | Analyte   | Result<br>(ug/L) | Acceptance<br>Limit | Conc<br>Qual         | LOD<br>ug/L | CRQL<br>ug/L    | M | Analysis<br>Date  | Analysis<br>Time  | Run      |
| <b>PB169300TB</b> |           | <b>WATER</b>     |                     | <b>Batch Number:</b> |             | <b>PB169300</b> |   | <b>Prep Date:</b> | <b>08/18/2025</b> |          |
|                   | Antimony  | 0.13             | <1                  | J                    | 0.25        | 2.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Arsenic   | 0.089            | <0.5                | U                    | 0.25        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Barium    | 0.21             | <5                  | U                    | 1.25        | 10.0            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Beryllium | 0.32             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Cadmium   | 0.34             | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Chromium  | 0.21             | <1                  | U                    | 0.75        | 2.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Copper    | 0.30             | <1                  | U                    | 1.50        | 2.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Lead      | 0.21             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Nickel    | 0.27             | <0.5                | U                    | 0.75        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Selenium  | 2.90             | <2.5                | U                    | 4.50        | 5.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Silver    | 0.060            | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Thallium  | 0.060            | <0.5                | U                    | 0.50        | 1.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Vanadium  | 0.077            | <2.5                | U                    | 0.25        | 5.00            | P | 08/20/2025        | 12:25             | LB136893 |
|                   | Zinc      | 1.25             | <2.5                | U                    | 1.50        | 5.00            | P | 08/20/2025        | 12:25             | LB136893 |

**Metals**  
- 4 -  
**INTERFERENCE CHECK SAMPLE**

|                                   |                                 |
|-----------------------------------|---------------------------------|
| <b>Client:</b> <u>Nobis Group</u> | <b>SDG No.:</b> <u>Q2879</u>    |
| <b>Contract:</b> <u>NOBI03</u>    | <b>Lab Code:</b> <u>ACE</u>     |
| <b>ICS Source:</b> <u>EPA</u>     | <b>Instrument ID:</b> <u>P7</u> |

| Sample ID | Analyte   | Result<br>ug/L | True Value<br>ug/L | %<br>Recovery | Low<br>Limit<br>(ug/L) | High<br>Limit<br>(ug/L) | Analysis<br>Date | Analysis<br>Time | Run<br>Number |
|-----------|-----------|----------------|--------------------|---------------|------------------------|-------------------------|------------------|------------------|---------------|
| ICSA01    | Antimony  | 1.14           | 1.5                | 76            | -2.5                   | 5.5                     | 08/20/2025       | 12:00            | LB136893      |
|           | Arsenic   | 0.32           | 0.1                | 320           | -1.9                   | 2.1                     | 08/20/2025       | 12:00            | LB136893      |
|           | Barium    | 1.40           | 1.2                | 117           | -18.8                  | 21.2                    | 08/20/2025       | 12:00            | LB136893      |
|           | Beryllium | 0.29           |                    |               | -2                     | 2                       | 08/20/2025       | 12:00            | LB136893      |
|           | Cadmium   | 0              | 0.7                |               | -1.3                   | 2.7                     | 08/20/2025       | 12:00            | LB136893      |
|           | Chromium  | 20.2           | 21.0               | 96            | 17                     | 25                      | 08/20/2025       | 12:00            | LB136893      |
|           | Copper    | 7.55           | 8.0                | 94            | 4                      | 12                      | 08/20/2025       | 12:00            | LB136893      |
|           | Lead      | 4.16           | 4.0                | 104           | 2                      | 6                       | 08/20/2025       | 12:00            | LB136893      |
|           | Nickel    | 5.30           | 6.0                | 88            | 4                      | 8                       | 08/20/2025       | 12:00            | LB136893      |
|           | Selenium  | 0.34           | 0.3                | 113           | -9.7                   | 10                      | 08/20/2025       | 12:00            | LB136893      |
|           | Silver    | 0.040          |                    |               | -2                     | 2                       | 08/20/2025       | 12:00            | LB136893      |
|           | Thallium  | 0.010          |                    |               | -2                     | 2                       | 08/20/2025       | 12:00            | LB136893      |
|           | Vanadium  | 0.20           | 0.5                | 40            | -9.5                   | 10.5                    | 08/20/2025       | 12:00            | LB136893      |
|           | Zinc      | 9.07           | 11.0               | 82            | 1                      | 21                      | 08/20/2025       | 12:00            | LB136893      |
| ICSAB01   | Antimony  | 21.3           | 22.0               | 97            | 18                     | 26                      | 08/20/2025       | 12:03            | LB136893      |
|           | Arsenic   | 19.3           | 19.0               | 102           | 16.2                   | 21.9                    | 08/20/2025       | 12:03            | LB136893      |
|           | Barium    | 21.7           | 22.0               | 99            | 2                      | 42                      | 08/20/2025       | 12:03            | LB136893      |
|           | Beryllium | 20.4           | 19.0               | 107           | 16.2                   | 21.9                    | 08/20/2025       | 12:03            | LB136893      |
|           | Cadmium   | 20.3           | 20.0               | 102           | 17                     | 23                      | 08/20/2025       | 12:03            | LB136893      |
|           | Chromium  | 40.4           | 40.0               | 101           | 34                     | 46                      | 08/20/2025       | 12:03            | LB136893      |
|           | Copper    | 26.0           | 25.0               | 104           | 21                     | 29                      | 08/20/2025       | 12:03            | LB136893      |
|           | Lead      | 24.9           | 25.0               | 100           | 21.3                   | 28.8                    | 08/20/2025       | 12:03            | LB136893      |
|           | Nickel    | 25.4           | 24.0               | 106           | 20.4                   | 27.6                    | 08/20/2025       | 12:03            | LB136893      |
|           | Selenium  | 19.4           | 19.0               | 102           | 9                      | 29                      | 08/20/2025       | 12:03            | LB136893      |
|           | Silver    | 20.0           | 18.0               | 111           | 15.3                   | 20.7                    | 08/20/2025       | 12:03            | LB136893      |
|           | Thallium  | 22.1           | 21.0               | 105           | 17.9                   | 24.2                    | 08/20/2025       | 12:03            | LB136893      |
|           | Vanadium  | 20.1           | 19.0               | 106           | 9                      | 29                      | 08/20/2025       | 12:03            | LB136893      |
|           | Zinc      | 28.3           | 29.0               | 98            | 19                     | 39                      | 08/20/2025       | 12:03            | LB136893      |



# METAL QC DATA

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**metals**  
**- 5a -**  
**MATRIX SPIKE SUMMARY**

**client:** Nobis Group **level:** low **sdg no.:** Q2879  
**contract:** NOBI03 **lab code:** ACE  
**matrix:** Water **sample id:** Q2879-18 **client id:** OU4-TS-GRILLO-TSCP11-081425MS  
**Percent Solids for Sample:** NA **Spiked ID:** Q2879-18MS **Percent Solids for Spike Sample:** NA

| Analyte   | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C  | Spike<br>Added | %<br>Recovery | Qual | M  |
|-----------|-------|------------------------|------------------|---|------------------|----|----------------|---------------|------|----|
| Antimony  | ug/L  | 85 - 117               | 474              | D | 0.75             | JD | 500            | 95            |      | P  |
| Arsenic   | ug/L  | 84 - 116               | 693              | D | 31.9             | D  | 500            | 132           | N    | P  |
| Barium    | ug/L  | 86 - 114               | 2260             | D | 132              | D  | 2500           | 85            | N    | P  |
| Beryllium | ug/L  | 83 - 121               | 476              | D | 12.2             | D  | 500            | 93            |      | P  |
| Cadmium   | ug/L  | 87 - 115               | 488              | D | 9.70             | D  | 500            | 96            |      | P  |
| Chromium  | ug/L  | 85 - 116               | 518              | D | 64.5             | D  | 500            | 91            |      | P  |
| Copper    | ug/L  | 85 - 118               | 4730             | D | 248              | D  | 5000           | 90            |      | P  |
| Lead      | ug/L  | 88 - 115               | 2560             | D | 280              | D  | 2500           | 91            |      | P  |
| Nickel    | ug/L  | 85 - 117               | 569              | D | 100              | D  | 500            | 94            |      | P  |
| Mercury   | ug/L  | 82 - 119               | 4.03             |   | 0.20             | U  | 4.0            | 101           |      | CV |
| Selenium  | ug/L  | 80 - 120               | 442              | D | 25.0             | UD | 500            | 88            |      | P  |
| Silver    | ug/L  | 85 - 116               | 79.4             | D | 5.00             | UD | 500            | 16            | N    | P  |
| Thallium  | ug/L  | 82 - 116               | 424              | D | 0.65             | JD | 500            | 85            |      | P  |
| Vanadium  | ug/L  | 86 - 115               | 749              | D | 302              | D  | 500            | 89            |      | P  |
| Zinc      | ug/L  | 83 - 119               | 6210             | D | 1750             | D  | 5000           | 89            |      | P  |

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

|                                             |                                      |                                                         |
|---------------------------------------------|--------------------------------------|---------------------------------------------------------|
| <b>client:</b> <u>Nobis Group</u>           | <b>level:</b> <u>low</u>             | <b>sdg no.:</b> <u>Q2879</u>                            |
| <b>contract:</b> <u>NOBI03</u>              |                                      | <b>lab code:</b> <u>ACE</u>                             |
| <b>matrix:</b> <u>Water</u>                 | <b>sample id:</b> <u>Q2879-18</u>    | <b>client id:</b> <u>OU4-TS-GRILLO-TSCP11-081425MSD</u> |
| <b>Percent Solids for Sample:</b> <u>NA</u> | <b>Spiked ID:</b> <u>Q2879-18MSD</u> | <b>Percent Solids for Spike Sample:</b> <u>NA</u>       |

| Analyte   | Units | Acceptance<br>Limit %R | MSD<br>Result | C | Sample<br>Result | C  | Spike<br>Added | %<br>Recovery | Qual | M  |
|-----------|-------|------------------------|---------------|---|------------------|----|----------------|---------------|------|----|
| Antimony  | ug/L  | 85 - 117               | 484           | D | 0.75             | JD | 500            | 97            |      | P  |
| Arsenic   | ug/L  | 84 - 116               | 711           | D | 31.9             | D  | 500            | 136           | N    | P  |
| Barium    | ug/L  | 86 - 114               | 2310          | D | 132              | D  | 2500           | 87            |      | P  |
| Beryllium | ug/L  | 83 - 121               | 483           | D | 12.2             | D  | 500            | 94            |      | P  |
| Cadmium   | ug/L  | 87 - 115               | 495           | D | 9.70             | D  | 500            | 97            |      | P  |
| Chromium  | ug/L  | 85 - 116               | 527           | D | 64.5             | D  | 500            | 93            |      | P  |
| Copper    | ug/L  | 85 - 118               | 4820          | D | 248              | D  | 5000           | 92            |      | P  |
| Lead      | ug/L  | 88 - 115               | 2660          | D | 280              | D  | 2500           | 95            |      | P  |
| Nickel    | ug/L  | 85 - 117               | 580           | D | 100              | D  | 500            | 96            |      | P  |
| Mercury   | ug/L  | 82 - 119               | 4.00          |   | 0.20             | U  | 4.0            | 100           |      | CV |
| Selenium  | ug/L  | 80 - 120               | 455           | D | 25.0             | UD | 500            | 91            |      | P  |
| Silver    | ug/L  | 85 - 116               | 80.4          | D | 5.00             | UD | 500            | 16            | N    | P  |
| Thallium  | ug/L  | 82 - 116               | 434           | D | 0.65             | JD | 500            | 87            |      | P  |
| Vanadium  | ug/L  | 86 - 115               | 765           | D | 302              | D  | 500            | 93            |      | P  |
| Zinc      | ug/L  | 83 - 119               | 6340          | D | 1750             | D  | 5000           | 92            |      | P  |

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

|                   |                    |                   |                                     |
|-------------------|--------------------|-------------------|-------------------------------------|
| <b>Client:</b>    | <u>Nobis Group</u> | <b>SDG No.:</b>   | <u>Q2879</u>                        |
| <b>Contract:</b>  | <u>NOBI03</u>      | <b>Lab Code:</b>  | <u>ACE</u>                          |
| <b>Matrix:</b>    | <u>Water</u>       | <b>Level:</b>     | <u>LOW</u>                          |
| <b>Sample ID:</b> | <u>Q2879-18</u>    | <b>Client ID:</b> | <u>OU4-TS-GRILLO-TSCP11-081425A</u> |
|                   | <b>Spiked ID:</b>  | <u>Q2879-18A</u>  |                                     |

| Analyte | Units | Acceptance<br>Limit %R | Spiked<br>Result | C | Sample<br>Result | C  | Spike<br>Added | %<br>Recovery | Qual | M |
|---------|-------|------------------------|------------------|---|------------------|----|----------------|---------------|------|---|
| Arsenic | ug/L  | 84 - 116               | 728              | D | 31.9             | D  | 500            | 139           | N    | P |
| Barium  | ug/L  | 86 - 114               | 2260             | D | 132              | D  | 2500           | 85            | N    | P |
| Silver  | ug/L  | 85 - 116               | 79.3             | D | 5.00             | UD | 500            | 16            | N    | P |

**Metals**

- 6 -

**DUPLICATE SAMPLE SUMMARY**

**Client:** Nobis Group **Level:** LOW **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE  
**Matrix:** Water **Sample ID:** Q2879-18 **Client ID:** OU4-TS-GRILLO-TSCP11-081425DUP  
**Percent Solids for Sample:** NA **Duplicate ID** Q2879-18DUP **Percent Solids for Spike Sample:** NA

| Analyte   | Units | Acceptance Limit | Sample Result | C  | Duplicate Result | C  | RPD | Qual | M  |
|-----------|-------|------------------|---------------|----|------------------|----|-----|------|----|
| Antimony  | ug/L  | 20               | 0.75          | JD | 0.80             | JD | 6   |      | P  |
| Arsenic   | ug/L  | 20               | 31.9          | D  | 32.5             | D  | 2   |      | P  |
| Barium    | ug/L  | 20               | 132           | D  | 129              | D  | 2   |      | P  |
| Beryllium | ug/L  | 20               | 12.2          | D  | 12.9             | D  | 6   |      | P  |
| Cadmium   | ug/L  | 20               | 9.70          | D  | 9.40             | D  | 3   |      | P  |
| Chromium  | ug/L  | 20               | 64.5          | D  | 65.3             | D  | 1   |      | P  |
| Copper    | ug/L  | 20               | 248           | D  | 252              | D  | 2   |      | P  |
| Lead      | ug/L  | 20               | 280           | D  | 288              | D  | 3   |      | P  |
| Nickel    | ug/L  | 20               | 100           | D  | 103              | D  | 3   |      | P  |
| Mercury   | ug/L  | 20               | 0.20          | U  | 0.20             | U  |     |      | CV |
| Selenium  | ug/L  | 20               | 25.0          | UD | 25.0             | UD |     |      | P  |
| Silver    | ug/L  | 20               | 5.00          | UD | 5.00             | UD |     |      | P  |
| Thallium  | ug/L  | 20               | 0.65          | JD | 0.65             | JD | 0   |      | P  |
| Vanadium  | ug/L  | 20               | 302           | D  | 307              | D  | 2   |      | P  |
| Zinc      | ug/L  | 20               | 1750          | D  | 1780             | D  | 2   |      | P  |

“A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit”

**Metals**

- 6 -

**DUPLICATE SAMPLE SUMMARY**

**Client:** Nobis Group **Level:** LOW **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE  
**Matrix:** Water **Sample ID:** Q2879-18MS **Client ID:** OU4-TS-GRILLO-TSCP11-081425MSD  
**Percent Solids for Sample:** NA **Duplicate ID** Q2879-18MSD **Percent Solids for Spike Sample:** NA

| Analyte   | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M  |
|-----------|-------|------------------|---------------|---|------------------|---|-----|------|----|
| Antimony  | ug/L  | 20               | 474           | D | 484              | D | 2   |      | P  |
| Arsenic   | ug/L  | 20               | 693           | D | 711              | D | 3   |      | P  |
| Barium    | ug/L  | 20               | 2260          | D | 2310             | D | 2   |      | P  |
| Beryllium | ug/L  | 20               | 476           | D | 483              | D | 1   |      | P  |
| Cadmium   | ug/L  | 20               | 488           | D | 495              | D | 1   |      | P  |
| Chromium  | ug/L  | 20               | 518           | D | 527              | D | 2   |      | P  |
| Copper    | ug/L  | 20               | 4730          | D | 4820             | D | 2   |      | P  |
| Lead      | ug/L  | 20               | 2560          | D | 2660             | D | 4   |      | P  |
| Nickel    | ug/L  | 20               | 569           | D | 580              | D | 2   |      | P  |
| Mercury   | ug/L  | 20               | 4.03          |   | 4.00             |   | 1   |      | CV |
| Selenium  | ug/L  | 20               | 442           | D | 455              | D | 3   |      | P  |
| Silver    | ug/L  | 20               | 79.4          | D | 80.4             | D | 1   |      | P  |
| Thallium  | ug/L  | 20               | 424           | D | 434              | D | 2   |      | P  |
| Vanadium  | ug/L  | 20               | 749           | D | 765              | D | 2   |      | P  |
| Zinc      | ug/L  | 20               | 6210          | D | 6340             | D | 2   |      | P  |

“A control limit of  $\pm 20\%$  RPD for each matrix applies for sample values greater than 10 times Detection Limit”

**Metals**

- 7 -

**LABORATORY CONTROL SAMPLE SUMMARY**

**Client:** Nobis Group

**SDG No.:** Q2879

**Contract:** NOBI03

**Lab Code:** ACE

| Analyte               | Units | True Value | Result | C | %<br>Recovery | Acceptance<br>Limits | M  |
|-----------------------|-------|------------|--------|---|---------------|----------------------|----|
| PB169293BS<br>Mercury | ug/L  | 4.0        | 4.15   |   | 104           | 82 - 119             | CV |

**Metals**

- 7 -

**LABORATORY CONTROL SAMPLE SUMMARY**

|                  |                    |                  |              |
|------------------|--------------------|------------------|--------------|
| <b>Client:</b>   | <u>Nobis Group</u> | <b>SDG No.:</b>  | <u>Q2879</u> |
| <b>Contract:</b> | <u>NOBI03</u>      | <b>Lab Code:</b> | <u>ACE</u>   |

| Analyte    | Units | True Value | Result | C | % Recovery | Acceptance Limits | M |
|------------|-------|------------|--------|---|------------|-------------------|---|
| PB169300BS |       |            |        |   |            |                   |   |
| Antimony   | ug/L  | 500        | 515    |   | 103        | 85 - 117          | P |
| Arsenic    | ug/L  | 500        | 501    |   | 100        | 84 - 116          | P |
| Barium     | ug/L  | 2500       | 2540   |   | 102        | 86 - 114          | P |
| Beryllium  | ug/L  | 500        | 515    |   | 103        | 83 - 121          | P |
| Cadmium    | ug/L  | 500        | 517    |   | 103        | 87 - 115          | P |
| Chromium   | ug/L  | 500        | 514    |   | 103        | 85 - 116          | P |
| Copper     | ug/L  | 5000       | 5140   |   | 103        | 85 - 118          | P |
| Lead       | ug/L  | 2500       | 2480   |   | 99         | 88 - 115          | P |
| Nickel     | ug/L  | 500        | 513    |   | 103        | 85 - 117          | P |
| Selenium   | ug/L  | 500        | 499    |   | 100        | 80 - 120          | P |
| Silver     | ug/L  | 500        | 516    |   | 103        | 85 - 116          | P |
| Thallium   | ug/L  | 500        | 502    |   | 100        | 82 - 116          | P |
| Vanadium   | ug/L  | 500        | 514    |   | 103        | 86 - 115          | P |
| Zinc       | ug/L  | 5000       | 5230   |   | 105        | 83 - 119          | P |

## FORM 8A

## ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group

Contract: NOBI03

Lab Code: ACE

SDG No.: Q2879

Instrument ID: P7

Start Date : 08/20/2025

Run Number: LB136893

End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Non-Collision Cell |   |                 |   |                |   |                  |   |                  |   |
|-----------------|--------------------|------|-----------------------------------------------|---|-----------------|---|----------------|---|------------------|---|------------------|---|
|                 |                    |      | Element<br>6Li                                | Q | Element<br>45Sc | Q | Element<br>89Y | Q | Element<br>103Rh | Q | Element<br>159Tb | Q |
| S0              | S0                 | 1049 | 100                                           |   | 100             |   | 100            |   | 100              |   | 100              |   |
| S2              | S2                 | 1056 | 102                                           |   | 99              |   | 99             |   | 99               |   | 100              |   |
| S3              | S3                 | 1059 | 103                                           |   | 98              |   | 98             |   | 97               |   | 98               |   |
| S4              | S4                 | 1102 | 105                                           |   | 99              |   | 100            |   | 99               |   | 101              |   |
| S5              | S5                 | 1105 | 104                                           |   | 97              |   | 98             |   | 98               |   | 99               |   |
| S6              | S6                 | 1108 | 106                                           |   | 99              |   | 100            |   | 99               |   | 103              |   |
| S7              | S7                 | 1111 | 107                                           |   | 103             |   | 105            |   | 102              |   | 106              |   |
| S8              | S8                 | 1114 | 104                                           |   | 103             |   | 102            |   | 96               |   | 102              |   |
| ICV01           | ICV01              | 1135 | 95                                            |   | 101             |   | 102            |   | 102              |   | 100              |   |
| LLICV01         | LLICV01            | 1150 | 96                                            |   | 99              |   | 101            |   | 100              |   | 99               |   |
| ICB01           | ICB01              | 1156 | 95                                            |   | 99              |   | 100            |   | 100              |   | 97               |   |
| ICSA01          | ICSA01             | 1200 | 97                                            |   | 98              |   | 101            |   | 98               |   | 100              |   |
| ICSAB01         | ICSAB01            | 1203 | 95                                            |   | 103             |   | 107            |   | 104              |   | 106              |   |
| CCV01           | CCV01              | 1206 | 98                                            |   | 106             |   | 110            |   | 105              |   | 109              |   |
| CCB01           | CCB01              | 1209 | 92                                            |   | 102             |   | 106            |   | 105              |   | 102              |   |
| CRI             | CRI                | 1215 | 93                                            |   | 102             |   | 104            |   | 104              |   | 101              |   |
| PB169300BL      | PB169300BL         | 1219 | 91                                            |   | 101             |   | 103            |   | 102              |   | 99               |   |
| PB169300BS      | PB169300BS         | 1222 | 95                                            |   | 102             |   | 106            |   | 103              |   | 104              |   |
| PB169300TB      | PB169300TB         | 1225 | 91                                            |   | 99              |   | 102            |   | 101              |   | 99               |   |
| Q2879-02        | OU4-TS-GRIL        | 1228 | 93                                            |   | 104             |   | 115            |   | 105              |   | 104              |   |
| Q2879-04        | OU4-TS-GRIL        | 1232 | 89                                            |   | 103             |   | 113            |   | 105              |   | 103              |   |
| Q2879-06        | OU4-TS-GRIL        | 1235 | 87                                            |   | 102             |   | 113            |   | 106              |   | 103              |   |
| Q2879-08        | OU4-TS-GRIL        | 1238 | 87                                            |   | 103             |   | 115            |   | 106              |   | 103              |   |
| Q2879-10        | OU4-TS-GRIL        | 1241 | 87                                            |   | 103             |   | 111            |   | 107              |   | 104              |   |
| Q2879-12        | OU4-TS-GRIL        | 1244 | 87                                            |   | 104             |   | 117            |   | 109              |   | 107              |   |
| CCV02           | CCV02              | 1247 | 92                                            |   | 106             |   | 110            |   | 105              |   | 106              |   |
| CCB02           | CCB02              | 1252 | 90                                            |   | 100             |   | 103            |   | 104              |   | 101              |   |
| Q2879-14        | OU4-TS-GRIL        | 1256 | 92                                            |   | 103             |   | 114            |   | 106              |   | 105              |   |
| Q2879-16        | OU4-TS-GRIL        | 1259 | 89                                            |   | 104             |   | 117            |   | 107              |   | 105              |   |
| Q2879-18        | OU4-TS-GRIL        | 1302 | 88                                            |   | 104             |   | 117            |   | 106              |   | 103              |   |
| Q2879-18DUP     | OU4-TS-GRIL        | 1305 | 88                                            |   | 103             |   | 116            |   | 106              |   | 105              |   |
| Q2879-18L       | OU4-TS-GRIL        | 1308 | 87                                            |   | 104             |   | 109            |   | 106              |   | 103              |   |
| Q2879-18MS      | OU4-TS-GRIL        | 1311 | 89                                            |   | 105             |   | 117            |   | 109              |   | 106              |   |
| Q2879-18MSD     | OU4-TS-GRIL        | 1314 | 88                                            |   | 103             |   | 114            |   | 106              |   | 106              |   |
| Q2879-18A       | OU4-TS-GRIL        | 1317 | 88                                            |   | 106             |   | 117            |   | 108              |   | 105              |   |
| CCV03           | CCV03              | 1327 | 91                                            |   | 108             |   | 112            |   | 106              |   | 107              |   |

Internal Standard %RI Limit: 30 - 120



FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group

Contract: NOBI03

Lab Code: ACE

SDG No.: Q2879

Instrument ID: P7

Start Date : 08/20/2025

Run Number: LB136893

End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Non-Collision Cell |   |                 |   |                |   |                  |   |                  |   |
|-----------------|--------------------|------|-----------------------------------------------|---|-----------------|---|----------------|---|------------------|---|------------------|---|
|                 |                    |      | Element<br>6Li                                | Q | Element<br>45Sc | Q | Element<br>89Y | Q | Element<br>103Rh | Q | Element<br>159Tb | Q |
| CCB03           | CCB03              | 1330 | 88                                            |   | 100             |   | 105            |   | 105              |   | 102              |   |

## FORM 8A

## ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group

Contract: NOBI03

Lab Code: ACE

SDG No.: Q2879

Instrument ID: P7

Start Date : 08/20/2025

Run Number: LB136893

End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Collision Cell |   |                |   |                  |   |                  |   |                  |   |
|-----------------|--------------------|------|-------------------------------------------|---|----------------|---|------------------|---|------------------|---|------------------|---|
|                 |                    |      | Element<br>45Sc                           | Q | Element<br>89Y | Q | Element<br>103Rh | Q | Element<br>159Tb | Q | Element<br>165Ho | Q |
| S0              | S0                 | 1049 | 100                                       |   | 100            |   | 100              |   | 100              |   | 100              |   |
| S2              | S2                 | 1056 | 101                                       |   | 99             |   | 99               |   | 100              |   | 102              |   |
| S3              | S3                 | 1059 | 98                                        |   | 97             |   | 98               |   | 98               |   | 101              |   |
| S4              | S4                 | 1102 | 100                                       |   | 99             |   | 98               |   | 99               |   | 101              |   |
| S5              | S5                 | 1105 | 99                                        |   | 97             |   | 98               |   | 99               |   | 103              |   |
| S6              | S6                 | 1108 | 100                                       |   | 98             |   | 99               |   | 101              |   | 105              |   |
| S7              | S7                 | 1111 | 104                                       |   | 103            |   | 102              |   | 105              |   | 108              |   |
| S8              | S8                 | 1114 | 105                                       |   | 105            |   | 97               |   | 103              |   | 107              |   |
| ICV01           | ICV01              | 1135 | 102                                       |   | 102            |   | 103              |   | 101              |   | 103              |   |
| LLICV01         | LLICV01            | 1150 | 98                                        |   | 99             |   | 99               |   | 99               |   | 101              |   |
| ICB01           | ICB01              | 1156 | 97                                        |   | 98             |   | 98               |   | 97               |   | 100              |   |
| ICSA01          | ICSA01             | 1200 | 100                                       |   | 100            |   | 99               |   | 100              |   | 106              |   |
| ICSAB01         | ICSAB01            | 1203 | 104                                       |   | 105            |   | 102              |   | 104              |   | 108              |   |
| CCV01           | CCV01              | 1206 | 107                                       |   | 108            |   | 103              |   | 107              |   | 111              |   |
| CCB01           | CCB01              | 1209 | 100                                       |   | 103            |   | 103              |   | 102              |   | 105              |   |
| CRI             | CRI                | 1215 | 102                                       |   | 103            |   | 103              |   | 101              |   | 106              |   |
| PB169300BL      | PB169300BL         | 1219 | 101                                       |   | 103            |   | 103              |   | 100              |   | 104              |   |
| PB169300BS      | PB169300BS         | 1222 | 103                                       |   | 104            |   | 103              |   | 104              |   | 108              |   |
| PB169300TB      | PB169300TB         | 1225 | 100                                       |   | 102            |   | 101              |   | 100              |   | 104              |   |
| Q2879-02        | OU4-TS-GRIL        | 1228 | 105                                       |   | 113            |   | 106              |   | 106              |   | 110              |   |
| Q2879-04        | OU4-TS-GRIL        | 1232 | 102                                       |   | 111            |   | 104              |   | 103              |   | 106              |   |
| Q2879-06        | OU4-TS-GRIL        | 1235 | 103                                       |   | 113            |   | 107              |   | 105              |   | 108              |   |
| Q2879-08        | OU4-TS-GRIL        | 1238 | 105                                       |   | 114            |   | 107              |   | 107              |   | 111              |   |
| Q2879-10        | OU4-TS-GRIL        | 1241 | 105                                       |   | 111            |   | 107              |   | 106              |   | 111              |   |
| Q2879-12        | OU4-TS-GRIL        | 1244 | 106                                       |   | 115            |   | 108              |   | 108              |   | 112              |   |
| CCV02           | CCV02              | 1247 | 107                                       |   | 108            |   | 104              |   | 108              |   | 112              |   |
| CCB02           | CCB02              | 1252 | 99                                        |   | 102            |   | 102              |   | 101              |   | 104              |   |
| Q2879-14        | OU4-TS-GRIL        | 1256 | 104                                       |   | 112            |   | 107              |   | 106              |   | 111              |   |
| Q2879-16        | OU4-TS-GRIL        | 1259 | 104                                       |   | 115            |   | 108              |   | 106              |   | 111              |   |
| Q2879-18        | OU4-TS-GRIL        | 1302 | 103                                       |   | 115            |   | 108              |   | 107              |   | 111              |   |
| Q2879-18DUP     | OU4-TS-GRIL        | 1305 | 102                                       |   | 114            |   | 107              |   | 107              |   | 110              |   |
| Q2879-18L       | OU4-TS-GRIL        | 1308 | 102                                       |   | 107            |   | 106              |   | 105              |   | 109              |   |
| Q2879-18MS      | OU4-TS-GRIL        | 1311 | 105                                       |   | 114            |   | 107              |   | 107              |   | 112              |   |
| Q2879-18MSD     | OU4-TS-GRIL        | 1314 | 104                                       |   | 113            |   | 107              |   | 106              |   | 110              |   |
| Q2879-18A       | OU4-TS-GRIL        | 1317 | 104                                       |   | 114            |   | 110              |   | 108              |   | 112              |   |
| CCV03           | CCV03              | 1327 | 106                                       |   | 109            |   | 104              |   | 109              |   | 114              |   |

Internal Standard %RI Limit: 30 - 120

FORM 8A

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group

Contract: NOBI03

Lab Code: ACE

SDG No.: Q2879

Instrument ID: P7

Start Date : 08/20/2025

Run Number: LB136893

End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Collision Cell |   |                |   |                  |   |                  |   |                  |   |
|-----------------|--------------------|------|-------------------------------------------|---|----------------|---|------------------|---|------------------|---|------------------|---|
|                 |                    |      | Element<br>45Sc                           | Q | Element<br>89Y | Q | Element<br>103Rh | Q | Element<br>159Tb | Q | Element<br>165Ho | Q |
| CCB03           | CCB03              | 1330 | 99                                        |   | 103            |   | 103              |   | 103              |   | 106              |   |

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group  
Lab Code: ACE  
Instrument ID: P7  
Run Number: LB136893

Contract: NOBI03  
SDG No.: Q2879  
Start Date : 08/20/2025  
End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Non-Collision Cell |   |                  |   |         |   |         |   |         |   |
|-----------------|--------------------|------|-----------------------------------------------|---|------------------|---|---------|---|---------|---|---------|---|
|                 |                    |      | Element<br>165Ho                              | Q | Element<br>209Bi | Q | Element | Q | Element | Q | Element | Q |
| S0              | S0                 | 1049 | 100                                           |   | 100              |   |         |   |         |   |         |   |
| S2              | S2                 | 1056 | 100                                           |   | 102              |   |         |   |         |   |         |   |
| S3              | S3                 | 1059 | 98                                            |   | 100              |   |         |   |         |   |         |   |
| S4              | S4                 | 1102 | 101                                           |   | 102              |   |         |   |         |   |         |   |
| S5              | S5                 | 1105 | 100                                           |   | 100              |   |         |   |         |   |         |   |
| S6              | S6                 | 1108 | 104                                           |   | 104              |   |         |   |         |   |         |   |
| S7              | S7                 | 1111 | 106                                           |   | 106              |   |         |   |         |   |         |   |
| S8              | S8                 | 1114 | 104                                           |   | 97               |   |         |   |         |   |         |   |
| ICV01           | ICV01              | 1135 | 100                                           |   | 100              |   |         |   |         |   |         |   |
| LLICV01         | LLICV01            | 1150 | 99                                            |   | 98               |   |         |   |         |   |         |   |
| ICB01           | ICB01              | 1156 | 99                                            |   | 98               |   |         |   |         |   |         |   |
| ICSA01          | ICSA01             | 1200 | 103                                           |   | 99               |   |         |   |         |   |         |   |
| ICSAB01         | ICSAB01            | 1203 | 106                                           |   | 102              |   |         |   |         |   |         |   |
| CCV01           | CCV01              | 1206 | 111                                           |   | 103              |   |         |   |         |   |         |   |
| CCB01           | CCB01              | 1209 | 103                                           |   | 101              |   |         |   |         |   |         |   |
| CRI             | CRI                | 1215 | 103                                           |   | 101              |   |         |   |         |   |         |   |
| PB169300BL      | PB169300BL         | 1219 | 101                                           |   | 99               |   |         |   |         |   |         |   |
| PB169300BS      | PB169300BS         | 1222 | 105                                           |   | 102              |   |         |   |         |   |         |   |
| PB169300TB      | PB169300TB         | 1225 | 102                                           |   | 100              |   |         |   |         |   |         |   |
| Q2879-02        | OU4-TS-GRILI       | 1228 | 106                                           |   | 101              |   |         |   |         |   |         |   |
| Q2879-04        | OU4-TS-GRILI       | 1232 | 104                                           |   | 99               |   |         |   |         |   |         |   |
| Q2879-06        | OU4-TS-GRILI       | 1235 | 105                                           |   | 100              |   |         |   |         |   |         |   |
| Q2879-08        | OU4-TS-GRILI       | 1238 | 105                                           |   | 101              |   |         |   |         |   |         |   |
| Q2879-10        | OU4-TS-GRILI       | 1241 | 104                                           |   | 100              |   |         |   |         |   |         |   |
| Q2879-12        | OU4-TS-GRILI       | 1244 | 106                                           |   | 101              |   |         |   |         |   |         |   |
| CCV02           | CCV02              | 1247 | 108                                           |   | 101              |   |         |   |         |   |         |   |
| CCB02           | CCB02              | 1252 | 102                                           |   | 99               |   |         |   |         |   |         |   |
| Q2879-14        | OU4-TS-GRILI       | 1256 | 107                                           |   | 102              |   |         |   |         |   |         |   |
| Q2879-16        | OU4-TS-GRILI       | 1259 | 109                                           |   | 103              |   |         |   |         |   |         |   |
| Q2879-18        | OU4-TS-GRILI       | 1302 | 107                                           |   | 101              |   |         |   |         |   |         |   |
| Q2879-18DUP     | OU4-TS-GRILI       | 1305 | 105                                           |   | 99               |   |         |   |         |   |         |   |
| Q2879-18L       | OU4-TS-GRILI       | 1308 | 104                                           |   | 100              |   |         |   |         |   |         |   |
| Q2879-18MS      | OU4-TS-GRILI       | 1311 | 108                                           |   | 102              |   |         |   |         |   |         |   |
| Q2879-18MSD     | OU4-TS-GRILI       | 1314 | 107                                           |   | 101              |   |         |   |         |   |         |   |

Internal Standard %RI Limit: 30 -120

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group  
Lab Code: ACE  
Instrument ID: P7  
Run Number: LB136893

Contract: NOBI03  
SDG No.: Q2879  
Start Date : 08/20/2025  
End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Non-Collision Cell |   |                  |   |         |   |         |   |         |   |
|-----------------|--------------------|------|-----------------------------------------------|---|------------------|---|---------|---|---------|---|---------|---|
|                 |                    |      | Element<br>165Ho                              | Q | Element<br>209Bi | Q | Element | Q | Element | Q | Element | Q |
| Q2879-18A       | OU4-TS-GRILI       | 1317 | 106                                           |   | 103              |   |         |   |         |   |         |   |
| CCV03           | CCV03              | 1327 | 110                                           |   | 99               |   |         |   |         |   |         |   |
| CCB03           | CCB03              | 1330 | 103                                           |   | 99               |   |         |   |         |   |         |   |

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group

Contract: NOBI03

Lab Code: ACE

SDG No.: Q2879

Instrument ID: P7

Start Date : 08/20/2025

Run Number: LB136893

End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Collision Cell |   |         |   |         |   |         |   |         |   |
|-----------------|--------------------|------|-------------------------------------------|---|---------|---|---------|---|---------|---|---------|---|
|                 |                    |      | Element<br>209Bi                          | Q | Element | Q | Element | Q | Element | Q | Element | Q |
| S0              | S0                 | 1049 | 100                                       |   |         |   |         |   |         |   |         |   |
| S2              | S2                 | 1056 | 101                                       |   |         |   |         |   |         |   |         |   |
| S3              | S3                 | 1059 | 100                                       |   |         |   |         |   |         |   |         |   |
| S4              | S4                 | 1102 | 100                                       |   |         |   |         |   |         |   |         |   |
| S5              | S5                 | 1105 | 101                                       |   |         |   |         |   |         |   |         |   |
| S6              | S6                 | 1108 | 101                                       |   |         |   |         |   |         |   |         |   |
| S7              | S7                 | 1111 | 103                                       |   |         |   |         |   |         |   |         |   |
| S8              | S8                 | 1114 | 96                                        |   |         |   |         |   |         |   |         |   |
| ICV01           | ICV01              | 1135 | 102                                       |   |         |   |         |   |         |   |         |   |
| LLICV01         | LLICV01            | 1150 | 100                                       |   |         |   |         |   |         |   |         |   |
| ICB01           | ICB01              | 1156 | 98                                        |   |         |   |         |   |         |   |         |   |
| ICSA01          | ICSA01             | 1200 | 98                                        |   |         |   |         |   |         |   |         |   |
| ICSAB01         | ICSAB01            | 1203 | 102                                       |   |         |   |         |   |         |   |         |   |
| CCV01           | CCV01              | 1206 | 102                                       |   |         |   |         |   |         |   |         |   |
| CCB01           | CCB01              | 1209 | 101                                       |   |         |   |         |   |         |   |         |   |
| CRI             | CRI                | 1215 | 102                                       |   |         |   |         |   |         |   |         |   |
| PB169300BL      | PB169300BL         | 1219 | 101                                       |   |         |   |         |   |         |   |         |   |
| PB169300BS      | PB169300BS         | 1222 | 103                                       |   |         |   |         |   |         |   |         |   |
| PB169300TB      | PB169300TB         | 1225 | 101                                       |   |         |   |         |   |         |   |         |   |
| Q2879-02        | OU4-TS-GRILI       | 1228 | 104                                       |   |         |   |         |   |         |   |         |   |
| Q2879-04        | OU4-TS-GRILI       | 1232 | 101                                       |   |         |   |         |   |         |   |         |   |
| Q2879-06        | OU4-TS-GRILI       | 1235 | 103                                       |   |         |   |         |   |         |   |         |   |
| Q2879-08        | OU4-TS-GRILI       | 1238 | 106                                       |   |         |   |         |   |         |   |         |   |
| Q2879-10        | OU4-TS-GRILI       | 1241 | 106                                       |   |         |   |         |   |         |   |         |   |
| Q2879-12        | OU4-TS-GRILI       | 1244 | 106                                       |   |         |   |         |   |         |   |         |   |
| CCV02           | CCV02              | 1247 | 102                                       |   |         |   |         |   |         |   |         |   |
| CCB02           | CCB02              | 1252 | 100                                       |   |         |   |         |   |         |   |         |   |
| Q2879-14        | OU4-TS-GRILI       | 1256 | 106                                       |   |         |   |         |   |         |   |         |   |
| Q2879-16        | OU4-TS-GRILI       | 1259 | 105                                       |   |         |   |         |   |         |   |         |   |
| Q2879-18        | OU4-TS-GRILI       | 1302 | 104                                       |   |         |   |         |   |         |   |         |   |
| Q2879-18DUP     | OU4-TS-GRILI       | 1305 | 104                                       |   |         |   |         |   |         |   |         |   |
| Q2879-18L       | OU4-TS-GRILI       | 1308 | 103                                       |   |         |   |         |   |         |   |         |   |
| Q2879-18MS      | OU4-TS-GRILI       | 1311 | 105                                       |   |         |   |         |   |         |   |         |   |
| Q2879-18MSD     | OU4-TS-GRILI       | 1314 | 103                                       |   |         |   |         |   |         |   |         |   |

Internal Standard %RI Limit: 30 -120

FORM 8B

ICP-MS INTERNAL STANDARD RELATIVE INTENSITY SUMMARY

Client: Nobis Group  
Lab Code: ACE  
Instrument ID: P7  
Run Number: LB136893

Contract: NOBI03  
SDG No.: Q2879  
Start Date : 08/20/2025  
End Date : 08/20/2025

| Lab<br>SampleID | Client<br>SampleID | Time | Internal Standard %RI For: Collision Cell |   |         |   |         |   |         |   |         |   |
|-----------------|--------------------|------|-------------------------------------------|---|---------|---|---------|---|---------|---|---------|---|
|                 |                    |      | Element<br>209Bi                          | Q | Element | Q | Element | Q | Element | Q | Element | Q |
| Q2879-18A       | OU4-TS-GRILI       | 1317 | 104                                       |   |         |   |         |   |         |   |         |   |
| CCV03           | CCV03              | 1327 | 102                                       |   |         |   |         |   |         |   |         |   |
| CCB03           | CCB03              | 1330 | 102                                       |   |         |   |         |   |         |   |         |   |

**Metals**  
**-9 -**  
**ICP SERIAL DILUTIONS**

SAMPLE NO.

OU4-TS-GRILLO-TSCP11-081425L

**Lab Name:** Alliance **Contract:** NOBI03  
**Lab Code:** ACE **Lb No.:** lb136893 **Lab Sample ID :** Q2879-18L **SDG No.:** Q2879  
**Matrix (soil/water):** Water **Level (low/med):** LOW  
**Concentration Units:** ug/L

| Analyte   | Initial Sample Result (I) |    | Serial Dilution Result (S) |    | % Differ-<br>ence | Q | M  |
|-----------|---------------------------|----|----------------------------|----|-------------------|---|----|
|           | C                         |    | C                          |    |                   |   |    |
| Antimony  | 0.75                      | JD | 50.0                       | UD | 67                |   | P  |
| Arsenic   | 31.9                      | D  | 35.5                       | D  | 11                |   | P  |
| Barium    | 132                       | D  | 130                        | JD | 2                 |   | P  |
| Beryllium | 12.2                      | D  | 13.0                       | JD | 7                 |   | P  |
| Cadmium   | 9.70                      | D  | 25.0                       | UD | 82                |   | P  |
| Chromium  | 64.5                      | D  | 63.3                       | D  | 2                 |   | P  |
| Copper    | 248                       | D  | 257                        | D  | 3                 |   | P  |
| Lead      | 280                       | D  | 278                        | D  | 1                 |   | P  |
| Nickel    | 100                       | D  | 104                        | D  | 4                 |   | P  |
| Mercury   | 0.20                      | U  | 1.00                       | U  |                   |   | CV |
| Selenium  | 25.0                      | UD | 125                        | UD |                   |   | P  |
| Silver    | 5.00                      | UD | 25.0                       | UD |                   |   | P  |
| Thallium  | 0.65                      | JD | 25.0                       | UD | 62                |   | P  |
| Vanadium  | 302                       | D  | 312                        | D  | 3                 |   | P  |
| Zinc      | 1750                      | D  | 1810                       | D  | 3                 |   | P  |





# METAL PREPARATION & INSTRUMENT DATA

1  
2  
3  
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# METAL PREPARATION & ANALYICAL SUMMARY

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**Metals**  
**- 13 -**

**SAMPLE PREPARATION SUMMARY**

**Client:** Nobis Group **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE **Method:** \_\_\_\_\_

| Sample ID                     | Client ID                      | Sample Type | Matrix | Prep Date  | Initial Sample Size(mL) | Final Sample Volume (mL) | Percent Solids |
|-------------------------------|--------------------------------|-------------|--------|------------|-------------------------|--------------------------|----------------|
| <b>Batch Number: PB169293</b> |                                |             |        |            |                         |                          |                |
| PB169293BL                    | PB169293BL                     | MB          | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| PB169293BS                    | PB169293BS                     | LCS         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| PB169293TB                    | PB169293TB                     | MB          | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-02                      | OU4-TS-GRILLO-TSCP03-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-04                      | OU4-TS-GRILLO-TSCP04-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-06                      | OU4-TS-GRILLO-TSCP05-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-08                      | OU4-TS-GRILLO-TSCP06-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-10                      | OU4-TS-GRILLO-TSCP07-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-12                      | OU4-TS-GRILLO-TSCP08-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-14                      | OU4-TS-GRILLO-TSCP09-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-16                      | OU4-TS-GRILLO-TSCP10-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-18                      | OU4-TS-GRILLO-TSCP11-081425    | SAM         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-18DUP                   | OU4-TS-GRILLO-TSCP11-081425DUP | DUP         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-18MS                    | OU4-TS-GRILLO-TSCP11-081425MS  | MS          | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |
| Q2879-18MSD                   | OU4-TS-GRILLO-TSCP11-081425MSD | MSD         | WATER  | 08/19/2025 | 30.0                    | 30.0                     |                |

**Metals**  
**- 13 -**

**SAMPLE PREPARATION SUMMARY**

**Client:** Nobis Group **SDG No.:** Q2879  
**Contract:** NOBI03 **Lab Code:** ACE **Method:** \_\_\_\_\_

| Sample ID                     | Client ID                      | Sample Type | Matrix | Prep Date  | Initial Sample Size(mL) | Final Sample Volume (mL) | Percent Solids |
|-------------------------------|--------------------------------|-------------|--------|------------|-------------------------|--------------------------|----------------|
| <b>Batch Number: PB169300</b> |                                |             |        |            |                         |                          |                |
| PB169300BL                    | PB169300BL                     | MB          | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| PB169300BS                    | PB169300BS                     | LCS         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| PB169300TB                    | PB169300TB                     | MB          | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-02                      | OU4-TS-GRILLO-TSCP03-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-04                      | OU4-TS-GRILLO-TSCP04-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-06                      | OU4-TS-GRILLO-TSCP05-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-08                      | OU4-TS-GRILLO-TSCP06-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-10                      | OU4-TS-GRILLO-TSCP07-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-12                      | OU4-TS-GRILLO-TSCP08-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-14                      | OU4-TS-GRILLO-TSCP09-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-16                      | OU4-TS-GRILLO-TSCP10-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-18                      | OU4-TS-GRILLO-TSCP11-081425    | SAM         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-18DUP                   | OU4-TS-GRILLO-TSCP11-081425DUP | DUP         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-18MS                    | OU4-TS-GRILLO-TSCP11-081425MS  | MS          | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |
| Q2879-18MSD                   | OU4-TS-GRILLO-TSCP11-081425MSD | MSD         | WATER  | 08/18/2025 | 50.0                    | 50.0                     |                |

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

**Client:** Nobis Group

**Contract:** NOBI03

**Lab code:** ACE

**Sdg no.:** Q2879

**Instrument id number:** \_\_\_\_\_

**Method:** \_\_\_\_\_

**Run number:** LB136879

**Start date:** 08/19/2025

**End date:** 08/19/2025

| Lab sample id. | Client Sample Id          | d/f | Time | Parameter list |
|----------------|---------------------------|-----|------|----------------|
| S0             | S0                        | 1   | 1352 | HG             |
| S0.2           | S0.2                      | 1   | 1355 | HG             |
| S2.5           | S2.5                      | 1   | 1357 | HG             |
| S5             | S5                        | 1   | 1359 | HG             |
| S7.5           | S7.5                      | 1   | 1401 | HG             |
| S10            | S10                       | 1   | 1404 | HG             |
| ICV23          | ICV23                     | 1   | 1407 | HG             |
| ICB23          | ICB23                     | 1   | 1409 | HG             |
| CCV71          | CCV71                     | 1   | 1411 | HG             |
| CCB71          | CCB71                     | 1   | 1414 | HG             |
| CRA            | CRA                       | 1   | 1416 | HG             |
| PB169293BL     | PB169293BL                | 1   | 1425 | HG             |
| PB169293BS     | PB169293BS                | 1   | 1431 | HG             |
| Q2879-02       | OU4-TS-GRILLO-TSCP03-0814 | 1   | 1438 | HG             |
| Q2879-04       | OU4-TS-GRILLO-TSCP04-0814 | 1   | 1440 | HG             |
| Q2879-06       | OU4-TS-GRILLO-TSCP05-0814 | 1   | 1443 | HG             |
| CCV72          | CCV72                     | 1   | 1445 | HG             |
| CCB72          | CCB72                     | 1   | 1447 | HG             |
| Q2879-08       | OU4-TS-GRILLO-TSCP06-0814 | 1   | 1450 | HG             |
| Q2879-10       | OU4-TS-GRILLO-TSCP07-0814 | 1   | 1452 | HG             |
| Q2879-12       | OU4-TS-GRILLO-TSCP08-0814 | 1   | 1454 | HG             |
| Q2879-14       | OU4-TS-GRILLO-TSCP09-0814 | 1   | 1457 | HG             |
| Q2879-16       | OU4-TS-GRILLO-TSCP10-0814 | 1   | 1459 | HG             |
| Q2879-18       | OU4-TS-GRILLO-TSCP11-0814 | 1   | 1501 | HG             |
| Q2879-18DUP    | OU4-TS-GRILLO-TSCP11-0814 | 1   | 1503 | HG             |
| Q2879-18MS     | OU4-TS-GRILLO-TSCP11-0814 | 1   | 1509 | HG             |
| Q2879-18MSD    | OU4-TS-GRILLO-TSCP11-0814 | 1   | 1512 | HG             |
| CCV73          | CCV73                     | 1   | 1514 | HG             |
| CCB73          | CCB73                     | 1   | 1516 | HG             |
| PB169293TB     | PB169293TB                | 1   | 1526 | HG             |
| Q2879-18L      | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1529 | HG             |
| CCV74          | CCV74                     | 1   | 1537 | HG             |
| CCB74          | CCB74                     | 1   | 1539 | HG             |

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

**Client:** Nobis Group

**Contract:** NOBI03

**Lab code:** ACE

**Sdg no.:** Q2879

**Instrument id number:** \_\_\_\_\_

**Method:** \_\_\_\_\_

**Run number:** LB136893

**Start date:** 08/20/2025

**End date:** 08/20/2025

| Lab sample id. | Client Sample Id          | d/f | Time | Parameter list                           |
|----------------|---------------------------|-----|------|------------------------------------------|
| S0             | S0                        | 1   | 1049 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S2             | S2                        | 1   | 1056 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S3             | S3                        | 1   | 1059 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S4             | S4                        | 1   | 1102 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S5             | S5                        | 1   | 1105 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S6             | S6                        | 1   | 1108 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S7             | S7                        | 1   | 1111 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| S8             | S8                        | 1   | 1114 | ,                                        |
| ICV01          | ICV01                     | 1   | 1135 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| LLICV01        | LLICV01                   | 1   | 1150 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICB01          | ICB01                     | 1   | 1156 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSA01         | ICSA01                    | 1   | 1200 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| ICSAB01        | ICSAB01                   | 1   | 1203 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV01          | CCV01                     | 1   | 1206 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB01          | CCB01                     | 1   | 1209 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CRI            | CRI                       | 1   | 1215 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| PB169300BL     | PB169300BL                | 1   | 1219 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| PB169300BS     | PB169300BS                | 1   | 1222 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| PB169300TB     | PB169300TB                | 1   | 1225 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-02       | OU4-TS-GRILLO-TSCP03-0814 | 5   | 1228 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-04       | OU4-TS-GRILLO-TSCP04-0814 | 5   | 1232 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-06       | OU4-TS-GRILLO-TSCP05-0814 | 5   | 1235 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-08       | OU4-TS-GRILLO-TSCP06-0814 | 5   | 1238 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-10       | OU4-TS-GRILLO-TSCP07-0814 | 5   | 1241 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-12       | OU4-TS-GRILLO-TSCP08-0814 | 5   | 1244 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCV02          | CCV02                     | 1   | 1247 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB02          | CCB02                     | 1   | 1252 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-14       | OU4-TS-GRILLO-TSCP09-0814 | 5   | 1256 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-16       | OU4-TS-GRILLO-TSCP10-0814 | 5   | 1259 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18       | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1302 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18DUP    | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1305 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18L      | OU4-TS-GRILLO-TSCP11-0814 | 25  | 1308 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18MS     | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1311 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18MSD    | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1314 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| Q2879-18A      | OU4-TS-GRILLO-TSCP11-0814 | 5   | 1317 | Ag,As,Ba                                 |
| CCV03          | CCV03                     | 1   | 1327 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |
| CCB03          | CCB03                     | 1   | 1330 | Ag,As,Ba,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se,Tl,V,Zn |



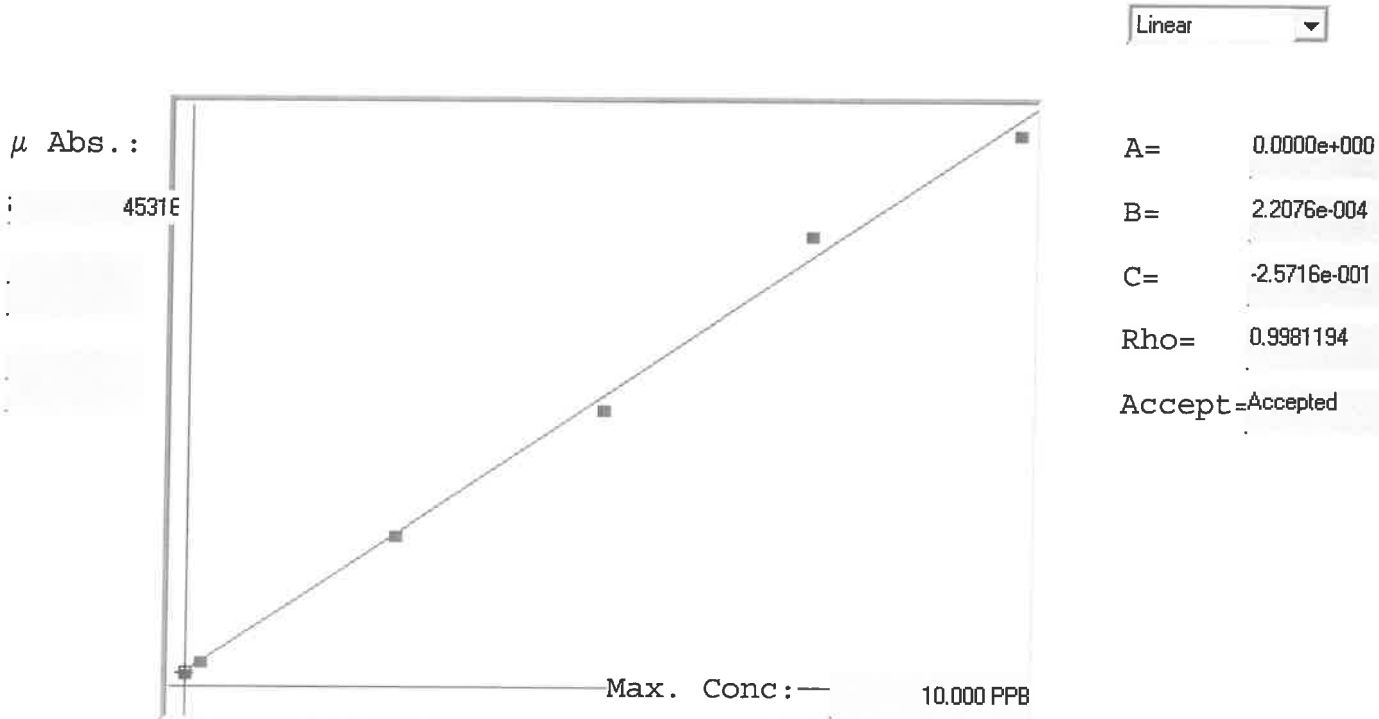
# METAL RAW DATA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

LB136879

7470A

INSTRUMENT ID: CV1



| Std ID | Conc.  | Calc. | Dev.   | Mean  | SD or %RSD | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | 0/01 |
|--------|--------|-------|--------|-------|------------|-------|-------|-------|-------|-------|------|
| 0.0    | 0.000  | 0.012 | 0.012  | 1220  | 0.000      | 1220  | 0     |       |       |       | -    |
| 0.2    | 0.200  | 0.212 | 0.012  | 2127  | 0.0 %      | 2127  |       |       |       |       | 6    |
| 2.5    | 2.500  | 2.508 | 0.008  | 12528 | 0.0 %      | 12528 | 0     |       |       |       | 0    |
| 5.0    | 5.000  | 4.780 | -0.220 | 22817 | 0.0 %      | 22817 |       |       |       |       | -4   |
| 7.5    | 7.500  | 7.940 | 0.440  | 37134 | 0.0 %      | 37134 |       |       |       |       | 6    |
| 10.0   | 10.000 | 9.747 | -0.253 | 45316 | 0.0 %      | 45316 |       |       |       |       | -3   |



# LB136879 INSTRUMENT ID : CV1

Method: 7470A

Operator: Admin

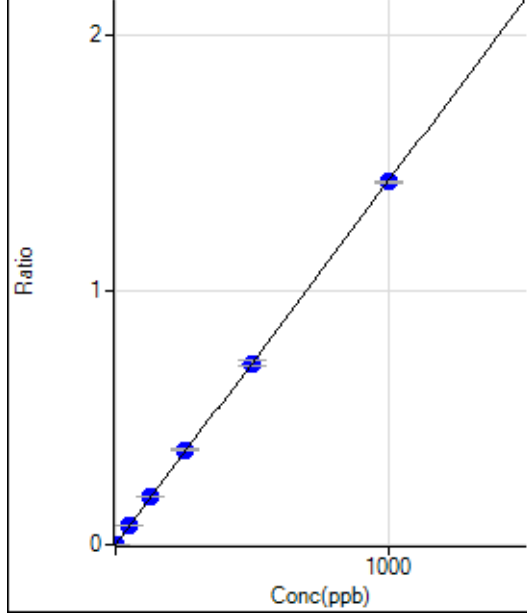
Date of Analysis: 19 Aug 2025 13:43:23

| Type | Sample ID       | Extended ID                    | Conc    | µ Abs | Units | Type | Std Conc | Method | Date                 |
|------|-----------------|--------------------------------|---------|-------|-------|------|----------|--------|----------------------|
| S    | 0.0 - 1         | 50                             | -       | 1220  | PPB   | Std  | 0.0000   | 7470A  | 19 Aug 2025 13:52:47 |
| S    | 0.2 - 1         | 50.2                           | -       | 2127  | PPB   | Std  | 0.2000   | 7470A  | 19 Aug 2025 13:55:05 |
| S    | 2.5 - 1         | 52.5                           | -       | 12528 | PPB   | Std  | 2.5000   | 7470A  | 19 Aug 2025 13:57:22 |
| S    | 5.0 - 1         | 55                             | -       | 22817 | PPB   | Std  | 5.0000   | 7470A  | 19 Aug 2025 13:59:39 |
| S    | 7.5 - 1         | 57.5                           | -       | 37134 | PPB   | Std  | 7.5000   | 7470A  | 19 Aug 2025 14:01:56 |
| S    | 10.0 - 1        | 57.5                           | -       | 45316 | PPB   | Std  | 10.0000  | 7470A  | 19 Aug 2025 14:04:13 |
| U    | ICV23 - 1       | ICV23                          | 4.1057  | 19763 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:07:25 |
| U    | ICB23 - 1       | ICB23                          | -0.0238 | 1057  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:09:40 |
| U    | CCV71 - 1       | CCV71                          | 4.7092  | 22497 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:11:56 |
| U    | CCB71 - 1       | CCB71                          | -0.0238 | 1057  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:14:12 |
| U    | CRA - 1         | CRA                            | 0.2053  | 2095  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:16:28 |
| U    | HighStd - 1     | HighStd                        | 9.7491  | 45327 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:18:44 |
| U    | ChkStd - 1      | ChkStd                         | 6.5837  | 30988 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:20:59 |
| U    | PB169293BL - 1  | PBW                            | -0.0055 | 1140  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:25:54 |
| U    | PB169293BS - 1  | LCSW                           | 4.1500  | 19964 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:31:42 |
| U    | Q2818-04 - 1    | B-2-5-1                        | 0.5250  | 3543  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:33:57 |
| U    | Q2818-05 - 1    | B-3-5-2                        | 0.7603  | 4609  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:36:14 |
| U    | Q2879-02 - 1    | OU4-TS-GRILLO-TSCP03-081425    | -0.0878 | 767   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:38:36 |
| U    | Q2879-04 - 1    | OU4-TS-GRILLO-TSCP04-081425    | -0.1187 | 627   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:40:55 |
| U    | Q2879-06 - 1    | OU4-TS-GRILLO-TSCP05-081425    | -0.1245 | 601   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:43:12 |
| U    | CCV72 - 1       | CCV72                          | 4.7033  | 22470 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:45:30 |
| U    | CCB72 - 1       | CCB72                          | -0.0333 | 1014  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:47:47 |
| U    | Q2879-08 - 1    | OU4-TS-GRILLO-TSCP06-081425    | 0.1994  | 2068  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:50:12 |
| U    | Q2879-10 - 1    | OU4-TS-GRILLO-TSCP07-081425    | 0.2016  | 2078  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:52:27 |
| U    | Q2879-12 - 1    | OU4-TS-GRILLO-TSCP08-081425    | 0.4071  | 3009  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:54:44 |
| U    | Q2879-14 - 1    | OU4-TS-GRILLO-TSCP09-081425    | 0.2636  | 2358  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:57:00 |
| U    | Q2879-16 - 1    | OU4-TS-GRILLO-TSCP10-081425    | 0.2115  | 2123  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 14:59:18 |
| U    | Q2879-18 - 1    | OU4-TS-GRILLO-TSCP11-081425    | -0.1018 | 704   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:01:36 |
| U    | Q2879-18DUP - 1 | OU4-TS-GRILLO-TSCP11-081425DUP | -0.0759 | 821   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:03:54 |
| U    | Q2879-18MS - 1  | OU4-TS-GRILLO-TSCP11-081425MS  | 4.0253  | 19399 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:09:51 |
| U    | Q2879-18MSD - 1 | OU4-TS-GRILLO-TSCP11-081425MSD | 3.9995  | 19282 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:12:08 |
| U    | CCV73 - 1       | CCV73                          | 4.7501  | 22682 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:14:24 |
| U    | CCB73 - 1       | CCB73                          | -0.0280 | 1038  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:16:40 |
| U    | PB169293TB - 1  | PB169276TB                     | -0.1132 | 652   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:22:24 |
| U    | PB169293TB - 1  | PB169294TB                     | -0.1123 | 656   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:26:46 |
| U    | Q2879-18LX5 - 1 |                                | -0.2154 | 189   | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:29:01 |
| U    | Q2879-18A - 1   |                                | 4.0260  | 19402 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:31:17 |
| U    | CCV74 - 1       | CCV74                          | 5.2370  | 24888 | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:37:18 |
| U    | CCB73 - 1       | CCB73                          | -0.0269 | 1043  | PPB   | SMPL | -7470A   | -7470A | 19 Aug 2025 15:39:33 |

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7082025-MS.b\  
Analysis File: P7082025-MS.batch.bin  
DA Date-Time: 2025-08-20 13:33:04  
Calibration Title:  
Calibration Method: External Calibration  
VIS Interpolation Fit:

| Level | Standard Data File | Sample Name | Acq. Date-Time      |
|-------|--------------------|-------------|---------------------|
| 1     | 004CALB.d          | S00         | 2025-08-20 10:49:41 |
| 2     | 006CALS.d          | S02         | 2025-08-20 10:56:16 |
| 3     | 007CALS.d          | S03         | 2025-08-20 10:59:31 |
| 4     | 008CALS.d          | S04         | 2025-08-20 11:02:40 |
| 5     | 009CALS.d          | S05         | 2025-08-20 11:05:38 |
| 6     | 010CALS.d          | S06         | 2025-08-20 11:08:36 |
| 7     | 011CALS.d          | S07         | 2025-08-20 11:11:20 |
| 8     | 012CALS.d          | S08         | 2025-08-20 11:14:08 |

9 Be [No Gas] ISTD: 6 Li [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS       | Ratio  | Det | RSD  |
|---|--------------------------|----------|------------|-----------|--------|-----|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 9.15      | 0.0000 | P   | 17.9 |
| 2 | <input type="checkbox"/> | 1.000    | 1.102      | 746.78    | 0.0016 | P   | 13.7 |
| 3 | <input type="checkbox"/> | 50.000   | 52.634     | 35640.38  | 0.0752 | P   | 1.4  |
| 4 | <input type="checkbox"/> | 125.000  | 131.022    | 90533.94  | 0.1872 | P   | 1.3  |
| 5 | <input type="checkbox"/> | 250.000  | 260.005    | 177498.40 | 0.3716 | P   | 1.8  |
| 6 | <input type="checkbox"/> | 500.000  | 498.018    | 347737.31 | 0.7117 | P   | 3.1  |
| 7 | <input type="checkbox"/> | 1000.000 | 997.605    | 700466.70 | 1.4255 | P   | 0.6  |
| 8 | <input type="checkbox"/> |          |            | 96.20     | 0.0002 | P   | 27.4 |

$$y = 0.0014 * x + 1.9902E-005$$

$$R = 0.9999$$

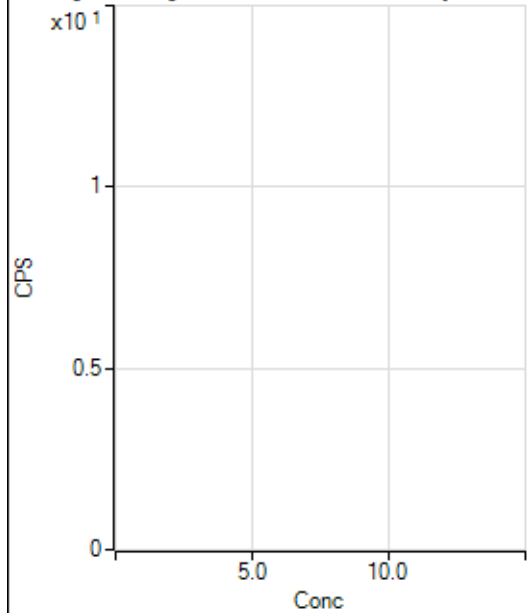
$$DL = 0.007461$$

$$BEC = 0.01393$$

Weight: <None>

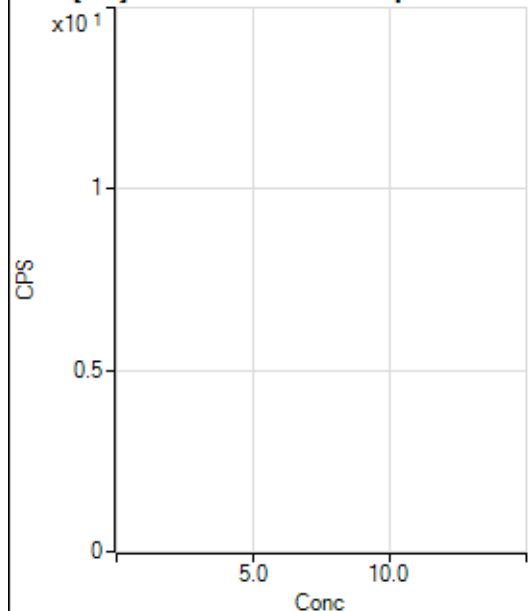
Min Conc: <None>

12 C [No Gas] No available calibration points



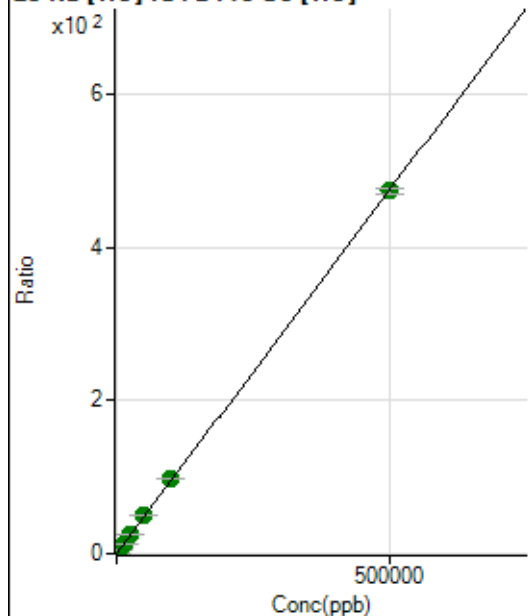
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS | Ratio | Det | RSD |
|---|--------------------------|-------|------------|-----|-------|-----|-----|
| 1 | <input type="checkbox"/> |       |            |     |       |     |     |
| 2 | <input type="checkbox"/> |       |            |     |       |     |     |
| 3 | <input type="checkbox"/> |       |            |     |       |     |     |
| 4 | <input type="checkbox"/> |       |            |     |       |     |     |
| 5 | <input type="checkbox"/> |       |            |     |       |     |     |
| 6 | <input type="checkbox"/> |       |            |     |       |     |     |
| 7 | <input type="checkbox"/> |       |            |     |       |     |     |
| 8 | <input type="checkbox"/> |       |            |     |       |     |     |

12 C [He] No available calibration points



|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS | Ratio | Det | RSD |
|---|--------------------------|-------|------------|-----|-------|-----|-----|
| 1 | <input type="checkbox"/> |       |            |     |       |     |     |
| 2 | <input type="checkbox"/> |       |            |     |       |     |     |
| 3 | <input type="checkbox"/> |       |            |     |       |     |     |
| 4 | <input type="checkbox"/> |       |            |     |       |     |     |
| 5 | <input type="checkbox"/> |       |            |     |       |     |     |
| 6 | <input type="checkbox"/> |       |            |     |       |     |     |
| 7 | <input type="checkbox"/> |       |            |     |       |     |     |
| 8 | <input type="checkbox"/> |       |            |     |       |     |     |

23 Na [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio    | Det | RSD |
|---|--------------------------|-----------|------------|-------------|----------|-----|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 32812.77    | 0.0793   | P   | 0.9 |
| 2 | <input type="checkbox"/> | 500.000   | 540.219    | 246758.66   | 0.5915   | P   | 1.7 |
| 3 | <input type="checkbox"/> | 5000.000  | 5382.768   | 2110730.44  | 5.1830   | A   | 0.7 |
| 4 | <input type="checkbox"/> | 12500.000 | 13251.479  | 5254211.17  | 12.6437  | A   | 1.1 |
| 5 | <input type="checkbox"/> | 25000.000 | 26564.351  | 10367527.07 | 25.2663  | A   | 2.1 |
| 6 | <input type="checkbox"/> | 50000.000 | 52693.428  | 20658632.33 | 50.0406  | A   | 2.1 |
| 7 | <input type="checkbox"/> | 100000.00 | 103167.05  | 42115517.43 | 97.8971  | A   | 1.2 |
| 8 | <input type="checkbox"/> | 500000.00 | 498996.37  | 205652992.4 | 473.2022 | A   | 1.3 |

$$y = 9.4815E-004 * x + 0.0793$$

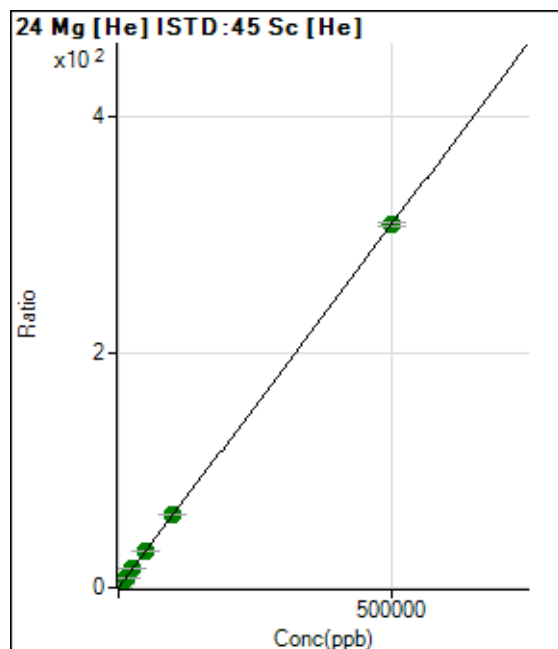
$$R = 1.0000$$

$$DL = 2.164$$

$$BEC = 83.67$$

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio    | Det. | RSD  |
|---|--------------------------|-----------|------------|-------------|----------|------|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 410.01      | 0.0010   | P    | 13.1 |
| 2 | <input type="checkbox"/> | 500.000   | 530.404    | 136931.72   | 0.3283   | P    | 1.9  |
| 3 | <input type="checkbox"/> | 5000.000  | 5272.312   | 1325276.09  | 3.2542   | A    | 1.2  |
| 4 | <input type="checkbox"/> | 12500.000 | 12938.745  | 3317972.24  | 7.9845   | A    | 1.3  |
| 5 | <input type="checkbox"/> | 25000.000 | 26132.113  | 6618212.26  | 16.1252  | A    | 0.6  |
| 6 | <input type="checkbox"/> | 50000.000 | 51328.016  | 13075887.31 | 31.6718  | A    | 0.8  |
| 7 | <input type="checkbox"/> | 100000.00 | 101029.80  | 26817921.82 | 62.3391  | A    | 1.3  |
| 8 | <input type="checkbox"/> | 500000.00 | 499590.91  | 133954822.4 | 308.2622 | A    | 1.0  |

$$y = 6.1703E-004 * x + 9.9132E-004$$

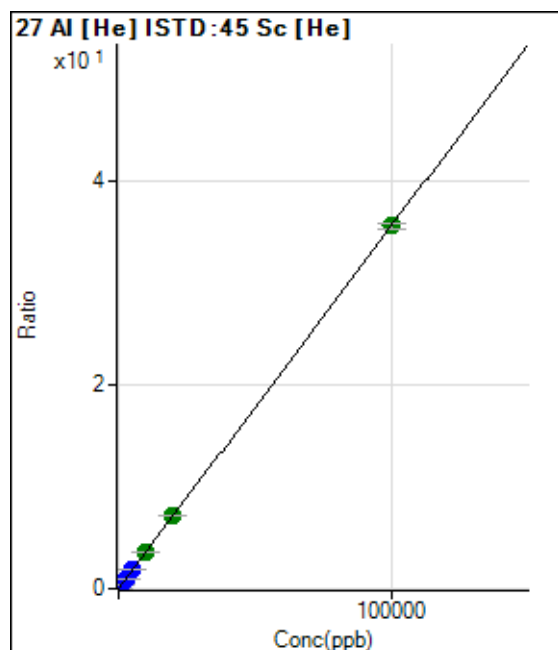
R = 1.0000

DL = 0.6326

BEC = 1.607

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio   | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 1507.86     | 0.0036  | P    | 2.5 |
| 2 | <input type="checkbox"/> | 20.000    | 21.305     | 4682.98     | 0.0112  | P    | 3.7 |
| 3 | <input type="checkbox"/> | 1000.000  | 1054.773   | 154350.49   | 0.3790  | P    | 0.6 |
| 4 | <input type="checkbox"/> | 2500.000  | 2582.874   | 383475.89   | 0.9228  | P    | 1.1 |
| 5 | <input type="checkbox"/> | 5000.000  | 5125.457   | 750006.05   | 1.8277  | P    | 1.4 |
| 6 | <input type="checkbox"/> | 10000.000 | 10050.179  | 1478181.87  | 3.5803  | A    | 1.6 |
| 7 | <input type="checkbox"/> | 20000.000 | 20119.487  | 3082084.67  | 7.1637  | A    | 0.6 |
| 8 | <input type="checkbox"/> | 100000.00 | 99962.192  | 15460211.16 | 35.5779 | A    | 1.4 |

$$y = 3.5588E-004 * x + 0.0036$$

R = 1.0000

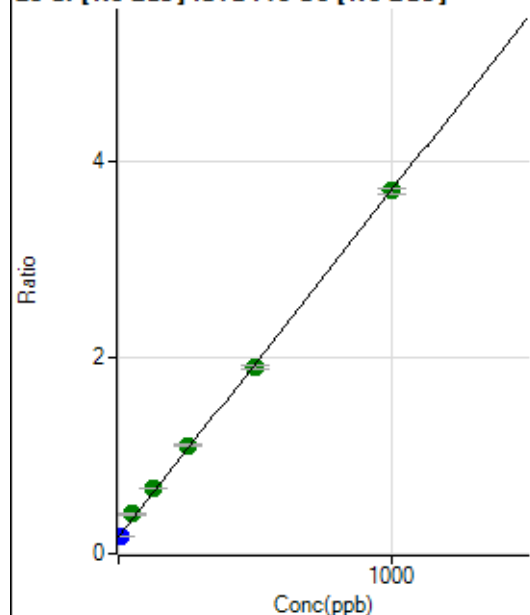
DL = 0.7823

BEC = 10.24

Weight: <None>

Min Conc: <None>

28 Si [No Gas] ISTD : 45 Sc [No Gas]



|   | R <sub>j</sub><br>ct     | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|-------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 695628.46   | 0.1713 | P    | 1.4 |
| 2 | <input type="checkbox"/> | 10.000   | 0.951      | 700341.08   | 0.1747 | P    | 1.0 |
| 3 | <input type="checkbox"/> | 50.000   | 66.152     | 1612428.88  | 0.4055 | A    | 2.4 |
| 4 | <input type="checkbox"/> | 125.000  | 139.278    | 2667551.00  | 0.6643 | A    | 1.8 |
| 5 | <input type="checkbox"/> | 250.000  | 264.004    | 4350693.72  | 1.1058 | A    | 2.2 |
| 6 | <input type="checkbox"/> | 500.000  | 491.721    | 7667926.34  | 1.9119 | A    | 2.2 |
| 7 | <input type="checkbox"/> | 1000.000 | 998.137    | 15497743.38 | 3.7045 | A    | 1.8 |
| 8 | <input type="checkbox"/> |          |            | 755136.03   | 0.1799 | P    | 1.3 |

$$y = 0.0035 * x + 0.1713$$

R = 0.9996

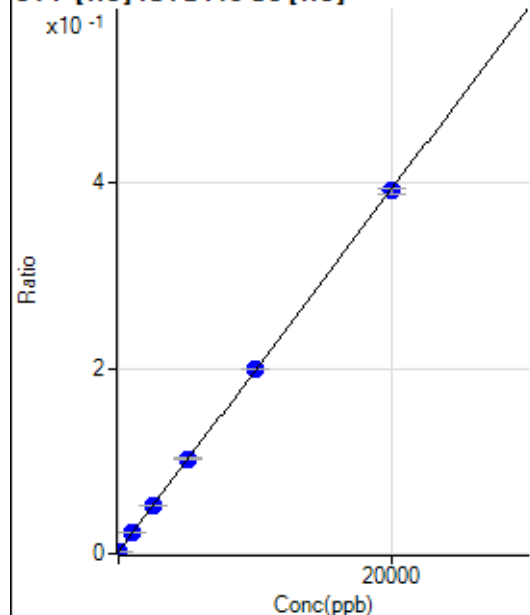
DL = 2.041

BEC = 48.4

Weight: <None>

Min Conc: <None>

31 P [He] ISTD : 45 Sc [He]



|   | R <sub>j</sub><br>ct     | Conc.     | Calc Conc. | CPS       | Ratio  | Det. | RSD |
|---|--------------------------|-----------|------------|-----------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | -11.735    | 883.37    | 0.0021 | P    | 4.6 |
| 2 | <input type="checkbox"/> | 0.000     | 11.735     | 1082.27   | 0.0026 | P    | 3.7 |
| 3 | <input type="checkbox"/> | 1000.000  | 1039.863   | 9238.44   | 0.0227 | P    | 2.6 |
| 4 | <input type="checkbox"/> | 2500.000  | 2566.693   | 21827.96  | 0.0525 | P    | 0.5 |
| 5 | <input type="checkbox"/> | 5000.000  | 5131.452   | 42123.74  | 0.1027 | P    | 1.6 |
| 6 | <input type="checkbox"/> | 10000.000 | 10098.315  | 82458.88  | 0.1997 | P    | 0.2 |
| 7 | <input type="checkbox"/> | 20000.000 | 19907.650  | 168390.35 | 0.3914 | P    | 1.4 |
| 8 | <input type="checkbox"/> |           |            | 910.04    | 0.0021 | P    | 4.4 |

$$y = 1.9544E-005 * x + 0.0024$$

R = 1.0000

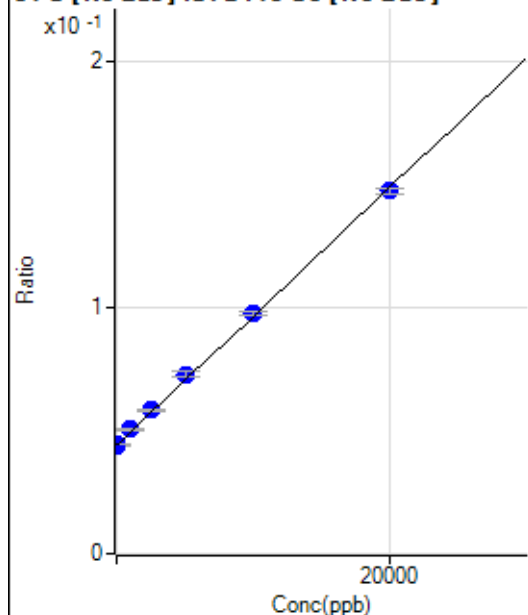
DL = 15.02

BEC = 121

Weight: <None>

Min Conc: <None>

34 S [No Gas] ISTD:45 Sc [No Gas]



$y = 5.2396E-006 * x + 0.0442$

R = 0.9995

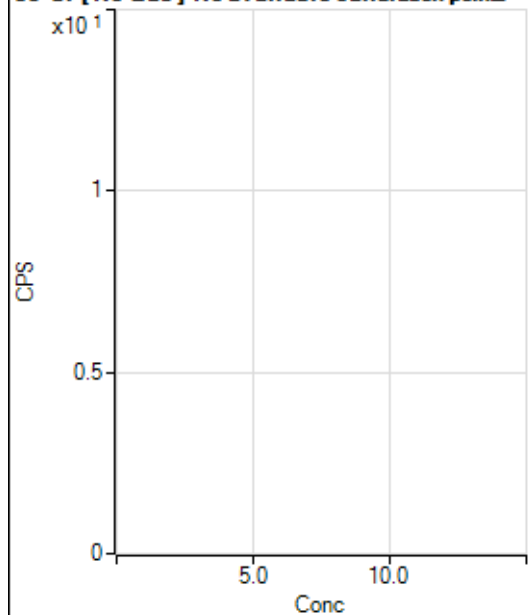
DL = 90.65

BEC = 8436

Weight: <None>

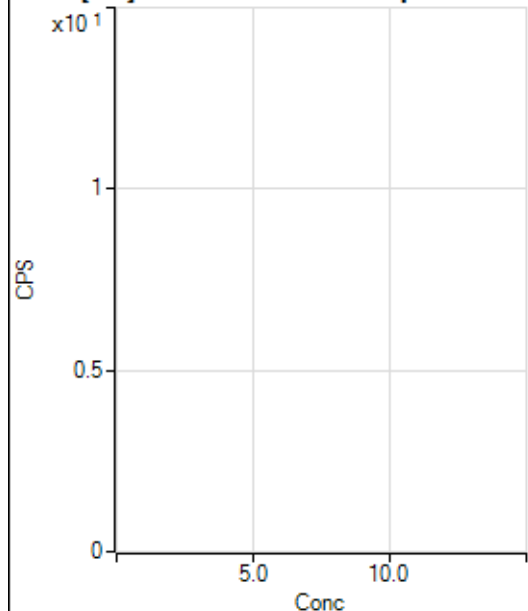
Min Conc: <None>

35 Cl [No Gas] No available calibration points



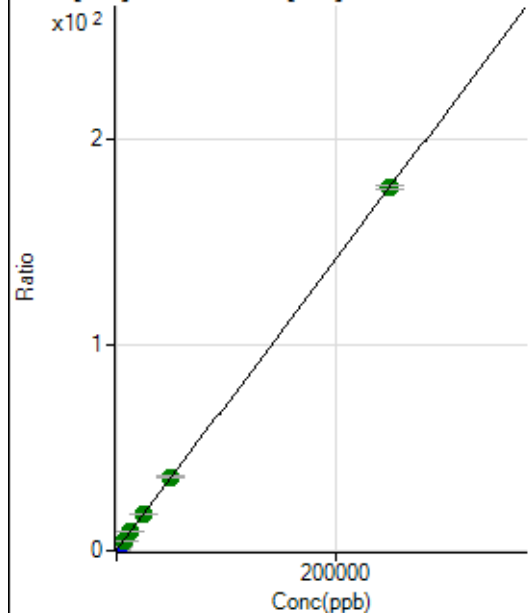
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS | Ratio | Det | RSD |
|---|--------------------------|-------|------------|-----|-------|-----|-----|
| 1 | <input type="checkbox"/> |       |            |     |       |     |     |
| 2 | <input type="checkbox"/> |       |            |     |       |     |     |
| 3 | <input type="checkbox"/> |       |            |     |       |     |     |
| 4 | <input type="checkbox"/> |       |            |     |       |     |     |
| 5 | <input type="checkbox"/> |       |            |     |       |     |     |
| 6 | <input type="checkbox"/> |       |            |     |       |     |     |
| 7 | <input type="checkbox"/> |       |            |     |       |     |     |
| 8 | <input type="checkbox"/> |       |            |     |       |     |     |

**35 Cl [He] No available calibration points**



|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|-----|-------|----------|-----|
| 1 | <input type="checkbox"/> |       |            |     |       |          |     |
| 2 | <input type="checkbox"/> |       |            |     |       |          |     |
| 3 | <input type="checkbox"/> |       |            |     |       |          |     |
| 4 | <input type="checkbox"/> |       |            |     |       |          |     |
| 5 | <input type="checkbox"/> |       |            |     |       |          |     |
| 6 | <input type="checkbox"/> |       |            |     |       |          |     |
| 7 | <input type="checkbox"/> |       |            |     |       |          |     |
| 8 | <input type="checkbox"/> |       |            |     |       |          |     |

**39 K [He] ISTD:45 Sc [He]**



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio    | Det<br>. | RSD |
|---|--------------------------|-----------|------------|-------------|----------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 67979.72    | 0.1644   | P        | 0.7 |
| 2 | <input type="checkbox"/> | 500.000   | 557.586    | 232842.61   | 0.5582   | P        | 1.4 |
| 3 | <input type="checkbox"/> | 2500.000  | 2775.781   | 865303.42   | 2.1249   | P        | 1.2 |
| 4 | <input type="checkbox"/> | 6250.000  | 6427.975   | 1954963.97  | 4.7044   | A        | 1.4 |
| 5 | <input type="checkbox"/> | 12500.000 | 12897.324  | 3805218.14  | 9.2736   | A        | 2.5 |
| 6 | <input type="checkbox"/> | 25000.000 | 25395.242  | 7473216.83  | 18.1008  | A        | 1.1 |
| 7 | <input type="checkbox"/> | 50000.000 | 50734.607  | 15483852.83 | 35.9978  | A        | 2.8 |
| 8 | <input type="checkbox"/> | 250000.00 | 249786.36  | 76738636.08 | 176.5867 | A        | 1.1 |

$$y = 7.0629E-004 * x + 0.1644$$

R = 1.0000

DL = 5.187

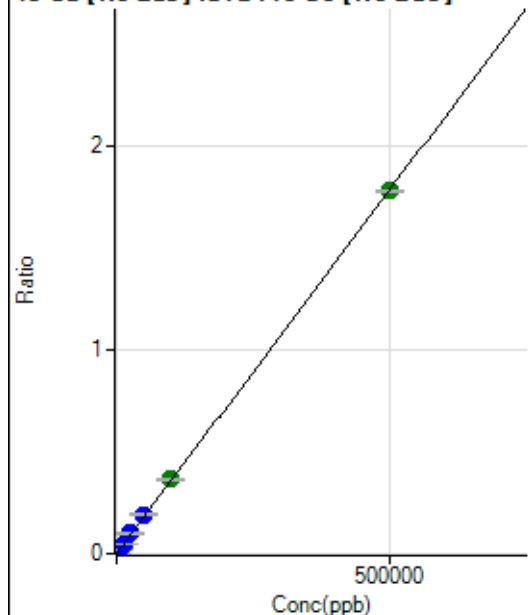
BEC = 232.7

Weight: <None>

Min Conc: <None>



43 Ca [No Gas] ISTD:45 Sc [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS        | Ratio  | Det. | RSD  |
|---|--------------------------|-----------|------------|------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 384.45     | 0.0001 | P    | 11.4 |
| 2 | <input type="checkbox"/> | 500.000   | 575.530    | 8594.74    | 0.0021 | P    | 1.6  |
| 3 | <input type="checkbox"/> | 5000.000  | 5578.107   | 79348.95   | 0.0200 | P    | 1.7  |
| 4 | <input type="checkbox"/> | 12500.000 | 13788.706  | 197495.18  | 0.0492 | P    | 1.2  |
| 5 | <input type="checkbox"/> | 25000.000 | 27945.639  | 391666.28  | 0.0996 | P    | 3.4  |
| 6 | <input type="checkbox"/> | 50000.000 | 54088.278  | 772595.06  | 0.1926 | P    | 2.6  |
| 7 | <input type="checkbox"/> | 100000.00 | 102008.92  | 1519702.81 | 0.3632 | A    | 0.6  |
| 8 | <input type="checkbox"/> | 500000.00 | 499004.03  | 7457942.39 | 1.7766 | A    | 0.4  |

$$y = 3.5600\text{E-}006 * x + 9.4675\text{E-}005$$

$$R = 1.0000$$

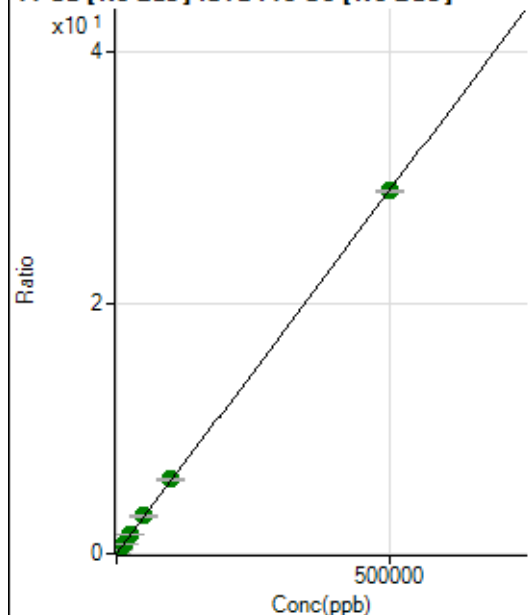
$$DL = 9.062$$

$$BEC = 26.59$$

Weight: <None>

Min Conc: <None>

44 Ca [No Gas] ISTD:45 Sc [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio   | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 26645.95    | 0.0066  | P    | 0.8 |
| 2 | <input type="checkbox"/> | 500.000   | 569.658    | 158584.40   | 0.0396  | P    | 1.4 |
| 3 | <input type="checkbox"/> | 5000.000  | 5262.206   | 1238124.97  | 0.3113  | A    | 1.8 |
| 4 | <input type="checkbox"/> | 12500.000 | 13075.544  | 3067283.98  | 0.7639  | A    | 0.6 |
| 5 | <input type="checkbox"/> | 25000.000 | 26806.547  | 6132856.92  | 1.5591  | A    | 3.0 |
| 6 | <input type="checkbox"/> | 50000.000 | 52090.558  | 12125284.82 | 3.0235  | A    | 2.6 |
| 7 | <input type="checkbox"/> | 100000.00 | 101905.91  | 24719067.96 | 5.9086  | A    | 1.3 |
| 8 | <input type="checkbox"/> | 500000.00 | 499302.35  | 121422291.5 | 28.9246 | A    | 0.5 |

$$y = 5.7917\text{E-}005 * x + 0.0066$$

$$R = 1.0000$$

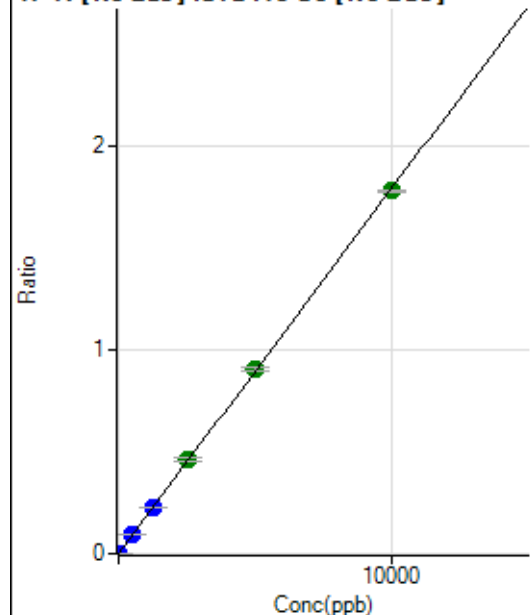
$$DL = 2.694$$

$$BEC = 113.3$$

Weight: <None>

Min Conc: <None>

47 Ti [No Gas] ISTD:45 Sc [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS        | Ratio  | Det | RSD  |
|---|--------------------------|-----------|------------|------------|--------|-----|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 83.33      | 0.0000 | P   | 21.1 |
| 2 | <input type="checkbox"/> | 5.000     | 5.020      | 3691.60    | 0.0009 | P   | 1.9  |
| 3 | <input type="checkbox"/> | 500.000   | 513.570    | 366309.36  | 0.0921 | P   | 2.2  |
| 4 | <input type="checkbox"/> | 1250.000  | 1268.281   | 913355.34  | 0.2275 | P   | 0.6  |
| 5 | <input type="checkbox"/> | 2500.000  | 2594.091   | 1829657.49 | 0.4652 | A   | 3.5  |
| 6 | <input type="checkbox"/> | 5000.000  | 5068.425   | 3645034.35 | 0.9089 | A   | 2.6  |
| 7 | <input type="checkbox"/> | 10000.000 | 9939.301   | 7456741.07 | 1.7824 | A   | 0.5  |
| 8 | <input type="checkbox"/> |           |            | 696.69     | 0.0002 | P   | 8.7  |

$$y = 1.7932E-004 * x + 2.0522E-005$$

R = 0.9999

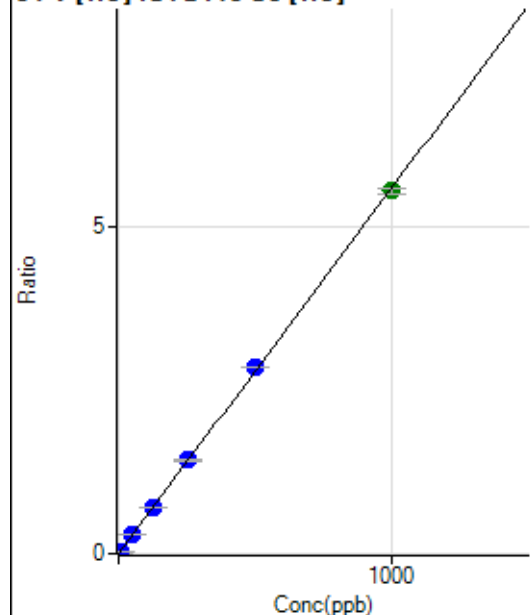
DL = 0.0725

BEC = 0.1144

Weight: <None>

Min Conc: <None>

51 V [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det | RSD  |
|---|--------------------------|----------|------------|------------|--------|-----|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 28.89      | 0.0001 | P   | 67.5 |
| 2 | <input type="checkbox"/> | 5.000    | 5.440      | 12707.69   | 0.0305 | P   | 1.8  |
| 3 | <input type="checkbox"/> | 50.000   | 52.500     | 119474.13  | 0.2934 | P   | 1.0  |
| 4 | <input type="checkbox"/> | 125.000  | 128.050    | 297295.50  | 0.7154 | P   | 1.1  |
| 5 | <input type="checkbox"/> | 250.000  | 255.423    | 585613.20  | 1.4270 | P   | 1.2  |
| 6 | <input type="checkbox"/> | 500.000  | 510.142    | 1176705.41 | 2.8501 | P   | 0.1  |
| 7 | <input type="checkbox"/> | 1000.000 | 993.065    | 2386669.15 | 5.5481 | A   | 1.6  |
| 8 | <input type="checkbox"/> |          |            | 1015.60    | 0.0023 | P   | 3.4  |

$$y = 0.0056 * x + 6.9765E-005$$

R = 0.9999

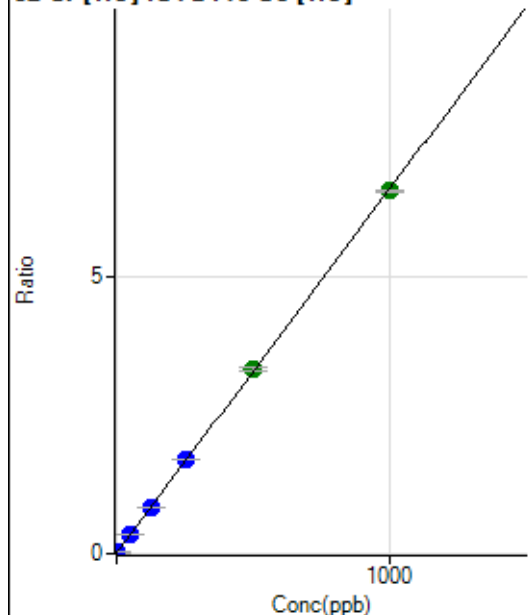
DL = 0.0253

BEC = 0.01249

Weight: <None>

Min Conc: <None>

52 Cr [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det | RSD |
|---|--------------------------|----------|------------|------------|--------|-----|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 2530.24    | 0.0061 | P   | 3.8 |
| 2 | <input type="checkbox"/> | 2.000    | 2.111      | 8349.03    | 0.0200 | P   | 2.9 |
| 3 | <input type="checkbox"/> | 50.000   | 52.817     | 144079.25  | 0.3538 | P   | 1.3 |
| 4 | <input type="checkbox"/> | 125.000  | 127.388    | 350984.14  | 0.8446 | P   | 0.7 |
| 5 | <input type="checkbox"/> | 250.000  | 257.158    | 697146.12  | 1.6988 | P   | 1.3 |
| 6 | <input type="checkbox"/> | 500.000  | 505.196    | 1375460.57 | 3.3315 | A   | 1.5 |
| 7 | <input type="checkbox"/> | 1000.000 | 995.173    | 2820780.31 | 6.5567 | A   | 0.9 |
| 8 | <input type="checkbox"/> |          |            | 14864.10   | 0.0342 | P   | 1.7 |

$$y = 0.0066 * x + 0.0061$$

$$R = 1.0000$$

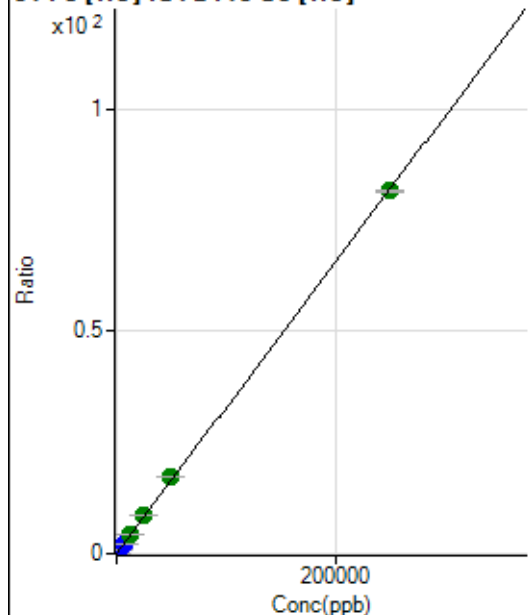
$$DL = 0.1065$$

$$BEC = 0.9294$$

Weight: <None>

Min Conc: <None>

54 Fe [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio   | Det | RSD |
|---|--------------------------|-----------|------------|-------------|---------|-----|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 2584.70     | 0.0062  | P   | 1.3 |
| 2 | <input type="checkbox"/> | 50.000    | 59.957     | 10798.40    | 0.0259  | P   | 3.3 |
| 3 | <input type="checkbox"/> | 2500.000  | 2890.793   | 388099.78   | 0.9530  | P   | 1.1 |
| 4 | <input type="checkbox"/> | 6250.000  | 7030.570   | 959398.80   | 2.3088  | P   | 1.2 |
| 5 | <input type="checkbox"/> | 12500.000 | 13461.720  | 1811771.93  | 4.4151  | A   | 1.4 |
| 6 | <input type="checkbox"/> | 25000.000 | 26781.353  | 3624015.40  | 8.7774  | A   | 0.9 |
| 7 | <input type="checkbox"/> | 50000.000 | 52506.019  | 7400668.01  | 17.2025 | A   | 1.1 |
| 8 | <input type="checkbox"/> | 250000.00 | 249249.15  | 35476485.86 | 81.6380 | A   | 0.6 |

$$y = 3.2751E-004 * x + 0.0062$$

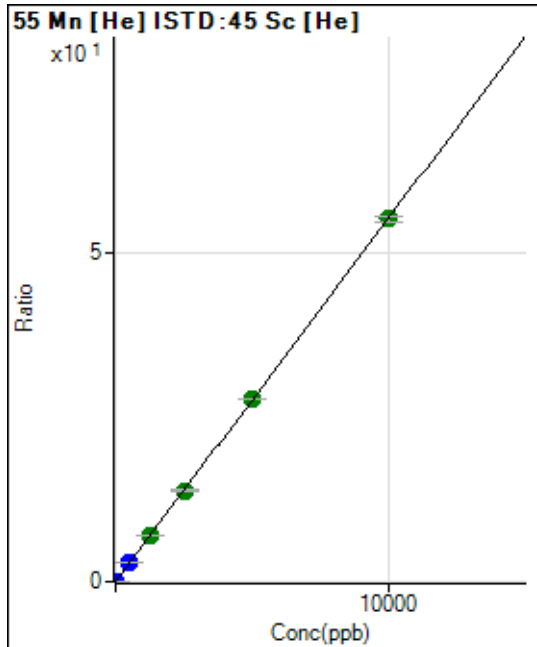
$$R = 0.9999$$

$$DL = 0.7232$$

$$BEC = 19.08$$

Weight: <None>

Min Conc: <None>



|   | R <sub>j</sub><br>ct     | Conc.     | Calc Conc. | CPS         | Ratio   | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 822.25      | 0.0020  | P    | 9.1 |
| 2 | <input type="checkbox"/> | 1.000     | 0.961      | 3039.22     | 0.0073  | P    | 2.4 |
| 3 | <input type="checkbox"/> | 500.000   | 525.745    | 1181088.68  | 2.9002  | P    | 0.7 |
| 4 | <input type="checkbox"/> | 1250.000  | 1262.727   | 2893306.45  | 6.9629  | A    | 2.3 |
| 5 | <input type="checkbox"/> | 2500.000  | 2506.510   | 5670788.18  | 13.8194 | A    | 1.7 |
| 6 | <input type="checkbox"/> | 5000.000  | 5028.046   | 11444694.41 | 27.7196 | A    | 0.6 |
| 7 | <input type="checkbox"/> | 10000.000 | 9981.471   | 23670842.98 | 55.0259 | A    | 1.8 |
| 8 | <input type="checkbox"/> |           |            | 10839.55    | 0.0249  | P    | 0.9 |

$$y = 0.0055 * x + 0.0020$$

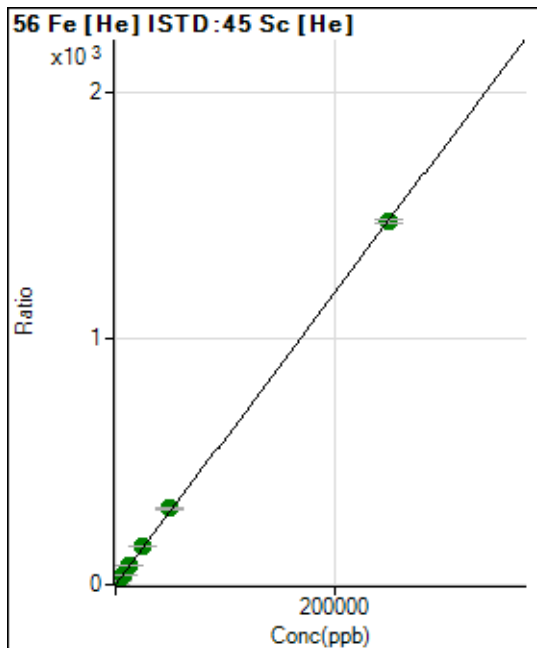
$$R = 1.0000$$

$$DL = 0.09887$$

$$BEC = 0.3606$$

Weight: <None>

Min Conc: <None>



|   | R <sub>j</sub><br>ct     | Conc.     | Calc Conc. | CPS         | Ratio    | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|----------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 21271.81    | 0.0514   | P    | 2.1 |
| 2 | <input type="checkbox"/> | 50.000    | 56.432     | 160883.24   | 0.3856   | P    | 1.0 |
| 3 | <input type="checkbox"/> | 2500.000  | 2712.645   | 6563708.38  | 16.1174  | A    | 1.0 |
| 4 | <input type="checkbox"/> | 6250.000  | 6660.635   | 16413589.90 | 39.4998  | A    | 1.8 |
| 5 | <input type="checkbox"/> | 12500.000 | 13312.403  | 32376926.46 | 78.8956  | A    | 1.0 |
| 6 | <input type="checkbox"/> | 25000.000 | 26820.196  | 65604136.25 | 158.8970 | A    | 0.5 |
| 7 | <input type="checkbox"/> | 50000.000 | 52430.880  | 133611431.3 | 310.5792 | A    | 1.1 |
| 8 | <input type="checkbox"/> | 250000.00 | 249278.79  | 641579323.7 | 1476.432 | A    | 1.1 |

$$y = 0.0059 * x + 0.0514$$

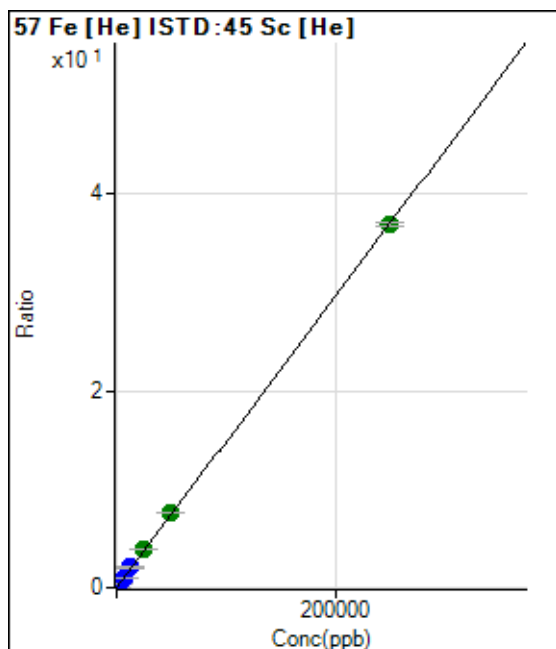
$$R = 0.9999$$

$$DL = 0.5392$$

$$BEC = 8.683$$

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio   | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 1498.98     | 0.0036  | P    | 4.1 |
| 2 | <input type="checkbox"/> | 50.000    | 58.221     | 5104.25     | 0.0122  | P    | 3.2 |
| 3 | <input type="checkbox"/> | 2500.000  | 2871.664   | 174481.83   | 0.4284  | P    | 0.8 |
| 4 | <input type="checkbox"/> | 6250.000  | 6948.693   | 428643.32   | 1.0316  | P    | 1.0 |
| 5 | <input type="checkbox"/> | 12500.000 | 13882.798  | 844324.33   | 2.0573  | P    | 0.7 |
| 6 | <input type="checkbox"/> | 25000.000 | 26628.554  | 1627895.20  | 3.9428  | A    | 0.8 |
| 7 | <input type="checkbox"/> | 50000.000 | 51810.455  | 3299099.85  | 7.6680  | A    | 0.6 |
| 8 | <input type="checkbox"/> | 250000.00 | 249384.72  | 16033807.96 | 36.8954 | A    | 1.1 |

$$y = 1.4793E-004 * x + 0.0036$$

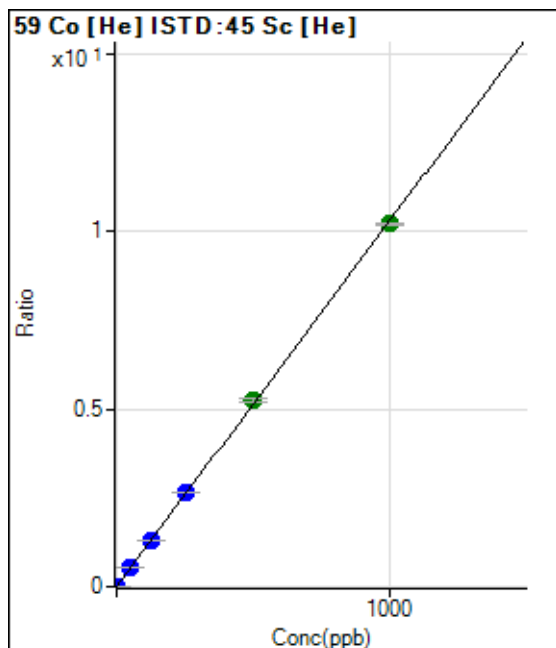
R = 1.0000

DL = 3.015

BEC = 24.5

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio   | Det. | RSD  |
|---|--------------------------|----------|------------|------------|---------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 116.67     | 0.0003  | P    | 18.5 |
| 2 | <input type="checkbox"/> | 1.000    | 1.132      | 4976.43    | 0.0119  | P    | 2.3  |
| 3 | <input type="checkbox"/> | 50.000   | 52.974     | 221994.05  | 0.5451  | P    | 1.1  |
| 4 | <input type="checkbox"/> | 125.000  | 127.361    | 544465.56  | 1.3102  | P    | 1.0  |
| 5 | <input type="checkbox"/> | 250.000  | 256.750    | 1083820.94 | 2.6410  | P    | 1.1  |
| 6 | <input type="checkbox"/> | 500.000  | 510.896    | 2169712.61 | 5.2550  | A    | 1.8  |
| 7 | <input type="checkbox"/> | 1000.000 | 992.421    | 4391481.01 | 10.2077 | A    | 0.9  |
| 8 | <input type="checkbox"/> |          |            | 8058.91    | 0.0185  | P    | 0.2  |

$$y = 0.0103 * x + 2.8198E-004$$

R = 0.9999

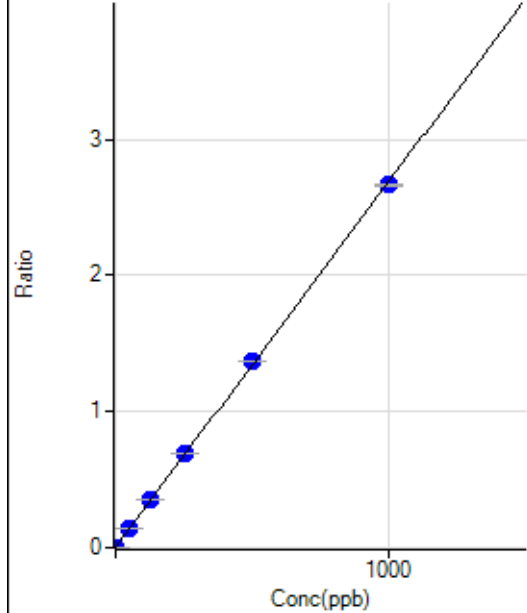
DL = 0.01524

BEC = 0.02742

Weight: <None>

Min Conc: <None>

60 Ni [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det | RSD |
|---|--------------------------|----------|------------|------------|--------|-----|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 610.02     | 0.0015 | P   | 2.5 |
| 2 | <input type="checkbox"/> | 1.000    | 1.116      | 1864.58    | 0.0045 | P   | 1.6 |
| 3 | <input type="checkbox"/> | 50.000   | 52.901     | 58440.31   | 0.1435 | P   | 0.1 |
| 4 | <input type="checkbox"/> | 125.000  | 129.986    | 145621.36  | 0.3504 | P   | 1.9 |
| 5 | <input type="checkbox"/> | 250.000  | 258.175    | 285048.35  | 0.6946 | P   | 1.0 |
| 6 | <input type="checkbox"/> | 500.000  | 510.363    | 566296.74  | 1.3717 | P   | 0.7 |
| 7 | <input type="checkbox"/> | 1000.000 | 992.006    | 1146399.19 | 2.6647 | P   | 0.8 |
| 8 | <input type="checkbox"/> |          |            | 4538.52    | 0.0104 | P   | 0.5 |

$$y = 0.0027 * x + 0.0015$$

$$R = 0.9999$$

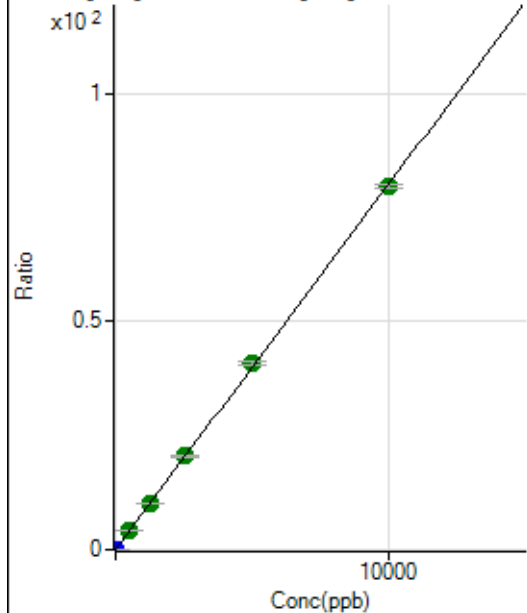
$$DL = 0.04111$$

$$BEC = 0.5493$$

Weight: <None>

Min Conc: <None>

63 Cu [He] ISTD:45 Sc [He]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio   | Det | RSD |
|---|--------------------------|-----------|------------|-------------|---------|-----|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 1298.96     | 0.0031  | P   | 5.6 |
| 2 | <input type="checkbox"/> | 2.000     | 2.073      | 8236.78     | 0.0197  | P   | 1.3 |
| 3 | <input type="checkbox"/> | 500.000   | 524.044    | 1710430.81  | 4.2001  | A   | 0.6 |
| 4 | <input type="checkbox"/> | 1250.000  | 1271.866   | 4234043.55  | 10.1891 | A   | 0.2 |
| 5 | <input type="checkbox"/> | 2500.000  | 2555.478   | 8399965.15  | 20.4692 | A   | 1.1 |
| 6 | <input type="checkbox"/> | 5000.000  | 5096.117   | 16851940.86 | 40.8164 | A   | 2.1 |
| 7 | <input type="checkbox"/> | 10000.000 | 9934.136   | 34231128.10 | 79.5627 | A   | 1.0 |
| 8 | <input type="checkbox"/> |           |            | 4427.37     | 0.0102  | P   | 0.4 |

$$y = 0.0080 * x + 0.0031$$

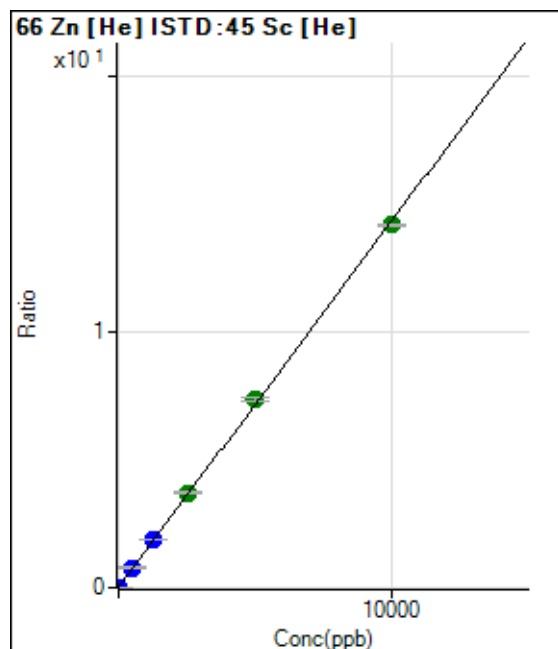
$$R = 0.9999$$

$$DL = 0.06539$$

$$BEC = 0.3921$$

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS        | Ratio   | Det. | RSD |
|---|--------------------------|-----------|------------|------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 4609.64    | 0.0111  | P    | 2.3 |
| 2 | <input type="checkbox"/> | 5.000     | 5.019      | 7647.60    | 0.0183  | P    | 3.1 |
| 3 | <input type="checkbox"/> | 500.000   | 542.192    | 320685.29  | 0.7875  | P    | 1.0 |
| 4 | <input type="checkbox"/> | 1250.000  | 1292.907   | 773892.17  | 1.8624  | P    | 0.9 |
| 5 | <input type="checkbox"/> | 2500.000  | 2590.524   | 1526576.92 | 3.7203  | A    | 2.1 |
| 6 | <input type="checkbox"/> | 5000.000  | 5136.982   | 3041265.79 | 7.3664  | A    | 1.5 |
| 7 | <input type="checkbox"/> | 10000.000 | 9901.405   | 6104145.47 | 14.1883 | A    | 0.7 |
| 8 | <input type="checkbox"/> |           |            | 7806.56    | 0.0180  | P    | 2.8 |

$$y = 0.0014 * x + 0.0111$$

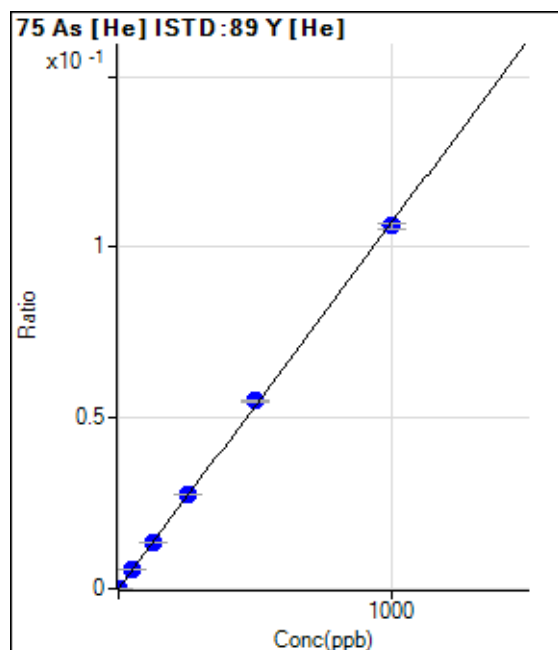
R = 0.9998

DL = 0.5374

BEC = 7.784

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS       | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|-----------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 8.89      | 0.0000 | P    | 77.4 |
| 2 | <input type="checkbox"/> | 1.000    | 1.238      | 447.79    | 0.0001 | P    | 14.0 |
| 3 | <input type="checkbox"/> | 50.000   | 52.212     | 18227.97  | 0.0056 | P    | 3.0  |
| 4 | <input type="checkbox"/> | 125.000  | 128.092    | 45211.13  | 0.0137 | P    | 1.0  |
| 5 | <input type="checkbox"/> | 250.000  | 256.583    | 89578.05  | 0.0275 | P    | 1.0  |
| 6 | <input type="checkbox"/> | 500.000  | 512.487    | 179995.36 | 0.0549 | P    | 0.8  |
| 7 | <input type="checkbox"/> | 1000.000 | 991.613    | 367581.40 | 0.1062 | P    | 1.9  |
| 8 | <input type="checkbox"/> |          |            | 442.23    | 0.0001 | P    | 13.7 |

$$y = 1.0712E-004 * x + 2.6458E-006$$

R = 0.9999

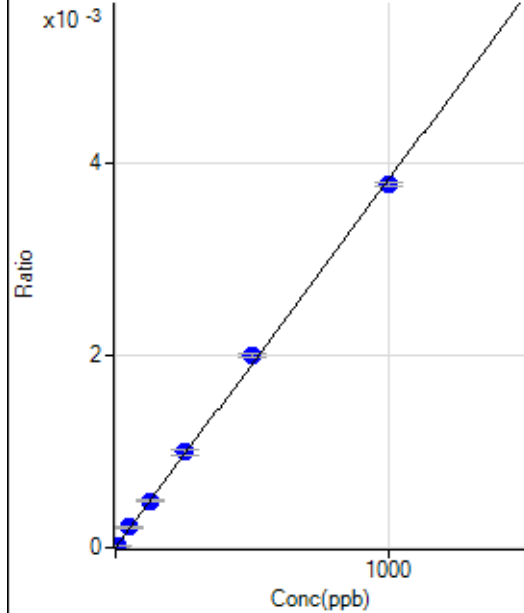
DL = 0.05734

BEC = 0.0247

Weight: <None>

Min Conc: <None>

77 Se [He] ISTD:89 Y [He]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS      | Ratio  | Det | RSD  |
|---|--------------------------|----------|------------|----------|--------|-----|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 1.11     | 0.0000 | P   | 173. |
| 2 | <input type="checkbox"/> | 5.000    | 5.419      | 70.00    | 0.0000 | P   | 28.6 |
| 3 | <input type="checkbox"/> | 50.000   | 55.001     | 687.80   | 0.0002 | P   | 5.4  |
| 4 | <input type="checkbox"/> | 125.000  | 127.279    | 1606.77  | 0.0005 | P   | 5.3  |
| 5 | <input type="checkbox"/> | 250.000  | 259.003    | 3232.61  | 0.0010 | P   | 6.1  |
| 6 | <input type="checkbox"/> | 500.000  | 522.157    | 6558.18  | 0.0020 | P   | 2.5  |
| 7 | <input type="checkbox"/> | 1000.000 | 986.134    | 13073.66 | 0.0038 | P   | 1.2  |
| 8 | <input type="checkbox"/> |          |            | 18.89    | 0.0000 | P   | 38.8 |

$$y = 3.8303E-006 * x + 3.2897E-007$$

R = 0.9996

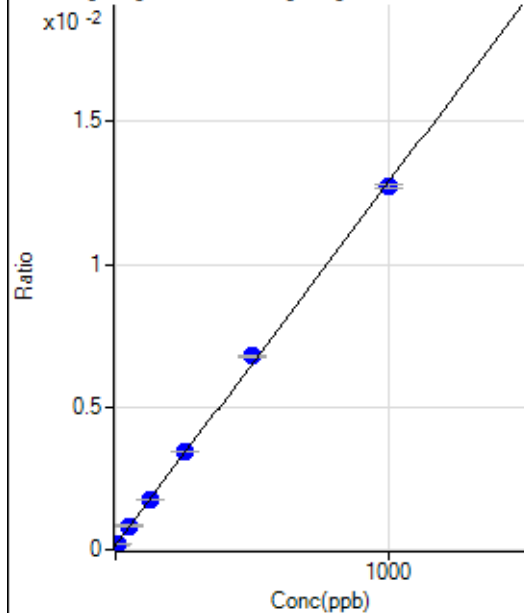
DL = 0.4463

BEC = 0.08589

Weight: <None>

Min Conc: <None>

78 Se [He] ISTD:89 Y [He]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS      | Ratio  | Det | RSD  |
|---|--------------------------|----------|------------|----------|--------|-----|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 516.68   | 0.0002 | P   | 3.8  |
| 2 | <input type="checkbox"/> | 5.000    | 4.931      | 720.03   | 0.0002 | P   | 11.3 |
| 3 | <input type="checkbox"/> | 50.000   | 53.929     | 2738.06  | 0.0008 | P   | 1.0  |
| 4 | <input type="checkbox"/> | 125.000  | 124.620    | 5730.05  | 0.0017 | P   | 1.7  |
| 5 | <input type="checkbox"/> | 250.000  | 257.907    | 11192.12 | 0.0034 | P   | 1.5  |
| 6 | <input type="checkbox"/> | 500.000  | 521.381    | 22248.01 | 0.0068 | P   | 1.2  |
| 7 | <input type="checkbox"/> | 1000.000 | 987.185    | 43985.59 | 0.0127 | P   | 1.1  |
| 8 | <input type="checkbox"/> |          |            | 550.02   | 0.0002 | P   | 5.6  |

$$y = 1.2717E-005 * x + 1.5447E-004$$

R = 0.9996

DL = 1.388

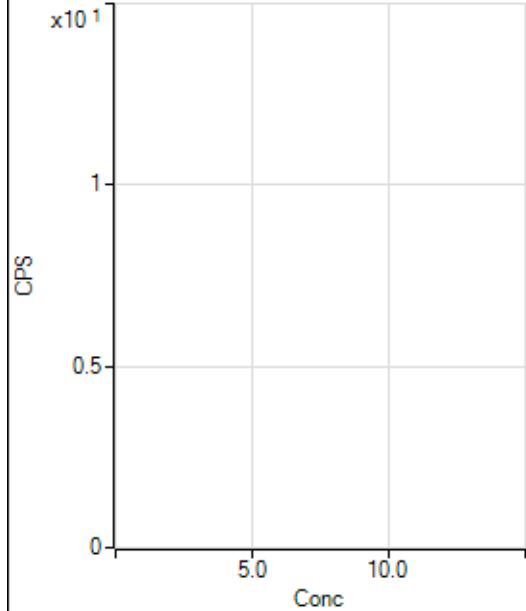
BEC = 12.15

Weight: <None>

Min Conc: <None>

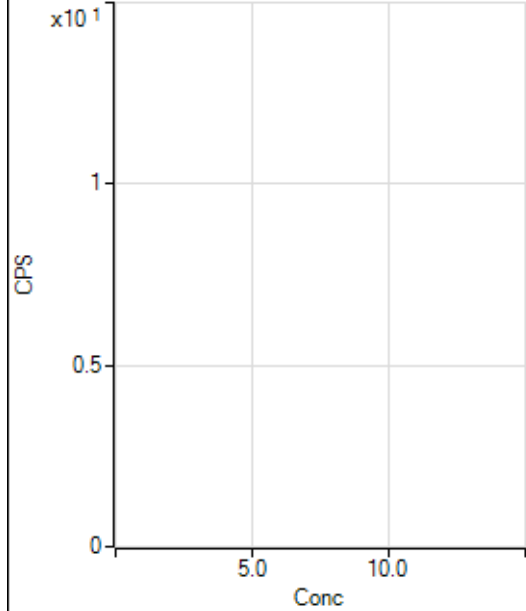


81 Br [ No Gas ] No available calibration points



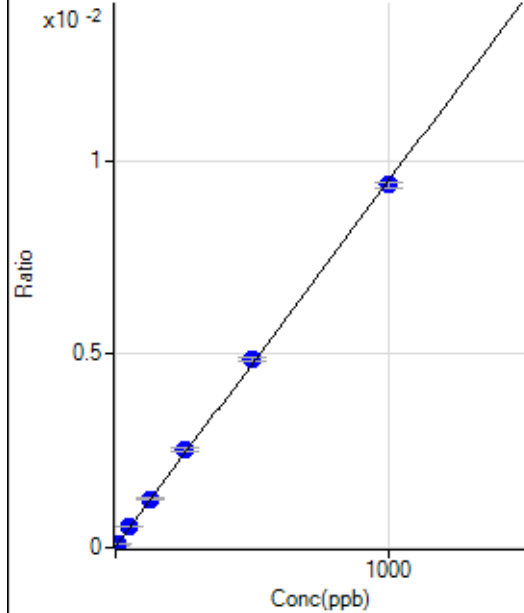
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS     | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|---------|-------|----------|-----|
| 1 | <input type="checkbox"/> |       |            | 9545.41 |       | P        | 1.9 |
| 2 | <input type="checkbox"/> |       |            | 9580.98 |       | P        | 1.7 |
| 3 | <input type="checkbox"/> |       |            | 9099.58 |       | P        | 2.1 |
| 4 | <input type="checkbox"/> |       |            | 9091.79 |       | P        | 1.0 |
| 5 | <input type="checkbox"/> |       |            | 9121.78 |       | P        | 1.1 |
| 6 | <input type="checkbox"/> |       |            | 8931.69 |       | P        | 2.6 |
| 7 | <input type="checkbox"/> |       |            | 9394.19 |       | P        | 1.7 |
| 8 | <input type="checkbox"/> |       |            | 9821.14 |       | P        | 2.5 |

81 Br [ He ] No available calibration points



|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 195.56 |       | P        | 8.1  |
| 2 | <input type="checkbox"/> |       |            | 162.22 |       | P        | 9.7  |
| 3 | <input type="checkbox"/> |       |            | 120.00 |       | P        | 5.6  |
| 4 | <input type="checkbox"/> |       |            | 123.33 |       | P        | 4.7  |
| 5 | <input type="checkbox"/> |       |            | 131.12 |       | P        | 10.3 |
| 6 | <input type="checkbox"/> |       |            | 127.78 |       | P        | 15.7 |
| 7 | <input type="checkbox"/> |       |            | 148.89 |       | P        | 6.5  |
| 8 | <input type="checkbox"/> |       |            | 197.78 |       | P        | 14.3 |

82 Se [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS       | Ratio  | Det<br>. | RSD  |
|---|--------------------------|----------|------------|-----------|--------|----------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 321.25    | 0.0000 | P        | 8.0  |
| 2 | <input type="checkbox"/> | 5.000    | 5.655      | 927.43    | 0.0001 | P        | 2.5  |
| 3 | <input type="checkbox"/> | 50.000   | 53.428     | 6021.69   | 0.0005 | P        | 1.0  |
| 4 | <input type="checkbox"/> | 125.000  | 130.986    | 14503.76  | 0.0013 | P        | 1.1  |
| 5 | <input type="checkbox"/> | 250.000  | 263.603    | 28260.44  | 0.0025 | P        | 3.5  |
| 6 | <input type="checkbox"/> | 500.000  | 513.205    | 55806.12  | 0.0049 | P        | 1.4  |
| 7 | <input type="checkbox"/> | 1000.000 | 989.074    | 112970.51 | 0.0094 | P        | 1.6  |
| 8 | <input type="checkbox"/> |          |            | 527.06    | 0.0000 | P        | 15.3 |

$$y = 9.4607E-006 * x + 2.8035E-005$$

R = 0.9998

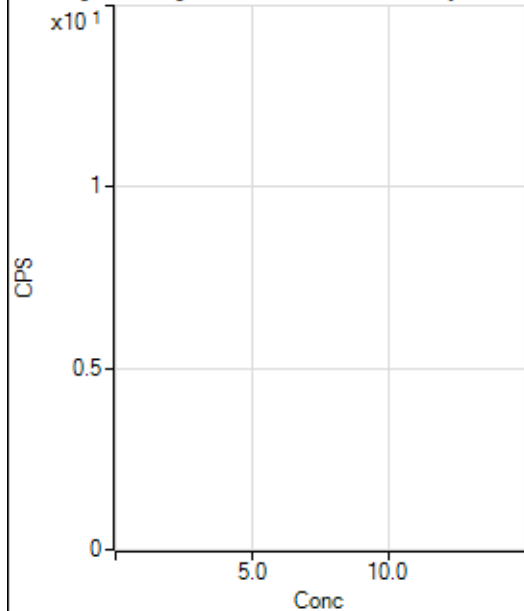
DL = 0.7128

BEC = 2.963

Weight: <None>

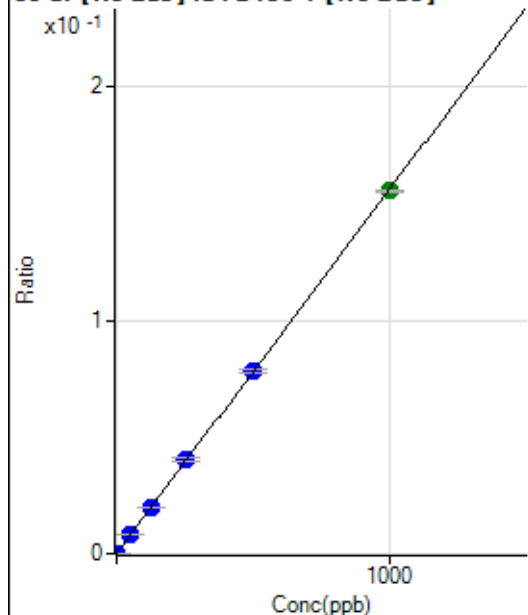
Min Conc: <None>

83 Kr [No Gas] No available calibration points



|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 502.24 |       | P        | 4.7  |
| 2 | <input type="checkbox"/> |       |            | 438.90 |       | P        | 6.4  |
| 3 | <input type="checkbox"/> |       |            | 493.35 |       | P        | 8.4  |
| 4 | <input type="checkbox"/> |       |            | 465.57 |       | P        | 3.3  |
| 5 | <input type="checkbox"/> |       |            | 441.12 |       | P        | 6.9  |
| 6 | <input type="checkbox"/> |       |            | 496.68 |       | P        | 16.3 |
| 7 | <input type="checkbox"/> |       |            | 478.90 |       | P        | 10.3 |
| 8 | <input type="checkbox"/> |       |            | 443.34 |       | P        | 11.4 |

86 Sr [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 795.58     | 0.0001 | P    | 6.4 |
| 2 | <input type="checkbox"/> | 1.000    | 1.024      | 2604.71    | 0.0002 | P    | 1.8 |
| 3 | <input type="checkbox"/> | 50.000   | 50.945     | 90395.05   | 0.0080 | P    | 1.1 |
| 4 | <input type="checkbox"/> | 125.000  | 126.156    | 225808.30  | 0.0197 | P    | 1.7 |
| 5 | <input type="checkbox"/> | 250.000  | 258.799    | 452788.07  | 0.0404 | P    | 3.2 |
| 6 | <input type="checkbox"/> | 500.000  | 502.661    | 896008.24  | 0.0784 | P    | 1.6 |
| 7 | <input type="checkbox"/> | 1000.000 | 996.278    | 1869868.38 | 0.1553 | A    | 0.9 |
| 8 | <input type="checkbox"/> |          |            | 23691.41   | 0.0020 | P    | 1.1 |

$$y = 1.5585E-004 * x + 6.9350E-005$$

R = 1.0000

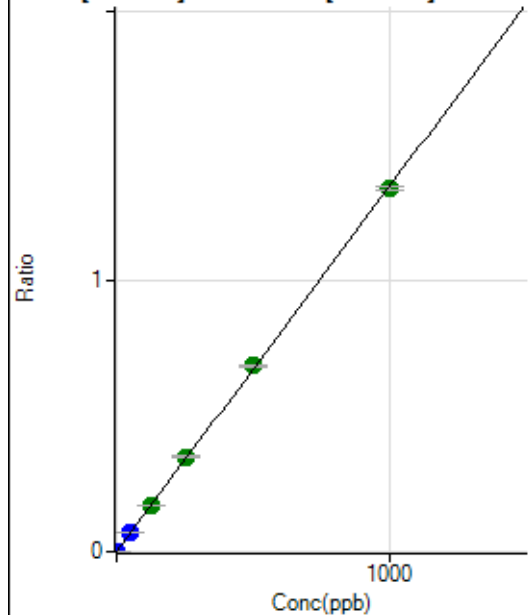
DL = 0.08497

BEC = 0.445

Weight: <None>

Min Conc: <None>

88 Sr [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|-------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 323.34      | 0.0000 | P    | 5.3 |
| 2 | <input type="checkbox"/> | 1.000    | 1.051      | 16473.77    | 0.0014 | P    | 1.5 |
| 3 | <input type="checkbox"/> | 50.000   | 51.526     | 786173.84   | 0.0697 | P    | 0.9 |
| 4 | <input type="checkbox"/> | 125.000  | 126.653    | 1958850.09  | 0.1712 | A    | 2.1 |
| 5 | <input type="checkbox"/> | 250.000  | 259.408    | 3929096.33  | 0.3505 | A    | 2.9 |
| 6 | <input type="checkbox"/> | 500.000  | 508.402    | 7850850.92  | 0.6870 | A    | 1.4 |
| 7 | <input type="checkbox"/> | 1000.000 | 993.164    | 16154391.84 | 1.3420 | A    | 1.0 |
| 8 | <input type="checkbox"/> |          |            | 203093.85   | 0.0174 | P    | 0.5 |

$$y = 0.0014 * x + 2.8189E-005$$

R = 0.9999

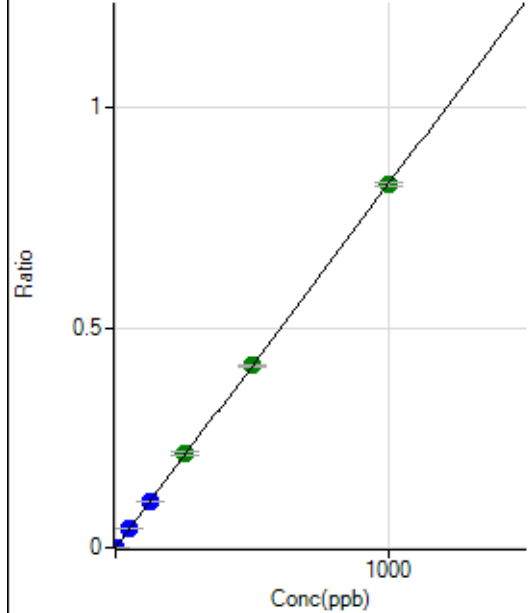
DL = 0.003339

BEC = 0.02086

Weight: <None>

Min Conc: <None>

90 Zr [No Gas] ISTD : 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det<br>. | RSD |
|---|--------------------------|----------|------------|------------|--------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 508.91     | 0.0000 | P        | 3.8 |
| 2 | <input type="checkbox"/> | 1.000    | 1.031      | 10211.44   | 0.0009 | P        | 1.6 |
| 3 | <input type="checkbox"/> | 50.000   | 50.790     | 474770.69  | 0.0421 | P        | 0.9 |
| 4 | <input type="checkbox"/> | 125.000  | 126.314    | 1196502.04 | 0.1045 | P        | 1.3 |
| 5 | <input type="checkbox"/> | 250.000  | 259.425    | 2404869.77 | 0.2147 | A        | 4.5 |
| 6 | <input type="checkbox"/> | 500.000  | 499.813    | 4725977.50 | 0.4135 | A        | 0.6 |
| 7 | <input type="checkbox"/> | 1000.000 | 997.533    | 9934186.73 | 0.8253 | A        | 1.1 |
| 8 | <input type="checkbox"/> |          |            | 8730.44    | 0.0007 | P        | 1.7 |

$$y = 8.2729E-004 * x + 4.4398E-005$$

$$R = 1.0000$$

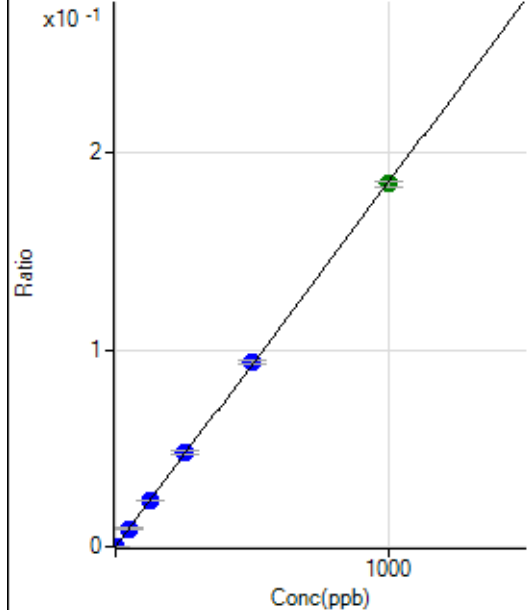
$$DL = 0.006086$$

$$BEC = 0.05367$$

Weight: <None>

Min Conc: <None>

91 Zr [No Gas] ISTD : 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det<br>. | RSD |
|---|--------------------------|----------|------------|------------|--------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 116.67     | 0.0000 | P        | 1.3 |
| 2 | <input type="checkbox"/> | 1.000    | 1.016      | 2252.42    | 0.0002 | P        | 4.8 |
| 3 | <input type="checkbox"/> | 50.000   | 50.040     | 104567.98  | 0.0093 | P        | 0.5 |
| 4 | <input type="checkbox"/> | 125.000  | 125.971    | 266741.15  | 0.0233 | P        | 1.2 |
| 5 | <input type="checkbox"/> | 250.000  | 257.454    | 533632.60  | 0.0476 | P        | 3.6 |
| 6 | <input type="checkbox"/> | 500.000  | 505.152    | 1067683.52 | 0.0934 | P        | 1.6 |
| 7 | <input type="checkbox"/> | 1000.000 | 995.437    | 2215954.86 | 0.1841 | A        | 1.8 |
| 8 | <input type="checkbox"/> |          |            | 1937.93    | 0.0002 | P        | 0.6 |

$$y = 1.8493E-004 * x + 1.0176E-005$$

$$R = 0.9999$$

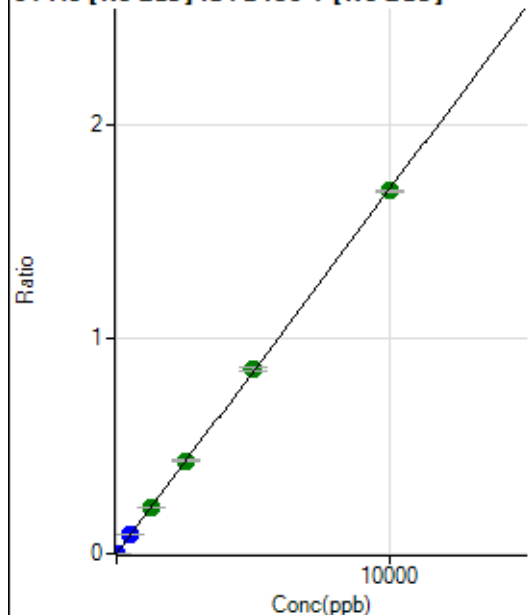
$$DL = 0.002216$$

$$BEC = 0.05503$$

Weight: <None>

Min Conc: <None>

94 Mo [No Gas] ISTD:89 Y [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio  | Det<br>. | RSD  |
|---|--------------------------|-----------|------------|-------------|--------|----------|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 336.67      | 0.0000 | P        | 13.0 |
| 2 | <input type="checkbox"/> | 5.000     | 6.169      | 12254.11    | 0.0011 | P        | 1.9  |
| 3 | <input type="checkbox"/> | 500.000   | 508.946    | 976292.90   | 0.0865 | P        | 1.0  |
| 4 | <input type="checkbox"/> | 1250.000  | 1254.314   | 2439482.62  | 0.2131 | A        | 1.4  |
| 5 | <input type="checkbox"/> | 2500.000  | 2553.110   | 4862478.78  | 0.4338 | A        | 2.6  |
| 6 | <input type="checkbox"/> | 5000.000  | 5056.365   | 9816774.78  | 0.8591 | A        | 2.1  |
| 7 | <input type="checkbox"/> | 10000.000 | 9957.553   | 20364717.47 | 1.6917 | A        | 0.2  |
| 8 | <input type="checkbox"/> |           |            | 6234.73     | 0.0005 | P        | 2.4  |

$$y = 1.6989E-004 * x + 2.9337E-005$$

R = 1.0000

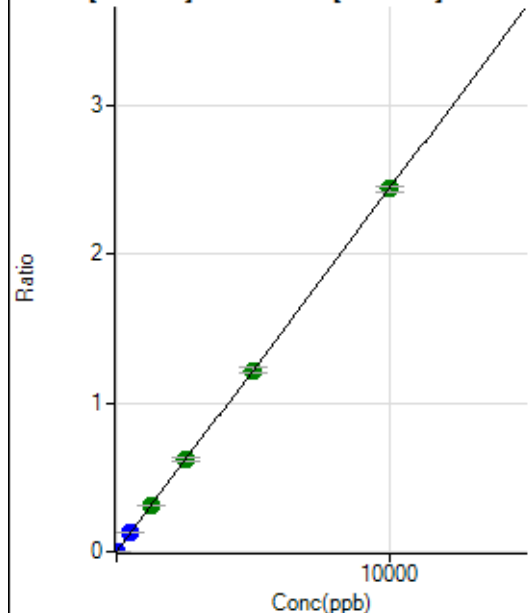
DL = 0.06743

BEC = 0.1727

Weight: <None>

Min Conc: <None>

95 Mo [No Gas] ISTD:89 Y [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio  | Det<br>. | RSD  |
|---|--------------------------|-----------|------------|-------------|--------|----------|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 295.56      | 0.0000 | P        | 13.4 |
| 2 | <input type="checkbox"/> | 5.000     | 5.187      | 14676.37    | 0.0013 | P        | 0.2  |
| 3 | <input type="checkbox"/> | 500.000   | 505.512    | 1391226.23  | 0.1233 | P        | 0.9  |
| 4 | <input type="checkbox"/> | 1250.000  | 1253.386   | 3497434.74  | 0.3056 | A        | 0.8  |
| 5 | <input type="checkbox"/> | 2500.000  | 2530.545   | 6913755.45  | 0.6169 | A        | 3.2  |
| 6 | <input type="checkbox"/> | 5000.000  | 5003.328   | 13937924.65 | 1.2197 | A        | 2.9  |
| 7 | <input type="checkbox"/> | 10000.000 | 9990.001   | 29314137.62 | 2.4354 | A        | 1.6  |
| 8 | <input type="checkbox"/> |           |            | 5055.38     | 0.0004 | P        | 6.1  |

$$y = 2.4378E-004 * x + 2.5779E-005$$

R = 1.0000

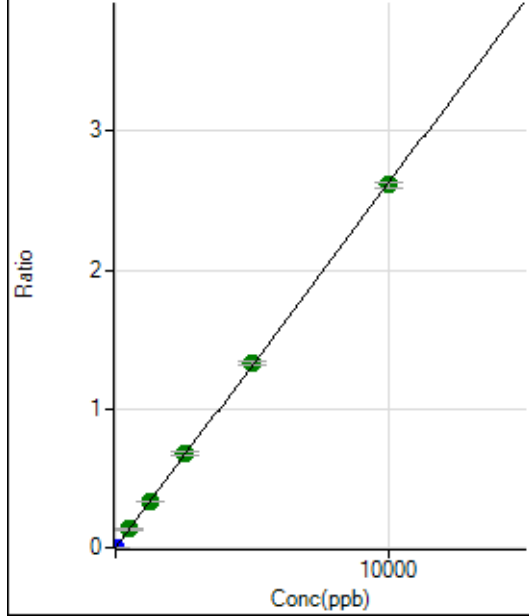
DL = 0.04252

BEC = 0.1057

Weight: <None>

Min Conc: <None>

96 Mo [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio  | Det. | RSD  |
|---|--------------------------|-----------|------------|-------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 351.12      | 0.0000 | P    | 21.1 |
| 2 | <input type="checkbox"/> | 5.000     | 5.420      | 16546.15    | 0.0015 | P    | 1.4  |
| 3 | <input type="checkbox"/> | 500.000   | 501.854    | 1488623.05  | 0.1319 | A    | 0.5  |
| 4 | <input type="checkbox"/> | 1250.000  | 1270.635   | 3820828.41  | 0.3339 | A    | 2.1  |
| 5 | <input type="checkbox"/> | 2500.000  | 2576.423   | 7586977.53  | 0.6769 | A    | 2.9  |
| 6 | <input type="checkbox"/> | 5000.000  | 5056.158   | 15181291.30 | 1.3284 | A    | 1.4  |
| 7 | <input type="checkbox"/> | 10000.000 | 9950.143   | 31467836.20 | 2.6143 | A    | 1.6  |
| 8 | <input type="checkbox"/> |           |            | 9812.26     | 0.0008 | P    | 3.6  |

$$y = 2.6273E-004 * x + 3.0596E-005$$

R = 0.9999

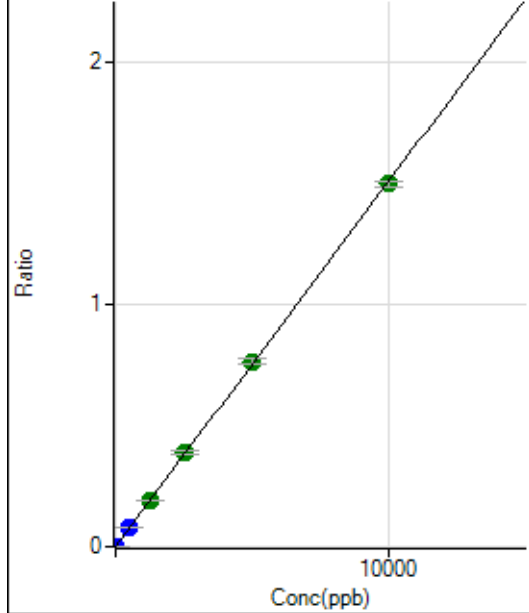
DL = 0.07386

BEC = 0.1165

Weight: <None>

Min Conc: <None>

97 Mo [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio  | Det. | RSD |
|---|--------------------------|-----------|------------|-------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 176.67      | 0.0000 | P    | 8.9 |
| 2 | <input type="checkbox"/> | 5.000     | 5.439      | 9487.58     | 0.0008 | P    | 1.2 |
| 3 | <input type="checkbox"/> | 500.000   | 514.697    | 874718.35   | 0.0775 | P    | 0.4 |
| 4 | <input type="checkbox"/> | 1250.000  | 1257.849   | 2167505.26  | 0.1894 | A    | 0.1 |
| 5 | <input type="checkbox"/> | 2500.000  | 2591.255   | 4370767.19  | 0.3901 | A    | 4.0 |
| 6 | <input type="checkbox"/> | 5000.000  | 5076.146   | 8732119.46  | 0.7642 | A    | 2.4 |
| 7 | <input type="checkbox"/> | 10000.000 | 9937.397   | 18006874.04 | 1.4959 | A    | 1.3 |
| 8 | <input type="checkbox"/> |           |            | 3329.30     | 0.0003 | P    | 5.9 |

$$y = 1.5053E-004 * x + 1.5399E-005$$

R = 0.9999

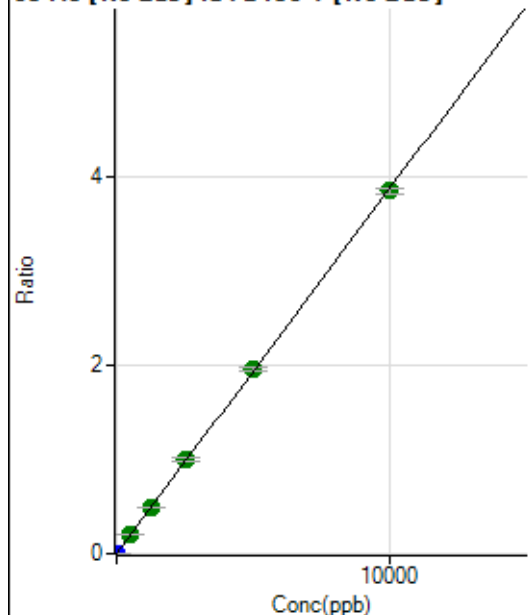
DL = 0.0273

BEC = 0.1023

Weight: <None>

Min Conc: <None>

98 Mo [No Gas] ISTD: 89 Y [No Gas]



|   | Rj<br>ct                 | Conc.     | Calc Conc. | CPS         | Ratio  | Det<br>. | RSD |
|---|--------------------------|-----------|------------|-------------|--------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000     | 0.000      | 450.01      | 0.0000 | P        | 8.7 |
| 2 | <input type="checkbox"/> | 5.000     | 5.252      | 23631.48    | 0.0021 | P        | 1.0 |
| 3 | <input type="checkbox"/> | 500.000   | 502.728    | 2203005.03  | 0.1952 | A        | 0.2 |
| 4 | <input type="checkbox"/> | 1250.000  | 1263.249   | 5612550.61  | 0.4904 | A        | 0.4 |
| 5 | <input type="checkbox"/> | 2500.000  | 2585.203   | 11243792.19 | 1.0035 | A        | 3.9 |
| 6 | <input type="checkbox"/> | 5000.000  | 5072.787   | 22500484.94 | 1.9690 | A        | 1.9 |
| 7 | <input type="checkbox"/> | 10000.000 | 9940.513   | 46443258.20 | 3.8583 | A        | 1.6 |
| 8 | <input type="checkbox"/> |           |            | 7937.79     | 0.0007 | P        | 6.6 |

$$y = 3.8814E-004 * x + 3.9236E-005$$

R = 0.9999

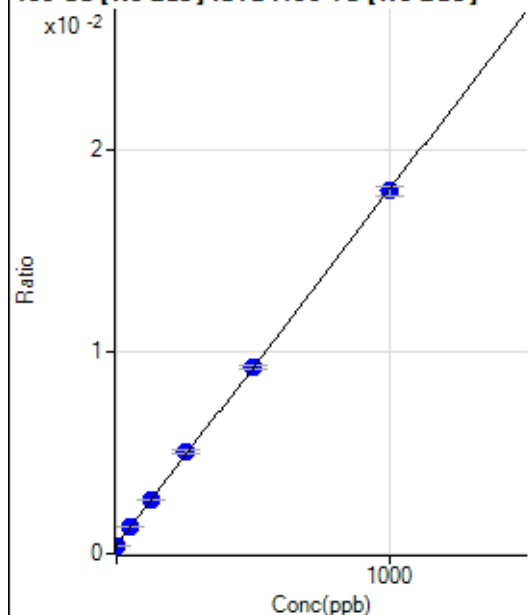
DL = 0.02627

BEC = 0.1011

Weight: <None>

Min Conc: <None>

106 Cd [No Gas] ISTD: 159 Tb [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS       | Ratio  | Det<br>. | RSD |
|---|--------------------------|----------|------------|-----------|--------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 3277.07   | 0.0004 | P        | 2.6 |
| 2 | <input type="checkbox"/> | 1.000    | 0.009      | 3265.96   | 0.0004 | P        | 2.5 |
| 3 | <input type="checkbox"/> | 50.000   | 52.113     | 10328.20  | 0.0013 | P        | 1.5 |
| 4 | <input type="checkbox"/> | 125.000  | 127.395    | 21387.01  | 0.0027 | P        | 0.7 |
| 5 | <input type="checkbox"/> | 250.000  | 264.042    | 39839.24  | 0.0051 | P        | 4.4 |
| 6 | <input type="checkbox"/> | 500.000  | 499.405    | 75074.68  | 0.0092 | P        | 1.9 |
| 7 | <input type="checkbox"/> | 1000.000 | 996.383    | 151077.29 | 0.0179 | P        | 2.5 |
| 8 | <input type="checkbox"/> |          |            | 3254.84   | 0.0004 | P        | 1.4 |

$$y = 1.7585E-005 * x + 4.1208E-004$$

R = 0.9999

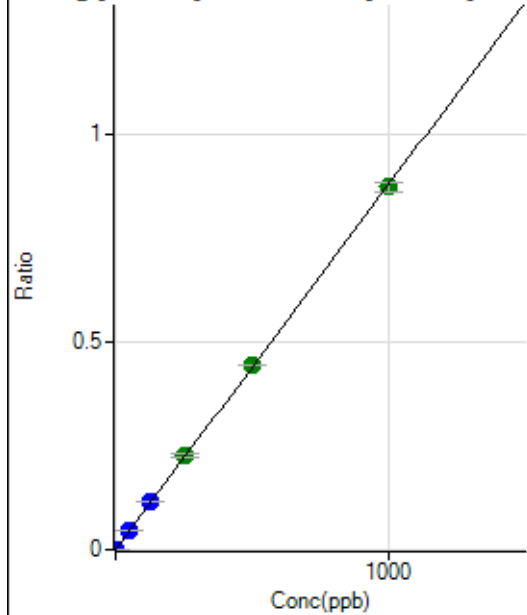
DL = 1.804

BEC = 23.43

Weight: <None>

Min Conc: <None>

107 Ag [No Gas] ISTD : 159 Tb [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 80.00      | 0.0000 | P    | 12.3 |
| 2 | <input type="checkbox"/> | 1.000    | 1.078      | 7577.59    | 0.0010 | P    | 3.1  |
| 3 | <input type="checkbox"/> | 50.000   | 53.427     | 364965.98  | 0.0469 | P    | 0.6  |
| 4 | <input type="checkbox"/> | 125.000  | 129.540    | 917682.50  | 0.1138 | P    | 0.6  |
| 5 | <input type="checkbox"/> | 250.000  | 259.746    | 1798512.42 | 0.2282 | A    | 3.7  |
| 6 | <input type="checkbox"/> | 500.000  | 506.059    | 3630216.27 | 0.4446 | A    | 0.8  |
| 7 | <input type="checkbox"/> | 1000.000 | 993.795    | 7354535.17 | 0.8730 | A    | 2.6  |
| 8 | <input type="checkbox"/> |          |            | 1956.85    | 0.0002 | P    | 44.4 |

$$y = 8.7844\text{E-}004 * x + 1.0058\text{E-}005$$

$$R = 0.9999$$

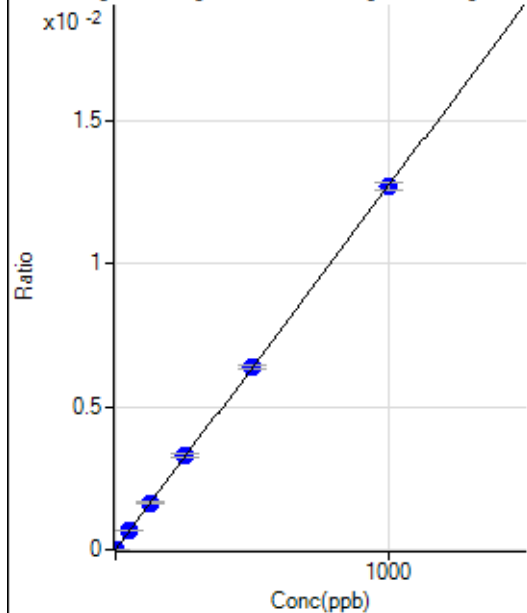
$$DL = 0.00424$$

$$BEC = 0.01145$$

Weight: <None>

Min Conc: <None>

108 Cd [No Gas] ISTD : 159 Tb [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS       | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|-----------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 11.11     | 0.0000 | P    | 62.2 |
| 2 | <input type="checkbox"/> | 1.000    | 1.159      | 127.78    | 0.0000 | P    | 2.9  |
| 3 | <input type="checkbox"/> | 50.000   | 53.238     | 5274.35   | 0.0007 | P    | 2.0  |
| 4 | <input type="checkbox"/> | 125.000  | 129.066    | 13245.07  | 0.0016 | P    | 3.0  |
| 5 | <input type="checkbox"/> | 250.000  | 258.844    | 25948.92  | 0.0033 | P    | 4.2  |
| 6 | <input type="checkbox"/> | 500.000  | 500.697    | 52002.08  | 0.0064 | P    | 2.0  |
| 7 | <input type="checkbox"/> | 1000.000 | 996.770    | 106795.64 | 0.0127 | P    | 2.3  |
| 8 | <input type="checkbox"/> |          |            | 105.56    | 0.0000 | P    | 5.1  |

$$y = 1.2716\text{E-}005 * x + 1.3954\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.2048$$

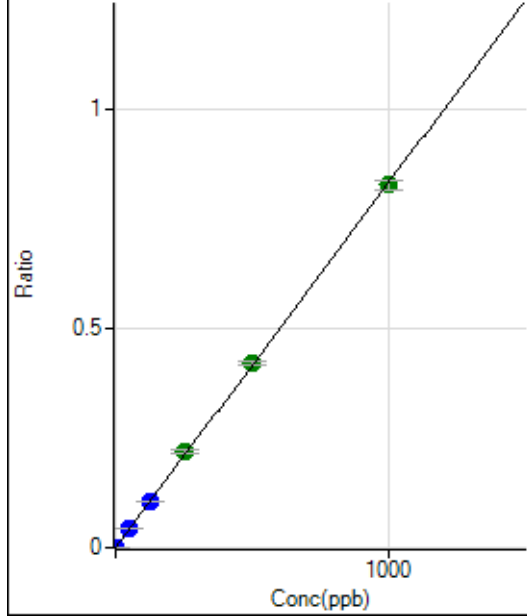
$$BEC = 0.1097$$

Weight: <None>

Min Conc: <None>



109 Ag [No Gas] ISTD : 159 Tb [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det<br>. | RSD  |
|---|--------------------------|----------|------------|------------|--------|----------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 64.44      | 0.0000 | P        | 33.9 |
| 2 | <input type="checkbox"/> | 1.000    | 1.056      | 7039.56    | 0.0009 | P        | 2.1  |
| 3 | <input type="checkbox"/> | 50.000   | 52.951     | 343285.46  | 0.0442 | P        | 0.3  |
| 4 | <input type="checkbox"/> | 125.000  | 127.876    | 859764.83  | 0.1066 | P        | 0.8  |
| 5 | <input type="checkbox"/> | 250.000  | 262.926    | 1727800.09 | 0.2192 | A        | 3.5  |
| 6 | <input type="checkbox"/> | 500.000  | 503.501    | 3427787.38 | 0.4198 | A        | 2.1  |
| 7 | <input type="checkbox"/> | 1000.000 | 994.511    | 6985359.83 | 0.8291 | A        | 2.6  |
| 8 | <input type="checkbox"/> |          |            | 1784.59    | 0.0002 | P        | 46.8 |

$$y = 8.3372E-004 * x + 8.0923E-006$$

$$R = 0.9999$$

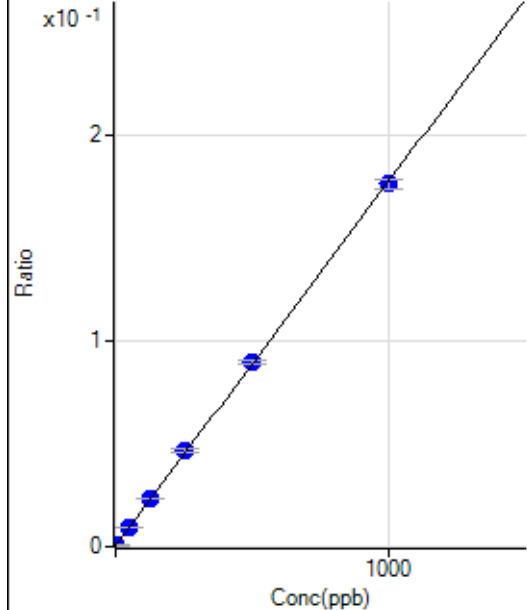
$$DL = 0.009875$$

$$BEC = 0.009706$$

Weight: <None>

Min Conc: <None>

111 Cd [No Gas] ISTD : 159 Tb [No Gas]



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det<br>. | RSD |
|---|--------------------------|----------|------------|------------|--------|----------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 2319.50    | 0.0003 | P        | 2.4 |
| 2 | <input type="checkbox"/> | 1.000    | 1.012      | 3730.16    | 0.0005 | P        | 2.0 |
| 3 | <input type="checkbox"/> | 50.000   | 53.200     | 75511.82   | 0.0097 | P        | 1.6 |
| 4 | <input type="checkbox"/> | 125.000  | 128.979    | 186538.38  | 0.0231 | P        | 1.3 |
| 5 | <input type="checkbox"/> | 250.000  | 263.123    | 369575.28  | 0.0469 | P        | 3.3 |
| 6 | <input type="checkbox"/> | 500.000  | 505.095    | 732799.27  | 0.0897 | P        | 1.5 |
| 7 | <input type="checkbox"/> | 1000.000 | 993.514    | 1484683.37 | 0.1762 | P        | 2.6 |
| 8 | <input type="checkbox"/> |          |            | 2914.52    | 0.0004 | P        | 1.0 |

$$y = 1.7709E-004 * x + 2.9167E-004$$

$$R = 0.9999$$

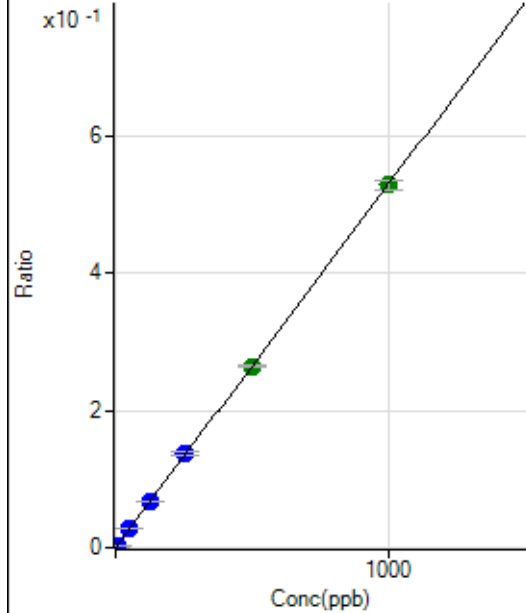
$$DL = 0.118$$

$$BEC = 1.647$$

Weight: <None>

Min Conc: <None>

118 Sn [No Gas] ISTD:159 Tb [No Gas]



|   | R <sub>j</sub><br>ct     | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 975.60     | 0.0001 | P    | 2.4 |
| 2 | <input type="checkbox"/> | 5.000    | 5.346      | 23408.06   | 0.0030 | P    | 1.9 |
| 3 | <input type="checkbox"/> | 50.000   | 52.841     | 218636.91  | 0.0281 | P    | 0.6 |
| 4 | <input type="checkbox"/> | 125.000  | 127.738    | 546791.98  | 0.0678 | P    | 1.0 |
| 5 | <input type="checkbox"/> | 250.000  | 259.898    | 1086233.52 | 0.1378 | P    | 4.0 |
| 6 | <input type="checkbox"/> | 500.000  | 498.451    | 2157797.64 | 0.2642 | A    | 0.8 |
| 7 | <input type="checkbox"/> | 1000.000 | 997.814    | 4454989.52 | 0.5288 | A    | 2.9 |
| 8 | <input type="checkbox"/> |          |            | 1903.48    | 0.0002 | P    | 3.0 |

$$y = 5.2987E-004 * x + 1.2269E-004$$

R = 0.9999

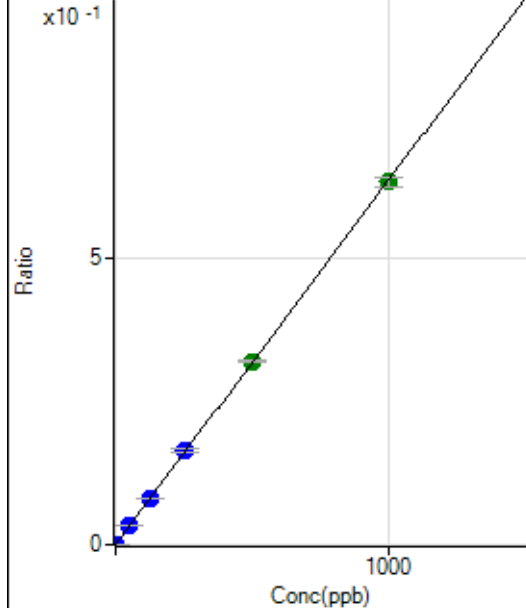
DL = 0.01637

BEC = 0.2315

Weight: <None>

Min Conc: <None>

121 Sb [No Gas] ISTD:159 Tb [No Gas]



|   | R <sub>j</sub><br>ct     | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 36.67      | 0.0000 | P    | 36.7 |
| 2 | <input type="checkbox"/> | 2.000    | 2.117      | 10710.74   | 0.0014 | P    | 1.7  |
| 3 | <input type="checkbox"/> | 50.000   | 52.140     | 258106.41  | 0.0332 | P    | 0.6  |
| 4 | <input type="checkbox"/> | 125.000  | 125.949    | 646633.04  | 0.0802 | P    | 0.6  |
| 5 | <input type="checkbox"/> | 250.000  | 259.155    | 1300319.73 | 0.1650 | P    | 3.8  |
| 6 | <input type="checkbox"/> | 500.000  | 503.319    | 2616704.08 | 0.3204 | A    | 0.9  |
| 7 | <input type="checkbox"/> | 1000.000 | 995.826    | 5341137.52 | 0.6340 | A    | 2.4  |
| 8 | <input type="checkbox"/> |          |            | 4429.61    | 0.0005 | P    | 4.3  |

$$y = 6.3664E-004 * x + 4.6155E-006$$

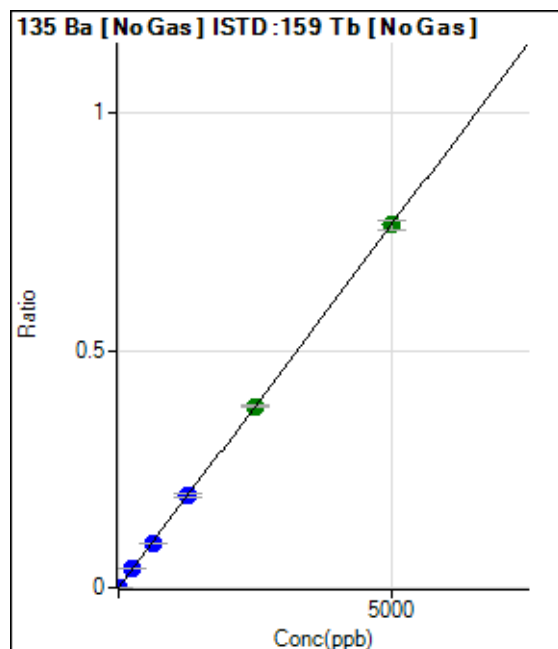
R = 0.9999

DL = 0.007973

BEC = 0.00725

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 54.44      | 0.0000 | P    | 27.9 |
| 2 | <input type="checkbox"/> | 10.000   | 10.568     | 12870.39   | 0.0016 | P    | 1.6  |
| 3 | <input type="checkbox"/> | 250.000  | 254.157    | 302555.04  | 0.0389 | P    | 0.9  |
| 4 | <input type="checkbox"/> | 625.000  | 618.918    | 764106.94  | 0.0948 | P    | 0.5  |
| 5 | <input type="checkbox"/> | 1250.000 | 1266.462   | 1528209.01 | 0.1939 | P    | 3.4  |
| 6 | <input type="checkbox"/> | 2500.000 | 2495.567   | 3119806.93 | 0.3821 | A    | 1.3  |
| 7 | <input type="checkbox"/> | 5000.000 | 4998.652   | 6447011.78 | 0.7653 | A    | 2.4  |
| 8 | <input type="checkbox"/> |          |            | 3928.36    | 0.0005 | P    | 2.2  |

$$y = 1.5309E-004 * x + 6.8511E-006$$

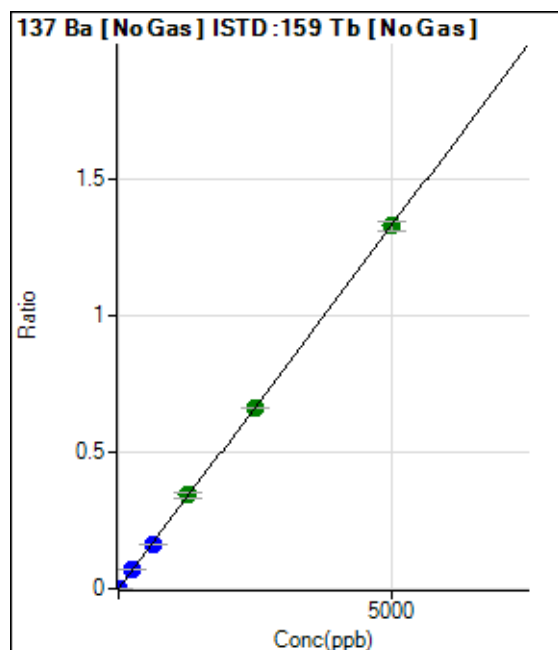
$$R = 1.0000$$

$$DL = 0.03748$$

$$BEC = 0.04475$$

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|-------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 122.22      | 0.0000 | P    | 28.6 |
| 2 | <input type="checkbox"/> | 10.000   | 10.430     | 22082.85    | 0.0028 | P    | 3.7  |
| 3 | <input type="checkbox"/> | 250.000  | 255.135    | 527525.89   | 0.0679 | P    | 0.4  |
| 4 | <input type="checkbox"/> | 625.000  | 618.919    | 1327116.61  | 0.1646 | P    | 0.6  |
| 5 | <input type="checkbox"/> | 1250.000 | 1287.338   | 2697069.86  | 0.3423 | A    | 4.7  |
| 6 | <input type="checkbox"/> | 2500.000 | 2486.584   | 5399145.27  | 0.6612 | A    | 0.7  |
| 7 | <input type="checkbox"/> | 5000.000 | 4997.876   | 11194790.25 | 1.3289 | A    | 2.8  |
| 8 | <input type="checkbox"/> |          |            | 6723.87     | 0.0008 | P    | 2.0  |

$$y = 2.6589E-004 * x + 1.5386E-005$$

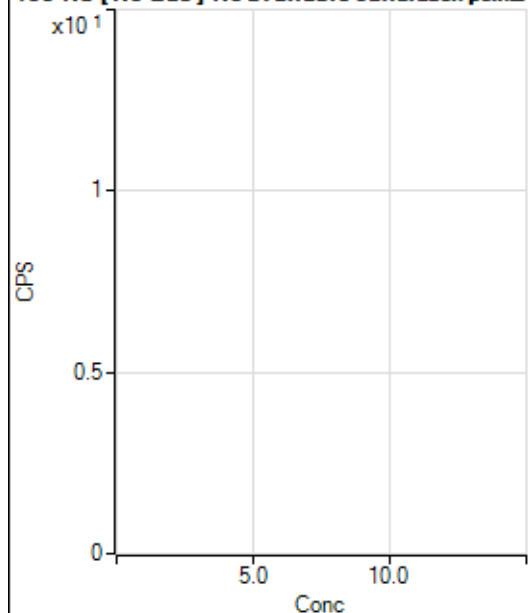
$$R = 1.0000$$

$$DL = 0.04963$$

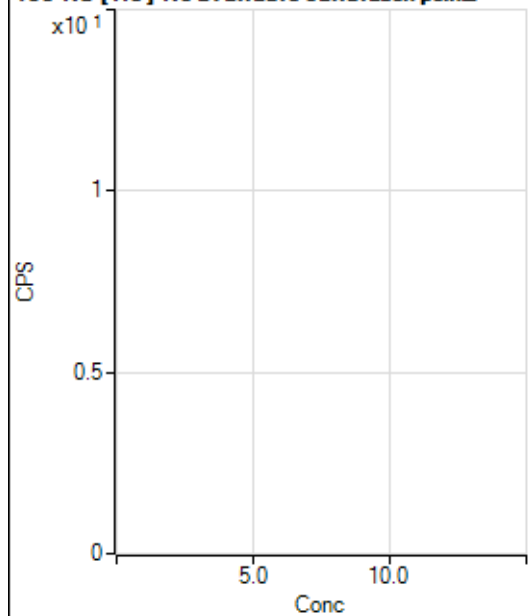
$$BEC = 0.05787$$

Weight: <None>

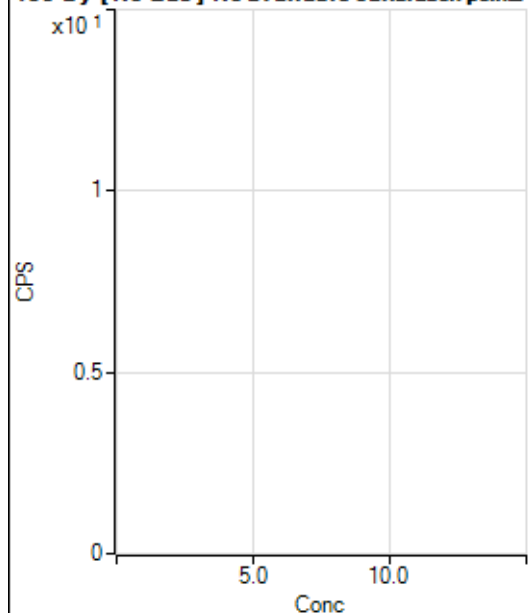
Min Conc: <None>

**150 Nd [ No Gas ] No available calibration points**

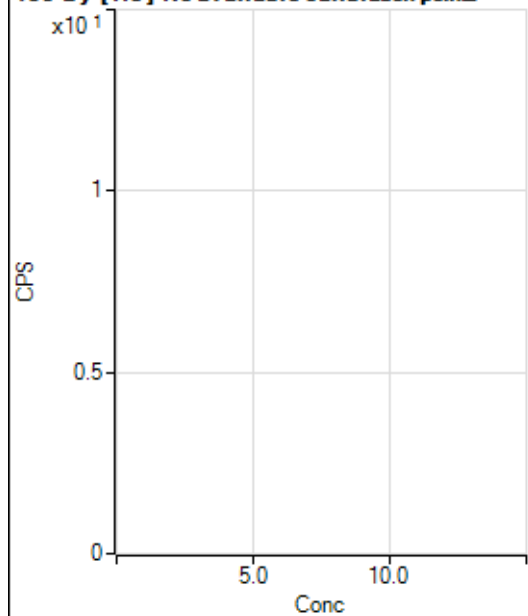
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 11.11  |       | P        | 75.5 |
| 2 | <input type="checkbox"/> |       |            | 3.33   |       | P        | 0.0  |
| 3 | <input type="checkbox"/> |       |            | 16.67  |       | P        | 52.9 |
| 4 | <input type="checkbox"/> |       |            | 26.67  |       | P        | 12.5 |
| 5 | <input type="checkbox"/> |       |            | 58.89  |       | P        | 29.0 |
| 6 | <input type="checkbox"/> |       |            | 105.56 |       | P        | 17.4 |
| 7 | <input type="checkbox"/> |       |            | 224.45 |       | P        | 12.6 |
| 8 | <input type="checkbox"/> |       |            | 121.11 |       | P        | 20.3 |

**150 Nd [ He ] No available calibration points**

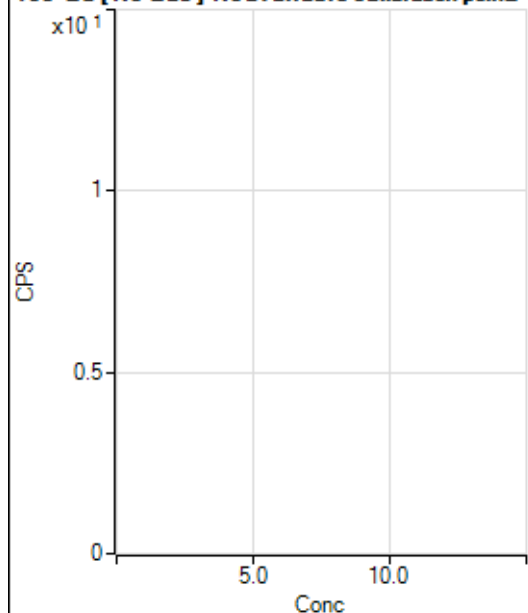
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS   | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|-------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 7.78  |       | P        | 65.5 |
| 2 | <input type="checkbox"/> |       |            | 3.33  |       | P        | 100. |
| 3 | <input type="checkbox"/> |       |            | 14.44 |       | P        | 35.3 |
| 4 | <input type="checkbox"/> |       |            | 7.78  |       | P        | 49.5 |
| 5 | <input type="checkbox"/> |       |            | 23.33 |       | P        | 57.2 |
| 6 | <input type="checkbox"/> |       |            | 27.78 |       | P        | 27.7 |
| 7 | <input type="checkbox"/> |       |            | 66.67 |       | P        | 10.0 |
| 8 | <input type="checkbox"/> |       |            | 83.33 |       | P        | 24.3 |

**156 Dy [ No Gas ] No available calibration points**

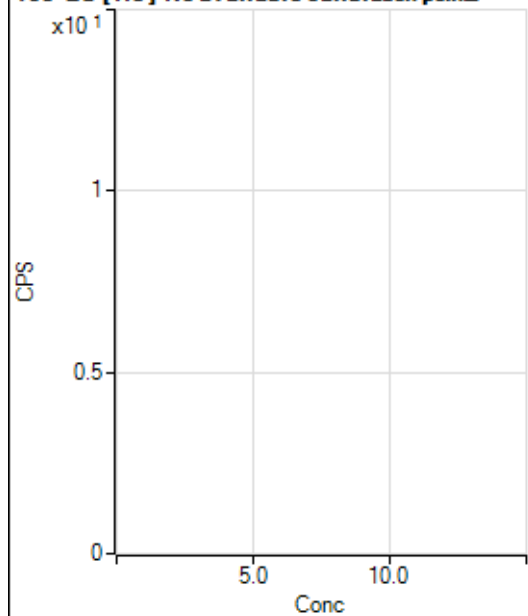
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 5.55   |       | P        | 124. |
| 2 | <input type="checkbox"/> |       |            | 6.67   |       | P        | 50.0 |
| 3 | <input type="checkbox"/> |       |            | 10.00  |       | P        | 57.7 |
| 4 | <input type="checkbox"/> |       |            | 31.11  |       | P        | 43.3 |
| 5 | <input type="checkbox"/> |       |            | 36.67  |       | P        | 32.8 |
| 6 | <input type="checkbox"/> |       |            | 75.55  |       | P        | 9.2  |
| 7 | <input type="checkbox"/> |       |            | 114.44 |       | P        | 11.0 |
| 8 | <input type="checkbox"/> |       |            | 265.56 |       | P        | 21.4 |

**156 Dy [ He ] No available calibration points**

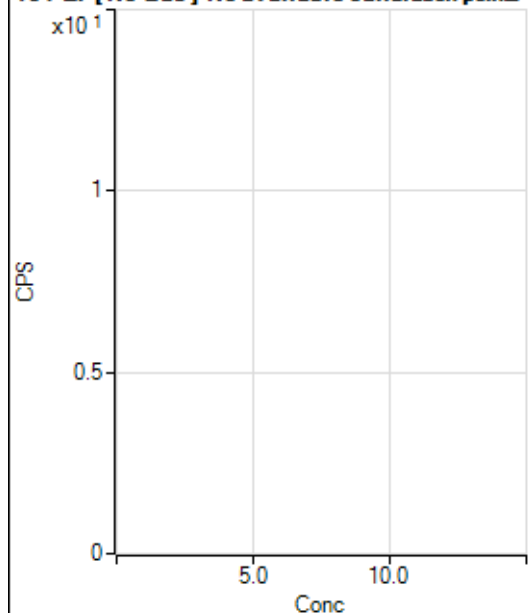
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 4.44   |       | P        | 173. |
| 2 | <input type="checkbox"/> |       |            | 7.78   |       | P        | 99.0 |
| 3 | <input type="checkbox"/> |       |            | 21.11  |       | P        | 24.1 |
| 4 | <input type="checkbox"/> |       |            | 53.33  |       | P        | 6.3  |
| 5 | <input type="checkbox"/> |       |            | 80.00  |       | P        | 11.0 |
| 6 | <input type="checkbox"/> |       |            | 175.56 |       | P        | 11.4 |
| 7 | <input type="checkbox"/> |       |            | 343.34 |       | P        | 12.7 |
| 8 | <input type="checkbox"/> |       |            | 246.67 |       | P        | 3.6  |

**160 Gd [ No Gas ] No available calibration poin...**

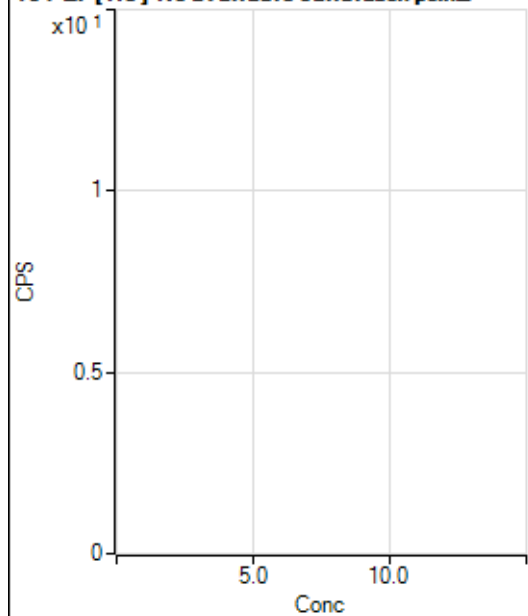
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 60.00  |       | P        | 16.7 |
| 2 | <input type="checkbox"/> |       |            | 53.33  |       | P        | 6.3  |
| 3 | <input type="checkbox"/> |       |            | 51.11  |       | P        | 21.0 |
| 4 | <input type="checkbox"/> |       |            | 57.78  |       | P        | 21.8 |
| 5 | <input type="checkbox"/> |       |            | 71.11  |       | P        | 31.2 |
| 6 | <input type="checkbox"/> |       |            | 88.89  |       | P        | 15.6 |
| 7 | <input type="checkbox"/> |       |            | 145.56 |       | P        | 8.0  |
| 8 | <input type="checkbox"/> |       |            | 375.56 |       | P        | 11.3 |

**160 Gd [ He ] No available calibration points**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 351.12 |       | P        | 4.8  |
| 2 | <input type="checkbox"/> |       |            | 372.23 |       | P        | 7.5  |
| 3 | <input type="checkbox"/> |       |            | 371.12 |       | P        | 7.3  |
| 4 | <input type="checkbox"/> |       |            | 361.12 |       | P        | 12.5 |
| 5 | <input type="checkbox"/> |       |            | 338.90 |       | P        | 19.7 |
| 6 | <input type="checkbox"/> |       |            | 370.01 |       | P        | 7.2  |
| 7 | <input type="checkbox"/> |       |            | 386.68 |       | P        | 11.3 |
| 8 | <input type="checkbox"/> |       |            | 560.02 |       | P        | 11.3 |

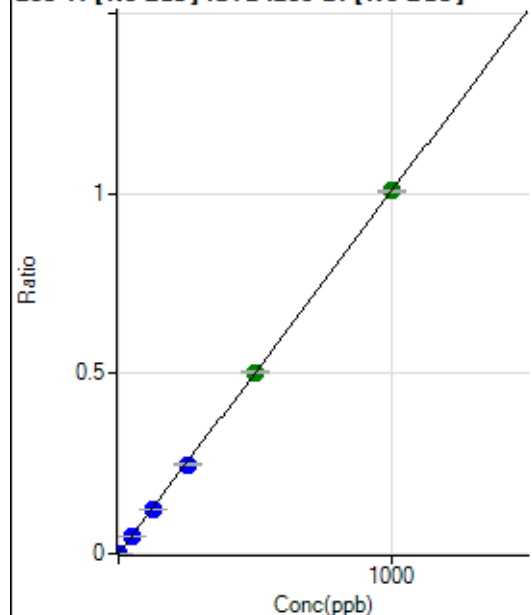
**164 Er [ No Gas ] No available calibration points**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 55.55  |       | P        | 28.4 |
| 2 | <input type="checkbox"/> |       |            | 75.55  |       | P        | 17.8 |
| 3 | <input type="checkbox"/> |       |            | 55.56  |       | P        | 22.7 |
| 4 | <input type="checkbox"/> |       |            | 78.89  |       | P        | 21.3 |
| 5 | <input type="checkbox"/> |       |            | 102.22 |       | P        | 21.0 |
| 6 | <input type="checkbox"/> |       |            | 131.11 |       | P        | 10.3 |
| 7 | <input type="checkbox"/> |       |            | 200.00 |       | P        | 12.0 |
| 8 | <input type="checkbox"/> |       |            | 618.91 |       | P        | 11.0 |

**164 Er [ He ] No available calibration points**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS    | Ratio | Det<br>. | RSD  |
|---|--------------------------|-------|------------|--------|-------|----------|------|
| 1 | <input type="checkbox"/> |       |            | 36.67  |       | P        | 32.8 |
| 2 | <input type="checkbox"/> |       |            | 55.56  |       | P        | 17.3 |
| 3 | <input type="checkbox"/> |       |            | 53.33  |       | P        | 22.5 |
| 4 | <input type="checkbox"/> |       |            | 65.56  |       | P        | 17.9 |
| 5 | <input type="checkbox"/> |       |            | 67.78  |       | P        | 14.2 |
| 6 | <input type="checkbox"/> |       |            | 87.78  |       | P        | 19.1 |
| 7 | <input type="checkbox"/> |       |            | 147.78 |       | P        | 13.0 |
| 8 | <input type="checkbox"/> |       |            | 477.79 |       | P        | 4.7  |

203 Tl [No Gas] ISTD : 209 Bi [No Gas]



|   | R <sub>j</sub><br>ct     | Conc.    | Calc Conc. | CPS        | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 362.23     | 0.0001 | P    | 6.9 |
| 2 | <input type="checkbox"/> | 1.000    | 0.982      | 5229.96    | 0.0011 | P    | 3.2 |
| 3 | <input type="checkbox"/> | 50.000   | 48.647     | 235871.46  | 0.0490 | P    | 0.3 |
| 4 | <input type="checkbox"/> | 125.000  | 120.887    | 596549.79  | 0.1217 | P    | 0.7 |
| 5 | <input type="checkbox"/> | 250.000  | 245.601    | 1189897.52 | 0.2472 | P    | 3.0 |
| 6 | <input type="checkbox"/> | 500.000  | 500.891    | 2510454.70 | 0.5041 | A    | 1.3 |
| 7 | <input type="checkbox"/> | 1000.000 | 1001.236   | 5140025.65 | 1.0076 | A    | 0.7 |
| 8 | <input type="checkbox"/> |          |            | 7011.88    | 0.0015 | P    | 2.0 |

$$y = 0.0010 * x + 7.5334E-005$$

$$R = 1.0000$$

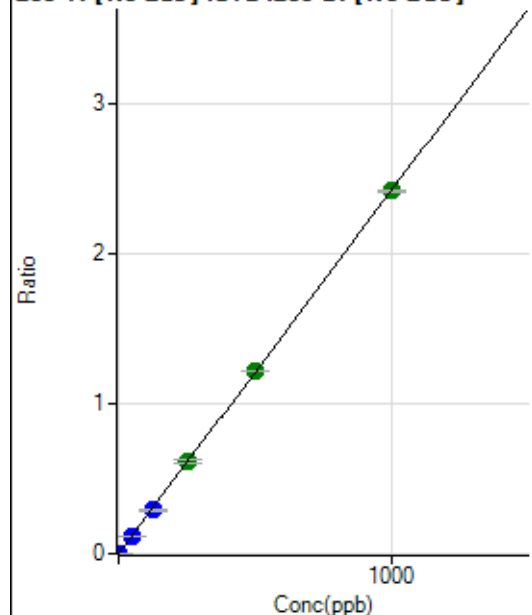
$$DL = 0.01556$$

$$BEC = 0.07486$$

Weight: <None>

Min Conc: <None>

205 Tl [No Gas] ISTD : 209 Bi [No Gas]



|   | R <sub>j</sub><br>ct     | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|-------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 884.48      | 0.0002 | P    | 1.7 |
| 2 | <input type="checkbox"/> | 1.000    | 0.975      | 12504.79    | 0.0025 | P    | 1.0 |
| 3 | <input type="checkbox"/> | 50.000   | 48.179     | 561729.61   | 0.1168 | P    | 0.2 |
| 4 | <input type="checkbox"/> | 125.000  | 119.743    | 1420856.89  | 0.2899 | P    | 1.6 |
| 5 | <input type="checkbox"/> | 250.000  | 253.547    | 2953575.89  | 0.6137 | A    | 3.2 |
| 6 | <input type="checkbox"/> | 500.000  | 502.237    | 6052746.93  | 1.2154 | A    | 0.3 |
| 7 | <input type="checkbox"/> | 1000.000 | 998.743    | 12328566.62 | 2.4168 | A    | 0.8 |
| 8 | <input type="checkbox"/> |          |            | 17076.46    | 0.0036 | P    | 3.0 |

$$y = 0.0024 * x + 1.8389E-004$$

$$R = 1.0000$$

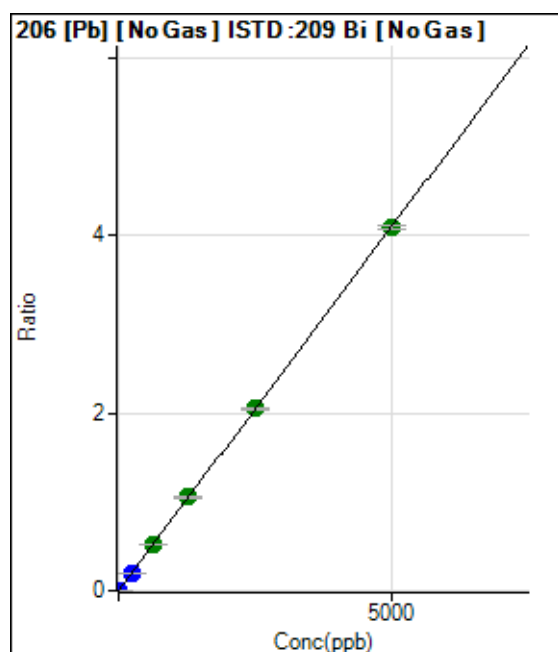
$$DL = 0.003795$$

$$BEC = 0.076$$

Weight: <None>

Min Conc: <None>





|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|-------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 427.79      | 0.0001 | P    | 10.7 |
| 2 | <input type="checkbox"/> | 1.000    | 1.002      | 4468.55     | 0.0009 | P    | 0.8  |
| 3 | <input type="checkbox"/> | 250.000  | 244.102    | 961837.30   | 0.1999 | P    | 0.6  |
| 4 | <input type="checkbox"/> | 625.000  | 632.074    | 2536490.90  | 0.5175 | A    | 1.4  |
| 5 | <input type="checkbox"/> | 1250.000 | 1291.516   | 5090781.49  | 1.0574 | A    | 1.9  |
| 6 | <input type="checkbox"/> | 2500.000 | 2507.134   | 10221836.93 | 2.0526 | A    | 1.0  |
| 7 | <input type="checkbox"/> | 5000.000 | 4985.464   | 20821632.74 | 4.0815 | A    | 1.0  |
| 8 | <input type="checkbox"/> |          |            | 5433.35     | 0.0012 | P    | 0.9  |

$$y = 8.1866E-004 * x + 8.8906E-005$$

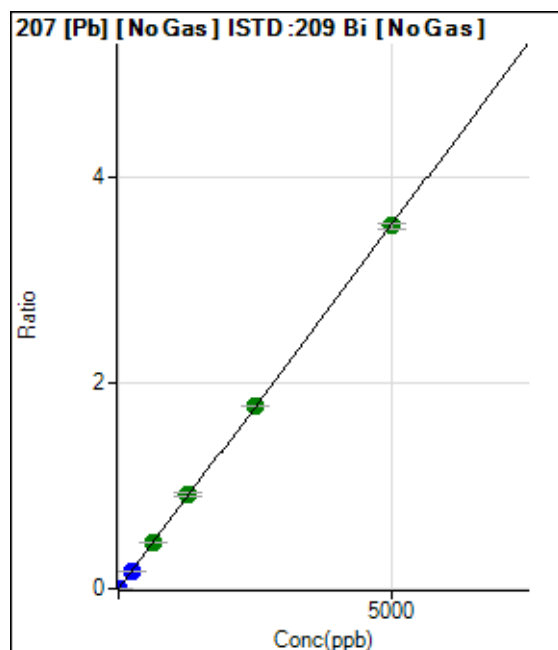
R = 1.0000

DL = 0.03478

BEC = 0.1086

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD |
|---|--------------------------|----------|------------|-------------|--------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 333.34      | 0.0001 | P    | 9.4 |
| 2 | <input type="checkbox"/> | 1.000    | 1.008      | 3845.02     | 0.0008 | P    | 3.1 |
| 3 | <input type="checkbox"/> | 250.000  | 241.877    | 823278.83   | 0.1711 | P    | 0.4 |
| 4 | <input type="checkbox"/> | 625.000  | 625.160    | 2167101.27  | 0.4422 | A    | 0.9 |
| 5 | <input type="checkbox"/> | 1250.000 | 1295.239   | 4409739.66  | 0.9161 | A    | 2.4 |
| 6 | <input type="checkbox"/> | 2500.000 | 2505.793   | 8825362.86  | 1.7722 | A    | 0.5 |
| 7 | <input type="checkbox"/> | 5000.000 | 4986.180   | 17987884.18 | 3.5263 | A    | 1.7 |
| 8 | <input type="checkbox"/> |          |            | 4583.04     | 0.0010 | P    | 2.7 |

$$y = 7.0720E-004 * x + 6.9264E-005$$

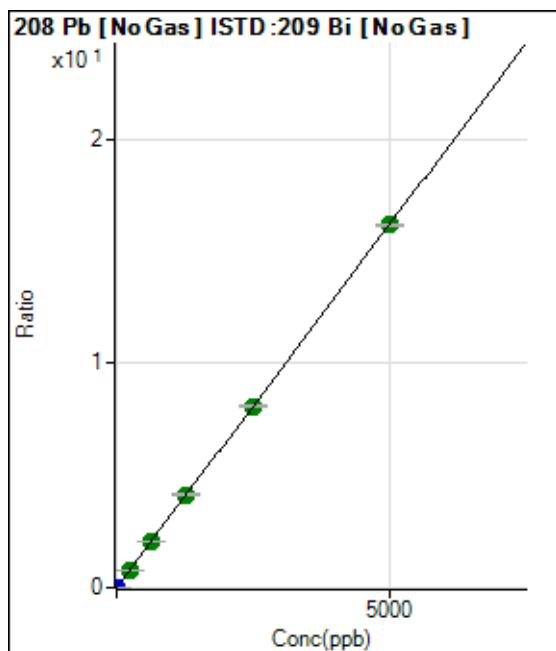
R = 0.9999

DL = 0.02757

BEC = 0.09794

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio   | Det. | RSD |
|---|--------------------------|----------|------------|-------------|---------|------|-----|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 1585.61     | 0.0003  | P    | 7.1 |
| 2 | <input type="checkbox"/> | 1.000    | 1.002      | 17556.82    | 0.0036  | P    | 3.1 |
| 3 | <input type="checkbox"/> | 250.000  | 245.667    | 3826467.04  | 0.7953  | A    | 0.9 |
| 4 | <input type="checkbox"/> | 625.000  | 627.988    | 9961729.32  | 2.0326  | A    | 0.4 |
| 5 | <input type="checkbox"/> | 1250.000 | 1275.710   | 19873323.00 | 4.1287  | A    | 2.7 |
| 6 | <input type="checkbox"/> | 2500.000 | 2496.778   | 40239758.36 | 8.0803  | A    | 1.3 |
| 7 | <input type="checkbox"/> | 5000.000 | 4995.027   | 82464507.94 | 16.1650 | A    | 0.2 |
| 8 | <input type="checkbox"/> |          |            | 21397.96    | 0.0046  | P    | 1.4 |

$$y = 0.0032 * x + 3.2947E-004$$

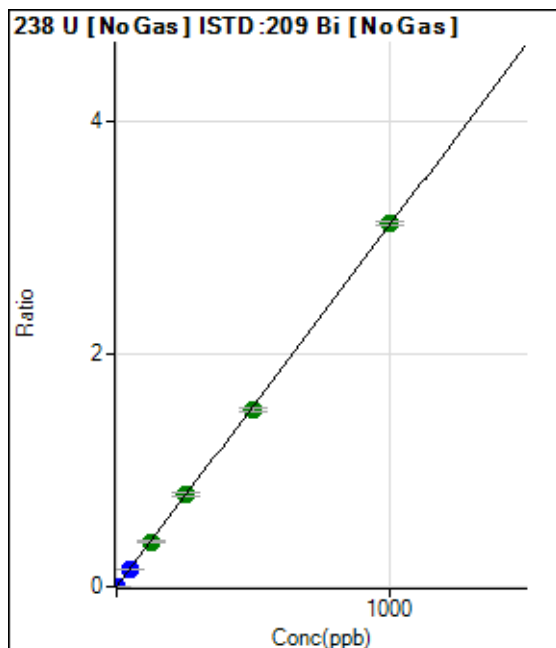
R = 1.0000

DL = 0.02155

BEC = 0.1018

Weight: <None>

Min Conc: <None>



|   | Rj<br>ct                 | Conc.    | Calc Conc. | CPS         | Ratio  | Det. | RSD  |
|---|--------------------------|----------|------------|-------------|--------|------|------|
| 1 | <input type="checkbox"/> | 0.000    | 0.000      | 87.78       | 0.0000 | P    | 99.7 |
| 2 | <input type="checkbox"/> | 1.000    | 0.989      | 15213.33    | 0.0031 | P    | 2.9  |
| 3 | <input type="checkbox"/> | 50.000   | 47.263     | 707624.35   | 0.1471 | P    | 0.7  |
| 4 | <input type="checkbox"/> | 125.000  | 124.923    | 1905160.35  | 0.3887 | A    | 1.3  |
| 5 | <input type="checkbox"/> | 250.000  | 254.808    | 3816613.87  | 0.7929 | A    | 2.6  |
| 6 | <input type="checkbox"/> | 500.000  | 490.404    | 7599380.72  | 1.5260 | A    | 2.2  |
| 7 | <input type="checkbox"/> | 1000.000 | 1003.743   | 15932751.98 | 3.1233 | A    | 0.9  |
| 8 | <input type="checkbox"/> |          |            | 585.58      | 0.0001 | P    | 37.5 |

$$y = 0.0031 * x + 1.8098E-005$$

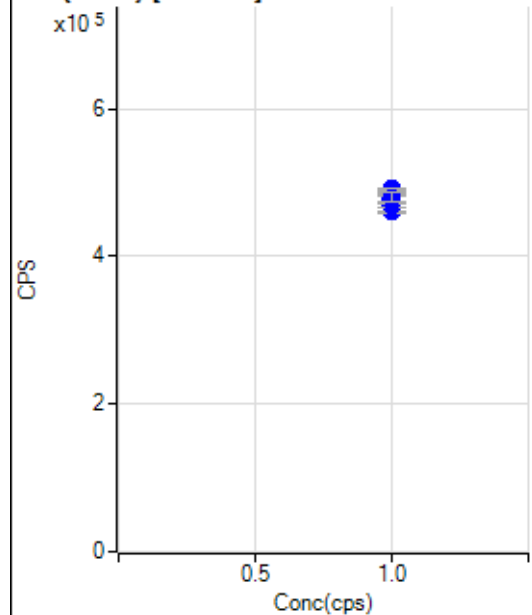
R = 0.9999

DL = 0.0174

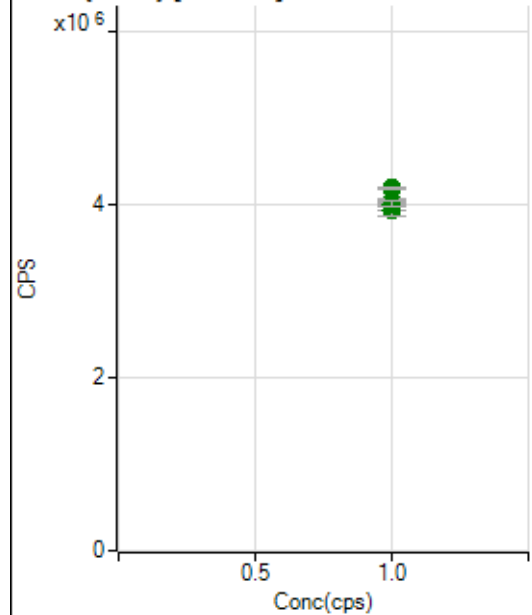
BEC = 0.005816

Weight: <None>

Min Conc: <None>

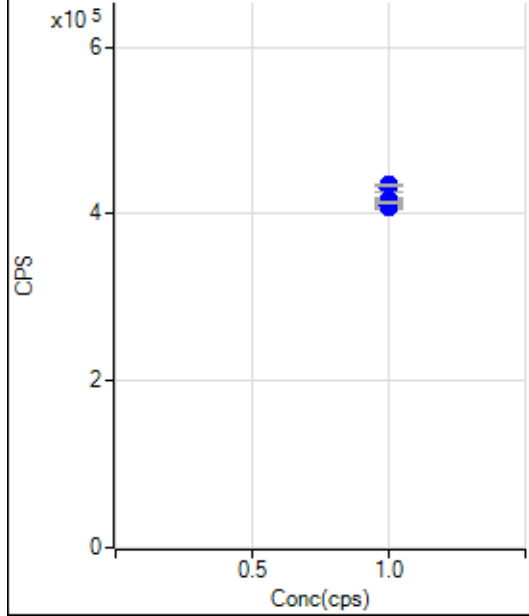
**6 Li (ISTD) [No Gas]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS       | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|-----------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 459758.41 |       | P        | 0.4 |
| 2 | <input type="checkbox"/> | 1.000 |            | 468440.95 |       | P        | 0.9 |
| 3 | <input type="checkbox"/> | 1.000 |            | 473758.51 |       | P        | 0.3 |
| 4 | <input type="checkbox"/> | 1.000 |            | 483497.54 |       | P        | 0.3 |
| 5 | <input type="checkbox"/> | 1.000 |            | 477857.11 |       | P        | 2.6 |
| 6 | <input type="checkbox"/> | 1.000 |            | 488787.03 |       | P        | 1.6 |
| 7 | <input type="checkbox"/> | 1.000 |            | 491378.38 |       | P        | 0.6 |
| 8 | <input type="checkbox"/> | 1.000 |            | 479936.03 |       | P        | 2.5 |

**45 Sc (ISTD) [No Gas]**

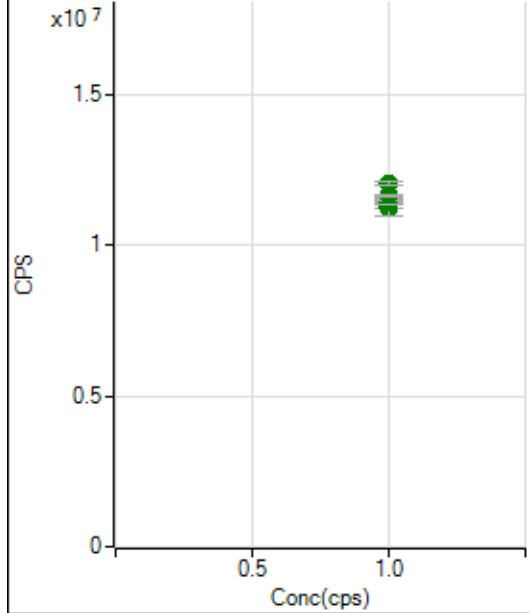
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 4060500.36 |       | A        | 0.3 |
| 2 | <input type="checkbox"/> | 1.000 |            | 4009419.38 |       | A        | 0.7 |
| 3 | <input type="checkbox"/> | 1.000 |            | 3977458.07 |       | A        | 1.4 |
| 4 | <input type="checkbox"/> | 1.000 |            | 4015599.52 |       | A        | 0.5 |
| 5 | <input type="checkbox"/> | 1.000 |            | 3936186.85 |       | A        | 3.4 |
| 6 | <input type="checkbox"/> | 1.000 |            | 4011628.93 |       | A        | 1.8 |
| 7 | <input type="checkbox"/> | 1.000 |            | 4183664.80 |       | A        | 0.4 |
| 8 | <input type="checkbox"/> | 1.000 |            | 4197893.65 |       | A        | 0.8 |

45 Sc (ISTD) [He]



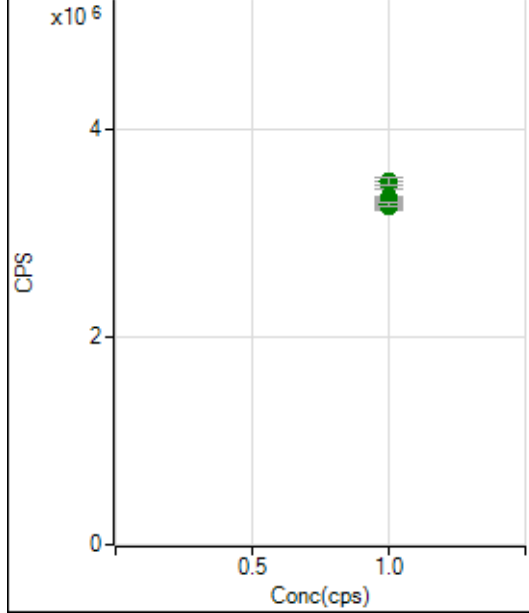
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS       | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|-----------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 413621.78 |       | P        | 0.3 |
| 2 | <input type="checkbox"/> | 1.000 |            | 417183.68 |       | P        | 0.9 |
| 3 | <input type="checkbox"/> | 1.000 |            | 407251.91 |       | P        | 0.8 |
| 4 | <input type="checkbox"/> | 1.000 |            | 415546.01 |       | P        | 0.5 |
| 5 | <input type="checkbox"/> | 1.000 |            | 410419.26 |       | P        | 1.6 |
| 6 | <input type="checkbox"/> | 1.000 |            | 412866.69 |       | P        | 0.5 |
| 7 | <input type="checkbox"/> | 1.000 |            | 430242.42 |       | P        | 1.4 |
| 8 | <input type="checkbox"/> | 1.000 |            | 434569.47 |       | P        | 0.8 |

89 Y (ISTD) [No Gas]



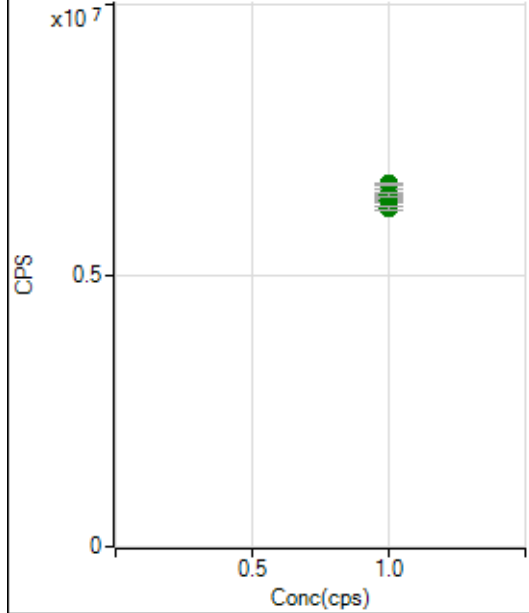
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS         | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|-------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 11466093.02 |       | A        | 1.3 |
| 2 | <input type="checkbox"/> | 1.000 |            | 11374416.22 |       | A        | 0.3 |
| 3 | <input type="checkbox"/> | 1.000 |            | 11287640.39 |       | A        | 1.0 |
| 4 | <input type="checkbox"/> | 1.000 |            | 11446150.39 |       | A        | 1.2 |
| 5 | <input type="checkbox"/> | 1.000 |            | 11216406.50 |       | A        | 4.0 |
| 6 | <input type="checkbox"/> | 1.000 |            | 11428500.80 |       | A        | 0.7 |
| 7 | <input type="checkbox"/> | 1.000 |            | 12037972.74 |       | A        | 0.9 |
| 8 | <input type="checkbox"/> | 1.000 |            | 11652435.80 |       | A        | 0.4 |

**89 Y (ISTD) [He]**



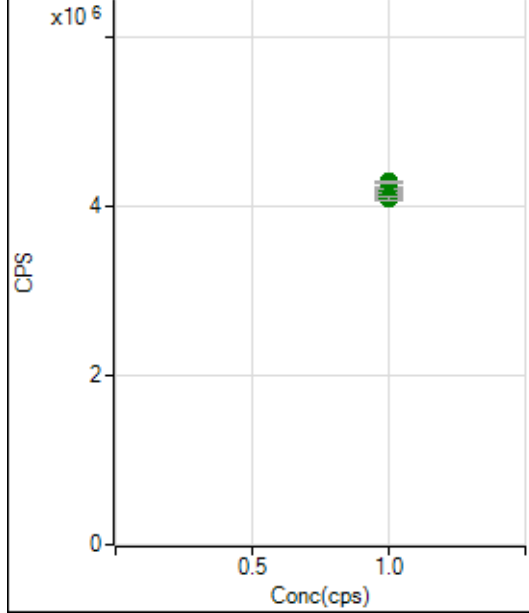
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 3344855.16 |       | A        | 1.0 |
| 2 | <input type="checkbox"/> | 1.000 |            | 3312267.45 |       | A        | 1.3 |
| 3 | <input type="checkbox"/> | 1.000 |            | 3258117.69 |       | A        | 1.4 |
| 4 | <input type="checkbox"/> | 1.000 |            | 3294688.49 |       | A        | 1.1 |
| 5 | <input type="checkbox"/> | 1.000 |            | 3259264.29 |       | A        | 1.5 |
| 6 | <input type="checkbox"/> | 1.000 |            | 3278940.79 |       | A        | 1.3 |
| 7 | <input type="checkbox"/> | 1.000 |            | 3461495.95 |       | A        | 2.2 |
| 8 | <input type="checkbox"/> | 1.000 |            | 3497474.53 |       | A        | 2.0 |

**103 Rh (ISTD) [No Gas]**



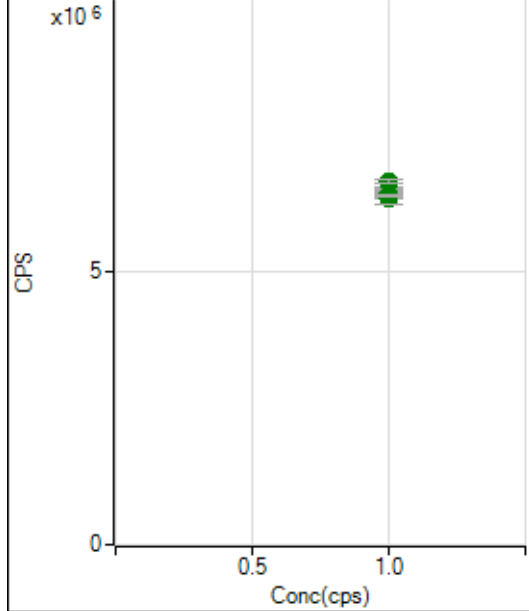
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 6532401.08 |       | A        | 1.7 |
| 2 | <input type="checkbox"/> | 1.000 |            | 6496422.12 |       | A        | 0.7 |
| 3 | <input type="checkbox"/> | 1.000 |            | 6367624.35 |       | A        | 0.7 |
| 4 | <input type="checkbox"/> | 1.000 |            | 6471677.89 |       | A        | 1.8 |
| 5 | <input type="checkbox"/> | 1.000 |            | 6388999.91 |       | A        | 3.2 |
| 6 | <input type="checkbox"/> | 1.000 |            | 6490655.67 |       | A        | 0.7 |
| 7 | <input type="checkbox"/> | 1.000 |            | 6690411.43 |       | A        | 0.5 |
| 8 | <input type="checkbox"/> | 1.000 |            | 6256424.07 |       | A        | 1.2 |

103 Rh (ISTD) [He]

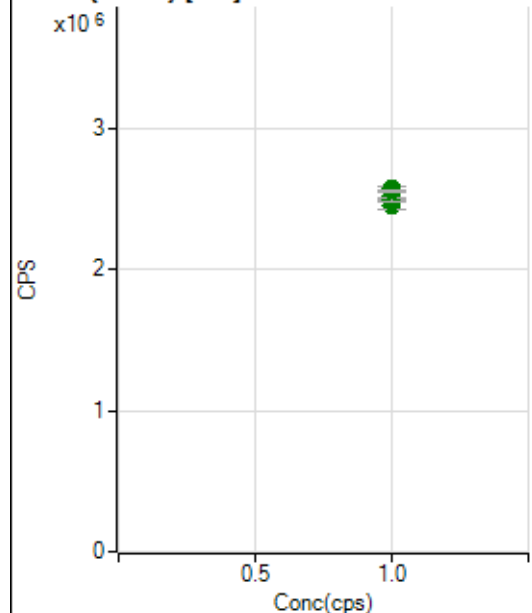


|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 4217689.31 |       | A        | 0.4 |
| 2 | <input type="checkbox"/> | 1.000 |            | 4185804.21 |       | A        | 0.9 |
| 3 | <input type="checkbox"/> | 1.000 |            | 4112284.76 |       | A        | 1.0 |
| 4 | <input type="checkbox"/> | 1.000 |            | 4115091.99 |       | A        | 1.8 |
| 5 | <input type="checkbox"/> | 1.000 |            | 4123946.36 |       | A        | 2.0 |
| 6 | <input type="checkbox"/> | 1.000 |            | 4169352.79 |       | A        | 1.0 |
| 7 | <input type="checkbox"/> | 1.000 |            | 4282307.47 |       | A        | 0.7 |
| 8 | <input type="checkbox"/> | 1.000 |            | 4093295.25 |       | A        | 1.1 |

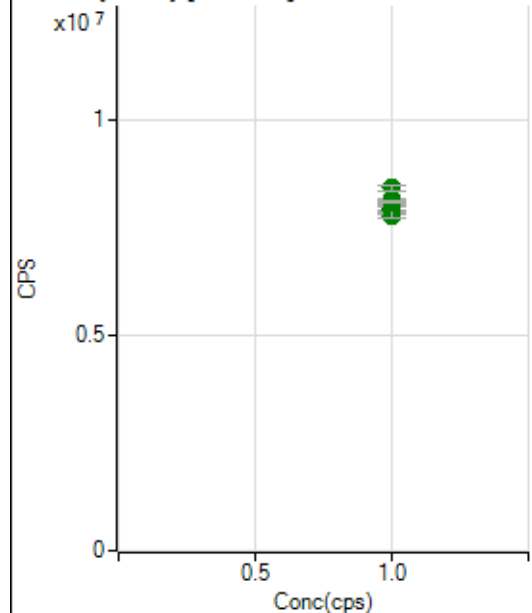
115 In (ISTD) [No Gas]



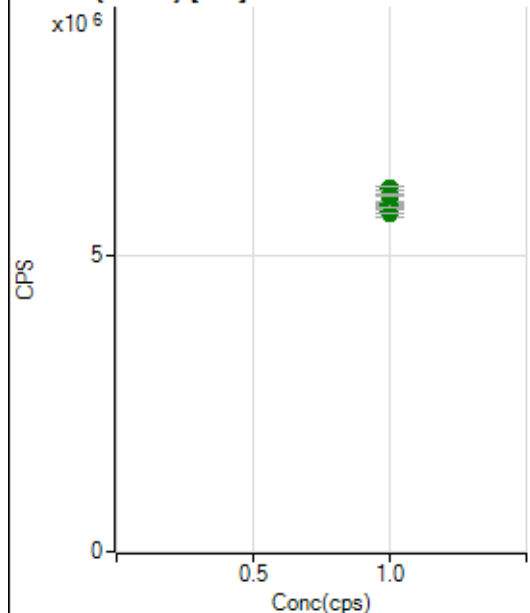
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 6512662.33 |       | A        | 0.4 |
| 2 | <input type="checkbox"/> | 1.000 |            | 6520399.39 |       | A        | 1.5 |
| 3 | <input type="checkbox"/> | 1.000 |            | 6347632.68 |       | A        | 0.4 |
| 4 | <input type="checkbox"/> | 1.000 |            | 6478655.31 |       | A        | 1.8 |
| 5 | <input type="checkbox"/> | 1.000 |            | 6364682.53 |       | A        | 4.2 |
| 6 | <input type="checkbox"/> | 1.000 |            | 6458919.95 |       | A        | 2.0 |
| 7 | <input type="checkbox"/> | 1.000 |            | 6652778.12 |       | A        | 1.2 |
| 8 | <input type="checkbox"/> | 1.000 |            | 6401282.23 |       | A        | 0.8 |

**115 In (ISTD) [He]**

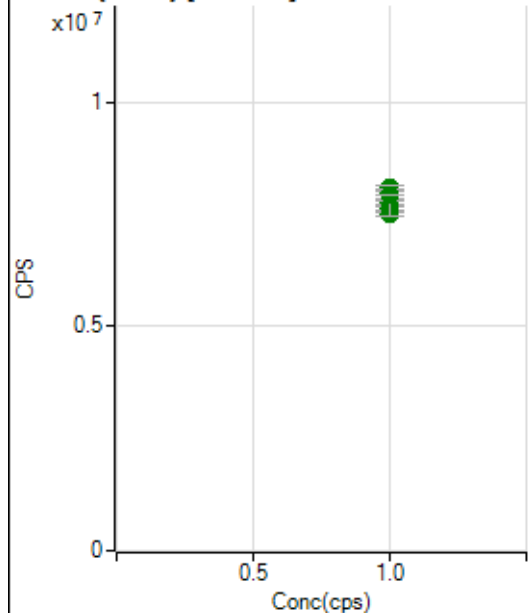
|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 2574981.09 |       | A        | 0.9 |
| 2 | <input type="checkbox"/> | 1.000 |            | 2525845.24 |       | A        | 1.8 |
| 3 | <input type="checkbox"/> | 1.000 |            | 2507121.96 |       | A        | 0.1 |
| 4 | <input type="checkbox"/> | 1.000 |            | 2455218.95 |       | A        | 2.3 |
| 5 | <input type="checkbox"/> | 1.000 |            | 2482372.34 |       | A        | 0.4 |
| 6 | <input type="checkbox"/> | 1.000 |            | 2502054.96 |       | A        | 1.2 |
| 7 | <input type="checkbox"/> | 1.000 |            | 2569016.17 |       | A        | 1.5 |
| 8 | <input type="checkbox"/> | 1.000 |            | 2559476.76 |       | A        | 1.0 |

**159 Tb (ISTD) [No Gas]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 7952722.87 |       | A        | 0.7 |
| 2 | <input type="checkbox"/> | 1.000 |            | 7922441.83 |       | A        | 1.8 |
| 3 | <input type="checkbox"/> | 1.000 |            | 7774748.22 |       | A        | 0.7 |
| 4 | <input type="checkbox"/> | 1.000 |            | 8063763.63 |       | A        | 0.2 |
| 5 | <input type="checkbox"/> | 1.000 |            | 7888586.90 |       | A        | 3.8 |
| 6 | <input type="checkbox"/> | 1.000 |            | 8166286.20 |       | A        | 0.6 |
| 7 | <input type="checkbox"/> | 1.000 |            | 8426885.92 |       | A        | 1.7 |
| 8 | <input type="checkbox"/> | 1.000 |            | 8093719.32 |       | A        | 0.7 |

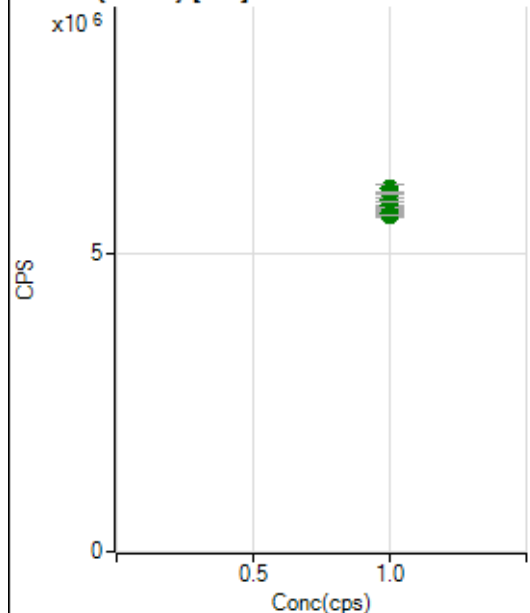
**159 Tb (ISTD) [He]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 5818372.55 |       | A        | 0.5 |
| 2 | <input type="checkbox"/> | 1.000 |            | 5841117.76 |       | A        | 1.1 |
| 3 | <input type="checkbox"/> | 1.000 |            | 5710811.72 |       | A        | 1.8 |
| 4 | <input type="checkbox"/> | 1.000 |            | 5760401.58 |       | A        | 1.1 |
| 5 | <input type="checkbox"/> | 1.000 |            | 5743884.22 |       | A        | 0.8 |
| 6 | <input type="checkbox"/> | 1.000 |            | 5862892.76 |       | A        | 1.3 |
| 7 | <input type="checkbox"/> | 1.000 |            | 6124750.53 |       | A        | 0.9 |
| 8 | <input type="checkbox"/> | 1.000 |            | 6013853.66 |       | A        | 0.6 |

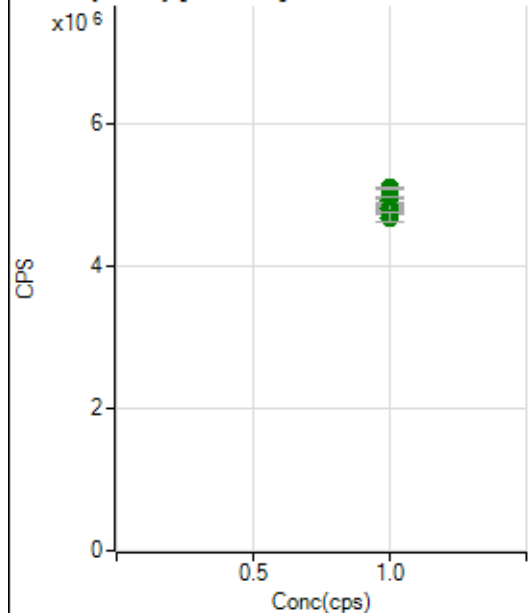
**165 Ho (ISTD) [No Gas]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 7655077.94 |       | A        | 1.3 |
| 2 | <input type="checkbox"/> | 1.000 |            | 7631103.01 |       | A        | 1.0 |
| 3 | <input type="checkbox"/> | 1.000 |            | 7501220.58 |       | A        | 0.7 |
| 4 | <input type="checkbox"/> | 1.000 |            | 7767765.72 |       | A        | 0.8 |
| 5 | <input type="checkbox"/> | 1.000 |            | 7648075.51 |       | A        | 4.8 |
| 6 | <input type="checkbox"/> | 1.000 |            | 7956508.49 |       | A        | 1.1 |
| 7 | <input type="checkbox"/> | 1.000 |            | 8090610.37 |       | A        | 1.2 |
| 8 | <input type="checkbox"/> | 1.000 |            | 7942516.27 |       | A        | 0.3 |

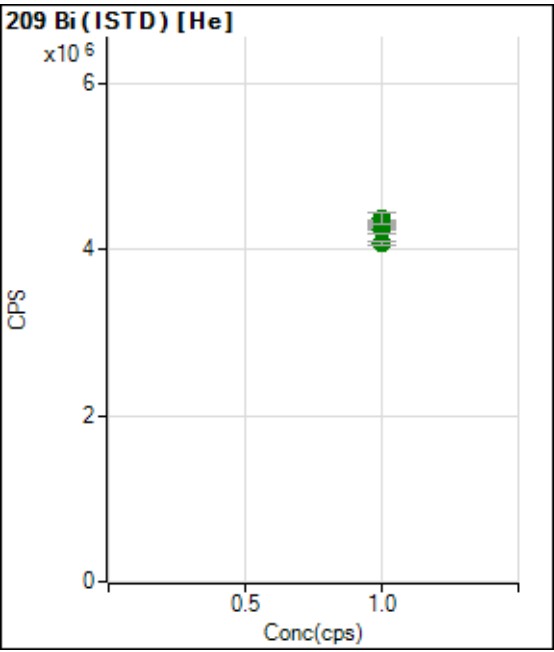


**165 Ho (ISTD) [He]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 5652922.90 |       | A        | 1.3 |
| 2 | <input type="checkbox"/> | 1.000 |            | 5749845.47 |       | A        | 1.4 |
| 3 | <input type="checkbox"/> | 1.000 |            | 5716796.65 |       | A        | 0.6 |
| 4 | <input type="checkbox"/> | 1.000 |            | 5689079.08 |       | A        | 1.6 |
| 5 | <input type="checkbox"/> | 1.000 |            | 5821331.72 |       | A        | 2.1 |
| 6 | <input type="checkbox"/> | 1.000 |            | 5911887.34 |       | A        | 0.9 |
| 7 | <input type="checkbox"/> | 1.000 |            | 6086402.76 |       | A        | 2.3 |
| 8 | <input type="checkbox"/> | 1.000 |            | 6024835.67 |       | A        | 0.7 |

**209 Bi (ISTD) [No Gas]**

|   | Rj<br>ct                 | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|--------------------------|-------|------------|------------|-------|----------|-----|
| 1 | <input type="checkbox"/> | 1.000 |            | 4809320.17 |       | A        | 1.5 |
| 2 | <input type="checkbox"/> | 1.000 |            | 4916446.46 |       | A        | 1.7 |
| 3 | <input type="checkbox"/> | 1.000 |            | 4810971.25 |       | A        | 0.3 |
| 4 | <input type="checkbox"/> | 1.000 |            | 4901010.86 |       | A        | 0.3 |
| 5 | <input type="checkbox"/> | 1.000 |            | 4816396.21 |       | A        | 3.4 |
| 6 | <input type="checkbox"/> | 1.000 |            | 4979999.33 |       | A        | 0.0 |
| 7 | <input type="checkbox"/> | 1.000 |            | 5101395.72 |       | A        | 0.6 |
| 8 | <input type="checkbox"/> | 1.000 |            | 4686092.29 |       | A        | 2.8 |



|   | Rj<br>ct | Conc. | Calc Conc. | CPS        | Ratio | Det<br>. | RSD |
|---|----------|-------|------------|------------|-------|----------|-----|
| 1 |          | 1.000 |            | 4262040.80 |       | A        | 1.2 |
| 2 |          | 1.000 |            | 4304393.34 |       | A        | 1.4 |
| 3 |          | 1.000 |            | 4245502.26 |       | A        | 0.7 |
| 4 |          | 1.000 |            | 4248263.27 |       | A        | 2.3 |
| 5 |          | 1.000 |            | 4320349.10 |       | A        | 1.8 |
| 6 |          | 1.000 |            | 4322527.43 |       | A        | 0.3 |
| 7 |          | 1.000 |            | 4372552.61 |       | A        | 3.1 |
| 8 |          | 1.000 |            | 4085659.14 |       | A        | 1.0 |

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US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7082025-MS.b

Acq. Date-Time 2025-08-20 10:16:14

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

| Mass | Conc. [ug/l] | Count  | CPS        | Resp (Required) [cps/ug/l] | Resp (Flag) | RSD%   | RSD% (Required) |
|------|--------------|--------|------------|----------------------------|-------------|--------|-----------------|
| 9    |              | 5781   | 57808.05   |                            |             | 1.378  | 5.000           |
| 24   |              | 150208 | 1502079.39 |                            |             | 1.419  | 5.000           |
| 25   |              | 19252  | 192524.77  |                            |             | 1.384  | 5.000           |
| 26   |              | 22573  | 225732.91  |                            |             | 0.881  | 5.000           |
| 59   |              | 90005  | 900045.87  |                            |             | 0.888  | 5.000           |
| 113  |              | 11407  | 114072.06  |                            |             | 0.526  | 5.000           |
| 115  |              | 132587 | 1325868.32 |                            |             | 1.012  | 5.000           |
| 206  |              | 26803  | 268025.72  |                            |             | 1.609  | 5.000           |
| 207  |              | 23545  | 235451.91  |                            |             | 1.230  | 5.000           |
| 208  |              | 55705  | 557048.49  |                            |             | 1.375  | 5.000           |
| 220  |              | 0      | 2.30       |                            |             | 45.079 |                 |

| Mass | RSD% (Flag) |
|------|-------------|
| 9    |             |
| 24   |             |
| 25   |             |
| 26   |             |
| 59   |             |
| 113  |             |
| 115  |             |
| 206  |             |
| 207  |             |
| 208  |             |
| 220  |             |

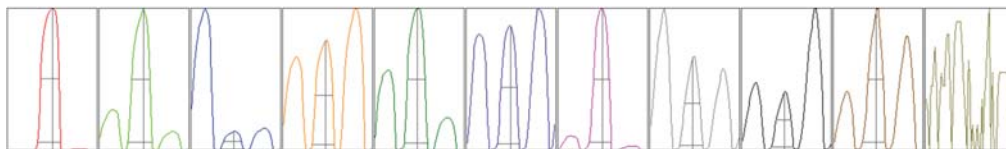
| Mass | Rep#1 Count | Rep#2 Count | Rep#3 Count | Rep#4 Count | Rep#5 Count |
|------|-------------|-------------|-------------|-------------|-------------|
| 9    | 5729        | 5676        | 5800        | 5881        | 5818        |
| 24   | 147357      | 148743      | 150893      | 152667      | 151379      |
| 25   | 18874       | 19083       | 19392       | 19389       | 19524       |
| 26   | 22284       | 22459       | 22645       | 22767       | 22712       |
| 59   | 89066       | 89558       | 89726       | 90910       | 90763       |
| 113  | 11342       | 11346       | 11426       | 11464       | 11459       |
| 115  | 132552      | 130282      | 133552      | 133193      | 133355      |
| 206  | 26514       | 26432       | 26592       | 27463       | 27011       |
| 207  | 23231       | 23265       | 23767       | 23872       | 23591       |
| 208  | 54972       | 54838       | 55875       | 56363       | 56477       |

# US EPA Tune Check Report

| Mass | Rep#1 Count | Rep#2 Count | Rep#3 Count | Rep#4 Count | Rep#5 Count |
|------|-------------|-------------|-------------|-------------|-------------|
| 220  | 0           | 0           | 0           | 0           | 0           |

Integration Time [sec] 0.1

## Resolution/Axis



| Mass | Peak Height | Axis   | Axis (Required) | Axis (Flag) |
|------|-------------|--------|-----------------|-------------|
| 9    | 9730.97     | 9.05   | 8.90 - 9.10     |             |
| 24   | 262715.07   | 24.00  | 23.90 - 24.10   |             |
| 25   | 33784.97    | 24.95  | 24.90 - 25.10   |             |
| 26   | 40117.06    | 25.95  | 25.90 - 26.10   |             |
| 59   | 157389.14   | 58.95  | 58.90 - 59.10   |             |
| 113  | 22381.50    | 113.00 | 112.90 - 113.10 |             |
| 115  | 255344.93   | 115.00 | 114.90 - 115.10 |             |
| 206  | 54457.83    | 205.95 | 205.90 - 206.10 |             |
| 207  | 47983.39    | 206.95 | 206.90 - 207.10 |             |
| 208  | 115258.27   | 207.95 | 207.90 - 208.10 |             |
| 220  |             |        | -               |             |

| Mass | W-50% | W-5%  | W-5% (Required) | W-5% (Flag) |
|------|-------|-------|-----------------|-------------|
| 9    | 0.62  | 0.768 | 0.900           |             |
| 24   | 0.61  | 0.815 | 0.900           |             |
| 25   | 0.60  | 0.757 | 0.900           |             |
| 26   | 0.60  | 0.742 | 0.900           |             |
| 59   | 0.60  | 0.779 | 0.900           |             |
| 113  | 0.52  | 0.733 | 0.900           |             |
| 115  | 0.52  | 0.742 | 0.900           |             |
| 206  | 0.51  | 0.777 | 0.900           |             |
| 207  | 0.50  | 0.738 | 0.900           |             |
| 208  | 0.50  | 0.775 | 0.900           |             |
| 220  |       |       |                 |             |

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

## Tune Parameters

### Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

|              |        |                |          |               |            |
|--------------|--------|----------------|----------|---------------|------------|
| RF Power     | 1600 W | Option Gas     | ---      | Auxiliary Gas | 0.90 L/min |
| RF Matching  | 1.80 V | Nebulizer Pump | 0.10 rps | Plasma Gas    | 15.0 L/min |
| Sample Depth | 9.0 mm | S/C Temp       | 2 °C     |               |            |

Lens Parameters

|            |          |               |       |            |        |
|------------|----------|---------------|-------|------------|--------|
| Extract 1  | 0.0 V    | Omega Lens    | 7.3 V | Deflect    | 16.4 V |
| Extract 2  | -150.0 V | Cell Entrance | -30 V | Plate Bias | -35 V  |
| Omega Bias | -70 V    | Cell Exit     | -50 V |            |        |

Cell Parameters

|         |            |              |        |                       |       |
|---------|------------|--------------|--------|-----------------------|-------|
| Use Gas | No         | 3rd Gas Flow | ---    | Energy Discrimination | 5.0 V |
| He Flow | 0.0 mL/min | OctP Bias    | -8.0 V |                       |       |
| H2 Flow | ---        | OctP RF      | 200 V  |                       |       |

QP Parameters

|             |     |             |        |         |        |
|-------------|-----|-------------|--------|---------|--------|
| Mass Gain   | 138 | Axis Gain   | 0.9973 | QP Bias | -3.0 V |
| Mass Offset | 130 | Axis Offset | 0.13   |         |        |

Hardware Settings

Torch

|         |         |         |        |
|---------|---------|---------|--------|
| Torch H | -1.8 mm | Torch V | 0.2 mm |
|---------|---------|---------|--------|

EM

|               |        |           |        |          |        |
|---------------|--------|-----------|--------|----------|--------|
| Discriminator | 4.7 mV | Analog HV | 2291 V | Pulse HV | 1190 V |
|---------------|--------|-----------|--------|----------|--------|

[He]

Sensitivity

| Mass | Conc. [ug/l] | Count | CPS       | Resp (Required) [cps/ug/l] | Resp (Flag) | RSD%  | RSD% (Required) |
|------|--------------|-------|-----------|----------------------------|-------------|-------|-----------------|
| 59   |              | 34247 | 342469.20 |                            |             | 0.701 |                 |
| 89   |              | 89995 | 899945.49 |                            |             | 0.920 |                 |
| 205  |              | 32032 | 320315.06 |                            |             | 0.716 |                 |

| Mass | RSD% (Flag) |
|------|-------------|
| 59   |             |
| 89   |             |
| 205  |             |

| Mass | Rep#1 Count | Rep#2 Count | Rep#3 Count | Rep#4 Count | Rep#5 Count |
|------|-------------|-------------|-------------|-------------|-------------|
| 59   | 34517       | 34470       | 34173       | 34121       | 33953       |
| 89   | 90579       | 89855       | 90219       | 90686       | 88633       |
| 205  | 32226       | 32063       | 31824       | 31769       | 32276       |

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

|              |        |                |            |               |            |
|--------------|--------|----------------|------------|---------------|------------|
| Plasma Mode  | ---    | Nebulizer Gas  | 0.87 L/min | Dilution Gas  | 0.40 L/min |
| RF Power     | 1600 W | Option Gas     | ---        | Auxiliary Gas | 0.90 L/min |
| RF Matching  | 1.80 V | Nebulizer Pump | 0.10 rps   | Plasma Gas    | 15.0 L/min |
| Sample Depth | 9.0 mm | S/C Temp       | 2 °C       |               |            |

Lens Parameters

|           |       |            |       |         |       |
|-----------|-------|------------|-------|---------|-------|
| Extract 1 | 0.0 V | Omega Lens | 9.4 V | Deflect | 3.8 V |
|-----------|-------|------------|-------|---------|-------|

# US EPA Tune Check Report

|                   |            |               |         |                       |         |
|-------------------|------------|---------------|---------|-----------------------|---------|
| Extract 2         | -190.0 V   | Cell Entrance | -40 V   | Plate Bias            | -60 V   |
| Omega Bias        | -90 V      | Cell Exit     | -60 V   |                       |         |
| Cell Parameters   |            |               |         |                       |         |
| Use Gas           | Yes        | 3rd Gas Flow  | ---     | Energy Discrimination | 5.0 V   |
| He Flow           | 3.9 mL/min | OctP Bias     | -18.0 V |                       |         |
| H2 Flow           | ---        | OctP RF       | 200 V   |                       |         |
| QP Parameters     |            |               |         |                       |         |
| Mass Gain         | 138        | Axis Gain     | 0.9973  | QP Bias               | -13.0 V |
| Mass Offset       | 130        | Axis Offset   | 0.13    |                       |         |
| Hardware Settings |            |               |         |                       |         |
| Torch             |            |               |         |                       |         |
| Torch H           | -1.8 mm    | Torch V       | 0.2 mm  |                       |         |
| EM                |            |               |         |                       |         |
| Discriminator     | 4.7 mV     | Analog HV     | 2291 V  | Pulse HV              | 1190 V  |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 0.02    | 0.25    | -0.27   | 0.00       | N/A     | ppb   |
| Antimony   | 121-1 | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Arsenic    | 75-2  | 0.02    | -0.01   | -0.02   | 0.00       | N/A     | ppb   |
| Barium     | 135-1 | 0.00    | 0.01    | -0.01   | 0.00       | N/A     | ppb   |
| Barium     | 137-1 | 0.02    | 0.00    | -0.01   | 0.00       | N/A     | ppb   |
| Beryllium  | 9-1   | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Bismuth    | 209-1 |         |         |         | 100        |         | %     |
| Bismuth    | 209-2 |         |         |         | 100        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 0.02    | -0.08   | 0.05    | 0.00       | N/A     | ppb   |
| Cadmium    | 106-1 | 0.59    | -0.61   | 0.02    | 0.00       | N/A     | ppb   |
| Cadmium    | 111-1 | 0.04    | -0.04   | 0.00    | 0.00       | N/A     | ppb   |
| Calcium    | 43-1  | -3.31   | 2.62    | 0.69    | 0.00       | N/A     | ppb   |
| Calcium    | 44-1  | 0.79    | 0.18    | -0.98   | 0.00       | N/A     | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.04   | 0.02    | 0.02    | 0.00       | N/A     | ppb   |
| Cobalt     | 59-2  | 0.00    | -0.01   | 0.00    | 0.00       | N/A     | ppb   |
| Copper     | 63-2  | 0.02    | -0.02   | 0.01    | 0.00       | N/A     | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 100        |         | %     |
| Holmium    | 165-2 |         |         |         | 100        |         | %     |
| Indium     | 115-1 |         |         |         | 100        |         | %     |
| Indium     | 115-2 |         |         |         | 100        |         | %     |
| Iron       | 56-2  | 0.20    | -0.14   | -0.06   | 0.00       | N/A     | ppb   |
| Iron       | 57-2  | -0.79   | 1.13    | -0.34   | 0.00       | N/A     | ppb   |
| Iron       | 54-2  | 0.23    | 0.03    | -0.25   | 0.00       | N/A     | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.00    | -0.01   | 0.01    | 0.00       | N/A     | ppb   |
| Lead       | 207-1 | 0.00    | -0.01   | 0.01    | 0.00       | N/A     | ppb   |
| Lead       | 208-1 | 0.01    | -0.01   | 0.00    | 0.00       | N/A     | ppb   |
| Lithium    | 6-1   |         |         |         | 100        |         | %     |
| Magnesium  | 24-2  | -0.22   | 0.03    | 0.19    | 0.00       | N/A     | ppb   |
| Manganese  | 55-2  | 0.03    | -0.03   | 0.00    | 0.00       | N/A     | ppb   |
| Molybdenum | 94-1  | 0.02    | 0.00    | -0.02   | 0.00       | N/A     | ppb   |
| Molybdenum | 95-1  | 0.02    | -0.01   | 0.00    | 0.00       | N/A     | ppb   |
| Molybdenum | 96-1  | 0.03    | -0.01   | -0.02   | 0.00       | N/A     | ppb   |
| Molybdenum | 97-1  | 0.00    | 0.01    | -0.01   | 0.00       | N/A     | ppb   |
| Molybdenum | 98-1  | 0.01    | 0.00    | -0.01   | 0.00       | N/A     | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | -0.01   | 0.00    | 0.01    | 0.00       | N/A     | ppb   |
| Phosphorus | 31-2  | -15.65  | -6.03   | -13.53  | -11.74     |         | ppb   |
| Potassium  | 39-2  | -2.00   | 0.93    | 1.06    | 0.00       | N/A     | ppb   |
| Rhodium    | 103-1 |         |         |         | 100        |         | %     |
| Rhodium    | 103-2 |         |         |         | 100        |         | %     |
| Scandium   | 45-1  |         |         |         | 100        |         | %     |
| Scandium   | 45-2  |         |         |         | 100        |         | %     |
| Selenium   | 82-1  | -0.17   | -0.10   | 0.27    | 0.00       | N/A     | ppb   |
| Selenium   | 77-2  | 0.17    | -0.09   | -0.09   | 0.00       | N/A     | ppb   |
| Selenium   | 78-2  | -0.34   | 0.53    | -0.19   | 0.00       | N/A     | ppb   |
| Silicon    | 28-1  | 0.77    | -0.50   | -0.27   | 0.00       | N/A     | ppb   |
| Silver     | 107-1 | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Silver     | 109-1 | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Sodium     | 23-2  | -0.07   | 0.75    | -0.69   | 0.00       | N/A     | ppb   |
| Strontium  | 86-1  | 0.02    | 0.01    | -0.03   | 0.00       | N/A     | ppb   |
| Strontium  | 88-1  | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Sulfur     | 34-1  | -105.45 | -83.96  | -66.11  | -85.17     |         | ppb   |
| Terbium    | 159-1 |         |         |         | 100        |         | %     |
| Terbium    | 159-2 |         |         |         | 100        |         | %     |
| Thallium   | 203-1 | 0.00    | 0.00    | 0.01    | 0.00       | N/A     | ppb   |
| Thallium   | 205-1 | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Tin        | 118-1 | 0.01    | 0.00    | -0.01   | 0.00       | N/A     | ppb   |
| Titanium   | 47-1  | -0.03   | 0.02    | 0.01    | 0.00       | N/A     | ppb   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.01    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Vanadium  | 51-2  | 0.00    | -0.01   | 0.01    | 0.00       | N/A     | ppb   |
| Yttrium   | 89-1  |         |         |         | 100        |         | %     |
| Yttrium   | 89-2  |         |         |         | 100        |         | %     |
| Zinc      | 66-2  | -0.11   | 0.21    | -0.09   | 0.00       | N/A     | ppb   |
| Zirconium | 90-1  | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |
| Zirconium | 91-1  | 0.00    | 0.00    | 0.00    | 0.00       | N/A     | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CALS.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 20.17   | 22.48   | 21.26   | 21.30      | 5.43    | ppb   |
| Antimony   | 121-1 | 2.08    | 2.13    | 2.15    | 2.12       | 1.72    | ppb   |
| Arsenic    | 75-2  | 1.34    | 1.34    | 1.03    | 1.24       | 14.31   | ppb   |
| Barium     | 135-1 | 10.47   | 10.76   | 10.48   | 10.57      | 1.56    | ppb   |
| Barium     | 137-1 | 9.99    | 10.61   | 10.69   | 10.43      | 3.69    | ppb   |
| Beryllium  | 9-1   | 1.20    | 1.17    | 0.93    | 1.10       | 13.85   | ppb   |
| Bismuth    | 209-1 |         |         |         | 102        |         | %     |
| Bismuth    | 209-2 |         |         |         | 101        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 1.12    | 1.20    | 1.16    | 1.16       | 3.17    | ppb   |
| Cadmium    | 106-1 | -0.04   | -0.54   | 0.61    | 0.01       | 6235.28 | ppb   |
| Cadmium    | 111-1 | 0.96    | 1.02    | 1.06    | 1.01       | 5.27    | ppb   |
| Calcium    | 43-1  | 564.37  | 580.53  | 581.70  | 575.53     | 1.68    | ppb   |
| Calcium    | 44-1  | 567.50  | 580.00  | 561.47  | 569.66     | 1.66    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 2.11    | 2.20    | 2.02    | 2.11       | 4.25    | ppb   |
| Cobalt     | 59-2  | 1.16    | 1.14    | 1.10    | 1.13       | 2.35    | ppb   |
| Copper     | 63-2  | 2.05    | 2.11    | 2.06    | 2.07       | 1.57    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 100        |         | %     |
| Holmium    | 165-2 |         |         |         | 102        |         | %     |
| Indium     | 115-1 |         |         |         | 100        |         | %     |
| Indium     | 115-2 |         |         |         | 98         |         | %     |
| Iron       | 56-2  | 56.26   | 57.15   | 55.89   | 56.43      | 1.14    | ppb   |
| Iron       | 57-2  | 55.41   | 58.58   | 60.68   | 58.22      | 4.56    | ppb   |
| Iron       | 54-2  | 59.64   | 62.69   | 57.54   | 59.96      | 4.32    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CAL.S.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 1.01    | 0.99    | 1.01    | 1.00       | 0.84    | ppb   |
| Lead       | 207-1 | 1.02    | 0.97    | 1.04    | 1.01       | 3.44    | ppb   |
| Lead       | 208-1 | 1.02    | 0.96    | 1.02    | 1.00       | 3.46    | ppb   |
| Lithium    | 6-1   |         |         |         | 102        |         | %     |
| Magnesium  | 24-2  | 519.20  | 538.53  | 533.48  | 530.40     | 1.89    | ppb   |
| Manganese  | 55-2  | 0.98    | 0.97    | 0.92    | 0.96       | 3.35    | ppb   |
| Molybdenum | 94-1  | 6.03    | 6.26    | 6.22    | 6.17       | 2.00    | ppb   |
| Molybdenum | 95-1  | 5.19    | 5.20    | 5.18    | 5.19       | 0.19    | ppb   |
| Molybdenum | 96-1  | 5.40    | 5.51    | 5.35    | 5.42       | 1.46    | ppb   |
| Molybdenum | 97-1  | 5.44    | 5.51    | 5.37    | 5.44       | 1.27    | ppb   |
| Molybdenum | 98-1  | 5.19    | 5.29    | 5.27    | 5.25       | 1.04    | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 1.10    | 1.15    | 1.10    | 1.12       | 2.40    | ppb   |
| Phosphorus | 31-2  | 7.70    | 10.24   | 17.27   | 11.74      | 42.22   | ppb   |
| Potassium  | 39-2  | 546.52  | 568.34  | 557.91  | 557.59     | 1.96    | ppb   |
| Rhodium    | 103-1 |         |         |         | 99         |         | %     |
| Rhodium    | 103-2 |         |         |         | 99         |         | %     |
| Scandium   | 45-1  |         |         |         | 99         |         | %     |
| Scandium   | 45-2  |         |         |         | 101        |         | %     |
| Selenium   | 82-1  | 5.83    | 5.72    | 5.42    | 5.65       | 3.74    | ppb   |
| Selenium   | 77-2  | 7.19    | 4.18    | 4.89    | 5.42       | 29.05   | ppb   |
| Selenium   | 78-2  | 6.01    | 2.71    | 6.07    | 4.93       | 39.03   | ppb   |
| Silicon    | 28-1  | 1.31    | 1.17    | 0.37    | 0.95       | 53.29   | ppb   |
| Silver     | 107-1 | 1.04    | 1.11    | 1.08    | 1.08       | 3.14    | ppb   |
| Silver     | 109-1 | 1.04    | 1.08    | 1.05    | 1.06       | 2.10    | ppb   |
| Sodium     | 23-2  | 530.26  | 550.85  | 539.54  | 540.22     | 1.91    | ppb   |
| Strontium  | 86-1  | 1.05    | 1.03    | 1.00    | 1.02       | 2.52    | ppb   |
| Strontium  | 88-1  | 1.05    | 1.03    | 1.07    | 1.05       | 1.53    | ppb   |
| Sulfur     | 34-1  | 38.22   | 106.14  | 111.16  | 85.17      | 47.83   | ppb   |
| Terbium    | 159-1 |         |         |         | 100        |         | %     |
| Terbium    | 159-2 |         |         |         | 100        |         | %     |
| Thallium   | 203-1 | 1.02    | 0.97    | 0.95    | 0.98       | 3.50    | ppb   |
| Thallium   | 205-1 | 0.97    | 0.97    | 0.99    | 0.98       | 1.05    | ppb   |
| Tin        | 118-1 | 5.24    | 5.45    | 5.35    | 5.35       | 1.97    | ppb   |
| Titanium   | 47-1  | 5.03    | 4.92    | 5.11    | 5.02       | 1.96    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 1.02    | 0.96    | 0.99    | 0.99       | 2.88    | ppb   |
| Vanadium  | 51-2  | 5.33    | 5.51    | 5.49    | 5.44       | 1.85    | ppb   |
| Yttrium   | 89-1  |         |         |         | 99         |         | %     |
| Yttrium   | 89-2  |         |         |         | 99         |         | %     |
| Zinc      | 66-2  | 4.89    | 4.70    | 5.47    | 5.02       | 7.94    | ppb   |
| Zirconium | 90-1  | 1.03    | 1.05    | 1.01    | 1.03       | 1.74    | ppb   |
| Zirconium | 91-1  | 0.96    | 1.03    | 1.06    | 1.02       | 5.04    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CALS.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 1053.23 | 1049.58 | 1061.51 | 1054.77    | 0.58    | ppb   |
| Antimony   | 121-1 | 52.33   | 52.32   | 51.77   | 52.14      | 0.62    | ppb   |
| Arsenic    | 75-2  | 54.00   | 51.57   | 51.07   | 52.21      | 3.00    | ppb   |
| Barium     | 135-1 | 254.00  | 256.53  | 251.95  | 254.16     | 0.90    | ppb   |
| Barium     | 137-1 | 256.30  | 254.65  | 254.46  | 255.13     | 0.40    | ppb   |
| Beryllium  | 9-1   | 51.78   | 53.18   | 52.94   | 52.63      | 1.42    | ppb   |
| Bismuth    | 209-1 |         |         |         | 100        |         | %     |
| Bismuth    | 209-2 |         |         |         | 100        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 52.18   | 54.28   | 53.26   | 53.24      | 1.97    | ppb   |
| Cadmium    | 106-1 | 53.35   | 51.11   | 51.88   | 52.11      | 2.19    | ppb   |
| Cadmium    | 111-1 | 53.24   | 54.07   | 52.28   | 53.20      | 1.68    | ppb   |
| Calcium    | 43-1  | 5480.44 | 5667.05 | 5586.83 | 5578.11    | 1.68    | ppb   |
| Calcium    | 44-1  | 5186.67 | 5370.92 | 5229.03 | 5262.21    | 1.83    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 53.50   | 52.11   | 52.84   | 52.82      | 1.32    | ppb   |
| Cobalt     | 59-2  | 52.52   | 52.76   | 53.64   | 52.97      | 1.12    | ppb   |
| Copper     | 63-2  | 523.47  | 521.26  | 527.40  | 524.04     | 0.59    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 98         |         | %     |
| Holmium    | 165-2 |         |         |         | 101        |         | %     |
| Indium     | 115-1 |         |         |         | 97         |         | %     |
| Indium     | 115-2 |         |         |         | 97         |         | %     |
| Iron       | 56-2  | 2680.79 | 2734.86 | 2722.29 | 2712.65    | 1.04    | ppb   |
| Iron       | 57-2  | 2896.74 | 2851.81 | 2866.44 | 2871.66    | 0.80    | ppb   |
| Iron       | 54-2  | 2895.30 | 2856.98 | 2920.11 | 2890.79    | 1.10    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CAL.S.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 242.85  | 245.53  | 243.92  | 244.10     | 0.55    | ppb   |
| Lead       | 207-1 | 240.76  | 242.28  | 242.59  | 241.88     | 0.40    | ppb   |
| Lead       | 208-1 | 244.23  | 244.57  | 248.20  | 245.67     | 0.90    | ppb   |
| Lithium    | 6-1   |         |         |         | 103        |         | %     |
| Magnesium  | 24-2  | 5341.15 | 5214.65 | 5261.14 | 5272.31    | 1.21    | ppb   |
| Manganese  | 55-2  | 526.99  | 521.69  | 528.56  | 525.74     | 0.68    | ppb   |
| Molybdenum | 94-1  | 505.80  | 506.31  | 514.73  | 508.95     | 0.99    | ppb   |
| Molybdenum | 95-1  | 507.45  | 500.57  | 508.52  | 505.51     | 0.85    | ppb   |
| Molybdenum | 96-1  | 501.80  | 499.49  | 504.27  | 501.85     | 0.48    | ppb   |
| Molybdenum | 97-1  | 514.44  | 512.54  | 517.12  | 514.70     | 0.45    | ppb   |
| Molybdenum | 98-1  | 502.85  | 503.74  | 501.59  | 502.73     | 0.22    | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 52.90   | 52.95   | 52.85   | 52.90      | 0.10    | ppb   |
| Phosphorus | 31-2  | 1017.90 | 1026.67 | 1075.02 | 1039.86    | 2.96    | ppb   |
| Potassium  | 39-2  | 2762.45 | 2748.24 | 2816.65 | 2775.78    | 1.30    | ppb   |
| Rhodium    | 103-1 |         |         |         | 97         |         | %     |
| Rhodium    | 103-2 |         |         |         | 98         |         | %     |
| Scandium   | 45-1  |         |         |         | 98         |         | %     |
| Scandium   | 45-2  |         |         |         | 98         |         | %     |
| Selenium   | 82-1  | 53.37   | 52.90   | 54.01   | 53.43      | 1.04    | ppb   |
| Selenium   | 77-2  | 52.00   | 58.00   | 55.00   | 55.00      | 5.45    | ppb   |
| Selenium   | 78-2  | 53.70   | 54.67   | 53.42   | 53.93      | 1.22    | ppb   |
| Silicon    | 28-1  | 63.11   | 68.34   | 67.01   | 66.15      | 4.10    | ppb   |
| Silver     | 107-1 | 53.13   | 53.76   | 53.39   | 53.43      | 0.60    | ppb   |
| Silver     | 109-1 | 53.11   | 52.84   | 52.90   | 52.95      | 0.26    | ppb   |
| Sodium     | 23-2  | 5390.38 | 5342.35 | 5415.58 | 5382.77    | 0.69    | ppb   |
| Strontium  | 86-1  | 51.19   | 50.29   | 51.35   | 50.94      | 1.12    | ppb   |
| Strontium  | 88-1  | 51.54   | 51.04   | 52.00   | 51.53      | 0.94    | ppb   |
| Sulfur     | 34-1  | 1017.32 | 1351.23 | 1348.88 | 1239.14    | 15.50   | ppb   |
| Terbium    | 159-1 |         |         |         | 98         |         | %     |
| Terbium    | 159-2 |         |         |         | 98         |         | %     |
| Thallium   | 203-1 | 48.59   | 48.55   | 48.80   | 48.65      | 0.28    | ppb   |
| Thallium   | 205-1 | 48.13   | 48.28   | 48.13   | 48.18      | 0.18    | ppb   |
| Tin        | 118-1 | 53.19   | 52.53   | 52.80   | 52.84      | 0.62    | ppb   |
| Titanium   | 47-1  | 501.62  | 524.51  | 514.58  | 513.57     | 2.23    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 46.90   | 47.53   | 47.36   | 47.26      | 0.69    | ppb   |
| Vanadium  | 51-2  | 52.82   | 51.87   | 52.82   | 52.50      | 1.05    | ppb   |
| Yttrium   | 89-1  |         |         |         | 98         |         | %     |
| Yttrium   | 89-2  |         |         |         | 97         |         | %     |
| Zinc      | 66-2  | 536.75  | 542.32  | 547.50  | 542.19     | 0.99    | ppb   |
| Zirconium | 90-1  | 50.70   | 50.37   | 51.31   | 50.79      | 0.94    | ppb   |
| Zirconium | 91-1  | 50.27   | 49.76   | 50.09   | 50.04      | 0.51    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 2604.19  | 2594.78  | 2549.66  | 2582.87    | 1.13    | ppb   |
| Antimony   | 121-1 | 125.09   | 126.54   | 126.21   | 125.95     | 0.60    | ppb   |
| Arsenic    | 75-2  | 128.92   | 128.75   | 126.61   | 128.09     | 1.00    | ppb   |
| Barium     | 135-1 | 617.04   | 622.71   | 617.00   | 618.92     | 0.53    | ppb   |
| Barium     | 137-1 | 616.61   | 623.08   | 617.06   | 618.92     | 0.58    | ppb   |
| Beryllium  | 9-1   | 130.86   | 132.85   | 129.35   | 131.02     | 1.34    | ppb   |
| Bismuth    | 209-1 |          |          |          | 102        |         | %     |
| Bismuth    | 209-2 |          |          |          | 100        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 133.57   | 126.29   | 127.34   | 129.07     | 3.05    | ppb   |
| Cadmium    | 106-1 | 128.59   | 126.48   | 127.11   | 127.39     | 0.85    | ppb   |
| Cadmium    | 111-1 | 128.35   | 130.87   | 127.71   | 128.98     | 1.30    | ppb   |
| Calcium    | 43-1  | 13613.16 | 13928.59 | 13824.37 | 13788.71   | 1.17    | ppb   |
| Calcium    | 44-1  | 13043.04 | 13018.57 | 13165.02 | 13075.54   | 0.60    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 126.46   | 127.46   | 128.24   | 127.39     | 0.70    | ppb   |
| Cobalt     | 59-2  | 126.17   | 127.18   | 128.74   | 127.36     | 1.02    | ppb   |
| Copper     | 63-2  | 1269.37  | 1272.67  | 1273.56  | 1271.87    | 0.17    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 101        |         | %     |
| Holmium    | 165-2 |          |          |          | 101        |         | %     |
| Indium     | 115-1 |          |          |          | 99         |         | %     |
| Indium     | 115-2 |          |          |          | 95         |         | %     |
| Iron       | 56-2  | 6730.79  | 6731.41  | 6519.71  | 6660.64    | 1.83    | ppb   |
| Iron       | 57-2  | 6897.42  | 7028.95  | 6919.71  | 6948.69    | 1.01    | ppb   |
| Iron       | 54-2  | 7036.05  | 7111.24  | 6944.42  | 7030.57    | 1.19    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 632.67   | 640.66   | 622.89   | 632.07     | 1.41    | ppb   |
| Lead       | 207-1 | 618.68   | 629.05   | 627.75   | 625.16     | 0.90    | ppb   |
| Lead       | 208-1 | 626.25   | 631.12   | 626.60   | 627.99     | 0.43    | ppb   |
| Lithium    | 6-1   |          |          |          | 105        |         | %     |
| Magnesium  | 24-2  | 13117.73 | 12929.02 | 12769.48 | 12938.75   | 1.35    | ppb   |
| Manganese  | 55-2  | 1277.36  | 1281.71  | 1229.11  | 1262.73    | 2.31    | ppb   |
| Molybdenum | 94-1  | 1240.62  | 1274.36  | 1247.96  | 1254.31    | 1.41    | ppb   |
| Molybdenum | 95-1  | 1248.76  | 1246.77  | 1264.63  | 1253.39    | 0.78    | ppb   |
| Molybdenum | 96-1  | 1252.40  | 1257.58  | 1301.93  | 1270.63    | 2.14    | ppb   |
| Molybdenum | 97-1  | 1259.52  | 1255.91  | 1258.11  | 1257.85    | 0.14    | ppb   |
| Molybdenum | 98-1  | 1257.36  | 1265.98  | 1266.40  | 1263.25    | 0.40    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 130.31   | 132.23   | 127.42   | 129.99     | 1.87    | ppb   |
| Phosphorus | 31-2  | 2581.11  | 2558.88  | 2560.09  | 2566.69    | 0.49    | ppb   |
| Potassium  | 39-2  | 6437.76  | 6331.29  | 6514.87  | 6427.98    | 1.43    | ppb   |
| Rhodium    | 103-1 |          |          |          | 99         |         | %     |
| Rhodium    | 103-2 |          |          |          | 98         |         | %     |
| Scandium   | 45-1  |          |          |          | 99         |         | %     |
| Scandium   | 45-2  |          |          |          | 100        |         | %     |
| Selenium   | 82-1  | 129.73   | 130.56   | 132.66   | 130.99     | 1.15    | ppb   |
| Selenium   | 77-2  | 135.06   | 123.32   | 123.46   | 127.28     | 5.29    | ppb   |
| Selenium   | 78-2  | 127.20   | 122.54   | 124.12   | 124.62     | 1.90    | ppb   |
| Silicon    | 28-1  | 135.74   | 139.60   | 142.50   | 139.28     | 2.44    | ppb   |
| Silver     | 107-1 | 129.24   | 130.45   | 128.92   | 129.54     | 0.62    | ppb   |
| Silver     | 109-1 | 127.50   | 128.98   | 127.15   | 127.88     | 0.76    | ppb   |
| Sodium     | 23-2  | 13392.15 | 13108.12 | 13254.16 | 13251.48   | 1.07    | ppb   |
| Strontium  | 86-1  | 123.69   | 126.95   | 127.82   | 126.16     | 1.72    | ppb   |
| Strontium  | 88-1  | 124.71   | 125.60   | 129.65   | 126.65     | 2.08    | ppb   |
| Sulfur     | 34-1  | 2606.96  | 2679.91  | 2771.01  | 2685.96    | 3.06    | ppb   |
| Terbium    | 159-1 |          |          |          | 101        |         | %     |
| Terbium    | 159-2 |          |          |          | 99         |         | %     |
| Thallium   | 203-1 | 120.21   | 121.81   | 120.64   | 120.89     | 0.68    | ppb   |
| Thallium   | 205-1 | 118.17   | 121.89   | 119.16   | 119.74     | 1.61    | ppb   |
| Tin        | 118-1 | 126.25   | 128.70   | 128.26   | 127.74     | 1.02    | ppb   |
| Titanium   | 47-1  | 1260.74  | 1274.61  | 1269.49  | 1268.28    | 0.55    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 123.40  | 126.71  | 124.65  | 124.92     | 1.34    | ppb   |
| Vanadium  | 51-2  | 128.48  | 129.21  | 126.46  | 128.05     | 1.11    | ppb   |
| Yttrium   | 89-1  |         |         |         | 100        |         | %     |
| Yttrium   | 89-2  |         |         |         | 99         |         | %     |
| Zinc      | 66-2  | 1279.75 | 1296.41 | 1302.56 | 1292.91    | 0.91    | ppb   |
| Zirconium | 90-1  | 124.53  | 126.73  | 127.68  | 126.31     | 1.28    | ppb   |
| Zirconium | 91-1  | 124.54  | 125.76  | 127.61  | 125.97     | 1.23    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 5050.87  | 5192.53  | 5132.97  | 5125.46    | 1.39    | ppb   |
| Antimony   | 121-1 | 266.11   | 247.92   | 263.44   | 259.16     | 3.79    | ppb   |
| Arsenic    | 75-2  | 253.61   | 258.21   | 257.93   | 256.58     | 1.01    | ppb   |
| Barium     | 135-1 | 1298.66  | 1217.64  | 1283.08  | 1266.46    | 3.39    | ppb   |
| Barium     | 137-1 | 1326.92  | 1217.86  | 1317.23  | 1287.34    | 4.69    | ppb   |
| Beryllium  | 9-1   | 263.31   | 254.51   | 262.19   | 260.00     | 1.84    | ppb   |
| Bismuth    | 209-1 |          |          |          | 100        |         | %     |
| Bismuth    | 209-2 |          |          |          | 101        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 267.76   | 246.88   | 261.89   | 258.84     | 4.16    | ppb   |
| Cadmium    | 106-1 | 266.82   | 250.29   | 275.01   | 264.04     | 4.77    | ppb   |
| Cadmium    | 111-1 | 268.75   | 252.94   | 267.68   | 263.12     | 3.36    | ppb   |
| Calcium    | 43-1  | 28881.94 | 26988.28 | 27966.70 | 27945.64   | 3.39    | ppb   |
| Calcium    | 44-1  | 27657.62 | 26081.87 | 26680.15 | 26806.55   | 2.97    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 254.45   | 260.87   | 256.15   | 257.16     | 1.29    | ppb   |
| Cobalt     | 59-2  | 254.43   | 259.86   | 255.96   | 256.75     | 1.09    | ppb   |
| Copper     | 63-2  | 2527.91  | 2586.15  | 2552.38  | 2555.48    | 1.14    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 100        |         | %     |
| Holmium    | 165-2 |          |          |          | 103        |         | %     |
| Indium     | 115-1 |          |          |          | 98         |         | %     |
| Indium     | 115-2 |          |          |          | 96         |         | %     |
| Iron       | 56-2  | 13183.15 | 13449.56 | 13304.50 | 13312.40   | 1.00    | ppb   |
| Iron       | 57-2  | 13783.49 | 13892.28 | 13972.62 | 13882.80   | 0.68    | ppb   |
| Iron       | 54-2  | 13264.92 | 13651.51 | 13468.73 | 13461.72   | 1.44    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 1318.91  | 1283.81  | 1271.82  | 1291.52    | 1.89    | ppb   |
| Lead       | 207-1 | 1330.75  | 1275.91  | 1279.06  | 1295.24    | 2.38    | ppb   |
| Lead       | 208-1 | 1316.04  | 1257.89  | 1253.20  | 1275.71    | 2.74    | ppb   |
| Lithium    | 6-1   |          |          |          | 104        |         | %     |
| Magnesium  | 24-2  | 26251.66 | 26206.02 | 25938.66 | 26132.11   | 0.65    | ppb   |
| Manganese  | 55-2  | 2469.74  | 2552.31  | 2497.47  | 2506.51    | 1.68    | ppb   |
| Molybdenum | 94-1  | 2599.85  | 2477.75  | 2581.72  | 2553.11    | 2.58    | ppb   |
| Molybdenum | 95-1  | 2612.32  | 2450.81  | 2528.51  | 2530.54    | 3.19    | ppb   |
| Molybdenum | 96-1  | 2655.06  | 2505.74  | 2568.47  | 2576.42    | 2.91    | ppb   |
| Molybdenum | 97-1  | 2697.32  | 2490.82  | 2585.64  | 2591.26    | 3.99    | ppb   |
| Molybdenum | 98-1  | 2677.08  | 2475.63  | 2602.90  | 2585.20    | 3.94    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 255.08   | 259.86   | 259.59   | 258.18     | 1.04    | ppb   |
| Phosphorus | 31-2  | 5043.54  | 5206.29  | 5144.52  | 5131.45    | 1.60    | ppb   |
| Potassium  | 39-2  | 12673.33 | 13275.44 | 12743.20 | 12897.32   | 2.55    | ppb   |
| Rhodium    | 103-1 |          |          |          | 98         |         | %     |
| Rhodium    | 103-2 |          |          |          | 98         |         | %     |
| Scandium   | 45-1  |          |          |          | 97         |         | %     |
| Scandium   | 45-2  |          |          |          | 99         |         | %     |
| Selenium   | 82-1  | 272.65   | 253.88   | 264.28   | 263.60     | 3.57    | ppb   |
| Selenium   | 77-2  | 245.15   | 276.07   | 255.79   | 259.00     | 6.06    | ppb   |
| Selenium   | 78-2  | 253.37   | 260.03   | 260.32   | 257.91     | 1.53    | ppb   |
| Silicon    | 28-1  | 269.16   | 256.23   | 266.62   | 264.00     | 2.60    | ppb   |
| Silver     | 107-1 | 262.65   | 249.11   | 267.48   | 259.75     | 3.67    | ppb   |
| Silver     | 109-1 | 268.02   | 252.43   | 268.33   | 262.93     | 3.46    | ppb   |
| Sodium     | 23-2  | 25918.98 | 26978.06 | 26796.02 | 26564.35   | 2.13    | ppb   |
| Strontium  | 86-1  | 266.61   | 250.18   | 259.61   | 258.80     | 3.19    | ppb   |
| Strontium  | 88-1  | 265.62   | 251.23   | 261.38   | 259.41     | 2.85    | ppb   |
| Sulfur     | 34-1  | 5974.65  | 5067.51  | 5476.00  | 5506.05    | 8.25    | ppb   |
| Terbium    | 159-1 |          |          |          | 99         |         | %     |
| Terbium    | 159-2 |          |          |          | 99         |         | %     |
| Thallium   | 203-1 | 254.02   | 241.28   | 241.50   | 245.60     | 2.97    | ppb   |
| Thallium   | 205-1 | 262.80   | 247.90   | 249.94   | 253.55     | 3.19    | ppb   |
| Tin        | 118-1 | 268.08   | 248.26   | 263.35   | 259.90     | 3.98    | ppb   |
| Titanium   | 47-1  | 2673.87  | 2494.37  | 2614.03  | 2594.09    | 3.52    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 262.50  | 250.10  | 251.83  | 254.81     | 2.64    | ppb   |
| Vanadium  | 51-2  | 252.07  | 258.13  | 256.06  | 255.42     | 1.21    | ppb   |
| Yttrium   | 89-1  |         |         |         | 98         |         | %     |
| Yttrium   | 89-2  |         |         |         | 97         |         | %     |
| Zinc      | 66-2  | 2530.09 | 2631.38 | 2610.10 | 2590.52    | 2.06    | ppb   |
| Zirconium | 90-1  | 271.42  | 247.90  | 258.95  | 259.43     | 4.54    | ppb   |
| Zirconium | 91-1  | 267.25  | 248.65  | 256.46  | 257.45     | 3.63    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 9876.64  | 10087.73 | 10186.17 | 10050.18   | 1.57    | ppb   |
| Antimony   | 121-1 | 499.29   | 502.58   | 508.09   | 503.32     | 0.88    | ppb   |
| Arsenic    | 75-2  | 517.35   | 510.38   | 509.72   | 512.49     | 0.82    | ppb   |
| Barium     | 135-1 | 2459.31  | 2502.67  | 2524.72  | 2495.57    | 1.33    | ppb   |
| Barium     | 137-1 | 2482.15  | 2472.67  | 2504.93  | 2486.58    | 0.67    | ppb   |
| Beryllium  | 9-1   | 483.44   | 513.76   | 496.86   | 498.02     | 3.05    | ppb   |
| Bismuth    | 209-1 |          |          |          | 104        |         | %     |
| Bismuth    | 209-2 |          |          |          | 101        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 489.65   | 508.38   | 504.06   | 500.70     | 1.96    | ppb   |
| Cadmium    | 106-1 | 488.17   | 504.67   | 505.37   | 499.40     | 1.95    | ppb   |
| Cadmium    | 111-1 | 496.67   | 507.83   | 510.78   | 505.10     | 1.47    | ppb   |
| Calcium    | 43-1  | 52476.53 | 54806.69 | 54981.61 | 54088.28   | 2.59    | ppb   |
| Calcium    | 44-1  | 50521.27 | 52873.54 | 52876.86 | 52090.56   | 2.61    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 496.66   | 509.15   | 509.77   | 505.20     | 1.46    | ppb   |
| Cobalt     | 59-2  | 520.56   | 502.39   | 509.73   | 510.90     | 1.79    | ppb   |
| Copper     | 63-2  | 4985.93  | 5107.54  | 5194.89  | 5096.12    | 2.06    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 104        |         | %     |
| Holmium    | 165-2 |          |          |          | 105        |         | %     |
| Indium     | 115-1 |          |          |          | 99         |         | %     |
| Indium     | 115-2 |          |          |          | 97         |         | %     |
| Iron       | 56-2  | 26931.61 | 26687.05 | 26841.93 | 26820.20   | 0.46    | ppb   |
| Iron       | 57-2  | 26577.16 | 26457.14 | 26851.36 | 26628.55   | 0.76    | ppb   |
| Iron       | 54-2  | 26888.78 | 26511.50 | 26943.78 | 26781.35   | 0.88    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CAL.S.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 2477.58  | 2522.46  | 2521.36  | 2507.13    | 1.02    | ppb   |
| Lead       | 207-1 | 2491.80  | 2507.79  | 2517.80  | 2505.79    | 0.52    | ppb   |
| Lead       | 208-1 | 2461.69  | 2505.83  | 2522.81  | 2496.78    | 1.26    | ppb   |
| Lithium    | 6-1   |          |          |          | 106        |         | %     |
| Magnesium  | 24-2  | 51448.72 | 51687.13 | 50848.19 | 51328.02   | 0.84    | ppb   |
| Manganese  | 55-2  | 5014.84  | 5006.80  | 5062.50  | 5028.05    | 0.60    | ppb   |
| Molybdenum | 94-1  | 4933.28  | 5105.61  | 5130.20  | 5056.37    | 2.12    | ppb   |
| Molybdenum | 95-1  | 4834.31  | 5085.05  | 5090.62  | 5003.33    | 2.93    | ppb   |
| Molybdenum | 96-1  | 4974.63  | 5098.52  | 5095.33  | 5056.16    | 1.40    | ppb   |
| Molybdenum | 97-1  | 4945.56  | 5103.31  | 5179.57  | 5076.15    | 2.35    | ppb   |
| Molybdenum | 98-1  | 4984.22  | 5056.14  | 5178.00  | 5072.79    | 1.93    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 510.96   | 513.66   | 506.47   | 510.36     | 0.71    | ppb   |
| Phosphorus | 31-2  | 10077.61 | 10115.91 | 10101.42 | 10098.32   | 0.19    | ppb   |
| Potassium  | 39-2  | 25720.11 | 25320.26 | 25145.36 | 25395.24   | 1.16    | ppb   |
| Rhodium    | 103-1 |          |          |          | 99         |         | %     |
| Rhodium    | 103-2 |          |          |          | 99         |         | %     |
| Scandium   | 45-1  |          |          |          | 99         |         | %     |
| Scandium   | 45-2  |          |          |          | 100        |         | %     |
| Selenium   | 82-1  | 505.22   | 519.17   | 515.23   | 513.21     | 1.40    | ppb   |
| Selenium   | 77-2  | 527.94   | 531.56   | 506.98   | 522.16     | 2.54    | ppb   |
| Selenium   | 78-2  | 523.37   | 514.22   | 526.55   | 521.38     | 1.23    | ppb   |
| Silicon    | 28-1  | 478.33   | 499.45   | 497.39   | 491.72     | 2.37    | ppb   |
| Silver     | 107-1 | 501.18   | 507.92   | 509.08   | 506.06     | 0.84    | ppb   |
| Silver     | 109-1 | 491.38   | 507.63   | 511.49   | 503.50     | 2.12    | ppb   |
| Sodium     | 23-2  | 51981.11 | 53989.23 | 52109.94 | 52693.43   | 2.13    | ppb   |
| Strontium  | 86-1  | 493.32   | 506.91   | 507.75   | 502.66     | 1.61    | ppb   |
| Strontium  | 88-1  | 502.53   | 506.21   | 516.46   | 508.40     | 1.42    | ppb   |
| Sulfur     | 34-1  | 9773.55  | 10406.16 | 10503.95 | 10227.89   | 3.88    | ppb   |
| Terbium    | 159-1 |          |          |          | 103        |         | %     |
| Terbium    | 159-2 |          |          |          | 101        |         | %     |
| Thallium   | 203-1 | 493.32   | 506.07   | 503.28   | 500.89     | 1.34    | ppb   |
| Thallium   | 205-1 | 502.52   | 500.36   | 503.83   | 502.24     | 0.35    | ppb   |
| Tin        | 118-1 | 496.95   | 495.66   | 502.74   | 498.45     | 0.76    | ppb   |
| Titanium   | 47-1  | 4914.06  | 5143.29  | 5147.93  | 5068.43    | 2.64    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 478.32  | 498.48  | 494.41  | 490.40     | 2.17    | ppb   |
| Vanadium  | 51-2  | 509.53  | 510.65  | 510.25  | 510.14     | 0.11    | ppb   |
| Yttrium   | 89-1  |         |         |         | 100        |         | %     |
| Yttrium   | 89-2  |         |         |         | 98         |         | %     |
| Zinc      | 66-2  | 5192.97 | 5168.87 | 5049.11 | 5136.98    | 1.50    | ppb   |
| Zirconium | 90-1  | 496.46  | 501.94  | 501.04  | 499.81     | 0.59    | ppb   |
| Zirconium | 91-1  | 495.80  | 509.30  | 510.36  | 505.15     | 1.61    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CAL.S.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 19985.79  | 20240.19  | 20132.48  | 20119.49   | 0.63    | ppb   |
| Antimony   | 121-1 | 969.31    | 1017.32   | 1000.85   | 995.83     | 2.45    | ppb   |
| Arsenic    | 75-2  | 972.24    | 993.73    | 1008.87   | 991.61     | 1.86    | ppb   |
| Barium     | 135-1 | 4865.31   | 5092.92   | 5037.73   | 4998.65    | 2.38    | ppb   |
| Barium     | 137-1 | 4840.02   | 5099.99   | 5053.62   | 4997.88    | 2.77    | ppb   |
| Beryllium  | 9-1   | 994.34    | 994.11    | 1004.36   | 997.61     | 0.59    | ppb   |
| Bismuth    | 209-1 |           |           |           | 106        |         | %     |
| Bismuth    | 209-2 |           |           |           | 103        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 971.51    | 1014.80   | 1004.01   | 996.77     | 2.26    | ppb   |
| Cadmium    | 106-1 | 967.74    | 1016.18   | 1005.23   | 996.38     | 2.55    | ppb   |
| Cadmium    | 111-1 | 964.58    | 1012.35   | 1003.60   | 993.51     | 2.56    | ppb   |
| Calcium    | 43-1  | 101342.49 | 102278.42 | 102405.86 | 102008.92  | 0.57    | ppb   |
| Calcium    | 44-1  | 100684.97 | 103322.97 | 101709.81 | 101905.92  | 1.31    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 986.59    | 995.28    | 1003.65   | 995.17     | 0.86    | ppb   |
| Cobalt     | 59-2  | 983.08    | 994.30    | 999.88    | 992.42     | 0.86    | ppb   |
| Copper     | 63-2  | 10015.74  | 9827.43   | 9959.24   | 9934.14    | 0.97    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 106        |         | %     |
| Holmium    | 165-2 |           |           |           | 108        |         | %     |
| Indium     | 115-1 |           |           |           | 102        |         | %     |
| Indium     | 115-2 |           |           |           | 100        |         | %     |
| Iron       | 56-2  | 52174.44  | 52025.84  | 53092.36  | 52430.88   | 1.10    | ppb   |
| Iron       | 57-2  | 52084.45  | 51466.00  | 51880.92  | 51810.46   | 0.61    | ppb   |
| Iron       | 54-2  | 51837.54  | 52745.64  | 52934.88  | 52506.02   | 1.12    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CAL.S.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 4931.19   | 4990.13   | 5035.08   | 4985.46    | 1.05    | ppb   |
| Lead       | 207-1 | 5079.13   | 4919.58   | 4959.83   | 4986.18    | 1.66    | ppb   |
| Lead       | 208-1 | 4983.94   | 4999.07   | 5002.07   | 4995.03    | 0.19    | ppb   |
| Lithium    | 6-1   |           |           |           | 107        |         | %     |
| Magnesium  | 24-2  | 99681.35  | 101091.26 | 102316.80 | 101029.80  | 1.31    | ppb   |
| Manganese  | 55-2  | 9800.64   | 9988.88   | 10154.89  | 9981.47    | 1.78    | ppb   |
| Molybdenum | 94-1  | 9938.89   | 9983.10   | 9950.67   | 9957.55    | 0.23    | ppb   |
| Molybdenum | 95-1  | 9810.98   | 10042.85  | 10116.18  | 9990.00    | 1.59    | ppb   |
| Molybdenum | 96-1  | 9773.84   | 10080.47  | 9996.11   | 9950.14    | 1.59    | ppb   |
| Molybdenum | 97-1  | 9791.27   | 10054.33  | 9966.59   | 9937.40    | 1.35    | ppb   |
| Molybdenum | 98-1  | 9773.02   | 10090.41  | 9958.11   | 9940.51    | 1.60    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 988.08    | 987.17    | 1000.76   | 992.01     | 0.77    | ppb   |
| Phosphorus | 31-2  | 19756.78  | 19734.50  | 20231.67  | 19907.65   | 1.41    | ppb   |
| Potassium  | 39-2  | 49692.46  | 50179.51  | 52331.86  | 50734.61   | 2.77    | ppb   |
| Rhodium    | 103-1 |           |           |           | 102        |         | %     |
| Rhodium    | 103-2 |           |           |           | 102        |         | %     |
| Scandium   | 45-1  |           |           |           | 103        |         | %     |
| Scandium   | 45-2  |           |           |           | 104        |         | %     |
| Selenium   | 82-1  | 970.78    | 1000.75   | 995.69    | 989.07     | 1.62    | ppb   |
| Selenium   | 77-2  | 973.93    | 987.34    | 997.13    | 986.13     | 1.18    | ppb   |
| Selenium   | 78-2  | 974.45    | 993.84    | 993.27    | 987.18     | 1.12    | ppb   |
| Silicon    | 28-1  | 993.36    | 1018.61   | 982.44    | 998.14     | 1.86    | ppb   |
| Silver     | 107-1 | 965.14    | 1016.84   | 999.40    | 993.80     | 2.65    | ppb   |
| Silver     | 109-1 | 968.87    | 995.04    | 1019.63   | 994.51     | 2.55    | ppb   |
| Sodium     | 23-2  | 101729.64 | 103579.61 | 104191.91 | 103167.06  | 1.24    | ppb   |
| Strontium  | 86-1  | 989.19    | 1005.83   | 993.82    | 996.28     | 0.86    | ppb   |
| Strontium  | 88-1  | 981.60    | 1000.82   | 997.07    | 993.16     | 1.03    | ppb   |
| Sulfur     | 34-1  | 19378.04  | 20129.86  | 19665.12  | 19724.34   | 1.92    | ppb   |
| Terbium    | 159-1 |           |           |           | 106        |         | %     |
| Terbium    | 159-2 |           |           |           | 105        |         | %     |
| Thallium   | 203-1 | 1008.78   | 997.03    | 997.89    | 1001.24    | 0.65    | ppb   |
| Thallium   | 205-1 | 1007.41   | 992.92    | 995.90    | 998.74     | 0.77    | ppb   |
| Tin        | 118-1 | 964.67    | 1012.29   | 1016.48   | 997.81     | 2.88    | ppb   |
| Titanium   | 47-1  | 9941.48   | 9985.34   | 9891.08   | 9939.30    | 0.47    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 1006.22 | 993.51  | 1011.50 | 1003.74    | 0.92    | ppb   |
| Vanadium  | 51-2  | 979.43  | 989.91  | 1009.85 | 993.07     | 1.56    | ppb   |
| Yttrium   | 89-1  |         |         |         | 105        |         | %     |
| Yttrium   | 89-2  |         |         |         | 103        |         | %     |
| Zinc      | 66-2  | 9823.73 | 9937.72 | 9942.77 | 9901.41    | 0.68    | ppb   |
| Zirconium | 90-1  | 985.28  | 999.46  | 1007.86 | 997.53     | 1.14    | ppb   |
| Zirconium | 91-1  | 975.03  | 1005.22 | 1006.07 | 995.44     | 1.78    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CALS.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 98607.49  | 99958.57  | 101320.52 | 99962.19   | 1.36    | ppb   |
| Antimony   | 121-1 | 0.89      | 0.85      | 0.82      | 0.85       | 4.37    | ppb   |
| Arsenic    | 75-2  | 1.14      | 1.01      | 1.33      | 1.16       | 14.01   | ppb   |
| Barium     | 135-1 | 3.05      | 3.14      | 3.19      | 3.13       | 2.25    | ppb   |
| Barium     | 137-1 | 3.10      | 2.99      | 3.10      | 3.07       | 2.06    | ppb   |
| Beryllium  | 9-1   | 0.12      | 0.09      | 0.17      | 0.13       | 30.43   | ppb   |
| Bismuth    | 209-1 |           |           |           | 97         |         | %     |
| Bismuth    | 209-2 |           |           |           | 96         |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 0.86      | 0.96      | 0.93      | 0.92       | 5.71    | ppb   |
| Cadmium    | 106-1 | -0.67     | -0.22     | -0.82     | -0.57      |         | ppb   |
| Cadmium    | 111-1 | 0.39      | 0.41      | 0.36      | 0.39       | 5.49    | ppb   |
| Calcium    | 43-1  | 496986.05 | 499179.38 | 500846.67 | 499004.03  | 0.39    | ppb   |
| Calcium    | 44-1  | 500600.90 | 496182.56 | 501123.60 | 499302.35  | 0.54    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 4.28      | 4.17      | 4.35      | 4.27       | 2.05    | ppb   |
| Cobalt     | 59-2  | 1.78      | 1.77      | 1.78      | 1.78       | 0.25    | ppb   |
| Copper     | 63-2  | 0.88      | 0.88      | 0.88      | 0.88       | 0.51    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 104        |         | %     |
| Holmium    | 165-2 |           |           |           | 107        |         | %     |
| Indium     | 115-1 |           |           |           | 98         |         | %     |
| Indium     | 115-2 |           |           |           | 99         |         | %     |
| Iron       | 56-2  | 247036.20 | 248538.91 | 252261.27 | 249278.79  | 1.08    | ppb   |
| Iron       | 57-2  | 252512.50 | 247386.57 | 248255.11 | 249384.73  | 1.10    | ppb   |
| Iron       | 54-2  | 249537.76 | 247741.82 | 250467.87 | 249249.15  | 0.56    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CAL.S.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 1.32      | 1.30      | 1.30      | 1.31       | 1.01    | ppb   |
| Lead       | 207-1 | 1.26      | 1.27      | 1.33      | 1.29       | 2.88    | ppb   |
| Lead       | 208-1 | 1.33      | 1.29      | 1.31      | 1.31       | 1.47    | ppb   |
| Lithium    | 6-1   |           |           |           | 104        |         | %     |
| Magnesium  | 24-2  | 495372.80 | 498215.39 | 505184.54 | 499590.91  | 1.01    | ppb   |
| Manganese  | 55-2  | 4.13      | 4.16      | 4.21      | 4.16       | 0.94    | ppb   |
| Molybdenum | 94-1  | 3.06      | 2.91      | 2.96      | 2.98       | 2.54    | ppb   |
| Molybdenum | 95-1  | 1.78      | 1.68      | 1.56      | 1.67       | 6.48    | ppb   |
| Molybdenum | 96-1  | 3.18      | 3.13      | 2.96      | 3.09       | 3.77    | ppb   |
| Molybdenum | 97-1  | 1.90      | 1.81      | 1.68      | 1.80       | 6.27    | ppb   |
| Molybdenum | 98-1  | 1.78      | 1.63      | 1.55      | 1.65       | 6.99    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 3.35      | 3.35      | 3.32      | 3.34       | 0.60    | ppb   |
| Phosphorus | 31-2  | -17.36    | -15.65    | -8.53     | -13.85     |         | ppb   |
| Potassium  | 39-2  | 252493.50 | 247162.01 | 249703.59 | 249786.37  | 1.07    | ppb   |
| Rhodium    | 103-1 |           |           |           | 96         |         | %     |
| Rhodium    | 103-2 |           |           |           | 97         |         | %     |
| Scandium   | 45-1  |           |           |           | 103        |         | %     |
| Scandium   | 45-2  |           |           |           | 105        |         | %     |
| Selenium   | 82-1  | 0.98      | 2.19      | 2.28      | 1.82       | 40.18   | ppb   |
| Selenium   | 77-2  | 1.16      | 0.89      | 1.95      | 1.33       | 41.27   | ppb   |
| Selenium   | 78-2  | 0.19      | -0.44     | 0.94      | 0.23       | 303.14  | ppb   |
| Silicon    | 28-1  | 3.20      | 2.07      | 2.01      | 2.42       | 27.64   | ppb   |
| Silver     | 107-1 | 0.40      | 0.22      | 0.17      | 0.26       | 46.34   | ppb   |
| Silver     | 109-1 | 0.40      | 0.20      | 0.17      | 0.25       | 48.61   | ppb   |
| Sodium     | 23-2  | 502874.45 | 502494.21 | 491620.46 | 498996.37  | 1.28    | ppb   |
| Strontium  | 86-1  | 12.44     | 12.68     | 12.68     | 12.60      | 1.13    | ppb   |
| Strontium  | 88-1  | 12.89     | 12.81     | 12.93     | 12.88      | 0.47    | ppb   |
| Sulfur     | 34-1  | -686.79   | -632.59   | -780.84   | -700.07    |         | ppb   |
| Terbium    | 159-1 |           |           |           | 102        |         | %     |
| Terbium    | 159-2 |           |           |           | 103        |         | %     |
| Thallium   | 203-1 | 1.40      | 1.40      | 1.45      | 1.41       | 2.06    | ppb   |
| Thallium   | 205-1 | 1.46      | 1.38      | 1.45      | 1.43       | 3.14    | ppb   |
| Tin        | 118-1 | 0.20      | 0.23      | 0.21      | 0.21       | 6.34    | ppb   |
| Titanium   | 47-1  | 0.90      | 0.77      | 0.76      | 0.81       | 9.95    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CALS.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.05    | 0.02    | 0.03    | 0.03       | 43.93   | ppb   |
| Vanadium  | 51-2  | 0.39    | 0.41    | 0.42    | 0.41       | 3.53    | ppb   |
| Yttrium   | 89-1  |         |         |         | 102        |         | %     |
| Yttrium   | 89-2  |         |         |         | 105        |         | %     |
| Zinc      | 66-2  | 5.10    | 4.40    | 4.79    | 4.76       | 7.39    | ppb   |
| Zirconium | 90-1  | 0.86    | 0.86    | 0.84    | 0.85       | 1.79    | ppb   |
| Zirconium | 91-1  | 0.85    | 0.84    | 0.84    | 0.84       | 0.63    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 1509.34 | 1501.00 | 1518.07 | 1509.47    | 0.57    | ppb   |
| Antimony   | 121-1 | 405.80  | 408.52  | 411.01  | 408.44     | 0.64    | ppb   |
| Arsenic    | 75-2  | 396.31  | 396.54  | 401.67  | 398.17     | 0.76    | ppb   |
| Barium     | 135-1 | 1614.09 | 1614.39 | 1641.21 | 1623.23    | 0.96    | ppb   |
| Barium     | 137-1 | 1616.32 | 1617.23 | 1603.56 | 1612.37    | 0.47    | ppb   |
| Beryllium  | 9-1   | 39.19   | 39.99   | 39.95   | 39.71      | 1.13    | ppb   |
| Bismuth    | 209-1 |         |         |         | 100        |         | %     |
| Bismuth    | 209-2 |         |         |         | 102        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 186.74  | 185.89  | 194.04  | 188.89     | 2.37    | ppb   |
| Cadmium    | 106-1 | 181.98  | 183.71  | 186.65  | 184.12     | 1.28    | ppb   |
| Cadmium    | 111-1 | 206.88  | 205.75  | 206.38  | 206.33     | 0.27    | ppb   |
| Calcium    | 43-1  | 4194.33 | 4136.02 | 4263.55 | 4197.97    | 1.52    | ppb   |
| Calcium    | 44-1  | 4176.00 | 4218.88 | 4248.28 | 4214.39    | 0.86    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 164.82  | 161.03  | 161.44  | 162.43     | 1.28    | ppb   |
| Cobalt     | 59-2  | 409.37  | 402.85  | 414.28  | 408.84     | 1.40    | ppb   |
| Copper     | 63-2  | 189.07  | 188.40  | 189.54  | 189.00     | 0.30    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 100        |         | %     |
| Holmium    | 165-2 |         |         |         | 103        |         | %     |
| Indium     | 115-1 |         |         |         | 101        |         | %     |
| Indium     | 115-2 |         |         |         | 102        |         | %     |
| Iron       | 56-2  | 825.11  | 810.69  | 812.38  | 816.06     | 0.97    | ppb   |
| Iron       | 57-2  | 875.82  | 853.63  | 870.31  | 866.59     | 1.33    | ppb   |
| Iron       | 54-2  | 960.01  | 955.55  | 954.71  | 956.76     | 0.30    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 367.96  | 380.30  | 373.75  | 374.00     | 1.65    | ppb   |
| Lead       | 207-1 | 365.63  | 375.74  | 371.29  | 370.89     | 1.37    | ppb   |
| Lead       | 208-1 | 378.81  | 386.61  | 380.07  | 381.83     | 1.10    | ppb   |
| Lithium    | 6-1   |         |         |         | 95         |         | %     |
| Magnesium  | 24-2  | 3659.78 | 3657.43 | 3672.57 | 3663.26    | 0.22    | ppb   |
| Manganese  | 55-2  | 363.38  | 362.12  | 360.21  | 361.90     | 0.44    | ppb   |
| Molybdenum | 94-1  | 0.17    | 0.21    | 0.19    | 0.19       | 11.26   | ppb   |
| Molybdenum | 95-1  | 0.16    | 0.18    | 0.18    | 0.17       | 6.98    | ppb   |
| Molybdenum | 96-1  | 0.26    | 0.21    | 0.21    | 0.23       | 12.56   | ppb   |
| Molybdenum | 97-1  | 0.22    | 0.25    | 0.24    | 0.23       | 6.68    | ppb   |
| Molybdenum | 98-1  | 0.17    | 0.20    | 0.18    | 0.18       | 9.05    | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 410.15  | 407.35  | 410.46  | 409.32     | 0.42    | ppb   |
| Phosphorus | 31-2  | -19.93  | -16.50  | -11.55  | -15.99     |         | ppb   |
| Potassium  | 39-2  | 3993.87 | 3933.07 | 3992.87 | 3973.27    | 0.88    | ppb   |
| Rhodium    | 103-1 |         |         |         | 102        |         | %     |
| Rhodium    | 103-2 |         |         |         | 103        |         | %     |
| Scandium   | 45-1  |         |         |         | 101        |         | %     |
| Scandium   | 45-2  |         |         |         | 102        |         | %     |
| Selenium   | 82-1  | 403.91  | 408.24  | 425.18  | 412.44     | 2.73    | ppb   |
| Selenium   | 77-2  | 408.65  | 413.88  | 424.78  | 415.77     | 1.98    | ppb   |
| Selenium   | 78-2  | 406.48  | 414.60  | 413.95  | 411.68     | 1.10    | ppb   |
| Silicon    | 28-1  | 0.46    | -0.28   | 0.98    | 0.39       | 163.37  | ppb   |
| Silver     | 107-1 | 211.79  | 211.84  | 214.62  | 212.75     | 0.76    | ppb   |
| Silver     | 109-1 | 211.52  | 208.99  | 211.39  | 210.63     | 0.68    | ppb   |
| Sodium     | 23-2  | 4041.69 | 4006.11 | 4064.97 | 4037.59    | 0.73    | ppb   |
| Strontium  | 86-1  | 0.04    | 0.01    | 0.10    | 0.05       | 87.55   | ppb   |
| Strontium  | 88-1  | 0.04    | 0.05    | 0.05    | 0.05       | 6.63    | ppb   |
| Sulfur     | 34-1  | -677.49 | -629.59 | -523.86 | -610.31    |         | ppb   |
| Terbium    | 159-1 |         |         |         | 100        |         | %     |
| Terbium    | 159-2 |         |         |         | 101        |         | %     |
| Thallium   | 203-1 | 376.23  | 379.59  | 363.61  | 373.14     | 2.26    | ppb   |
| Thallium   | 205-1 | 380.93  | 386.35  | 378.41  | 381.90     | 1.06    | ppb   |
| Tin        | 118-1 | 0.18    | 0.20    | 0.17    | 0.18       | 10.21   | ppb   |
| Titanium   | 47-1  | 0.17    | 0.18    | 0.19    | 0.18       | 6.21    | ppb   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Vanadium  | 51-2  | 405.56  | 401.00  | 405.53  | 404.03     | 0.65    | ppb   |
| Yttrium   | 89-1  |         |         |         | 102        |         | %     |
| Yttrium   | 89-2  |         |         |         | 102        |         | %     |
| Zinc      | 66-2  | 379.22  | 379.39  | 380.54  | 379.72     | 0.19    | ppb   |
| Zirconium | 90-1  | 0.01    | 0.02    | 0.01    | 0.01       | 55.77   | ppb   |
| Zirconium | 91-1  | 0.09    | 0.06    | 0.08    | 0.08       | 14.72   | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 20.09   | 21.19   | 20.40   | 20.56      | 2.77    | ppb   |
| Antimony   | 121-1 | 2.04    | 2.22    | 2.17    | 2.14       | 4.36    | ppb   |
| Arsenic    | 75-2  | 0.99    | 0.99    | 0.99    | 0.99       | 0.09    | ppb   |
| Barium     | 135-1 | 10.01   | 10.11   | 10.59   | 10.24      | 3.05    | ppb   |
| Barium     | 137-1 | 9.98    | 10.15   | 10.11   | 10.08      | 0.89    | ppb   |
| Beryllium  | 9-1   | 1.03    | 1.19    | 1.12    | 1.11       | 7.13    | ppb   |
| Bismuth    | 209-1 |         |         |         | 98         |         | %     |
| Bismuth    | 209-2 |         |         |         | 100        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 1.55    | 1.62    | 0.99    | 1.39       | 24.86   | ppb   |
| Cadmium    | 106-1 | -3.02   | -2.14   | -3.35   | -2.83      |         | ppb   |
| Cadmium    | 111-1 | 0.84    | 1.12    | 0.85    | 0.94       | 16.50   | ppb   |
| Calcium    | 43-1  | 552.87  | 559.86  | 556.83  | 556.52     | 0.63    | ppb   |
| Calcium    | 44-1  | 547.59  | 553.13  | 555.64  | 552.12     | 0.75    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 2.06    | 2.15    | 2.02    | 2.08       | 3.19    | ppb   |
| Cobalt     | 59-2  | 1.12    | 1.05    | 1.09    | 1.09       | 3.28    | ppb   |
| Copper     | 63-2  | 2.06    | 1.99    | 1.96    | 2.00       | 2.49    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 99         |         | %     |
| Holmium    | 165-2 |         |         |         | 101        |         | %     |
| Indium     | 115-1 |         |         |         | 100        |         | %     |
| Indium     | 115-2 |         |         |         | 97         |         | %     |
| Iron       | 56-2  | 57.58   | 58.03   | 59.80   | 58.47      | 2.01    | ppb   |
| Iron       | 57-2  | 65.42   | 57.96   | 56.73   | 60.04      | 7.83    | ppb   |
| Iron       | 54-2  | 59.60   | 61.58   | 63.03   | 61.40      | 2.80    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.93    | 0.87    | 0.89    | 0.90       | 3.36    | ppb   |
| Lead       | 207-1 | 0.92    | 0.92    | 0.89    | 0.91       | 2.12    | ppb   |
| Lead       | 208-1 | 0.90    | 0.91    | 0.91    | 0.91       | 0.41    | ppb   |
| Lithium    | 6-1   |         |         |         | 96         |         | %     |
| Magnesium  | 24-2  | 511.86  | 508.11  | 510.27  | 510.08     | 0.37    | ppb   |
| Manganese  | 55-2  | 1.18    | 1.07    | 1.05    | 1.10       | 6.16    | ppb   |
| Molybdenum | 94-1  | 6.14    | 5.97    | 5.93    | 6.01       | 1.82    | ppb   |
| Molybdenum | 95-1  | 5.08    | 5.16    | 4.91    | 5.05       | 2.48    | ppb   |
| Molybdenum | 96-1  | 5.13    | 5.26    | 4.87    | 5.09       | 3.90    | ppb   |
| Molybdenum | 97-1  | 5.00    | 5.21    | 4.98    | 5.06       | 2.59    | ppb   |
| Molybdenum | 98-1  | 4.97    | 5.18    | 4.88    | 5.01       | 3.04    | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 0.94    | 0.87    | 0.94    | 0.92       | 4.33    | ppb   |
| Phosphorus | 31-2  | 238.19  | 247.19  | 242.19  | 242.52     | 1.86    | ppb   |
| Potassium  | 39-2  | 548.30  | 539.66  | 532.57  | 540.18     | 1.46    | ppb   |
| Rhodium    | 103-1 |         |         |         | 100        |         | %     |
| Rhodium    | 103-2 |         |         |         | 99         |         | %     |
| Scandium   | 45-1  |         |         |         | 99         |         | %     |
| Scandium   | 45-2  |         |         |         | 98         |         | %     |
| Selenium   | 82-1  | 5.45    | 4.95    | 4.80    | 5.07       | 6.72    | ppb   |
| Selenium   | 77-2  | 3.33    | 3.81    | 5.47    | 4.20       | 26.83   | ppb   |
| Selenium   | 78-2  | 4.45    | 4.11    | 5.64    | 4.73       | 16.88   | ppb   |
| Silicon    | 28-1  | 0.10    | 0.32    | 0.12    | 0.18       | 70.03   | ppb   |
| Silver     | 107-1 | 1.12    | 1.21    | 1.09    | 1.14       | 5.27    | ppb   |
| Silver     | 109-1 | 1.07    | 1.12    | 1.08    | 1.09       | 2.41    | ppb   |
| Sodium     | 23-2  | 518.05  | 515.55  | 512.15  | 515.25     | 0.57    | ppb   |
| Strontium  | 86-1  | 1.01    | 0.96    | 1.06    | 1.01       | 4.90    | ppb   |
| Strontium  | 88-1  | 1.02    | 1.07    | 0.98    | 1.02       | 4.61    | ppb   |
| Sulfur     | 34-1  | -123.32 | 26.35   | -49.50  | -48.82     |         | ppb   |
| Terbium    | 159-1 |         |         |         | 99         |         | %     |
| Terbium    | 159-2 |         |         |         | 99         |         | %     |
| Thallium   | 203-1 | 1.02    | 1.01    | 1.05    | 1.03       | 2.35    | ppb   |
| Thallium   | 205-1 | 0.98    | 1.01    | 1.01    | 1.00       | 2.04    | ppb   |
| Tin        | 118-1 | 5.36    | 5.50    | 5.40    | 5.42       | 1.32    | ppb   |
| Titanium   | 47-1  | 4.99    | 5.07    | 5.10    | 5.05       | 1.12    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.94    | 0.93    | 0.93    | 0.93       | 0.31    | ppb   |
| Vanadium  | 51-2  | 5.22    | 5.32    | 5.21    | 5.25       | 1.15    | ppb   |
| Yttrium   | 89-1  |         |         |         | 101        |         | %     |
| Yttrium   | 89-2  |         |         |         | 99         |         | %     |
| Zinc      | 66-2  | 4.52    | 3.84    | 3.76    | 4.04       | 10.30   | ppb   |
| Zirconium | 90-1  | 1.03    | 1.08    | 1.02    | 1.04       | 2.87    | ppb   |
| Zirconium | 91-1  | 0.99    | 1.08    | 1.02    | 1.03       | 4.43    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | -0.40   | 0.40    | 0.94    | 0.31       | 215.65  | ppb   |
| Antimony   | 121-1 | 0.01    | 0.01    | 0.00    | 0.01       | 71.73   | ppb   |
| Arsenic    | 75-2  | 0.00    | 0.00    | -0.01   | 0.00       | 1000.84 | ppb   |
| Barium     | 135-1 | 0.02    | 0.00    | -0.01   | 0.00       | 408.24  | ppb   |
| Barium     | 137-1 | -0.02   | 0.00    | -0.01   | -0.01      |         | ppb   |
| Beryllium  | 9-1   | 0.01    | -0.01   | -0.01   | 0.00       |         | ppb   |
| Bismuth    | 209-1 |         |         |         | 98         |         | %     |
| Bismuth    | 209-2 |         |         |         | 98         |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | -0.01   | -0.04   | -0.01   | -0.02      |         | ppb   |
| Cadmium    | 106-1 | -4.45   | -2.84   | -5.28   | -4.19      |         | ppb   |
| Cadmium    | 111-1 | -0.31   | -0.21   | -0.38   | -0.30      |         | ppb   |
| Calcium    | 43-1  | -3.42   | 3.91    | -4.30   | -1.27      |         | ppb   |
| Calcium    | 44-1  | -7.40   | -1.23   | 3.04    | -1.86      |         | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.07   | 0.01    | -0.02   | -0.02      |         | ppb   |
| Cobalt     | 59-2  | 0.00    | 0.00    | -0.01   | 0.00       |         | ppb   |
| Copper     | 63-2  | 0.03    | -0.01   | -0.02   | 0.00       |         | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 99         |         | %     |
| Holmium    | 165-2 |         |         |         | 100        |         | %     |
| Indium     | 115-1 |         |         |         | 100        |         | %     |
| Indium     | 115-2 |         |         |         | 97         |         | %     |
| Iron       | 56-2  | 0.52    | 0.46    | 0.60    | 0.53       | 13.68   | ppb   |
| Iron       | 57-2  | -0.43   | -0.78   | -0.74   | -0.65      |         | ppb   |
| Iron       | 54-2  | 1.65    | 1.49    | 1.75    | 1.63       | 7.99    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.01    | 0.03    | 0.02    | 0.02       | 44.74   | ppb   |
| Lead       | 207-1 | 0.03    | 0.03    | 0.02    | 0.03       | 13.43   | ppb   |
| Lead       | 208-1 | 0.03    | 0.03    | 0.03    | 0.03       | 9.47    | ppb   |
| Lithium    | 6-1   |         |         |         | 95         |         | %     |
| Magnesium  | 24-2  | -0.07   | 0.25    | 0.00    | 0.06       | 282.23  | ppb   |
| Manganese  | 55-2  | 0.02    | -0.01   | -0.02   | 0.00       |         | ppb   |
| Molybdenum | 94-1  | 0.06    | 0.02    | 0.06    | 0.05       | 43.49   | ppb   |
| Molybdenum | 95-1  | 0.00    | -0.01   | -0.01   | 0.00       |         | ppb   |
| Molybdenum | 96-1  | 0.00    | 0.01    | 0.01    | 0.01       | 118.77  | ppb   |
| Molybdenum | 97-1  | 0.03    | 0.05    | 0.03    | 0.03       | 46.58   | ppb   |
| Molybdenum | 98-1  | 0.03    | 0.02    | 0.00    | 0.02       | 82.05   | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | -0.04   | -0.02   | -0.03   | -0.03      |         | ppb   |
| Phosphorus | 31-2  | -27.20  | -16.50  | -16.84  | -20.18     |         | ppb   |
| Potassium  | 39-2  | -1.79   | 4.41    | 1.46    | 1.36       | 227.61  | ppb   |
| Rhodium    | 103-1 |         |         |         | 100        |         | %     |
| Rhodium    | 103-2 |         |         |         | 98         |         | %     |
| Scandium   | 45-1  |         |         |         | 99         |         | %     |
| Scandium   | 45-2  |         |         |         | 97         |         | %     |
| Selenium   | 82-1  | -0.38   | -0.09   | 0.69    | 0.08       | 730.19  | ppb   |
| Selenium   | 77-2  | 0.18    | 0.18    | 0.18    | 0.18       | 0.93    | ppb   |
| Selenium   | 78-2  | -2.50   | -0.41   | -0.83   | -1.25      |         | ppb   |
| Silicon    | 28-1  | -1.78   | -0.52   | 16.23   | 4.64       | 216.47  | ppb   |
| Silver     | 107-1 | 0.01    | 0.00    | 0.01    | 0.01       | 28.95   | ppb   |
| Silver     | 109-1 | 0.01    | 0.01    | 0.00    | 0.01       | 29.68   | ppb   |
| Sodium     | 23-2  | 9.35    | 9.15    | 8.58    | 9.03       | 4.40    | ppb   |
| Strontium  | 86-1  | -0.02   | 0.05    | 0.00    | 0.01       | 354.82  | ppb   |
| Strontium  | 88-1  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Sulfur     | 34-1  | -428.42 | -140.53 | -24.56  | -197.83    |         | ppb   |
| Terbium    | 159-1 |         |         |         | 97         |         | %     |
| Terbium    | 159-2 |         |         |         | 97         |         | %     |
| Thallium   | 203-1 | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Thallium   | 205-1 | -0.01   | -0.01   | -0.01   | -0.01      |         | ppb   |
| Tin        | 118-1 | 0.03    | 0.00    | 0.01    | 0.01       | 137.60  | ppb   |
| Titanium   | 47-1  | 0.03    | 0.02    | 0.03    | 0.02       | 31.99   | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Vanadium  | 51-2  | 0.00    | -0.01   | 0.00    | 0.00       |         | ppb   |
| Yttrium   | 89-1  |         |         |         | 100        |         | %     |
| Yttrium   | 89-2  |         |         |         | 98         |         | %     |
| Zinc      | 66-2  | -0.39   | -0.21   | -0.05   | -0.22      |         | ppb   |
| Zirconium | 90-1  | -0.01   | 0.00    | 0.02    | 0.00       | 509.55  | ppb   |
| Zirconium | 91-1  | -0.01   | 0.01    | 0.00    | 0.00       |         | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 90070.40  | 93051.79  | 89738.53  | 90953.57   | 2.01    | ppb   |
| Antimony   | 121-1 | 1.11      | 1.14      | 1.16      | 1.14       | 2.28    | ppb   |
| Arsenic    | 75-2  | 0.24      | 0.42      | 0.32      | 0.32       | 28.26   | ppb   |
| Barium     | 135-1 | 1.54      | 1.48      | 1.56      | 1.53       | 2.61    | ppb   |
| Barium     | 137-1 | 1.39      | 1.41      | 1.38      | 1.40       | 1.11    | ppb   |
| Beryllium  | 9-1   | 0.28      | 0.32      | 0.27      | 0.29       | 9.81    | ppb   |
| Bismuth    | 209-1 |           |           |           | 99         |         | %     |
| Bismuth    | 209-2 |           |           |           | 98         |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 7.09      | 7.14      | 6.22      | 6.82       | 7.56    | ppb   |
| Cadmium    | 106-1 | -3.78     | -5.09     | -5.31     | -4.73      |         | ppb   |
| Cadmium    | 111-1 | -0.01     | -0.09     | -0.10     | -0.07      |         | ppb   |
| Calcium    | 43-1  | 100056.35 | 101452.03 | 100036.55 | 100514.97  | 0.81    | ppb   |
| Calcium    | 44-1  | 97651.00  | 101854.99 | 101274.52 | 100260.17  | 2.27    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 20.46     | 20.11     | 20.09     | 20.22      | 1.02    | ppb   |
| Cobalt     | 59-2  | 1.29      | 1.28      | 1.28      | 1.28       | 0.37    | ppb   |
| Copper     | 63-2  | 7.59      | 7.48      | 7.59      | 7.55       | 0.81    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 103        |         | %     |
| Holmium    | 165-2 |           |           |           | 106        |         | %     |
| Indium     | 115-1 |           |           |           | 100        |         | %     |
| Indium     | 115-2 |           |           |           | 97         |         | %     |
| Iron       | 56-2  | 100308.92 | 100229.09 | 101457.97 | 100665.32  | 0.68    | ppb   |
| Iron       | 57-2  | 100535.74 | 100253.33 | 100761.24 | 100516.77  | 0.25    | ppb   |
| Iron       | 54-2  | 101682.92 | 101432.72 | 102110.64 | 101742.09  | 0.34    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 4.50      | 4.45      | 4.40      | 4.45       | 1.18    | ppb   |
| Lead       | 207-1 | 4.10      | 3.90      | 4.08      | 4.03       | 2.76    | ppb   |
| Lead       | 208-1 | 4.19      | 4.14      | 4.15      | 4.16       | 0.64    | ppb   |
| Lithium    | 6-1   |           |           |           | 97         |         | %     |
| Magnesium  | 24-2  | 90244.58  | 91629.22  | 91324.03  | 91065.94   | 0.80    | ppb   |
| Manganese  | 55-2  | 7.29      | 7.35      | 7.10      | 7.25       | 1.76    | ppb   |
| Molybdenum | 94-1  | 1581.92   | 1583.52   | 1620.75   | 1595.39    | 1.38    | ppb   |
| Molybdenum | 95-1  | 1891.57   | 1933.79   | 1992.13   | 1939.16    | 2.60    | ppb   |
| Molybdenum | 96-1  | 1867.03   | 1933.97   | 1953.00   | 1918.00    | 2.35    | ppb   |
| Molybdenum | 97-1  | 1892.44   | 1956.34   | 2002.36   | 1950.38    | 2.83    | ppb   |
| Molybdenum | 98-1  | 1906.64   | 1927.88   | 1934.81   | 1923.11    | 0.76    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 5.46      | 5.00      | 5.43      | 5.30       | 4.83    | ppb   |
| Phosphorus | 31-2  | 97760.24  | 96737.93  | 96883.48  | 97127.22   | 0.57    | ppb   |
| Potassium  | 39-2  | 100787.61 | 99435.64  | 97526.37  | 99249.87   | 1.65    | ppb   |
| Rhodium    | 103-1 |           |           |           | 98         |         | %     |
| Rhodium    | 103-2 |           |           |           | 99         |         | %     |
| Scandium   | 45-1  |           |           |           | 98         |         | %     |
| Scandium   | 45-2  |           |           |           | 100        |         | %     |
| Selenium   | 82-1  | 0.17      | 0.19      | 0.67      | 0.34       | 81.75   | ppb   |
| Selenium   | 77-2  | -0.09     | -0.09     | 0.69      | 0.17       | 259.72  | ppb   |
| Selenium   | 78-2  | -2.46     | -2.94     | -1.35     | -2.25      |         | ppb   |
| Silicon    | 28-1  | -0.23     | 1.37      | -0.15     | 0.33       | 272.41  | ppb   |
| Silver     | 107-1 | 0.04      | 0.04      | 0.03      | 0.04       | 12.97   | ppb   |
| Silver     | 109-1 | 0.04      | 0.03      | 0.04      | 0.04       | 12.75   | ppb   |
| Sodium     | 23-2  | 101539.53 | 101795.76 | 102472.42 | 101935.90  | 0.47    | ppb   |
| Strontium  | 86-1  | 31.74     | 31.55     | 32.39     | 31.90      | 1.39    | ppb   |
| Strontium  | 88-1  | 32.21     | 32.81     | 33.36     | 32.79      | 1.76    | ppb   |
| Sulfur     | 34-1  | 102248.55 | 104814.47 | 103533.80 | 103532.28  | 1.24    | ppb   |
| Terbium    | 159-1 |           |           |           | 100        |         | %     |
| Terbium    | 159-2 |           |           |           | 100        |         | %     |
| Thallium   | 203-1 | 0.02      | 0.02      | 0.04      | 0.03       | 42.37   | ppb   |
| Thallium   | 205-1 | 0.00      | 0.00      | 0.03      | 0.01       | 130.60  | ppb   |
| Tin        | 118-1 | 0.50      | 0.78      | 0.91      | 0.73       | 28.07   | ppb   |
| Titanium   | 47-1  | 1940.42   | 2038.96   | 2035.07   | 2004.82    | 2.78    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.02    | 0.01    | 0.01    | 0.02       | 40.27   | ppb   |
| Vanadium  | 51-2  | 0.20    | 0.21    | 0.21    | 0.20       | 2.87    | ppb   |
| Yttrium   | 89-1  |         |         |         | 101        |         | %     |
| Yttrium   | 89-2  |         |         |         | 100        |         | %     |
| Zinc      | 66-2  | 8.74    | 9.24    | 9.24    | 9.07       | 3.16    | ppb   |
| Zirconium | 90-1  | 0.02    | 0.02    | -0.01   | 0.01       | 143.45  | ppb   |
| Zirconium | 91-1  | 0.02    | 0.01    | 0.00    | 0.01       | 143.41  | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 89082.61  | 92060.49  | 90826.60  | 90656.56   | 1.65    | ppb   |
| Antimony   | 121-1 | 20.93     | 21.45     | 21.48     | 21.29      | 1.47    | ppb   |
| Arsenic    | 75-2  | 17.99     | 19.85     | 19.92     | 19.25      | 5.69    | ppb   |
| Barium     | 135-1 | 20.98     | 22.14     | 21.27     | 21.46      | 2.81    | ppb   |
| Barium     | 137-1 | 21.55     | 21.74     | 21.88     | 21.72      | 0.74    | ppb   |
| Beryllium  | 9-1   | 20.52     | 19.41     | 21.29     | 20.41      | 4.64    | ppb   |
| Bismuth    | 209-1 |           |           |           | 102        |         | %     |
| Bismuth    | 209-2 |           |           |           | 102        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 24.57     | 25.61     | 24.92     | 25.03      | 2.10    | ppb   |
| Cadmium    | 106-1 | 13.89     | 13.22     | 12.98     | 13.36      | 3.53    | ppb   |
| Cadmium    | 111-1 | 19.90     | 20.67     | 20.21     | 20.26      | 1.91    | ppb   |
| Calcium    | 43-1  | 101447.58 | 99333.17  | 104320.98 | 101700.58  | 2.46    | ppb   |
| Calcium    | 44-1  | 99601.14  | 101352.51 | 103992.94 | 101648.86  | 2.17    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 40.00     | 40.31     | 40.89     | 40.40      | 1.13    | ppb   |
| Cobalt     | 59-2  | 21.62     | 21.91     | 22.02     | 21.85      | 0.94    | ppb   |
| Copper     | 63-2  | 25.85     | 26.14     | 25.93     | 25.97      | 0.58    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 106        |         | %     |
| Holmium    | 165-2 |           |           |           | 108        |         | %     |
| Indium     | 115-1 |           |           |           | 105        |         | %     |
| Indium     | 115-2 |           |           |           | 100        |         | %     |
| Iron       | 56-2  | 99670.43  | 101962.22 | 102465.45 | 101366.03  | 1.47    | ppb   |
| Iron       | 57-2  | 99719.66  | 99706.93  | 99980.36  | 99802.32   | 0.15    | ppb   |
| Iron       | 54-2  | 99835.98  | 101706.60 | 102494.68 | 101345.75  | 1.35    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 25.31     | 25.65     | 25.59     | 25.52      | 0.71    | ppb   |
| Lead       | 207-1 | 25.23     | 23.81     | 25.10     | 24.71      | 3.17    | ppb   |
| Lead       | 208-1 | 25.01     | 24.37     | 25.17     | 24.85      | 1.70    | ppb   |
| Lithium    | 6-1   |           |           |           | 95         |         | %     |
| Magnesium  | 24-2  | 90682.57  | 89581.46  | 89848.94  | 90037.66   | 0.64    | ppb   |
| Manganese  | 55-2  | 25.62     | 25.55     | 25.48     | 25.55      | 0.27    | ppb   |
| Molybdenum | 94-1  | 1510.71   | 1612.29   | 1542.91   | 1555.31    | 3.34    | ppb   |
| Molybdenum | 95-1  | 1855.00   | 1947.25   | 1866.47   | 1889.57    | 2.66    | ppb   |
| Molybdenum | 96-1  | 1838.08   | 1913.39   | 1838.08   | 1863.18    | 2.33    | ppb   |
| Molybdenum | 97-1  | 1874.56   | 1917.71   | 1898.10   | 1896.79    | 1.14    | ppb   |
| Molybdenum | 98-1  | 1884.03   | 1937.03   | 1896.55   | 1905.87    | 1.45    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 25.08     | 25.61     | 25.48     | 25.39      | 1.10    | ppb   |
| Phosphorus | 31-2  | 96438.66  | 96407.11  | 97077.84  | 96641.21   | 0.39    | ppb   |
| Potassium  | 39-2  | 98132.39  | 99444.20  | 99925.50  | 99167.36   | 0.94    | ppb   |
| Rhodium    | 103-1 |           |           |           | 104        |         | %     |
| Rhodium    | 103-2 |           |           |           | 102        |         | %     |
| Scandium   | 45-1  |           |           |           | 103        |         | %     |
| Scandium   | 45-2  |           |           |           | 104        |         | %     |
| Selenium   | 82-1  | 19.41     | 19.00     | 19.67     | 19.36      | 1.75    | ppb   |
| Selenium   | 77-2  | 18.23     | 18.79     | 27.71     | 21.58      | 24.64   | ppb   |
| Selenium   | 78-2  | 20.15     | 20.02     | 20.37     | 20.18      | 0.86    | ppb   |
| Silicon    | 28-1  | -1.91     | -1.46     | -1.13     | -1.50      |         | ppb   |
| Silver     | 107-1 | 19.28     | 20.52     | 20.05     | 19.95      | 3.12    | ppb   |
| Silver     | 109-1 | 19.55     | 19.79     | 19.79     | 19.71      | 0.72    | ppb   |
| Sodium     | 23-2  | 99755.66  | 100824.41 | 99387.07  | 99989.05   | 0.75    | ppb   |
| Strontium  | 86-1  | 31.46     | 32.15     | 32.41     | 32.01      | 1.53    | ppb   |
| Strontium  | 88-1  | 31.41     | 33.08     | 31.97     | 32.15      | 2.63    | ppb   |
| Sulfur     | 34-1  | 104302.25 | 100967.32 | 103639.93 | 102969.84  | 1.71    | ppb   |
| Terbium    | 159-1 |           |           |           | 106        |         | %     |
| Terbium    | 159-2 |           |           |           | 104        |         | %     |
| Thallium   | 203-1 | 22.53     | 21.76     | 22.57     | 22.29      | 2.04    | ppb   |
| Thallium   | 205-1 | 22.53     | 21.54     | 22.32     | 22.13      | 2.35    | ppb   |
| Tin        | 118-1 | 0.56      | 0.60      | 0.66      | 0.61       | 8.14    | ppb   |
| Titanium   | 47-1  | 1935.81   | 2004.06   | 1942.97   | 1960.95    | 1.91    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.02    | 0.01    | 0.01    | 0.01       | 36.48   | ppb   |
| Vanadium  | 51-2  | 20.04   | 20.06   | 20.05   | 20.05      | 0.05    | ppb   |
| Yttrium   | 89-1  |         |         |         | 107        |         | %     |
| Yttrium   | 89-2  |         |         |         | 105        |         | %     |
| Zinc      | 66-2  | 28.40   | 27.70   | 28.71   | 28.27      | 1.84    | ppb   |
| Zirconium | 90-1  | 0.01    | 0.00    | 0.00    | 0.00       | 38.87   | ppb   |
| Zirconium | 91-1  | 0.00    | 0.02    | -0.01   | 0.00       | 665.93  | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 46673.98  | 45836.17  | 46494.55  | 46334.90   | 0.95    | ppb   |
| Antimony   | 121-1 | 503.14    | 519.27    | 518.13    | 513.51     | 1.75    | ppb   |
| Arsenic    | 75-2  | 493.63    | 494.15    | 512.99    | 500.25     | 2.20    | ppb   |
| Barium     | 135-1 | 2489.18   | 2613.23   | 2617.63   | 2573.35    | 2.83    | ppb   |
| Barium     | 137-1 | 2504.99   | 2640.78   | 2620.53   | 2588.77    | 2.83    | ppb   |
| Beryllium  | 9-1   | 515.00    | 528.13    | 526.40    | 523.18     | 1.36    | ppb   |
| Bismuth    | 209-1 |           |           |           | 103        |         | %     |
| Bismuth    | 209-2 |           |           |           | 102        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 492.88    | 506.80    | 514.62    | 504.77     | 2.18    | ppb   |
| Cadmium    | 106-1 | 489.17    | 513.60    | 507.07    | 503.28     | 2.51    | ppb   |
| Cadmium    | 111-1 | 495.51    | 511.69    | 509.83    | 505.68     | 1.75    | ppb   |
| Calcium    | 43-1  | 250149.50 | 256503.62 | 255400.19 | 254017.77  | 1.34    | ppb   |
| Calcium    | 44-1  | 248671.84 | 257925.13 | 256942.26 | 254513.08  | 2.00    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 517.73    | 504.53    | 503.22    | 508.49     | 1.58    | ppb   |
| Cobalt     | 59-2  | 501.00    | 507.87    | 504.71    | 504.53     | 0.68    | ppb   |
| Copper     | 63-2  | 5057.36   | 5094.01   | 4984.48   | 5045.28    | 1.11    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 111        |         | %     |
| Holmium    | 165-2 |           |           |           | 111        |         | %     |
| Indium     | 115-1 |           |           |           | 107        |         | %     |
| Indium     | 115-2 |           |           |           | 104        |         | %     |
| Iron       | 56-2  | 123859.39 | 124323.50 | 122444.12 | 123542.34  | 0.79    | ppb   |
| Iron       | 57-2  | 123389.66 | 121518.50 | 122686.58 | 122531.58  | 0.77    | ppb   |
| Iron       | 54-2  | 123318.07 | 122312.74 | 122506.18 | 122712.33  | 0.43    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 2550.26   | 2671.61   | 2604.88   | 2608.92    | 2.33    | ppb   |
| Lead       | 207-1 | 2479.70   | 2643.84   | 2637.01   | 2586.85    | 3.59    | ppb   |
| Lead       | 208-1 | 2503.92   | 2605.81   | 2608.77   | 2572.83    | 2.32    | ppb   |
| Lithium    | 6-1   |           |           |           | 98         |         | %     |
| Magnesium  | 24-2  | 245012.26 | 244724.15 | 243575.85 | 244437.42  | 0.31    | ppb   |
| Manganese  | 55-2  | 5091.11   | 5109.70   | 5055.14   | 5085.32    | 0.55    | ppb   |
| Molybdenum | 94-1  | 5089.17   | 5169.01   | 5105.41   | 5121.20    | 0.82    | ppb   |
| Molybdenum | 95-1  | 5017.66   | 5151.08   | 5179.78   | 5116.18    | 1.69    | ppb   |
| Molybdenum | 96-1  | 5014.17   | 5155.38   | 5143.79   | 5104.44    | 1.54    | ppb   |
| Molybdenum | 97-1  | 5116.21   | 5168.14   | 5104.60   | 5129.65    | 0.66    | ppb   |
| Molybdenum | 98-1  | 5089.54   | 5162.93   | 5101.18   | 5117.88    | 0.77    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 499.63    | 505.28    | 500.37    | 501.76     | 0.61    | ppb   |
| Phosphorus | 31-2  | 9982.12   | 10065.97  | 10170.81  | 10072.97   | 0.94    | ppb   |
| Potassium  | 39-2  | 124617.91 | 122935.32 | 122107.98 | 123220.41  | 1.04    | ppb   |
| Rhodium    | 103-1 |           |           |           | 105        |         | %     |
| Rhodium    | 103-2 |           |           |           | 103        |         | %     |
| Scandium   | 45-1  |           |           |           | 106        |         | %     |
| Scandium   | 45-2  |           |           |           | 107        |         | %     |
| Selenium   | 82-1  | 480.91    | 495.17    | 489.64    | 488.57     | 1.47    | ppb   |
| Selenium   | 77-2  | 493.86    | 493.18    | 467.22    | 484.75     | 3.13    | ppb   |
| Selenium   | 78-2  | 494.91    | 484.66    | 490.24    | 489.94     | 1.05    | ppb   |
| Silicon    | 28-1  | 594.80    | 626.77    | 611.75    | 611.11     | 2.62    | ppb   |
| Silver     | 107-1 | 497.02    | 508.92    | 512.23    | 506.06     | 1.58    | ppb   |
| Silver     | 109-1 | 494.48    | 510.48    | 503.95    | 502.97     | 1.60    | ppb   |
| Sodium     | 23-2  | 245939.50 | 247796.12 | 242290.24 | 245341.95  | 1.14    | ppb   |
| Strontium  | 86-1  | 505.81    | 525.28    | 516.54    | 515.88     | 1.89    | ppb   |
| Strontium  | 88-1  | 514.85    | 527.17    | 520.87    | 520.96     | 1.18    | ppb   |
| Sulfur     | 34-1  | 8454.44   | 9001.32   | 8826.52   | 8760.76    | 3.19    | ppb   |
| Terbium    | 159-1 |           |           |           | 109        |         | %     |
| Terbium    | 159-2 |           |           |           | 107        |         | %     |
| Thallium   | 203-1 | 504.61    | 537.58    | 519.07    | 520.42     | 3.18    | ppb   |
| Thallium   | 205-1 | 504.31    | 532.70    | 519.43    | 518.81     | 2.74    | ppb   |
| Tin        | 118-1 | 527.45    | 532.71    | 521.96    | 527.37     | 1.02    | ppb   |
| Titanium   | 47-1  | 5001.09   | 5219.79   | 5202.28   | 5141.05    | 2.36    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 503.44  | 514.83  | 514.68  | 510.98     | 1.28    | ppb   |
| Vanadium  | 51-2  | 517.98  | 510.52  | 517.30  | 515.27     | 0.80    | ppb   |
| Yttrium   | 89-1  |         |         |         | 110        |         | %     |
| Yttrium   | 89-2  |         |         |         | 108        |         | %     |
| Zinc      | 66-2  | 4947.26 | 5031.55 | 4909.28 | 4962.69    | 1.26    | ppb   |
| Zirconium | 90-1  | 509.94  | 526.20  | 522.44  | 519.53     | 1.64    | ppb   |
| Zirconium | 91-1  | 505.99  | 520.58  | 518.20  | 514.93     | 1.52    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 0.00    | 0.39    | 0.60    | 0.33       | 91.42   | ppb   |
| Antimony   | 121-1 | 0.12    | 0.12    | 0.10    | 0.11       | 7.30    | ppb   |
| Arsenic    | 75-2  | 0.01    | -0.02   | 0.00    | 0.00       |         | ppb   |
| Barium     | 135-1 | -0.01   | 0.00    | 0.00    | 0.00       |         | ppb   |
| Barium     | 137-1 | 0.01    | 0.00    | 0.00    | 0.00       | 232.43  | ppb   |
| Beryllium  | 9-1   | 0.03    | 0.00    | -0.01   | 0.00       | 373.65  | ppb   |
| Bismuth    | 209-1 |         |         |         | 101        |         | %     |
| Bismuth    | 209-2 |         |         |         | 101        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 0.05    | -0.08   | -0.01   | -0.01      |         | ppb   |
| Cadmium    | 106-1 | -4.69   | -2.61   | -4.27   | -3.86      |         | ppb   |
| Cadmium    | 111-1 | -0.31   | -0.16   | -0.28   | -0.25      |         | ppb   |
| Calcium    | 43-1  | 3.29    | 2.06    | 5.26    | 3.54       | 45.67   | ppb   |
| Calcium    | 44-1  | 2.63    | 4.69    | 6.09    | 4.47       | 38.89   | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.02   | 0.01    | 0.00    | 0.00       |         | ppb   |
| Cobalt     | 59-2  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Copper     | 63-2  | 0.15    | 0.15    | 0.12    | 0.14       | 11.98   | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 103        |         | %     |
| Holmium    | 165-2 |         |         |         | 105        |         | %     |
| Indium     | 115-1 |         |         |         | 105        |         | %     |
| Indium     | 115-2 |         |         |         | 102        |         | %     |
| Iron       | 56-2  | 1.69    | 1.46    | 1.48    | 1.54       | 8.34    | ppb   |
| Iron       | 57-2  | 0.10    | 1.62    | 0.98    | 0.90       | 85.14   | ppb   |
| Iron       | 54-2  | 2.16    | 1.58    | 3.96    | 2.57       | 48.25   | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD  | Units |
|------------|-------|----------|----------|----------|------------|----------|-------|
| Lead       | 206-1 | 0.04     | 0.06     | 0.05     | 0.05       | 25.50    | ppb   |
| Lead       | 207-1 | 0.04     | 0.06     | 0.07     | 0.06       | 28.84    | ppb   |
| Lead       | 208-1 | 0.05     | 0.05     | 0.06     | 0.06       | 9.25     | ppb   |
| Lithium    | 6-1   |          |          |          | 92         |          | %     |
| Magnesium  | 24-2  | 2.02     | 1.73     | 1.96     | 1.91       | 7.98     | ppb   |
| Manganese  | 55-2  | -0.07    | 0.03     | 0.04     | 0.00       | 15676.56 | ppb   |
| Molybdenum | 94-1  | 0.19     | 0.17     | 0.17     | 0.18       | 5.80     | ppb   |
| Molybdenum | 95-1  | 0.17     | 0.16     | 0.10     | 0.14       | 27.91    | ppb   |
| Molybdenum | 96-1  | 0.16     | 0.13     | 0.14     | 0.14       | 8.47     | ppb   |
| Molybdenum | 97-1  | 0.21     | 0.16     | 0.16     | 0.18       | 16.47    | ppb   |
| Molybdenum | 98-1  | 0.14     | 0.16     | 0.11     | 0.14       | 16.35    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |          | cps   |
| Neodymium  | 150-2 |          |          |          |            |          | cps   |
| Nickel     | 60-2  | -0.02    | 0.00     | -0.05    | -0.02      |          | ppb   |
| Phosphorus | 31-2  | -15.86   | -30.43   | -32.65   | -26.31     |          | ppb   |
| Potassium  | 39-2  | 18.71    | 20.03    | 19.87    | 19.53      | 3.69     | ppb   |
| Rhodium    | 103-1 |          |          |          | 105        |          | %     |
| Rhodium    | 103-2 |          |          |          | 103        |          | %     |
| Scandium   | 45-1  |          |          |          | 102        |          | %     |
| Scandium   | 45-2  |          |          |          | 100        |          | %     |
| Selenium   | 82-1  | -0.19    | 0.07     | 0.37     | 0.08       | 348.53   | ppb   |
| Selenium   | 77-2  | -0.09    | -0.09    | 0.17     | 0.00       |          | ppb   |
| Selenium   | 78-2  | 0.03     | 1.01     | -1.52    | -0.16      |          | ppb   |
| Silicon    | 28-1  | -1.93    | -1.15    | -1.66    | -1.58      |          | ppb   |
| Silver     | 107-1 | 0.05     | 0.04     | 0.04     | 0.04       | 11.41    | ppb   |
| Silver     | 109-1 | 0.05     | 0.04     | 0.03     | 0.04       | 25.17    | ppb   |
| Sodium     | 23-2  | 59.25    | 57.80    | 58.53    | 58.53      | 1.23     | ppb   |
| Strontium  | 86-1  | 0.00     | -0.03    | 0.04     | 0.00       | 795.19   | ppb   |
| Strontium  | 88-1  | 0.00     | 0.00     | 0.00     | 0.00       | 74.38    | ppb   |
| Sulfur     | 34-1  | -1370.12 | -1200.14 | -1147.09 | -1239.12   |          | ppb   |
| Terbium    | 159-1 |          |          |          | 102        |          | %     |
| Terbium    | 159-2 |          |          |          | 102        |          | %     |
| Thallium   | 203-1 | 0.05     | 0.04     | 0.05     | 0.05       | 14.94    | ppb   |
| Thallium   | 205-1 | 0.04     | 0.06     | 0.04     | 0.05       | 26.70    | ppb   |
| Tin        | 118-1 | 0.10     | 0.07     | 0.08     | 0.09       | 22.08    | ppb   |
| Titanium   | 47-1  | 0.05     | 0.09     | 0.04     | 0.06       | 40.98    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.01    | 0.00    | 0.00    | 0.00       | 1109.55 | ppb   |
| Vanadium  | 51-2  | 0.00    | 0.00    | 0.00    | 0.00       | 31.05   | ppb   |
| Yttrium   | 89-1  |         |         |         | 106        |         | %     |
| Yttrium   | 89-2  |         |         |         | 103        |         | %     |
| Zinc      | 66-2  | -0.12   | 0.47    | -0.40   | -0.02      |         | ppb   |
| Zirconium | 90-1  | 0.02    | 0.01    | 0.02    | 0.02       | 31.36   | ppb   |
| Zirconium | 91-1  | 0.02    | 0.00    | 0.03    | 0.02       | 68.73   | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 22.41   | 21.61   | 21.13   | 21.72      | 2.97    | ppb   |
| Antimony   | 121-1 | 2.17    | 2.24    | 2.14    | 2.19       | 2.35    | ppb   |
| Arsenic    | 75-2  | 1.16    | 1.11    | 0.87    | 1.04       | 14.70   | ppb   |
| Barium     | 135-1 | 10.83   | 10.61   | 10.34   | 10.60      | 2.31    | ppb   |
| Barium     | 137-1 | 10.77   | 10.67   | 10.40   | 10.61      | 1.81    | ppb   |
| Beryllium  | 9-1   | 1.19    | 1.22    | 1.16    | 1.19       | 2.57    | ppb   |
| Bismuth    | 209-1 |         |         |         | 101        |         | %     |
| Bismuth    | 209-2 |         |         |         | 102        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 0.93    | 0.81    | 0.92    | 0.89       | 7.63    | ppb   |
| Cadmium    | 106-1 | -3.69   | -3.85   | -3.97   | -3.83      |         | ppb   |
| Cadmium    | 111-1 | 0.75    | 0.74    | 0.65    | 0.71       | 7.62    | ppb   |
| Calcium    | 43-1  | 589.26  | 561.52  | 554.38  | 568.39     | 3.24    | ppb   |
| Calcium    | 44-1  | 571.54  | 560.65  | 581.61  | 571.27     | 1.84    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 2.35    | 2.08    | 2.03    | 2.15       | 8.04    | ppb   |
| Cobalt     | 59-2  | 1.13    | 1.09    | 1.10    | 1.11       | 1.60    | ppb   |
| Copper     | 63-2  | 2.08    | 2.02    | 2.16    | 2.09       | 3.49    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 103        |         | %     |
| Holmium    | 165-2 |         |         |         | 106        |         | %     |
| Indium     | 115-1 |         |         |         | 104        |         | %     |
| Indium     | 115-2 |         |         |         | 101        |         | %     |
| Iron       | 56-2  | 60.17   | 58.55   | 58.42   | 59.05      | 1.66    | ppb   |
| Iron       | 57-2  | 61.06   | 60.92   | 64.35   | 62.11      | 3.12    | ppb   |
| Iron       | 54-2  | 59.53   | 58.50   | 60.64   | 59.56      | 1.80    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.93    | 0.93    | 0.90    | 0.92       | 2.37    | ppb   |
| Lead       | 207-1 | 0.89    | 0.89    | 0.97    | 0.92       | 4.92    | ppb   |
| Lead       | 208-1 | 0.92    | 0.91    | 0.92    | 0.92       | 0.68    | ppb   |
| Lithium    | 6-1   |         |         |         | 93         |         | %     |
| Magnesium  | 24-2  | 522.61  | 515.81  | 507.59  | 515.34     | 1.46    | ppb   |
| Manganese  | 55-2  | 1.21    | 1.11    | 1.12    | 1.15       | 4.70    | ppb   |
| Molybdenum | 94-1  | 6.16    | 6.19    | 6.16    | 6.17       | 0.27    | ppb   |
| Molybdenum | 95-1  | 5.27    | 5.16    | 5.16    | 5.20       | 1.19    | ppb   |
| Molybdenum | 96-1  | 5.48    | 5.30    | 5.22    | 5.33       | 2.50    | ppb   |
| Molybdenum | 97-1  | 5.24    | 5.47    | 5.30    | 5.34       | 2.24    | ppb   |
| Molybdenum | 98-1  | 5.36    | 5.25    | 5.10    | 5.24       | 2.47    | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 1.07    | 1.02    | 0.99    | 1.02       | 3.97    | ppb   |
| Phosphorus | 31-2  | 227.24  | 217.86  | 221.21  | 222.10     | 2.14    | ppb   |
| Potassium  | 39-2  | 569.83  | 559.26  | 552.21  | 560.43     | 1.58    | ppb   |
| Rhodium    | 103-1 |         |         |         | 104        |         | %     |
| Rhodium    | 103-2 |         |         |         | 103        |         | %     |
| Scandium   | 45-1  |         |         |         | 102        |         | %     |
| Scandium   | 45-2  |         |         |         | 102        |         | %     |
| Selenium   | 82-1  | 4.40    | 5.35    | 5.10    | 4.95       | 9.95    | ppb   |
| Selenium   | 77-2  | 3.50    | 5.85    | 6.55    | 5.30       | 30.14   | ppb   |
| Selenium   | 78-2  | 6.90    | 3.42    | 4.37    | 4.90       | 36.74   | ppb   |
| Silicon    | 28-1  | -1.48   | -1.59   | -0.92   | -1.33      |         | ppb   |
| Silver     | 107-1 | 1.21    | 1.21    | 1.15    | 1.19       | 2.87    | ppb   |
| Silver     | 109-1 | 1.14    | 1.17    | 1.18    | 1.16       | 1.77    | ppb   |
| Sodium     | 23-2  | 549.51  | 538.62  | 534.84  | 540.99     | 1.41    | ppb   |
| Strontium  | 86-1  | 1.11    | 1.07    | 1.08    | 1.09       | 2.04    | ppb   |
| Strontium  | 88-1  | 1.12    | 1.05    | 1.05    | 1.07       | 3.33    | ppb   |
| Sulfur     | 34-1  | -596.62 | -707.52 | -503.46 | -602.53    |         | ppb   |
| Terbium    | 159-1 |         |         |         | 101        |         | %     |
| Terbium    | 159-2 |         |         |         | 101        |         | %     |
| Thallium   | 203-1 | 1.09    | 1.03    | 1.03    | 1.05       | 3.02    | ppb   |
| Thallium   | 205-1 | 1.00    | 1.02    | 1.07    | 1.03       | 3.76    | ppb   |
| Tin        | 118-1 | 5.70    | 5.60    | 5.74    | 5.68       | 1.22    | ppb   |
| Titanium   | 47-1  | 5.21    | 4.85    | 5.24    | 5.10       | 4.29    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.95    | 0.95    | 0.92    | 0.94       | 2.06    | ppb   |
| Vanadium  | 51-2  | 5.47    | 5.44    | 5.31    | 5.41       | 1.55    | ppb   |
| Yttrium   | 89-1  |         |         |         | 104        |         | %     |
| Yttrium   | 89-2  |         |         |         | 103        |         | %     |
| Zinc      | 66-2  | 4.32    | 4.32    | 4.24    | 4.29       | 1.02    | ppb   |
| Zirconium | 90-1  | 1.12    | 1.10    | 1.08    | 1.10       | 1.76    | ppb   |
| Zirconium | 91-1  | 1.06    | 1.05    | 1.04    | 1.05       | 1.08    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | -0.02   | 0.26    | -0.51   | -0.09      |         | ppb   |
| Antimony   | 121-1 | 0.02    | 0.01    | 0.03    | 0.02       | 33.38   | ppb   |
| Arsenic    | 75-2  | -0.02   | -0.02   | -0.01   | -0.02      |         | ppb   |
| Barium     | 135-1 | 0.02    | 0.02    | 0.02    | 0.02       | 15.80   | ppb   |
| Barium     | 137-1 | -0.01   | 0.00    | -0.01   | -0.01      |         | ppb   |
| Beryllium  | 9-1   | 0.02    | 0.00    | 0.00    | 0.01       | 174.59  | ppb   |
| Bismuth    | 209-1 |         |         |         | 99         |         | %     |
| Bismuth    | 209-2 |         |         |         | 101        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | -0.08   | -0.08   | 0.05    | -0.03      |         | ppb   |
| Cadmium    | 106-1 | -4.25   | -4.41   | -4.29   | -4.32      |         | ppb   |
| Cadmium    | 111-1 | -0.29   | -0.32   | -0.30   | -0.30      |         | ppb   |
| Calcium    | 43-1  | -2.98   | 1.25    | -1.56   | -1.10      |         | ppb   |
| Calcium    | 44-1  | -0.77   | 3.97    | 4.87    | 2.69       | 112.65  | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 0.01    | -0.05   | -0.01   | -0.02      |         | ppb   |
| Cobalt     | 59-2  | 0.00    | 0.00    | 0.00    | 0.00       | 572.52  | ppb   |
| Copper     | 63-2  | 0.00    | 0.02    | 0.04    | 0.02       | 98.53   | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 101        |         | %     |
| Holmium    | 165-2 |         |         |         | 104        |         | %     |
| Indium     | 115-1 |         |         |         | 102        |         | %     |
| Indium     | 115-2 |         |         |         | 101        |         | %     |
| Iron       | 56-2  | 0.69    | 0.46    | 0.36    | 0.50       | 33.50   | ppb   |
| Iron       | 57-2  | 1.82    | 0.56    | -1.08   | 0.43       | 338.24  | ppb   |
| Iron       | 54-2  | 0.41    | 0.78    | 1.00    | 0.73       | 41.29   | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.04    | 0.02    | 0.00    | 0.02       | 91.34   | ppb   |
| Lead       | 207-1 | 0.04    | 0.03    | 0.03    | 0.03       | 17.86   | ppb   |
| Lead       | 208-1 | 0.03    | 0.03    | 0.02    | 0.03       | 20.56   | ppb   |
| Lithium    | 6-1   |         |         |         | 91         |         | %     |
| Magnesium  | 24-2  | 0.46    | 0.21    | 0.42    | 0.36       | 37.36   | ppb   |
| Manganese  | 55-2  | 0.01    | -0.03   | -0.03   | -0.02      |         | ppb   |
| Molybdenum | 94-1  | 0.03    | 0.02    | 0.03    | 0.03       | 24.09   | ppb   |
| Molybdenum | 95-1  | 0.02    | 0.05    | 0.03    | 0.03       | 44.32   | ppb   |
| Molybdenum | 96-1  | 0.03    | 0.05    | 0.03    | 0.03       | 31.06   | ppb   |
| Molybdenum | 97-1  | 0.04    | 0.03    | 0.05    | 0.04       | 26.86   | ppb   |
| Molybdenum | 98-1  | 0.03    | 0.02    | 0.02    | 0.02       | 22.00   | ppb   |
| Neodymium  | 150-1 |         |         |         |            |         | cps   |
| Neodymium  | 150-2 |         |         |         |            |         | cps   |
| Nickel     | 60-2  | 0.02    | 0.08    | -0.04   | 0.02       | 260.16  | ppb   |
| Phosphorus | 31-2  | -34.49  | -31.14  | -23.64  | -29.76     |         | ppb   |
| Potassium  | 39-2  | 10.07   | 4.74    | 0.91    | 5.24       | 87.86   | ppb   |
| Rhodium    | 103-1 |         |         |         | 102        |         | %     |
| Rhodium    | 103-2 |         |         |         | 103        |         | %     |
| Scandium   | 45-1  |         |         |         | 101        |         | %     |
| Scandium   | 45-2  |         |         |         | 101        |         | %     |
| Selenium   | 82-1  | 0.01    | -0.21   | -0.17   | -0.13      |         | ppb   |
| Selenium   | 77-2  | -0.09   | -0.09   | -0.09   | -0.09      |         | ppb   |
| Selenium   | 78-2  | 0.67    | 1.46    | 0.43    | 0.86       | 62.85   | ppb   |
| Silicon    | 28-1  | -2.30   | 0.10    | -1.57   | -1.26      |         | ppb   |
| Silver     | 107-1 | 0.02    | 0.02    | 0.01    | 0.02       | 28.54   | ppb   |
| Silver     | 109-1 | 0.02    | 0.01    | 0.01    | 0.01       | 38.71   | ppb   |
| Sodium     | 23-2  | 22.05   | 22.62   | 23.61   | 22.76      | 3.49    | ppb   |
| Strontium  | 86-1  | 0.07    | -0.04   | 0.01    | 0.01       | 454.74  | ppb   |
| Strontium  | 88-1  | 0.00    | 0.00    | 0.00    | 0.00       | 204.19  | ppb   |
| Sulfur     | 34-1  | -915.92 | -566.94 | -623.05 | -701.97    |         | ppb   |
| Terbium    | 159-1 |         |         |         | 99         |         | %     |
| Terbium    | 159-2 |         |         |         | 100        |         | %     |
| Thallium   | 203-1 | 0.00    | 0.00    | 0.01    | 0.00       |         | ppb   |
| Thallium   | 205-1 | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Tin        | 118-1 | 0.04    | 0.04    | 0.05    | 0.04       | 13.98   | ppb   |
| Titanium   | 47-1  | 0.05    | 0.01    | 0.00    | 0.02       | 105.79  | ppb   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Vanadium  | 51-2  | -0.01   | 0.00    | 0.00    | 0.00       |         | ppb   |
| Yttrium   | 89-1  |         |         |         | 103        |         | %     |
| Yttrium   | 89-2  |         |         |         | 103        |         | %     |
| Zinc      | 66-2  | 0.10    | 0.26    | -0.21   | 0.05       | 469.41  | ppb   |
| Zirconium | 90-1  | 0.01    | 0.00    | 0.01    | 0.01       | 29.87   | ppb   |
| Zirconium | 91-1  | 0.00    | 0.02    | 0.01    | 0.01       | 97.70   | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 9909.89  | 10008.12 | 10187.27 | 10035.09   | 1.40    | ppb   |
| Antimony   | 121-1 | 503.92   | 517.19   | 523.76   | 514.96     | 1.96    | ppb   |
| Arsenic    | 75-2  | 496.04   | 506.96   | 500.49   | 501.16     | 1.10    | ppb   |
| Barium     | 135-1 | 2489.59  | 2589.87  | 2577.81  | 2552.43    | 2.14    | ppb   |
| Barium     | 137-1 | 2496.86  | 2518.84  | 2602.54  | 2539.41    | 2.20    | ppb   |
| Beryllium  | 9-1   | 512.21   | 512.35   | 519.76   | 514.77     | 0.84    | ppb   |
| Bismuth    | 209-1 |          |          |          | 102        |         | %     |
| Bismuth    | 209-2 |          |          |          | 103        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 504.56   | 518.86   | 520.75   | 514.72     | 1.72    | ppb   |
| Cadmium    | 106-1 | 513.20   | 511.58   | 517.08   | 513.95     | 0.55    | ppb   |
| Cadmium    | 111-1 | 510.57   | 518.34   | 522.23   | 517.05     | 1.15    | ppb   |
| Calcium    | 43-1  | 53243.58 | 54756.82 | 54050.40 | 54016.93   | 1.40    | ppb   |
| Calcium    | 44-1  | 51605.42 | 52436.97 | 51425.52 | 51822.64   | 1.04    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 511.45   | 512.98   | 516.37   | 513.60     | 0.49    | ppb   |
| Cobalt     | 59-2  | 517.27   | 523.20   | 519.52   | 520.00     | 0.57    | ppb   |
| Copper     | 63-2  | 5113.19  | 5181.43  | 5116.60  | 5137.07    | 0.75    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 105        |         | %     |
| Holmium    | 165-2 |          |          |          | 108        |         | %     |
| Indium     | 115-1 |          |          |          | 103        |         | %     |
| Indium     | 115-2 |          |          |          | 102        |         | %     |
| Iron       | 56-2  | 26779.74 | 26450.39 | 27058.90 | 26763.01   | 1.14    | ppb   |
| Iron       | 57-2  | 26379.05 | 26685.90 | 26384.49 | 26483.15   | 0.66    | ppb   |
| Iron       | 54-2  | 27036.18 | 27083.95 | 26497.73 | 26872.62   | 1.21    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 2512.70  | 2502.80  | 2603.10  | 2539.53    | 2.18    | ppb   |
| Lead       | 207-1 | 2433.52  | 2485.51  | 2560.23  | 2493.09    | 2.55    | ppb   |
| Lead       | 208-1 | 2432.43  | 2470.02  | 2550.59  | 2484.35    | 2.43    | ppb   |
| Lithium    | 6-1   |          |          |          | 95         |         | %     |
| Magnesium  | 24-2  | 50471.77 | 51723.53 | 51349.52 | 51181.60   | 1.26    | ppb   |
| Manganese  | 55-2  | 5095.13  | 5032.95  | 5150.59  | 5092.89    | 1.16    | ppb   |
| Molybdenum | 94-1  | 4854.92  | 4946.62  | 5124.17  | 4975.24    | 2.75    | ppb   |
| Molybdenum | 95-1  | 4933.25  | 4827.24  | 5032.98  | 4931.16    | 2.09    | ppb   |
| Molybdenum | 96-1  | 4954.55  | 4849.09  | 5124.68  | 4976.11    | 2.79    | ppb   |
| Molybdenum | 97-1  | 4880.66  | 4887.72  | 5139.17  | 4969.18    | 2.96    | ppb   |
| Molybdenum | 98-1  | 4916.95  | 4857.44  | 5100.61  | 4958.33    | 2.56    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 509.31   | 516.87   | 512.74   | 512.97     | 0.74    | ppb   |
| Phosphorus | 31-2  | 9839.57  | 9952.72  | 10003.77 | 9932.02    | 0.85    | ppb   |
| Potassium  | 39-2  | 25364.45 | 25828.72 | 26056.37 | 25749.85   | 1.37    | ppb   |
| Rhodium    | 103-1 |          |          |          | 103        |         | %     |
| Rhodium    | 103-2 |          |          |          | 103        |         | %     |
| Scandium   | 45-1  |          |          |          | 102        |         | %     |
| Scandium   | 45-2  |          |          |          | 103        |         | %     |
| Selenium   | 82-1  | 490.84   | 491.95   | 513.88   | 498.89     | 2.60    | ppb   |
| Selenium   | 77-2  | 498.34   | 518.88   | 495.76   | 504.33     | 2.51    | ppb   |
| Selenium   | 78-2  | 501.77   | 515.24   | 522.34   | 513.12     | 2.04    | ppb   |
| Silicon    | 28-1  | 618.44   | 615.60   | 612.01   | 615.35     | 0.52    | ppb   |
| Silver     | 107-1 | 527.16   | 514.20   | 507.71   | 516.36     | 1.92    | ppb   |
| Silver     | 109-1 | 508.74   | 517.97   | 519.65   | 515.45     | 1.14    | ppb   |
| Sodium     | 23-2  | 51210.55 | 51678.13 | 51874.68 | 51587.79   | 0.66    | ppb   |
| Strontium  | 86-1  | 484.56   | 484.16   | 506.23   | 491.65     | 2.57    | ppb   |
| Strontium  | 88-1  | 498.48   | 490.55   | 514.11   | 501.05     | 2.39    | ppb   |
| Sulfur     | 34-1  | 9198.71  | 9654.47  | 9343.25  | 9398.81    | 2.48    | ppb   |
| Terbium    | 159-1 |          |          |          | 104        |         | %     |
| Terbium    | 159-2 |          |          |          | 104        |         | %     |
| Thallium   | 203-1 | 488.76   | 499.77   | 514.88   | 501.13     | 2.62    | ppb   |
| Thallium   | 205-1 | 495.87   | 500.16   | 509.86   | 501.96     | 1.43    | ppb   |
| Tin        | 118-1 | 511.06   | 511.38   | 530.43   | 517.62     | 2.14    | ppb   |
| Titanium   | 47-1  | 4924.39  | 5141.32  | 5047.21  | 5037.64    | 2.16    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 478.80  | 473.20  | 491.85  | 481.28     | 1.99    | ppb   |
| Vanadium  | 51-2  | 509.14  | 518.28  | 515.57  | 514.33     | 0.91    | ppb   |
| Yttrium   | 89-1  |         |         |         | 106        |         | %     |
| Yttrium   | 89-2  |         |         |         | 104        |         | %     |
| Zinc      | 66-2  | 5201.02 | 5240.56 | 5246.48 | 5229.35    | 0.47    | ppb   |
| Zirconium | 90-1  | 497.53  | 487.29  | 514.71  | 499.84     | 2.77    | ppb   |
| Zirconium | 91-1  | 485.46  | 485.05  | 505.14  | 491.88     | 2.33    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | -1.03   | 0.80    | -0.11   | -0.11      |         | ppb   |
| Antimony   | 121-1 | 0.13    | 0.15    | 0.13    | 0.13       | 8.87    | ppb   |
| Arsenic    | 75-2  | -0.01   | -0.02   | -0.01   | -0.01      |         | ppb   |
| Barium     | 135-1 | 0.04    | 0.02    | 0.00    | 0.02       | 83.23   | ppb   |
| Barium     | 137-1 | 0.01    | 0.00    | 0.00    | 0.00       | 351.58  | ppb   |
| Beryllium  | 9-1   | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Bismuth    | 209-1 |         |         |         | 100        |         | %     |
| Bismuth    | 209-2 |         |         |         | 101        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | -0.08   | 0.02    | -0.04   | -0.03      |         | ppb   |
| Cadmium    | 106-1 | -4.81   | -4.01   | -4.04   | -4.29      |         | ppb   |
| Cadmium    | 111-1 | -0.31   | -0.28   | -0.26   | -0.28      |         | ppb   |
| Calcium    | 43-1  | 3.26    | -2.65   | 0.15    | 0.25       | 1174.29 | ppb   |
| Calcium    | 44-1  | 8.63    | 10.20   | 4.52    | 7.79       | 37.67   | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.01   | 0.01    | -0.03   | -0.01      |         | ppb   |
| Cobalt     | 59-2  | 0.00    | 0.00    | -0.01   | 0.00       |         | ppb   |
| Copper     | 63-2  | 0.11    | 0.10    | 0.06    | 0.09       | 28.81   | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 102        |         | %     |
| Holmium    | 165-2 |         |         |         | 104        |         | %     |
| Indium     | 115-1 |         |         |         | 102        |         | %     |
| Indium     | 115-2 |         |         |         | 100        |         | %     |
| Iron       | 56-2  | 0.67    | 0.52    | 0.55    | 0.58       | 14.14   | ppb   |
| Iron       | 57-2  | -1.24   | 1.69    | -1.88   | -0.48      |         | ppb   |
| Iron       | 54-2  | 1.17    | 0.89    | 1.33    | 1.13       | 19.54   | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 0.05     | 0.02     | 0.06     | 0.04       | 43.96   | ppb   |
| Lead       | 207-1 | 0.07     | 0.06     | 0.06     | 0.06       | 13.36   | ppb   |
| Lead       | 208-1 | 0.05     | 0.05     | 0.04     | 0.05       | 6.96    | ppb   |
| Lithium    | 6-1   |          |          |          | 91         |         | %     |
| Magnesium  | 24-2  | 0.29     | 0.61     | 0.49     | 0.46       | 35.41   | ppb   |
| Manganese  | 55-2  | -0.01    | 0.01     | 0.03     | 0.01       | 205.43  | ppb   |
| Molybdenum | 94-1  | 0.22     | 0.16     | 0.18     | 0.19       | 16.05   | ppb   |
| Molybdenum | 95-1  | 0.18     | 0.17     | 0.14     | 0.16       | 12.67   | ppb   |
| Molybdenum | 96-1  | 0.15     | 0.18     | 0.18     | 0.17       | 9.96    | ppb   |
| Molybdenum | 97-1  | 0.21     | 0.17     | 0.18     | 0.19       | 10.61   | ppb   |
| Molybdenum | 98-1  | 0.20     | 0.16     | 0.17     | 0.18       | 13.54   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | -0.07    | -0.05    | -0.02    | -0.05      |         | ppb   |
| Phosphorus | 31-2  | -30.91   | -29.53   | -28.59   | -29.67     |         | ppb   |
| Potassium  | 39-2  | 13.03    | 5.60     | 7.45     | 8.69       | 44.50   | ppb   |
| Rhodium    | 103-1 |          |          |          | 101        |         | %     |
| Rhodium    | 103-2 |          |          |          | 101        |         | %     |
| Scandium   | 45-1  |          |          |          | 99         |         | %     |
| Scandium   | 45-2  |          |          |          | 100        |         | %     |
| Selenium   | 82-1  | -0.90    | -0.28    | -0.68    | -0.62      |         | ppb   |
| Selenium   | 77-2  | 0.17     | -0.09    | -0.09    | 0.00       |         | ppb   |
| Selenium   | 78-2  | -0.59    | 0.44     | 1.00     | 0.28       | 283.57  | ppb   |
| Silicon    | 28-1  | 0.45     | 1.01     | 0.43     | 0.63       | 51.87   | ppb   |
| Silver     | 107-1 | 0.06     | 0.04     | 0.03     | 0.04       | 32.70   | ppb   |
| Silver     | 109-1 | 0.07     | 0.04     | 0.03     | 0.05       | 43.61   | ppb   |
| Sodium     | 23-2  | 27.20    | 32.68    | 23.28    | 27.72      | 17.05   | ppb   |
| Strontium  | 86-1  | 0.02     | 0.06     | 0.00     | 0.03       | 129.09  | ppb   |
| Strontium  | 88-1  | 0.00     | 0.00     | 0.00     | 0.00       | 408.71  | ppb   |
| Sulfur     | 34-1  | -1134.96 | -1089.12 | -1065.87 | -1096.65   |         | ppb   |
| Terbium    | 159-1 |          |          |          | 99         |         | %     |
| Terbium    | 159-2 |          |          |          | 100        |         | %     |
| Thallium   | 203-1 | 0.04     | 0.02     | 0.02     | 0.03       | 42.60   | ppb   |
| Thallium   | 205-1 | 0.02     | 0.02     | 0.02     | 0.02       | 14.67   | ppb   |
| Tin        | 118-1 | 0.04     | 0.04     | 0.03     | 0.04       | 13.55   | ppb   |
| Titanium   | 47-1  | 0.05     | 0.02     | 0.10     | 0.05       | 73.14   | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.00    | 0.00    | 0.00    | 0.00       | 220.34  | ppb   |
| Vanadium  | 51-2  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Yttrium   | 89-1  |         |         |         | 102        |         | %     |
| Yttrium   | 89-2  |         |         |         | 102        |         | %     |
| Zinc      | 66-2  | 0.10    | 0.15    | 0.54    | 0.26       | 91.17   | ppb   |
| Zirconium | 90-1  | 0.03    | 0.01    | 0.02    | 0.02       | 35.57   | ppb   |
| Zirconium | 91-1  | -0.01   | 0.03    | 0.02    | 0.01       | 138.36  | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 22075.94 | 22361.74 | 21787.89 | 22075.19   | 1.30    | ppb   |
| Antimony   | 121-1 | 0.19     | 0.22     | 0.23     | 0.21       | 8.32    | ppb   |
| Arsenic    | 75-2  | 6.17     | 6.22     | 5.74     | 6.04       | 4.38    | ppb   |
| Barium     | 135-1 | 22.03    | 22.83    | 22.59    | 22.48      | 1.83    | ppb   |
| Barium     | 137-1 | 22.01    | 22.67    | 22.68    | 22.45      | 1.72    | ppb   |
| Beryllium  | 9-1   | 2.78     | 2.83     | 3.01     | 2.87       | 4.22    | ppb   |
| Bismuth    | 209-1 |          |          |          | 101        |         | %     |
| Bismuth    | 209-2 |          |          |          | 104        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.68     | 2.38     | 2.40     | 2.49       | 6.84    | ppb   |
| Cadmium    | 106-1 | -1.96    | -1.67    | -1.28    | -1.64      |         | ppb   |
| Cadmium    | 111-1 | 2.06     | 2.23     | 2.33     | 2.21       | 6.08    | ppb   |
| Calcium    | 43-1  | 60055.86 | 61499.87 | 61163.36 | 60906.36   | 1.24    | ppb   |
| Calcium    | 44-1  | 58001.00 | 60457.99 | 59895.99 | 59451.66   | 2.17    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 10.88    | 10.60    | 10.50    | 10.66      | 1.87    | ppb   |
| Cobalt     | 59-2  | 26.47    | 26.89    | 26.53    | 26.63      | 0.86    | ppb   |
| Copper     | 63-2  | 38.48    | 39.10    | 38.64    | 38.74      | 0.83    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 106        |         | %     |
| Holmium    | 165-2 |          |          |          | 110        |         | %     |
| Indium     | 115-1 |          |          |          | 105        |         | %     |
| Indium     | 115-2 |          |          |          | 104        |         | %     |
| Iron       | 56-2  | 11390.69 | 11147.19 | 11351.01 | 11296.30   | 1.16    | ppb   |
| Iron       | 57-2  | 11774.00 | 11988.06 | 11826.11 | 11862.72   | 0.94    | ppb   |
| Iron       | 54-2  | 11187.82 | 11512.78 | 11301.57 | 11334.06   | 1.45    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 42.30    | 41.34    | 41.40    | 41.68      | 1.30    | ppb   |
| Lead       | 207-1 | 40.32    | 39.93    | 39.92    | 40.06      | 0.57    | ppb   |
| Lead       | 208-1 | 40.91    | 40.46    | 40.50    | 40.63      | 0.61    | ppb   |
| Lithium    | 6-1   |          |          |          | 93         |         | %     |
| Magnesium  | 24-2  | 10559.02 | 10855.45 | 10796.01 | 10736.83   | 1.46    | ppb   |
| Manganese  | 55-2  | 2691.63  | 2771.44  | 2778.22  | 2747.10    | 1.75    | ppb   |
| Molybdenum | 94-1  | 1.63     | 1.70     | 1.63     | 1.65       | 2.41    | ppb   |
| Molybdenum | 95-1  | 0.11     | 0.14     | 0.14     | 0.13       | 13.54   | ppb   |
| Molybdenum | 96-1  | 0.32     | 0.29     | 0.31     | 0.31       | 6.15    | ppb   |
| Molybdenum | 97-1  | 0.09     | 0.07     | 0.09     | 0.08       | 10.95   | ppb   |
| Molybdenum | 98-1  | 0.09     | 0.10     | 0.07     | 0.09       | 18.81   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.76    | 20.44    | 20.67    | 20.62      | 0.81    | ppb   |
| Phosphorus | 31-2  | 1118.45  | 1196.02  | 1159.31  | 1157.92    | 3.35    | ppb   |
| Potassium  | 39-2  | 8091.79  | 8113.80  | 7929.08  | 8044.89    | 1.25    | ppb   |
| Rhodium    | 103-1 |          |          |          | 105        |         | %     |
| Rhodium    | 103-2 |          |          |          | 106        |         | %     |
| Scandium   | 45-1  |          |          |          | 104        |         | %     |
| Scandium   | 45-2  |          |          |          | 105        |         | %     |
| Selenium   | 82-1  | 0.81     | 0.78     | 0.21     | 0.60       | 56.58   | ppb   |
| Selenium   | 77-2  | 6.00     | 7.44     | 5.64     | 6.36       | 14.95   | ppb   |
| Selenium   | 78-2  | 0.55     | -0.46    | 2.77     | 0.95       | 173.22  | ppb   |
| Silicon    | 28-1  | 1486.62  | 1486.98  | 1482.89  | 1485.50    | 0.15    | ppb   |
| Silver     | 107-1 | 0.09     | 0.05     | 0.05     | 0.06       | 33.97   | ppb   |
| Silver     | 109-1 | 0.07     | 0.05     | 0.04     | 0.05       | 34.94   | ppb   |
| Sodium     | 23-2  | 3928.49  | 3970.06  | 3903.59  | 3934.05    | 0.85    | ppb   |
| Strontium  | 86-1  | 170.16   | 170.10   | 170.96   | 170.41     | 0.28    | ppb   |
| Strontium  | 88-1  | 176.15   | 175.68   | 177.74   | 176.52     | 0.61    | ppb   |
| Sulfur     | 34-1  | 97903.27 | 97422.84 | 97824.68 | 97716.93   | 0.26    | ppb   |
| Terbium    | 159-1 |          |          |          | 104        |         | %     |
| Terbium    | 159-2 |          |          |          | 106        |         | %     |
| Thallium   | 203-1 | 0.13     | 0.11     | 0.15     | 0.13       | 18.00   | ppb   |
| Thallium   | 205-1 | 0.13     | 0.13     | 0.13     | 0.13       | 2.68    | ppb   |
| Tin        | 118-1 | 0.31     | 0.49     | 0.54     | 0.45       | 27.20   | ppb   |
| Titanium   | 47-1  | 6.37     | 7.06     | 6.31     | 6.58       | 6.31    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.65    | 0.64    | 0.62    | 0.63       | 2.14    | ppb   |
| Vanadium  | 51-2  | 52.38   | 53.64   | 52.13   | 52.72      | 1.53    | ppb   |
| Yttrium   | 89-1  |         |         |         | 115        |         | %     |
| Yttrium   | 89-2  |         |         |         | 113        |         | %     |
| Zinc      | 66-2  | 483.29  | 495.34  | 484.77  | 487.80     | 1.35    | ppb   |
| Zirconium | 90-1  | 0.94    | 0.93    | 0.91    | 0.93       | 1.84    | ppb   |
| Zirconium | 91-1  | 0.91    | 0.89    | 0.96    | 0.92       | 4.12    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 20441.25 | 23626.23 | 19968.97 | 21345.49   | 9.32    | ppb   |
| Antimony   | 121-1 | 0.18     | 0.18     | 0.19     | 0.18       | 4.46    | ppb   |
| Arsenic    | 75-2  | 6.93     | 8.77     | 7.21     | 7.64       | 13.00   | ppb   |
| Barium     | 135-1 | 26.41    | 27.94    | 26.37    | 26.91      | 3.32    | ppb   |
| Barium     | 137-1 | 26.54    | 28.07    | 27.10    | 27.24      | 2.84    | ppb   |
| Beryllium  | 9-1   | 2.73     | 2.97     | 2.55     | 2.75       | 7.58    | ppb   |
| Bismuth    | 209-1 |          |          |          | 99         |         | %     |
| Bismuth    | 209-2 |          |          |          | 101        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.72     | 2.53     | 2.12     | 2.46       | 12.47   | ppb   |
| Cadmium    | 106-1 | -0.17    | -2.03    | -1.14    | -1.11      |         | ppb   |
| Cadmium    | 111-1 | 2.24     | 2.15     | 2.24     | 2.21       | 2.39    | ppb   |
| Calcium    | 43-1  | 59011.85 | 61554.70 | 58114.50 | 59560.35   | 3.00    | ppb   |
| Calcium    | 44-1  | 56730.82 | 61108.01 | 56906.46 | 58248.43   | 4.25    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 10.09    | 11.63    | 9.86     | 10.53      | 9.18    | ppb   |
| Cobalt     | 59-2  | 24.53    | 27.97    | 24.28    | 25.60      | 8.05    | ppb   |
| Copper     | 63-2  | 36.43    | 41.38    | 36.36    | 38.06      | 7.56    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 104        |         | %     |
| Holmium    | 165-2 |          |          |          | 106        |         | %     |
| Indium     | 115-1 |          |          |          | 106        |         | %     |
| Indium     | 115-2 |          |          |          | 101        |         | %     |
| Iron       | 56-2  | 10357.85 | 11959.68 | 10278.53 | 10865.35   | 8.73    | ppb   |
| Iron       | 57-2  | 11082.73 | 12687.56 | 10932.16 | 11567.48   | 8.41    | ppb   |
| Iron       | 54-2  | 10386.46 | 11839.73 | 10321.29 | 10849.16   | 7.91    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 35.28    | 38.74    | 36.66    | 36.89      | 4.71    | ppb   |
| Lead       | 207-1 | 33.80    | 36.94    | 34.97    | 35.24      | 4.50    | ppb   |
| Lead       | 208-1 | 34.43    | 37.41    | 35.52    | 35.79      | 4.21    | ppb   |
| Lithium    | 6-1   |          |          |          | 89         |         | %     |
| Magnesium  | 24-2  | 9732.32  | 11335.69 | 9679.00  | 10249.00   | 9.19    | ppb   |
| Manganese  | 55-2  | 2682.43  | 3144.86  | 2714.22  | 2847.17    | 9.07    | ppb   |
| Molybdenum | 94-1  | 1.56     | 1.74     | 1.70     | 1.67       | 5.50    | ppb   |
| Molybdenum | 95-1  | 0.12     | 0.13     | 0.10     | 0.12       | 17.32   | ppb   |
| Molybdenum | 96-1  | 0.31     | 0.32     | 0.27     | 0.30       | 8.79    | ppb   |
| Molybdenum | 97-1  | 0.07     | 0.07     | 0.06     | 0.07       | 11.15   | ppb   |
| Molybdenum | 98-1  | 0.07     | 0.08     | 0.07     | 0.07       | 8.11    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.06    | 22.24    | 19.43    | 20.58      | 7.16    | ppb   |
| Phosphorus | 31-2  | 1806.46  | 2049.21  | 1826.02  | 1893.89    | 7.12    | ppb   |
| Potassium  | 39-2  | 9016.27  | 9972.00  | 8675.96  | 9221.41    | 7.29    | ppb   |
| Rhodium    | 103-1 |          |          |          | 105        |         | %     |
| Rhodium    | 103-2 |          |          |          | 104        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 102        |         | %     |
| Selenium   | 82-1  | 0.49     | 0.25     | 0.02     | 0.25       | 91.72   | ppb   |
| Selenium   | 77-2  | 6.16     | 6.80     | 5.76     | 6.24       | 8.42    | ppb   |
| Selenium   | 78-2  | 0.83     | 2.84     | 2.55     | 2.07       | 52.55   | ppb   |
| Silicon    | 28-1  | 1334.19  | 1355.44  | 1274.37  | 1321.33    | 3.18    | ppb   |
| Silver     | 107-1 | 0.02     | 0.03     | 0.03     | 0.03       | 12.87   | ppb   |
| Silver     | 109-1 | 0.02     | 0.03     | 0.02     | 0.02       | 24.67   | ppb   |
| Sodium     | 23-2  | 3130.37  | 3588.71  | 3044.78  | 3254.62    | 8.99    | ppb   |
| Strontium  | 86-1  | 202.83   | 218.96   | 208.12   | 209.97     | 3.92    | ppb   |
| Strontium  | 88-1  | 206.14   | 220.17   | 211.06   | 212.46     | 3.35    | ppb   |
| Sulfur     | 34-1  | 93911.32 | 94971.62 | 90149.95 | 93010.96   | 2.72    | ppb   |
| Terbium    | 159-1 |          |          |          | 103        |         | %     |
| Terbium    | 159-2 |          |          |          | 103        |         | %     |
| Thallium   | 203-1 | 0.13     | 0.13     | 0.10     | 0.12       | 14.97   | ppb   |
| Thallium   | 205-1 | 0.12     | 0.14     | 0.12     | 0.13       | 7.58    | ppb   |
| Tin        | 118-1 | 0.27     | 0.33     | 0.35     | 0.32       | 13.09   | ppb   |
| Titanium   | 47-1  | 6.07     | 6.49     | 5.80     | 6.12       | 5.75    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.50    | 0.56    | 0.52    | 0.53       | 5.13    | ppb   |
| Vanadium  | 51-2  | 50.12   | 56.99   | 49.58   | 52.23      | 7.91    | ppb   |
| Yttrium   | 89-1  |         |         |         | 113        |         | %     |
| Yttrium   | 89-2  |         |         |         | 111        |         | %     |
| Zinc      | 66-2  | 386.92  | 437.37  | 379.63  | 401.31     | 7.84    | ppb   |
| Zirconium | 90-1  | 0.88    | 0.95    | 0.87    | 0.90       | 4.58    | ppb   |
| Zirconium | 91-1  | 0.82    | 0.90    | 0.88    | 0.87       | 4.68    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 22168.57 | 21921.26 | 22147.14 | 22078.99   | 0.62    | ppb   |
| Antimony   | 121-1 | 0.20     | 0.20     | 0.16     | 0.19       | 11.79   | ppb   |
| Arsenic    | 75-2  | 5.97     | 6.12     | 5.66     | 5.91       | 3.97    | ppb   |
| Barium     | 135-1 | 26.24    | 27.12    | 25.18    | 26.18      | 3.72    | ppb   |
| Barium     | 137-1 | 26.29    | 27.49    | 25.73    | 26.50      | 3.40    | ppb   |
| Beryllium  | 9-1   | 3.01     | 2.78     | 2.80     | 2.86       | 4.60    | ppb   |
| Bismuth    | 209-1 |          |          |          | 100        |         | %     |
| Bismuth    | 209-2 |          |          |          | 103        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.45     | 2.11     | 2.22     | 2.26       | 7.68    | ppb   |
| Cadmium    | 106-1 | -0.68    | 0.59     | -1.56    | -0.55      |         | ppb   |
| Cadmium    | 111-1 | 2.19     | 2.45     | 2.16     | 2.27       | 7.02    | ppb   |
| Calcium    | 43-1  | 53993.21 | 56266.04 | 54455.53 | 54904.93   | 2.19    | ppb   |
| Calcium    | 44-1  | 52500.45 | 53622.42 | 52537.70 | 52886.86   | 1.20    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 11.54    | 11.49    | 11.29    | 11.44      | 1.19    | ppb   |
| Cobalt     | 59-2  | 25.88    | 26.08    | 25.83    | 25.93      | 0.50    | ppb   |
| Copper     | 63-2  | 45.34    | 46.81    | 46.09    | 46.08      | 1.59    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 105        |         | %     |
| Holmium    | 165-2 |          |          |          | 108        |         | %     |
| Indium     | 115-1 |          |          |          | 106        |         | %     |
| Indium     | 115-2 |          |          |          | 103        |         | %     |
| Iron       | 56-2  | 11003.17 | 10716.69 | 10786.54 | 10835.47   | 1.38    | ppb   |
| Iron       | 57-2  | 11433.08 | 11426.73 | 11378.02 | 11412.61   | 0.26    | ppb   |
| Iron       | 54-2  | 10710.74 | 10955.60 | 10826.84 | 10831.06   | 1.13    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2   | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|-----------|----------|------------|---------|-------|
| Lead       | 206-1 | 55.34    | 55.60     | 55.45    | 55.46      | 0.23    | ppb   |
| Lead       | 207-1 | 52.72    | 52.55     | 52.60    | 52.62      | 0.16    | ppb   |
| Lead       | 208-1 | 53.23    | 53.72     | 53.73    | 53.56      | 0.54    | ppb   |
| Lithium    | 6-1   |          |           |          | 87         |         | %     |
| Magnesium  | 24-2  | 11209.34 | 11320.33  | 10746.56 | 11092.08   | 2.74    | ppb   |
| Manganese  | 55-2  | 2665.47  | 2668.98   | 2642.97  | 2659.14    | 0.53    | ppb   |
| Molybdenum | 94-1  | 1.66     | 1.72      | 1.66     | 1.68       | 2.23    | ppb   |
| Molybdenum | 95-1  | 0.09     | 0.09      | 0.08     | 0.09       | 4.59    | ppb   |
| Molybdenum | 96-1  | 0.28     | 0.31      | 0.30     | 0.30       | 5.15    | ppb   |
| Molybdenum | 97-1  | 0.11     | 0.07      | 0.09     | 0.09       | 24.41   | ppb   |
| Molybdenum | 98-1  | 0.06     | 0.07      | 0.07     | 0.06       | 8.93    | ppb   |
| Neodymium  | 150-1 |          |           |          |            |         | cps   |
| Neodymium  | 150-2 |          |           |          |            |         | cps   |
| Nickel     | 60-2  | 19.29    | 19.71     | 19.16    | 19.39      | 1.48    | ppb   |
| Phosphorus | 31-2  | 1122.15  | 1186.07   | 1145.33  | 1151.19    | 2.81    | ppb   |
| Potassium  | 39-2  | 7279.41  | 7367.01   | 7338.87  | 7328.43    | 0.61    | ppb   |
| Rhodium    | 103-1 |          |           |          | 106        |         | %     |
| Rhodium    | 103-2 |          |           |          | 107        |         | %     |
| Scandium   | 45-1  |          |           |          | 102        |         | %     |
| Scandium   | 45-2  |          |           |          | 103        |         | %     |
| Selenium   | 82-1  | 0.67     | -0.02     | 0.02     | 0.22       | 174.88  | ppb   |
| Selenium   | 77-2  | 6.04     | 8.49      | 7.72     | 7.42       | 16.85   | ppb   |
| Selenium   | 78-2  | 2.28     | 1.26      | 3.76     | 2.43       | 51.67   | ppb   |
| Silicon    | 28-1  | 1462.50  | 1543.42   | 1493.78  | 1499.90    | 2.72    | ppb   |
| Silver     | 107-1 | 0.02     | 0.02      | 0.03     | 0.03       | 6.77    | ppb   |
| Silver     | 109-1 | 0.02     | 0.03      | 0.02     | 0.02       | 27.02   | ppb   |
| Sodium     | 23-2  | 3038.82  | 3055.47   | 2990.67  | 3028.32    | 1.11    | ppb   |
| Strontium  | 86-1  | 144.42   | 148.08    | 150.53   | 147.68     | 2.08    | ppb   |
| Strontium  | 88-1  | 147.79   | 149.88    | 148.66   | 148.78     | 0.71    | ppb   |
| Sulfur     | 34-1  | 95602.88 | 100039.11 | 97832.08 | 97824.69   | 2.27    | ppb   |
| Terbium    | 159-1 |          |           |          | 103        |         | %     |
| Terbium    | 159-2 |          |           |          | 105        |         | %     |
| Thallium   | 203-1 | 0.15     | 0.15      | 0.13     | 0.14       | 7.65    | ppb   |
| Thallium   | 205-1 | 0.14     | 0.13      | 0.15     | 0.14       | 7.26    | ppb   |
| Tin        | 118-1 | 0.29     | 0.39      | 0.32     | 0.33       | 16.45   | ppb   |
| Titanium   | 47-1  | 7.68     | 8.09      | 7.95     | 7.91       | 2.62    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.76    | 0.78    | 0.75    | 0.76       | 1.81    | ppb   |
| Vanadium  | 51-2  | 57.01   | 56.57   | 56.51   | 56.70      | 0.48    | ppb   |
| Yttrium   | 89-1  |         |         |         | 113        |         | %     |
| Yttrium   | 89-2  |         |         |         | 113        |         | %     |
| Zinc      | 66-2  | 362.17  | 361.63  | 362.29  | 362.03     | 0.10    | ppb   |
| Zirconium | 90-1  | 0.85    | 0.92    | 0.93    | 0.90       | 5.13    | ppb   |
| Zirconium | 91-1  | 0.87    | 0.88    | 0.92    | 0.89       | 3.07    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 22003.56 | 21775.39 | 21393.38 | 21724.11   | 1.42    | ppb   |
| Antimony   | 121-1 | 0.19     | 0.16     | 0.18     | 0.18       | 9.73    | ppb   |
| Arsenic    | 75-2  | 6.84     | 6.82     | 6.59     | 6.75       | 2.03    | ppb   |
| Barium     | 135-1 | 24.99    | 24.85    | 24.77    | 24.87      | 0.43    | ppb   |
| Barium     | 137-1 | 25.09    | 25.03    | 24.52    | 24.88      | 1.26    | ppb   |
| Beryllium  | 9-1   | 2.81     | 2.79     | 2.95     | 2.85       | 3.07    | ppb   |
| Bismuth    | 209-1 |          |          |          | 101        |         | %     |
| Bismuth    | 209-2 |          |          |          | 106        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.34     | 2.90     | 2.47     | 2.57       | 11.26   | ppb   |
| Cadmium    | 106-1 | 0.20     | -0.80    | -1.16    | -0.59      |         | ppb   |
| Cadmium    | 111-1 | 2.51     | 2.20     | 2.24     | 2.32       | 7.24    | ppb   |
| Calcium    | 43-1  | 57223.16 | 58492.02 | 58883.10 | 58199.43   | 1.49    | ppb   |
| Calcium    | 44-1  | 55722.85 | 56654.80 | 56585.25 | 56320.97   | 0.92    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 11.86    | 12.18    | 12.24    | 12.09      | 1.68    | ppb   |
| Cobalt     | 59-2  | 26.27    | 26.77    | 26.82    | 26.62      | 1.14    | ppb   |
| Copper     | 63-2  | 43.10    | 43.16    | 43.18    | 43.15      | 0.10    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 105        |         | %     |
| Holmium    | 165-2 |          |          |          | 111        |         | %     |
| Indium     | 115-1 |          |          |          | 106        |         | %     |
| Indium     | 115-2 |          |          |          | 106        |         | %     |
| Iron       | 56-2  | 12655.66 | 12490.76 | 12383.79 | 12510.07   | 1.09    | ppb   |
| Iron       | 57-2  | 12944.96 | 13117.73 | 13179.28 | 13080.66   | 0.93    | ppb   |
| Iron       | 54-2  | 12397.69 | 12683.00 | 12448.86 | 12509.85   | 1.22    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 42.15    | 43.53    | 44.41    | 43.36      | 2.63    | ppb   |
| Lead       | 207-1 | 40.75    | 41.09    | 42.00    | 41.28      | 1.57    | ppb   |
| Lead       | 208-1 | 40.92    | 41.92    | 42.92    | 41.92      | 2.39    | ppb   |
| Lithium    | 6-1   |          |          |          | 87         |         | %     |
| Magnesium  | 24-2  | 9710.55  | 9986.57  | 10012.09 | 9903.07    | 1.69    | ppb   |
| Manganese  | 55-2  | 2674.60  | 2724.26  | 2635.52  | 2678.13    | 1.66    | ppb   |
| Molybdenum | 94-1  | 1.56     | 1.55     | 1.70     | 1.60       | 4.95    | ppb   |
| Molybdenum | 95-1  | 0.10     | 0.09     | 0.11     | 0.10       | 10.46   | ppb   |
| Molybdenum | 96-1  | 0.34     | 0.27     | 0.30     | 0.31       | 11.63   | ppb   |
| Molybdenum | 97-1  | 0.06     | 0.06     | 0.06     | 0.06       | 5.02    | ppb   |
| Molybdenum | 98-1  | 0.07     | 0.06     | 0.04     | 0.05       | 28.07   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 21.67    | 21.96    | 21.71    | 21.78      | 0.72    | ppb   |
| Phosphorus | 31-2  | 1272.82  | 1287.53  | 1316.14  | 1292.16    | 1.70    | ppb   |
| Potassium  | 39-2  | 7735.78  | 7879.02  | 7835.20  | 7816.67    | 0.94    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 105        |         | %     |
| Selenium   | 82-1  | 0.11     | 0.97     | -0.49    | 0.20       | 368.43  | ppb   |
| Selenium   | 77-2  | 7.12     | 5.38     | 6.63     | 6.37       | 14.05   | ppb   |
| Selenium   | 78-2  | 1.95     | 0.54     | 2.50     | 1.66       | 60.69   | ppb   |
| Silicon    | 28-1  | 1466.51  | 1487.13  | 1510.46  | 1488.03    | 1.48    | ppb   |
| Silver     | 107-1 | 0.03     | 0.03     | 0.03     | 0.03       | 15.82   | ppb   |
| Silver     | 109-1 | 0.02     | 0.03     | 0.03     | 0.03       | 17.87   | ppb   |
| Sodium     | 23-2  | 3422.20  | 3379.66  | 3378.71  | 3393.52    | 0.73    | ppb   |
| Strontium  | 86-1  | 167.16   | 167.76   | 166.48   | 167.13     | 0.38    | ppb   |
| Strontium  | 88-1  | 168.21   | 168.59   | 170.69   | 169.16     | 0.79    | ppb   |
| Sulfur     | 34-1  | 96018.97 | 98890.15 | 99753.67 | 98220.93   | 1.99    | ppb   |
| Terbium    | 159-1 |          |          |          | 103        |         | %     |
| Terbium    | 159-2 |          |          |          | 107        |         | %     |
| Thallium   | 203-1 | 0.16     | 0.17     | 0.17     | 0.17       | 3.98    | ppb   |
| Thallium   | 205-1 | 0.14     | 0.15     | 0.16     | 0.15       | 8.96    | ppb   |
| Tin        | 118-1 | 0.34     | 0.40     | 0.38     | 0.37       | 7.34    | ppb   |
| Titanium   | 47-1  | 7.49     | 7.23     | 7.58     | 7.43       | 2.40    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.65    | 0.65    | 0.69    | 0.66       | 2.95    | ppb   |
| Vanadium  | 51-2  | 56.35   | 56.18   | 56.71   | 56.41      | 0.48    | ppb   |
| Yttrium   | 89-1  |         |         |         | 115        |         | %     |
| Yttrium   | 89-2  |         |         |         | 114        |         | %     |
| Zinc      | 66-2  | 398.64  | 401.15  | 401.24  | 400.34     | 0.37    | ppb   |
| Zirconium | 90-1  | 0.83    | 0.89    | 0.86    | 0.86       | 3.18    | ppb   |
| Zirconium | 91-1  | 0.85    | 0.88    | 0.90    | 0.88       | 2.66    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 4566.26   | 4623.61   | 4564.79   | 4584.89    | 0.73    | ppb   |
| Antimony   | 121-1 | 0.14      | 0.15      | 0.16      | 0.15       | 7.46    | ppb   |
| Arsenic    | 75-2  | 2.07      | 2.02      | 1.98      | 2.03       | 2.23    | ppb   |
| Barium     | 135-1 | 20.09     | 21.31     | 20.51     | 20.63      | 3.01    | ppb   |
| Barium     | 137-1 | 20.34     | 21.40     | 20.89     | 20.87      | 2.55    | ppb   |
| Beryllium  | 9-1   | 0.95      | 0.92      | 1.02      | 0.96       | 5.49    | ppb   |
| Bismuth    | 209-1 |           |           |           | 100        |         | %     |
| Bismuth    | 209-2 |           |           |           | 106        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 1.23      | 1.25      | 1.47      | 1.32       | 9.98    | ppb   |
| Cadmium    | 106-1 | -1.43     | -1.75     | -1.11     | -1.43      |         | ppb   |
| Cadmium    | 111-1 | 1.48      | 1.44      | 1.48      | 1.47       | 1.50    | ppb   |
| Calcium    | 43-1  | 101892.63 | 102764.29 | 100310.70 | 101655.87  | 1.22    | ppb   |
| Calcium    | 44-1  | 104009.96 | 102257.72 | 101143.69 | 102470.46  | 1.41    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 1.91      | 2.04      | 2.03      | 1.99       | 3.56    | ppb   |
| Cobalt     | 59-2  | 18.67     | 19.14     | 18.97     | 18.92      | 1.26    | ppb   |
| Copper     | 63-2  | 5.24      | 5.42      | 5.18      | 5.28       | 2.43    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 104        |         | %     |
| Holmium    | 165-2 |           |           |           | 111        |         | %     |
| Indium     | 115-1 |           |           |           | 109        |         | %     |
| Indium     | 115-2 |           |           |           | 106        |         | %     |
| Iron       | 56-2  | 3794.24   | 3917.93   | 3850.12   | 3854.10    | 1.61    | ppb   |
| Iron       | 57-2  | 4429.06   | 4533.27   | 4491.48   | 4484.61    | 1.17    | ppb   |
| Iron       | 54-2  | 3952.19   | 3991.56   | 3967.28   | 3970.34    | 0.50    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 4.99     | 5.26     | 5.29     | 5.18       | 3.16    | ppb   |
| Lead       | 207-1 | 4.92     | 4.95     | 5.03     | 4.96       | 1.18    | ppb   |
| Lead       | 208-1 | 4.96     | 5.08     | 5.04     | 5.03       | 1.18    | ppb   |
| Lithium    | 6-1   |          |          |          | 87         |         | %     |
| Magnesium  | 24-2  | 25818.45 | 26391.13 | 25590.25 | 25933.28   | 1.59    | ppb   |
| Manganese  | 55-2  | 2375.58  | 2400.85  | 2386.21  | 2387.55    | 0.53    | ppb   |
| Molybdenum | 94-1  | 0.73     | 0.74     | 0.74     | 0.74       | 1.18    | ppb   |
| Molybdenum | 95-1  | 0.06     | 0.05     | 0.05     | 0.05       | 14.54   | ppb   |
| Molybdenum | 96-1  | 0.14     | 0.12     | 0.13     | 0.13       | 5.76    | ppb   |
| Molybdenum | 97-1  | 0.07     | 0.05     | 0.02     | 0.05       | 46.24   | ppb   |
| Molybdenum | 98-1  | 0.02     | 0.02     | 0.01     | 0.01       | 21.71   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 11.57    | 11.94    | 12.27    | 11.93      | 2.98    | ppb   |
| Phosphorus | 31-2  | 7.56     | 7.80     | 11.70    | 9.02       | 25.80   | ppb   |
| Potassium  | 39-2  | 6088.08  | 6228.31  | 6104.72  | 6140.37    | 1.25    | ppb   |
| Rhodium    | 103-1 |          |          |          | 107        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 105        |         | %     |
| Selenium   | 82-1  | 0.15     | -0.16    | 0.17     | 0.05       | 355.95  | ppb   |
| Selenium   | 77-2  | 4.55     | 3.70     | 1.82     | 3.36       | 41.69   | ppb   |
| Selenium   | 78-2  | 0.00     | 1.47     | -0.04    | 0.48       | 179.63  | ppb   |
| Silicon    | 28-1  | 1157.65  | 1176.78  | 1131.03  | 1155.15    | 1.99    | ppb   |
| Silver     | 107-1 | 0.03     | 0.03     | 0.03     | 0.03       | 6.51    | ppb   |
| Silver     | 109-1 | 0.02     | 0.02     | 0.02     | 0.02       | 5.35    | ppb   |
| Sodium     | 23-2  | 2754.43  | 2791.26  | 2861.67  | 2802.45    | 1.94    | ppb   |
| Strontium  | 86-1  | 177.04   | 181.44   | 179.00   | 179.16     | 1.23    | ppb   |
| Strontium  | 88-1  | 180.01   | 187.05   | 186.33   | 184.46     | 2.10    | ppb   |
| Sulfur     | 34-1  | 99096.55 | 99304.22 | 98546.84 | 98982.54   | 0.40    | ppb   |
| Terbium    | 159-1 |          |          |          | 104        |         | %     |
| Terbium    | 159-2 |          |          |          | 106        |         | %     |
| Thallium   | 203-1 | 0.08     | 0.06     | 0.07     | 0.07       | 12.99   | ppb   |
| Thallium   | 205-1 | 0.08     | 0.07     | 0.08     | 0.08       | 9.02    | ppb   |
| Tin        | 118-1 | 0.26     | 0.29     | 0.25     | 0.27       | 7.72    | ppb   |
| Titanium   | 47-1  | 1.12     | 1.07     | 1.12     | 1.11       | 2.77    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.04    | 0.04    | 0.04    | 0.04       | 4.97    | ppb   |
| Vanadium  | 51-2  | 3.11    | 3.25    | 3.09    | 3.15       | 2.72    | ppb   |
| Yttrium   | 89-1  |         |         |         | 111        |         | %     |
| Yttrium   | 89-2  |         |         |         | 111        |         | %     |
| Zinc      | 66-2  | 317.93  | 325.34  | 325.00  | 322.76     | 1.30    | ppb   |
| Zirconium | 90-1  | 0.39    | 0.40    | 0.40    | 0.40       | 1.30    | ppb   |
| Zirconium | 91-1  | 0.39    | 0.42    | 0.40    | 0.40       | 3.59    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 19746.98 | 19810.88 | 19866.32 | 19808.06   | 0.30    | ppb   |
| Antimony   | 121-1 | 0.15     | 0.16     | 0.15     | 0.15       | 3.53    | ppb   |
| Arsenic    | 75-2  | 6.25     | 6.28     | 6.09     | 6.21       | 1.62    | ppb   |
| Barium     | 135-1 | 23.71    | 23.67    | 23.76    | 23.71      | 0.19    | ppb   |
| Barium     | 137-1 | 23.55    | 24.40    | 24.10    | 24.02      | 1.79    | ppb   |
| Beryllium  | 9-1   | 2.58     | 2.68     | 2.64     | 2.63       | 1.85    | ppb   |
| Bismuth    | 209-1 |          |          |          | 101        |         | %     |
| Bismuth    | 209-2 |          |          |          | 106        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.34     | 2.85     | 1.90     | 2.37       | 20.13   | ppb   |
| Cadmium    | 106-1 | -1.03    | -0.81    | -1.07    | -0.97      |         | ppb   |
| Cadmium    | 111-1 | 2.15     | 2.08     | 2.12     | 2.12       | 1.83    | ppb   |
| Calcium    | 43-1  | 67321.07 | 69278.57 | 70194.33 | 68931.32   | 2.13    | ppb   |
| Calcium    | 44-1  | 64434.66 | 67538.67 | 68299.17 | 66757.50   | 3.07    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 9.64     | 9.47     | 9.52     | 9.55       | 0.89    | ppb   |
| Cobalt     | 59-2  | 25.21    | 25.12    | 25.08    | 25.14      | 0.26    | ppb   |
| Copper     | 63-2  | 33.64    | 33.64    | 33.75    | 33.68      | 0.19    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 106        |         | %     |
| Holmium    | 165-2 |          |          |          | 112        |         | %     |
| Indium     | 115-1 |          |          |          | 108        |         | %     |
| Indium     | 115-2 |          |          |          | 107        |         | %     |
| Iron       | 56-2  | 10519.60 | 10648.49 | 10661.33 | 10609.81   | 0.74    | ppb   |
| Iron       | 57-2  | 11317.01 | 11364.13 | 11340.26 | 11340.46   | 0.21    | ppb   |
| Iron       | 54-2  | 11067.59 | 10573.33 | 10686.78 | 10775.90   | 2.40    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 36.24    | 36.15    | 36.66    | 36.35      | 0.75    | ppb   |
| Lead       | 207-1 | 34.23    | 34.45    | 34.36    | 34.35      | 0.32    | ppb   |
| Lead       | 208-1 | 34.80    | 34.92    | 35.46    | 35.06      | 1.01    | ppb   |
| Lithium    | 6-1   |          |          |          | 87         |         | %     |
| Magnesium  | 24-2  | 9159.56  | 9141.41  | 8975.75  | 9092.24    | 1.11    | ppb   |
| Manganese  | 55-2  | 2744.75  | 2726.03  | 2724.79  | 2731.86    | 0.41    | ppb   |
| Molybdenum | 94-1  | 1.41     | 1.49     | 1.39     | 1.43       | 3.75    | ppb   |
| Molybdenum | 95-1  | 0.09     | 0.08     | 0.07     | 0.08       | 15.31   | ppb   |
| Molybdenum | 96-1  | 0.27     | 0.29     | 0.27     | 0.27       | 3.73    | ppb   |
| Molybdenum | 97-1  | 0.05     | 0.05     | 0.10     | 0.07       | 47.62   | ppb   |
| Molybdenum | 98-1  | 0.03     | 0.05     | 0.03     | 0.03       | 35.40   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 18.89    | 18.75    | 19.40    | 19.01      | 1.80    | ppb   |
| Phosphorus | 31-2  | 1119.59  | 1124.86  | 1149.82  | 1131.42    | 1.43    | ppb   |
| Potassium  | 39-2  | 7700.50  | 7656.31  | 7641.21  | 7666.01    | 0.40    | ppb   |
| Rhodium    | 103-1 |          |          |          | 109        |         | %     |
| Rhodium    | 103-2 |          |          |          | 108        |         | %     |
| Scandium   | 45-1  |          |          |          | 104        |         | %     |
| Scandium   | 45-2  |          |          |          | 106        |         | %     |
| Selenium   | 82-1  | 0.72     | 1.10     | 0.64     | 0.82       | 29.99   | ppb   |
| Selenium   | 77-2  | 6.26     | 6.63     | 4.94     | 5.94       | 14.94   | ppb   |
| Selenium   | 78-2  | 0.21     | 0.93     | 1.95     | 1.03       | 85.20   | ppb   |
| Silicon    | 28-1  | 1288.65  | 1338.98  | 1325.80  | 1317.81    | 1.98    | ppb   |
| Silver     | 107-1 | 0.03     | 0.02     | 0.03     | 0.03       | 28.87   | ppb   |
| Silver     | 109-1 | 0.02     | 0.03     | 0.03     | 0.03       | 15.79   | ppb   |
| Sodium     | 23-2  | 3330.32  | 3244.41  | 3215.08  | 3263.27    | 1.84    | ppb   |
| Strontium  | 86-1  | 186.43   | 196.95   | 189.15   | 190.84     | 2.86    | ppb   |
| Strontium  | 88-1  | 192.98   | 201.26   | 198.37   | 197.54     | 2.13    | ppb   |
| Sulfur     | 34-1  | 92307.55 | 98546.85 | 97112.82 | 95989.07   | 3.40    | ppb   |
| Terbium    | 159-1 |          |          |          | 107        |         | %     |
| Terbium    | 159-2 |          |          |          | 108        |         | %     |
| Thallium   | 203-1 | 0.14     | 0.14     | 0.14     | 0.14       | 2.24    | ppb   |
| Thallium   | 205-1 | 0.12     | 0.14     | 0.15     | 0.14       | 12.55   | ppb   |
| Tin        | 118-1 | 0.36     | 0.39     | 0.44     | 0.40       | 9.66    | ppb   |
| Titanium   | 47-1  | 5.43     | 5.62     | 5.60     | 5.55       | 1.88    | ppb   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.58    | 0.58    | 0.56    | 0.58       | 1.85    | ppb   |
| Vanadium  | 51-2  | 52.76   | 52.45   | 53.02   | 52.74      | 0.54    | ppb   |
| Yttrium   | 89-1  |         |         |         | 117        |         | %     |
| Yttrium   | 89-2  |         |         |         | 115        |         | %     |
| Zinc      | 66-2  | 370.00  | 367.02  | 370.09  | 369.04     | 0.47    | ppb   |
| Zirconium | 90-1  | 0.78    | 0.82    | 0.78    | 0.80       | 2.75    | ppb   |
| Zirconium | 91-1  | 0.80    | 0.86    | 0.82    | 0.83       | 3.53    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 46979.53  | 45653.26  | 46496.49  | 46376.43   | 1.45    | ppb   |
| Antimony   | 121-1 | 510.83    | 550.96    | 526.21    | 529.33     | 3.83    | ppb   |
| Arsenic    | 75-2  | 503.56    | 500.06    | 496.72    | 500.11     | 0.68    | ppb   |
| Barium     | 135-1 | 2629.15   | 2751.61   | 2650.63   | 2677.13    | 2.44    | ppb   |
| Barium     | 137-1 | 2657.99   | 2694.25   | 2647.99   | 2666.74    | 0.91    | ppb   |
| Beryllium  | 9-1   | 517.65    | 535.00    | 539.99    | 530.88     | 2.21    | ppb   |
| Bismuth    | 209-1 |           |           |           | 101        |         | %     |
| Bismuth    | 209-2 |           |           |           | 102        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 518.01    | 524.07    | 517.33    | 519.80     | 0.71    | ppb   |
| Cadmium    | 106-1 | 507.06    | 530.04    | 511.02    | 516.04     | 2.38    | ppb   |
| Cadmium    | 111-1 | 513.22    | 538.40    | 518.27    | 523.30     | 2.55    | ppb   |
| Calcium    | 43-1  | 250555.73 | 258912.43 | 258481.34 | 255983.17  | 1.84    | ppb   |
| Calcium    | 44-1  | 252816.80 | 256355.83 | 257832.92 | 255668.51  | 1.01    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 516.52    | 521.78    | 506.89    | 515.06     | 1.47    | ppb   |
| Cobalt     | 59-2  | 528.71    | 508.74    | 503.66    | 513.70     | 2.58    | ppb   |
| Copper     | 63-2  | 5153.51   | 5018.81   | 5004.40   | 5058.91    | 1.63    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 108        |         | %     |
| Holmium    | 165-2 |           |           |           | 112        |         | %     |
| Indium     | 115-1 |           |           |           | 106        |         | %     |
| Indium     | 115-2 |           |           |           | 102        |         | %     |
| Iron       | 56-2  | 125139.88 | 124459.49 | 123747.86 | 124449.08  | 0.56    | ppb   |
| Iron       | 57-2  | 124885.63 | 122207.81 | 121688.50 | 122927.31  | 1.40    | ppb   |
| Iron       | 54-2  | 125592.52 | 123819.26 | 122309.95 | 123907.24  | 1.33    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 2623.73   | 2614.95   | 2574.70   | 2604.46    | 1.00    | ppb   |
| Lead       | 207-1 | 2564.26   | 2537.34   | 2535.15   | 2545.58    | 0.64    | ppb   |
| Lead       | 208-1 | 2585.95   | 2564.87   | 2566.12   | 2572.32    | 0.46    | ppb   |
| Lithium    | 6-1   |           |           |           | 92         |         | %     |
| Magnesium  | 24-2  | 240054.11 | 241115.32 | 239295.57 | 240155.00  | 0.38    | ppb   |
| Manganese  | 55-2  | 5197.63   | 5228.30   | 5043.49   | 5156.47    | 1.92    | ppb   |
| Molybdenum | 94-1  | 5082.35   | 5343.60   | 5015.68   | 5147.21    | 3.37    | ppb   |
| Molybdenum | 95-1  | 5044.45   | 5342.25   | 5049.35   | 5145.35    | 3.31    | ppb   |
| Molybdenum | 96-1  | 5055.16   | 5311.96   | 5112.02   | 5159.72    | 2.61    | ppb   |
| Molybdenum | 97-1  | 5071.57   | 5314.08   | 5186.72   | 5190.79    | 2.34    | ppb   |
| Molybdenum | 98-1  | 5116.87   | 5325.22   | 5096.52   | 5179.54    | 2.44    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 511.23    | 501.38    | 497.34    | 503.32     | 1.42    | ppb   |
| Phosphorus | 31-2  | 10034.61  | 10096.66  | 9989.55   | 10040.27   | 0.54    | ppb   |
| Potassium  | 39-2  | 125196.14 | 124190.03 | 122122.75 | 123836.31  | 1.27    | ppb   |
| Rhodium    | 103-1 |           |           |           | 105        |         | %     |
| Rhodium    | 103-2 |           |           |           | 104        |         | %     |
| Scandium   | 45-1  |           |           |           | 106        |         | %     |
| Scandium   | 45-2  |           |           |           | 107        |         | %     |
| Selenium   | 82-1  | 486.44    | 509.08    | 486.73    | 494.08     | 2.63    | ppb   |
| Selenium   | 77-2  | 517.43    | 489.20    | 506.01    | 504.21     | 2.82    | ppb   |
| Selenium   | 78-2  | 491.49    | 492.92    | 489.56    | 491.32     | 0.34    | ppb   |
| Silicon    | 28-1  | 585.35    | 601.90    | 608.49    | 598.58     | 1.99    | ppb   |
| Silver     | 107-1 | 529.35    | 536.48    | 526.92    | 530.92     | 0.94    | ppb   |
| Silver     | 109-1 | 523.36    | 538.31    | 525.32    | 529.00     | 1.54    | ppb   |
| Sodium     | 23-2  | 251722.26 | 244790.15 | 241272.42 | 245928.27  | 2.16    | ppb   |
| Strontium  | 86-1  | 508.34    | 529.28    | 512.21    | 516.61     | 2.16    | ppb   |
| Strontium  | 88-1  | 511.42    | 542.72    | 516.91    | 523.68     | 3.19    | ppb   |
| Sulfur     | 34-1  | 8777.76   | 9174.48   | 8985.27   | 8979.17    | 2.21    | ppb   |
| Terbium    | 159-1 |           |           |           | 106        |         | %     |
| Terbium    | 159-2 |           |           |           | 108        |         | %     |
| Thallium   | 203-1 | 519.10    | 521.21    | 514.78    | 518.36     | 0.63    | ppb   |
| Thallium   | 205-1 | 512.85    | 528.91    | 524.36    | 522.04     | 1.59    | ppb   |
| Tin        | 118-1 | 527.74    | 549.86    | 534.85    | 537.48     | 2.10    | ppb   |
| Titanium   | 47-1  | 5040.18   | 5298.61   | 5106.68   | 5148.49    | 2.61    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 496.92  | 514.54  | 516.63  | 509.37     | 2.13    | ppb   |
| Vanadium  | 51-2  | 516.25  | 520.82  | 508.19  | 515.09     | 1.24    | ppb   |
| Yttrium   | 89-1  |         |         |         | 110        |         | %     |
| Yttrium   | 89-2  |         |         |         | 108        |         | %     |
| Zinc      | 66-2  | 5021.56 | 5040.59 | 4957.59 | 5006.58    | 0.87    | ppb   |
| Zirconium | 90-1  | 508.66  | 529.36  | 513.69  | 517.24     | 2.09    | ppb   |
| Zirconium | 91-1  | 503.73  | 531.89  | 517.23  | 517.62     | 2.72    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 0.71    | -0.43   | -0.67   | -0.13      |         | ppb   |
| Antimony   | 121-1 | 0.09    | 0.08    | 0.07    | 0.08       | 8.70    | ppb   |
| Arsenic    | 75-2  | -0.02   | 0.00    | 0.00    | 0.00       |         | ppb   |
| Barium     | 135-1 | 0.02    | 0.03    | 0.02    | 0.03       | 9.01    | ppb   |
| Barium     | 137-1 | 0.01    | -0.01   | -0.01   | 0.00       |         | ppb   |
| Beryllium  | 9-1   | 0.00    | -0.01   | -0.01   | -0.01      |         | ppb   |
| Bismuth    | 209-1 |         |         |         | 99         |         | %     |
| Bismuth    | 209-2 |         |         |         | 100        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | -0.01   | -0.11   | 0.06    | -0.02      |         | ppb   |
| Cadmium    | 106-1 | -6.26   | -6.09   | -4.47   | -5.60      |         | ppb   |
| Cadmium    | 111-1 | -0.42   | -0.41   | -0.32   | -0.38      |         | ppb   |
| Calcium    | 43-1  | 2.85    | -1.71   | -3.86   | -0.91      |         | ppb   |
| Calcium    | 44-1  | 3.82    | 3.67    | 6.42    | 4.64       | 33.29   | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.01   | 0.06    | -0.01   | 0.01       | 379.65  | ppb   |
| Cobalt     | 59-2  | 0.00    | -0.01   | -0.01   | -0.01      |         | ppb   |
| Copper     | 63-2  | 0.03    | 0.06    | 0.10    | 0.06       | 58.76   | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 102        |         | %     |
| Holmium    | 165-2 |         |         |         | 104        |         | %     |
| Indium     | 115-1 |         |         |         | 103        |         | %     |
| Indium     | 115-2 |         |         |         | 100        |         | %     |
| Iron       | 56-2  | 1.03    | 1.18    | 1.16    | 1.12       | 6.95    | ppb   |
| Iron       | 57-2  | 1.15    | -0.39   | 2.18    | 0.98       | 131.80  | ppb   |
| Iron       | 54-2  | 1.05    | 1.76    | 2.53    | 1.78       | 41.43   | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter  | Mass  | ConRep1  | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|---------|---------|------------|---------|-------|
| Lead       | 206-1 | 0.03     | 0.02    | 0.00    | 0.02       | 97.02   | ppb   |
| Lead       | 207-1 | 0.02     | 0.01    | 0.02    | 0.02       | 27.24   | ppb   |
| Lead       | 208-1 | 0.03     | 0.02    | 0.03    | 0.03       | 13.56   | ppb   |
| Lithium    | 6-1   |          |         |         | 90         |         | %     |
| Magnesium  | 24-2  | 1.01     | 0.96    | 0.51    | 0.83       | 33.22   | ppb   |
| Manganese  | 55-2  | 0.00     | 0.09    | 0.01    | 0.03       | 140.84  | ppb   |
| Molybdenum | 94-1  | 0.07     | 0.11    | 0.06    | 0.08       | 35.01   | ppb   |
| Molybdenum | 95-1  | 0.08     | 0.07    | 0.05    | 0.07       | 22.25   | ppb   |
| Molybdenum | 96-1  | 0.06     | 0.06    | 0.07    | 0.06       | 7.98    | ppb   |
| Molybdenum | 97-1  | 0.08     | 0.08    | 0.05    | 0.07       | 27.84   | ppb   |
| Molybdenum | 98-1  | 0.06     | 0.08    | 0.05    | 0.06       | 23.70   | ppb   |
| Neodymium  | 150-1 |          |         |         |            |         | cps   |
| Neodymium  | 150-2 |          |         |         |            |         | cps   |
| Nickel     | 60-2  | -0.05    | -0.05   | 0.03    | -0.02      |         | ppb   |
| Phosphorus | 31-2  | -22.29   | -31.47  | -36.57  | -30.11     |         | ppb   |
| Potassium  | 39-2  | 12.81    | 20.57   | 14.16   | 15.85      | 26.18   | ppb   |
| Rhodium    | 103-1 |          |         |         | 104        |         | %     |
| Rhodium    | 103-2 |          |         |         | 102        |         | %     |
| Scandium   | 45-1  |          |         |         | 100        |         | %     |
| Scandium   | 45-2  |          |         |         | 99         |         | %     |
| Selenium   | 82-1  | 0.10     | -0.74   | -0.12   | -0.25      |         | ppb   |
| Selenium   | 77-2  | -0.09    | -0.09   | 0.17    | 0.00       |         | ppb   |
| Selenium   | 78-2  | -0.18    | -0.42   | -0.77   | -0.46      |         | ppb   |
| Silicon    | 28-1  | -3.15    | -0.70   | -1.03   | -1.63      |         | ppb   |
| Silver     | 107-1 | 0.03     | 0.03    | 0.02    | 0.03       | 17.37   | ppb   |
| Silver     | 109-1 | 0.03     | 0.02    | 0.03    | 0.03       | 21.51   | ppb   |
| Sodium     | 23-2  | 33.56    | 36.66   | 33.73   | 34.65      | 5.03    | ppb   |
| Strontium  | 86-1  | 0.04     | 0.05    | 0.01    | 0.04       | 67.69   | ppb   |
| Strontium  | 88-1  | 0.00     | 0.00    | 0.00    | 0.00       | 42.66   | ppb   |
| Sulfur     | 34-1  | -1082.45 | -962.08 | -716.15 | -920.23    |         | ppb   |
| Terbium    | 159-1 |          |         |         | 101        |         | %     |
| Terbium    | 159-2 |          |         |         | 101        |         | %     |
| Thallium   | 203-1 | 0.01     | 0.02    | 0.02    | 0.02       | 27.04   | ppb   |
| Thallium   | 205-1 | 0.02     | 0.00    | 0.01    | 0.01       | 70.88   | ppb   |
| Tin        | 118-1 | 0.04     | 0.02    | 0.03    | 0.03       | 37.23   | ppb   |
| Titanium   | 47-1  | 0.06     | 0.08    | 0.06    | 0.07       | 22.24   | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.01    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Vanadium  | 51-2  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Yttrium   | 89-1  |         |         |         | 103        |         | %     |
| Yttrium   | 89-2  |         |         |         | 102        |         | %     |
| Zinc      | 66-2  | 0.15    | 0.13    | 0.12    | 0.13       | 11.84   | ppb   |
| Zirconium | 90-1  | 0.01    | 0.01    | 0.00    | 0.01       | 43.57   | ppb   |
| Zirconium | 91-1  | 0.01    | 0.01    | 0.00    | 0.01       | 139.90  | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 19413.80 | 19259.47 | 19645.94 | 19439.74   | 1.00    | ppb   |
| Antimony   | 121-1 | 0.16     | 0.19     | 0.19     | 0.18       | 9.40    | ppb   |
| Arsenic    | 75-2  | 5.40     | 5.38     | 5.40     | 5.39       | 0.19    | ppb   |
| Barium     | 135-1 | 24.50    | 24.68    | 24.65    | 24.61      | 0.38    | ppb   |
| Barium     | 137-1 | 24.31    | 24.47    | 24.42    | 24.40      | 0.33    | ppb   |
| Beryllium  | 9-1   | 2.51     | 2.75     | 2.44     | 2.57       | 6.32    | ppb   |
| Bismuth    | 209-1 |          |          |          | 102        |         | %     |
| Bismuth    | 209-2 |          |          |          | 106        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.61     | 2.41     | 2.78     | 2.60       | 7.05    | ppb   |
| Cadmium    | 106-1 | 1.00     | -1.42    | -0.56    | -0.33      |         | ppb   |
| Cadmium    | 111-1 | 2.33     | 2.22     | 2.23     | 2.26       | 2.63    | ppb   |
| Calcium    | 43-1  | 67358.79 | 68516.56 | 69388.61 | 68421.32   | 1.49    | ppb   |
| Calcium    | 44-1  | 64895.19 | 66787.76 | 68223.17 | 66635.37   | 2.50    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 9.31     | 9.27     | 9.28     | 9.29       | 0.25    | ppb   |
| Cobalt     | 59-2  | 27.13    | 26.74    | 26.81    | 26.89      | 0.77    | ppb   |
| Copper     | 63-2  | 29.09    | 28.26    | 28.76    | 28.70      | 1.45    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 107        |         | %     |
| Holmium    | 165-2 |          |          |          | 111        |         | %     |
| Indium     | 115-1 |          |          |          | 107        |         | %     |
| Indium     | 115-2 |          |          |          | 106        |         | %     |
| Iron       | 56-2  | 9403.84  | 9311.25  | 9494.90  | 9403.33    | 0.98    | ppb   |
| Iron       | 57-2  | 10118.69 | 9847.51  | 10034.14 | 10000.11   | 1.39    | ppb   |
| Iron       | 54-2  | 9601.00  | 9765.91  | 9890.10  | 9752.34    | 1.49    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 36.53    | 38.37    | 36.52    | 37.14      | 2.87    | ppb   |
| Lead       | 207-1 | 34.59    | 35.93    | 34.52    | 35.02      | 2.27    | ppb   |
| Lead       | 208-1 | 35.43    | 36.60    | 35.19    | 35.74      | 2.12    | ppb   |
| Lithium    | 6-1   |          |          |          | 92         |         | %     |
| Magnesium  | 24-2  | 12634.13 | 12771.65 | 12747.97 | 12717.91   | 0.58    | ppb   |
| Manganese  | 55-2  | 2831.76  | 2826.09  | 2816.78  | 2824.88    | 0.27    | ppb   |
| Molybdenum | 94-1  | 1.57     | 1.54     | 1.51     | 1.54       | 1.88    | ppb   |
| Molybdenum | 95-1  | 0.09     | 0.10     | 0.11     | 0.10       | 7.28    | ppb   |
| Molybdenum | 96-1  | 0.29     | 0.25     | 0.29     | 0.28       | 9.02    | ppb   |
| Molybdenum | 97-1  | 0.08     | 0.07     | 0.08     | 0.08       | 4.55    | ppb   |
| Molybdenum | 98-1  | 0.06     | 0.07     | 0.05     | 0.06       | 15.40   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.52    | 19.69    | 20.09    | 20.10      | 2.08    | ppb   |
| Phosphorus | 31-2  | 977.59   | 892.02   | 920.51   | 930.04     | 4.69    | ppb   |
| Potassium  | 39-2  | 8320.17  | 8164.55  | 8025.56  | 8170.09    | 1.80    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 104        |         | %     |
| Selenium   | 82-1  | -0.23    | 0.23     | 0.08     | 0.03       | 832.98  | ppb   |
| Selenium   | 77-2  | 5.51     | 4.95     | 5.57     | 5.34       | 6.33    | ppb   |
| Selenium   | 78-2  | 1.61     | 0.27     | 3.11     | 1.66       | 85.33   | ppb   |
| Silicon    | 28-1  | 1368.55  | 1379.08  | 1408.92  | 1385.51    | 1.51    | ppb   |
| Silver     | 107-1 | 0.05     | 0.04     | 0.03     | 0.04       | 20.78   | ppb   |
| Silver     | 109-1 | 0.05     | 0.03     | 0.03     | 0.04       | 32.74   | ppb   |
| Sodium     | 23-2  | 3309.06  | 3227.38  | 3273.74  | 3270.06    | 1.25    | ppb   |
| Strontium  | 86-1  | 176.30   | 178.81   | 176.91   | 177.34     | 0.74    | ppb   |
| Strontium  | 88-1  | 182.39   | 184.64   | 179.64   | 182.22     | 1.37    | ppb   |
| Sulfur     | 34-1  | 95368.01 | 97469.95 | 95971.37 | 96269.78   | 1.12    | ppb   |
| Terbium    | 159-1 |          |          |          | 105        |         | %     |
| Terbium    | 159-2 |          |          |          | 106        |         | %     |
| Thallium   | 203-1 | 0.10     | 0.11     | 0.08     | 0.10       | 14.41   | ppb   |
| Thallium   | 205-1 | 0.11     | 0.13     | 0.11     | 0.11       | 10.00   | ppb   |
| Tin        | 118-1 | 0.19     | 0.22     | 0.24     | 0.21       | 12.63   | ppb   |
| Titanium   | 47-1  | 4.14     | 3.88     | 4.16     | 4.06       | 3.89    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.41    | 0.41    | 0.41    | 0.41       | 0.90    | ppb   |
| Vanadium  | 51-2  | 42.96   | 42.16   | 42.75   | 42.62      | 0.98    | ppb   |
| Yttrium   | 89-1  |         |         |         | 114        |         | %     |
| Yttrium   | 89-2  |         |         |         | 112        |         | %     |
| Zinc      | 66-2  | 402.39  | 403.39  | 401.90  | 402.56     | 0.19    | ppb   |
| Zirconium | 90-1  | 0.81    | 0.80    | 0.79    | 0.80       | 1.38    | ppb   |
| Zirconium | 91-1  | 0.90    | 0.80    | 0.85    | 0.85       | 5.59    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 22214.07 | 22475.41 | 22445.12 | 22378.20   | 0.64    | ppb   |
| Antimony   | 121-1 | 0.16     | 0.18     | 0.20     | 0.18       | 11.49   | ppb   |
| Arsenic    | 75-2  | 6.25     | 5.95     | 6.01     | 6.07       | 2.66    | ppb   |
| Barium     | 135-1 | 22.92    | 23.23    | 22.99    | 23.05      | 0.70    | ppb   |
| Barium     | 137-1 | 23.06    | 22.80    | 22.93    | 22.93      | 0.59    | ppb   |
| Beryllium  | 9-1   | 2.97     | 2.97     | 2.75     | 2.90       | 4.35    | ppb   |
| Bismuth    | 209-1 |          |          |          | 103        |         | %     |
| Bismuth    | 209-2 |          |          |          | 105        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.40     | 2.96     | 2.94     | 2.77       | 11.38   | ppb   |
| Cadmium    | 106-1 | 0.02     | -0.24    | -1.06    | -0.43      |         | ppb   |
| Cadmium    | 111-1 | 2.35     | 2.32     | 2.25     | 2.31       | 2.13    | ppb   |
| Calcium    | 43-1  | 54051.71 | 54230.56 | 53197.51 | 53826.59   | 1.03    | ppb   |
| Calcium    | 44-1  | 52231.92 | 52491.02 | 51252.38 | 51991.77   | 1.26    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 11.18    | 11.39    | 11.53    | 11.37      | 1.55    | ppb   |
| Cobalt     | 59-2  | 28.20    | 28.40    | 28.79    | 28.47      | 1.06    | ppb   |
| Copper     | 63-2  | 40.26    | 41.03    | 41.00    | 40.77      | 1.07    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 109        |         | %     |
| Holmium    | 165-2 |          |          |          | 111        |         | %     |
| Indium     | 115-1 |          |          |          | 107        |         | %     |
| Indium     | 115-2 |          |          |          | 104        |         | %     |
| Iron       | 56-2  | 11649.80 | 12209.93 | 12032.67 | 11964.13   | 2.39    | ppb   |
| Iron       | 57-2  | 12435.54 | 12710.10 | 12644.89 | 12596.85   | 1.14    | ppb   |
| Iron       | 54-2  | 12034.99 | 12092.81 | 11929.01 | 12018.94   | 0.69    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 54.98    | 54.08    | 55.00    | 54.69      | 0.96    | ppb   |
| Lead       | 207-1 | 51.45    | 51.27    | 52.32    | 51.68      | 1.09    | ppb   |
| Lead       | 208-1 | 52.70    | 52.21    | 52.80    | 52.57      | 0.60    | ppb   |
| Lithium    | 6-1   |          |          |          | 89         |         | %     |
| Magnesium  | 24-2  | 9015.79  | 9144.76  | 9113.91  | 9091.49    | 0.74    | ppb   |
| Manganese  | 55-2  | 2760.66  | 2821.80  | 2779.45  | 2787.30    | 1.12    | ppb   |
| Molybdenum | 94-1  | 1.61     | 1.54     | 1.56     | 1.57       | 2.24    | ppb   |
| Molybdenum | 95-1  | 0.10     | 0.11     | 0.10     | 0.10       | 1.95    | ppb   |
| Molybdenum | 96-1  | 0.29     | 0.31     | 0.32     | 0.31       | 4.27    | ppb   |
| Molybdenum | 97-1  | 0.07     | 0.06     | 0.06     | 0.07       | 6.76    | ppb   |
| Molybdenum | 98-1  | 0.06     | 0.03     | 0.04     | 0.04       | 33.38   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.70    | 21.68    | 21.95    | 21.44      | 3.07    | ppb   |
| Phosphorus | 31-2  | 1137.10  | 1119.11  | 1117.33  | 1124.51    | 0.97    | ppb   |
| Potassium  | 39-2  | 7747.23  | 7665.48  | 7805.03  | 7739.25    | 0.91    | ppb   |
| Rhodium    | 103-1 |          |          |          | 107        |         | %     |
| Rhodium    | 103-2 |          |          |          | 108        |         | %     |
| Scandium   | 45-1  |          |          |          | 104        |         | %     |
| Scandium   | 45-2  |          |          |          | 104        |         | %     |
| Selenium   | 82-1  | -0.08    | 0.98     | 0.15     | 0.35       | 158.60  | ppb   |
| Selenium   | 77-2  | 6.18     | 7.85     | 11.79    | 8.61       | 33.46   | ppb   |
| Selenium   | 78-2  | 2.96     | 1.79     | 1.41     | 2.05       | 39.34   | ppb   |
| Silicon    | 28-1  | 1494.30  | 1499.53  | 1478.75  | 1490.86    | 0.73    | ppb   |
| Silver     | 107-1 | 0.02     | 0.03     | 0.03     | 0.03       | 20.01   | ppb   |
| Silver     | 109-1 | 0.02     | 0.03     | 0.03     | 0.03       | 14.39   | ppb   |
| Sodium     | 23-2  | 3294.44  | 3332.66  | 3361.82  | 3329.64    | 1.01    | ppb   |
| Strontium  | 86-1  | 158.25   | 154.70   | 154.64   | 155.86     | 1.33    | ppb   |
| Strontium  | 88-1  | 161.61   | 159.71   | 157.90   | 159.74     | 1.16    | ppb   |
| Sulfur     | 34-1  | 96144.68 | 93405.95 | 91262.53 | 93604.39   | 2.61    | ppb   |
| Terbium    | 159-1 |          |          |          | 105        |         | %     |
| Terbium    | 159-2 |          |          |          | 106        |         | %     |
| Thallium   | 203-1 | 0.11     | 0.12     | 0.12     | 0.12       | 5.13    | ppb   |
| Thallium   | 205-1 | 0.12     | 0.13     | 0.12     | 0.12       | 1.72    | ppb   |
| Tin        | 118-1 | 0.25     | 0.22     | 0.24     | 0.24       | 7.25    | ppb   |
| Titanium   | 47-1  | 6.70     | 6.71     | 6.41     | 6.61       | 2.58    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.67    | 0.64    | 0.67    | 0.66       | 2.55    | ppb   |
| Vanadium  | 51-2  | 57.15   | 57.51   | 57.94   | 57.53      | 0.69    | ppb   |
| Yttrium   | 89-1  |         |         |         | 117        |         | %     |
| Yttrium   | 89-2  |         |         |         | 115        |         | %     |
| Zinc      | 66-2  | 406.66  | 415.99  | 413.50  | 412.05     | 1.17    | ppb   |
| Zirconium | 90-1  | 0.85    | 0.85    | 0.88    | 0.86       | 1.86    | ppb   |
| Zirconium | 91-1  | 0.86    | 0.82    | 0.82    | 0.83       | 2.92    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 22040.68 | 21797.80 | 21863.32 | 21900.60   | 0.57    | ppb   |
| Antimony   | 121-1 | 0.16     | 0.15     | 0.16     | 0.15       | 3.61    | ppb   |
| Arsenic    | 75-2  | 6.40     | 6.68     | 6.03     | 6.37       | 5.06    | ppb   |
| Barium     | 135-1 | 26.57    | 26.06    | 26.42    | 26.35      | 1.01    | ppb   |
| Barium     | 137-1 | 26.34    | 26.52    | 26.25    | 26.37      | 0.54    | ppb   |
| Beryllium  | 9-1   | 2.29     | 2.58     | 2.47     | 2.44       | 6.07    | ppb   |
| Bismuth    | 209-1 |          |          |          | 101        |         | %     |
| Bismuth    | 209-2 |          |          |          | 104        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.02     | 2.51     | 2.00     | 2.18       | 13.21   | ppb   |
| Cadmium    | 106-1 | -0.82    | -0.69    | 0.61     | -0.30      |         | ppb   |
| Cadmium    | 111-1 | 1.93     | 1.90     | 2.00     | 1.94       | 2.53    | ppb   |
| Calcium    | 43-1  | 42827.60 | 43314.01 | 42878.29 | 43006.63   | 0.62    | ppb   |
| Calcium    | 44-1  | 41081.38 | 42226.12 | 41895.48 | 41734.33   | 1.41    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 12.73    | 13.12    | 12.82    | 12.89      | 1.57    | ppb   |
| Cobalt     | 59-2  | 25.31    | 24.65    | 24.55    | 24.84      | 1.66    | ppb   |
| Copper     | 63-2  | 50.44    | 49.23    | 49.35    | 49.67      | 1.35    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 107        |         | %     |
| Holmium    | 165-2 |          |          |          | 111        |         | %     |
| Indium     | 115-1 |          |          |          | 107        |         | %     |
| Indium     | 115-2 |          |          |          | 105        |         | %     |
| Iron       | 56-2  | 12592.86 | 12656.86 | 12538.99 | 12596.24   | 0.47    | ppb   |
| Iron       | 57-2  | 13160.20 | 13125.53 | 13023.57 | 13103.10   | 0.54    | ppb   |
| Iron       | 54-2  | 12546.80 | 12240.41 | 12528.92 | 12438.71   | 1.38    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 58.12    | 57.83    | 58.16    | 58.04      | 0.31    | ppb   |
| Lead       | 207-1 | 55.49    | 55.24    | 54.25    | 54.99      | 1.19    | ppb   |
| Lead       | 208-1 | 55.97    | 55.99    | 55.80    | 55.92      | 0.19    | ppb   |
| Lithium    | 6-1   |          |          |          | 88         |         | %     |
| Magnesium  | 24-2  | 8366.78  | 8197.45  | 8288.10  | 8284.11    | 1.02    | ppb   |
| Manganese  | 55-2  | 2249.27  | 2224.37  | 2212.53  | 2228.73    | 0.84    | ppb   |
| Molybdenum | 94-1  | 1.68     | 1.81     | 1.67     | 1.72       | 4.38    | ppb   |
| Molybdenum | 95-1  | 0.10     | 0.08     | 0.10     | 0.10       | 11.54   | ppb   |
| Molybdenum | 96-1  | 0.31     | 0.28     | 0.33     | 0.31       | 7.14    | ppb   |
| Molybdenum | 97-1  | 0.14     | 0.07     | 0.07     | 0.09       | 44.00   | ppb   |
| Molybdenum | 98-1  | 0.06     | 0.07     | 0.05     | 0.06       | 16.60   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.34    | 19.61    | 20.10    | 20.02      | 1.85    | ppb   |
| Phosphorus | 31-2  | 1404.08  | 1277.33  | 1325.69  | 1335.70    | 4.79    | ppb   |
| Potassium  | 39-2  | 7014.87  | 7022.07  | 6902.96  | 6979.96    | 0.96    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 108        |         | %     |
| Scandium   | 45-1  |          |          |          | 104        |         | %     |
| Scandium   | 45-2  |          |          |          | 103        |         | %     |
| Selenium   | 82-1  | -0.07    | 0.50     | 0.04     | 0.16       | 197.43  | ppb   |
| Selenium   | 77-2  | 11.94    | 5.57     | 7.66     | 8.39       | 38.69   | ppb   |
| Selenium   | 78-2  | 3.09     | 1.21     | 1.09     | 1.80       | 62.31   | ppb   |
| Silicon    | 28-1  | 1475.62  | 1474.12  | 1469.41  | 1473.05    | 0.22    | ppb   |
| Silver     | 107-1 | 0.02     | 0.02     | 0.03     | 0.02       | 2.81    | ppb   |
| Silver     | 109-1 | 0.02     | 0.03     | 0.02     | 0.02       | 16.48   | ppb   |
| Sodium     | 23-2  | 2681.27  | 2606.83  | 2631.10  | 2639.73    | 1.44    | ppb   |
| Strontium  | 86-1  | 118.71   | 123.00   | 121.45   | 121.05     | 1.79    | ppb   |
| Strontium  | 88-1  | 121.69   | 125.96   | 123.96   | 123.87     | 1.73    | ppb   |
| Sulfur     | 34-1  | 90636.00 | 92427.38 | 93021.48 | 92028.28   | 1.35    | ppb   |
| Terbium    | 159-1 |          |          |          | 103        |         | %     |
| Terbium    | 159-2 |          |          |          | 107        |         | %     |
| Thallium   | 203-1 | 0.12     | 0.14     | 0.12     | 0.13       | 8.12    | ppb   |
| Thallium   | 205-1 | 0.12     | 0.13     | 0.14     | 0.13       | 8.39    | ppb   |
| Tin        | 118-1 | 0.14     | 0.12     | 0.17     | 0.14       | 16.25   | ppb   |
| Titanium   | 47-1  | 11.49    | 11.10    | 11.74    | 11.45      | 2.81    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.95    | 0.93    | 0.92    | 0.93       | 1.91    | ppb   |
| Vanadium  | 51-2  | 60.97   | 60.16   | 60.06   | 60.40      | 0.83    | ppb   |
| Yttrium   | 89-1  |         |         |         | 117        |         | %     |
| Yttrium   | 89-2  |         |         |         | 115        |         | %     |
| Zinc      | 66-2  | 359.80  | 348.84  | 343.64  | 350.76     | 2.35    | ppb   |
| Zirconium | 90-1  | 0.88    | 0.92    | 0.92    | 0.91       | 2.45    | ppb   |
| Zirconium | 91-1  | 0.95    | 0.88    | 0.89    | 0.91       | 4.13    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 21530.12 | 22461.01 | 22153.72 | 22048.28   | 2.15    | ppb   |
| Antimony   | 121-1 | 0.16     | 0.16     | 0.16     | 0.16       | 1.29    | ppb   |
| Arsenic    | 75-2  | 6.35     | 6.44     | 6.72     | 6.50       | 2.91    | ppb   |
| Barium     | 135-1 | 25.65    | 26.12    | 25.79    | 25.86      | 0.93    | ppb   |
| Barium     | 137-1 | 25.98    | 25.95    | 25.75    | 25.89      | 0.49    | ppb   |
| Beryllium  | 9-1   | 2.39     | 2.71     | 2.65     | 2.58       | 6.73    | ppb   |
| Bismuth    | 209-1 |          |          |          | 99         |         | %     |
| Bismuth    | 209-2 |          |          |          | 104        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 2.24     | 1.95     | 2.08     | 2.09       | 7.05    | ppb   |
| Cadmium    | 106-1 | 0.07     | -1.54    | -1.73    | -1.07      |         | ppb   |
| Cadmium    | 111-1 | 2.01     | 1.82     | 1.80     | 1.88       | 6.26    | ppb   |
| Calcium    | 43-1  | 42985.18 | 43785.29 | 44492.19 | 43754.22   | 1.72    | ppb   |
| Calcium    | 44-1  | 41417.34 | 42461.93 | 42966.50 | 42281.92   | 1.87    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 13.03    | 13.32    | 12.79    | 13.05      | 2.03    | ppb   |
| Cobalt     | 59-2  | 25.34    | 25.78    | 25.01    | 25.38      | 1.54    | ppb   |
| Copper     | 63-2  | 49.93    | 50.91    | 50.49    | 50.44      | 0.98    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 105        |         | %     |
| Holmium    | 165-2 |          |          |          | 110        |         | %     |
| Indium     | 115-1 |          |          |          | 106        |         | %     |
| Indium     | 115-2 |          |          |          | 105        |         | %     |
| Iron       | 56-2  | 12553.76 | 12588.88 | 12732.91 | 12625.19   | 0.75    | ppb   |
| Iron       | 57-2  | 13186.58 | 13266.14 | 13283.78 | 13245.50   | 0.39    | ppb   |
| Iron       | 54-2  | 12708.14 | 12618.18 | 12749.33 | 12691.89   | 0.53    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 59.73    | 58.44    | 61.42    | 59.87      | 2.49    | ppb   |
| Lead       | 207-1 | 56.28    | 54.65    | 57.97    | 56.30      | 2.95    | ppb   |
| Lead       | 208-1 | 57.31    | 56.22    | 59.28    | 57.60      | 2.69    | ppb   |
| Lithium    | 6-1   |          |          |          | 88         |         | %     |
| Magnesium  | 24-2  | 8578.56  | 8362.59  | 8606.63  | 8515.92    | 1.57    | ppb   |
| Manganese  | 55-2  | 2288.82  | 2235.90  | 2255.84  | 2260.19    | 1.18    | ppb   |
| Molybdenum | 94-1  | 1.60     | 1.84     | 1.71     | 1.72       | 6.99    | ppb   |
| Molybdenum | 95-1  | 0.11     | 0.10     | 0.09     | 0.10       | 7.92    | ppb   |
| Molybdenum | 96-1  | 0.31     | 0.34     | 0.31     | 0.32       | 4.06    | ppb   |
| Molybdenum | 97-1  | 0.06     | 0.07     | 0.06     | 0.07       | 11.36   | ppb   |
| Molybdenum | 98-1  | 0.05     | 0.09     | 0.04     | 0.06       | 40.17   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 20.41    | 20.51    | 20.61    | 20.51      | 0.48    | ppb   |
| Phosphorus | 31-2  | 1389.98  | 1411.81  | 1413.91  | 1405.23    | 0.94    | ppb   |
| Potassium  | 39-2  | 7113.75  | 7107.34  | 7010.55  | 7077.22    | 0.82    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 102        |         | %     |
| Selenium   | 82-1  | 0.80     | -0.44    | 0.13     | 0.16       | 383.16  | ppb   |
| Selenium   | 77-2  | 8.74     | 7.50     | 9.97     | 8.74       | 14.14   | ppb   |
| Selenium   | 78-2  | 1.15     | -0.45    | 1.76     | 0.82       | 139.17  | ppb   |
| Silicon    | 28-1  | 1478.95  | 1466.90  | 1475.70  | 1473.85    | 0.42    | ppb   |
| Silver     | 107-1 | 0.02     | 0.03     | 0.04     | 0.03       | 17.95   | ppb   |
| Silver     | 109-1 | 0.02     | 0.02     | 0.03     | 0.02       | 16.27   | ppb   |
| Sodium     | 23-2  | 2676.86  | 2594.13  | 2688.49  | 2653.16    | 1.94    | ppb   |
| Strontium  | 86-1  | 121.83   | 124.18   | 124.35   | 123.45     | 1.14    | ppb   |
| Strontium  | 88-1  | 124.29   | 127.76   | 126.94   | 126.33     | 1.43    | ppb   |
| Sulfur     | 34-1  | 94701.08 | 94166.01 | 97603.20 | 95490.10   | 1.94    | ppb   |
| Terbium    | 159-1 |          |          |          | 105        |         | %     |
| Terbium    | 159-2 |          |          |          | 107        |         | %     |
| Thallium   | 203-1 | 0.13     | 0.12     | 0.15     | 0.14       | 11.49   | ppb   |
| Thallium   | 205-1 | 0.13     | 0.12     | 0.13     | 0.13       | 2.45    | ppb   |
| Tin        | 118-1 | 0.17     | 0.16     | 0.15     | 0.16       | 6.86    | ppb   |
| Titanium   | 47-1  | 11.21    | 11.45    | 12.01    | 11.55      | 3.53    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.97    | 0.94    | 0.99    | 0.97       | 2.84    | ppb   |
| Vanadium  | 51-2  | 61.36   | 61.96   | 61.16   | 61.49      | 0.68    | ppb   |
| Yttrium   | 89-1  |         |         |         | 116        |         | %     |
| Yttrium   | 89-2  |         |         |         | 114        |         | %     |
| Zinc      | 66-2  | 357.77  | 361.41  | 351.38  | 356.85     | 1.42    | ppb   |
| Zirconium | 90-1  | 0.99    | 0.98    | 0.98    | 0.98       | 0.68    | ppb   |
| Zirconium | 91-1  | 0.90    | 0.97    | 0.95    | 0.94       | 4.02    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 4406.71 | 4371.53 | 4467.86 | 4415.37    | 1.10    | ppb   |
| Antimony   | 121-1 | 0.05    | 0.05    | 0.06    | 0.05       | 3.99    | ppb   |
| Arsenic    | 75-2  | 1.49    | 1.42    | 1.34    | 1.42       | 5.46    | ppb   |
| Barium     | 135-1 | 4.91    | 5.73    | 5.30    | 5.31       | 7.70    | ppb   |
| Barium     | 137-1 | 5.23    | 5.15    | 5.18    | 5.19       | 0.74    | ppb   |
| Beryllium  | 9-1   | 0.57    | 0.49    | 0.51    | 0.52       | 8.02    | ppb   |
| Bismuth    | 209-1 |         |         |         | 100        |         | %     |
| Bismuth    | 209-2 |         |         |         | 103        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | 0.44    | 0.42    | 0.44    | 0.43       | 2.32    | ppb   |
| Cadmium    | 106-1 | -5.49   | -2.69   | -5.31   | -4.50      |         | ppb   |
| Cadmium    | 111-1 | -0.06   | 0.25    | 0.02    | 0.07       | 228.68  | ppb   |
| Calcium    | 43-1  | 8867.64 | 8483.15 | 8644.55 | 8665.12    | 2.23    | ppb   |
| Calcium    | 44-1  | 8510.96 | 8400.61 | 8620.66 | 8510.74    | 1.29    | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | 2.51    | 2.44    | 2.63    | 2.53       | 3.83    | ppb   |
| Cobalt     | 59-2  | 5.03    | 4.95    | 5.03    | 5.00       | 0.85    | ppb   |
| Copper     | 63-2  | 10.32   | 10.31   | 10.15   | 10.26      | 0.88    | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 104        |         | %     |
| Holmium    | 165-2 |         |         |         | 109        |         | %     |
| Indium     | 115-1 |         |         |         | 107        |         | %     |
| Indium     | 115-2 |         |         |         | 104        |         | %     |
| Iron       | 56-2  | 2597.23 | 2487.24 | 2553.06 | 2545.84    | 2.17    | ppb   |
| Iron       | 57-2  | 2676.33 | 2625.43 | 2690.24 | 2664.00    | 1.28    | ppb   |
| Iron       | 54-2  | 2637.97 | 2621.69 | 2632.91 | 2630.86    | 0.32    | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 11.64    | 11.94    | 11.71    | 11.76      | 1.32    | ppb   |
| Lead       | 207-1 | 11.33    | 10.77    | 10.43    | 10.85      | 4.16    | ppb   |
| Lead       | 208-1 | 11.36    | 11.06    | 10.91    | 11.11      | 2.03    | ppb   |
| Lithium    | 6-1   |          |          |          | 87         |         | %     |
| Magnesium  | 24-2  | 1672.84  | 1623.11  | 1697.06  | 1664.34    | 2.27    | ppb   |
| Manganese  | 55-2  | 458.41   | 449.48   | 455.08   | 454.32     | 0.99    | ppb   |
| Molybdenum | 94-1  | 0.37     | 0.35     | 0.35     | 0.36       | 3.22    | ppb   |
| Molybdenum | 95-1  | 0.02     | 0.02     | 0.00     | 0.01       | 63.52   | ppb   |
| Molybdenum | 96-1  | 0.09     | 0.06     | 0.04     | 0.06       | 44.31   | ppb   |
| Molybdenum | 97-1  | 0.03     | 0.03     | 0.05     | 0.04       | 27.14   | ppb   |
| Molybdenum | 98-1  | 0.01     | 0.01     | 0.00     | 0.01       | 54.72   | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 4.22     | 4.20     | 4.09     | 4.17       | 1.71    | ppb   |
| Phosphorus | 31-2  | 256.34   | 230.10   | 226.61   | 237.68     | 6.84    | ppb   |
| Potassium  | 39-2  | 1489.34  | 1463.08  | 1499.54  | 1483.98    | 1.27    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 106        |         | %     |
| Scandium   | 45-1  |          |          |          | 104        |         | %     |
| Scandium   | 45-2  |          |          |          | 102        |         | %     |
| Selenium   | 82-1  | 0.11     | -0.64    | 0.26     | -0.09      |         | ppb   |
| Selenium   | 77-2  | 1.64     | 2.55     | 1.86     | 2.02       | 23.67   | ppb   |
| Selenium   | 78-2  | -0.78    | -0.94    | 1.08     | -0.21      |         | ppb   |
| Silicon    | 28-1  | 304.67   | 294.33   | 300.69   | 299.89     | 1.74    | ppb   |
| Silver     | 107-1 | 0.01     | 0.01     | 0.01     | 0.01       | 3.24    | ppb   |
| Silver     | 109-1 | 0.01     | 0.02     | 0.02     | 0.02       | 17.81   | ppb   |
| Sodium     | 23-2  | 542.31   | 533.69   | 549.56   | 541.85     | 1.47    | ppb   |
| Strontium  | 86-1  | 26.36    | 25.97    | 25.83    | 26.05      | 1.06    | ppb   |
| Strontium  | 88-1  | 26.47    | 25.62    | 26.24    | 26.11      | 1.67    | ppb   |
| Sulfur     | 34-1  | 16929.84 | 15294.77 | 15584.28 | 15936.30   | 5.48    | ppb   |
| Terbium    | 159-1 |          |          |          | 103        |         | %     |
| Terbium    | 159-2 |          |          |          | 105        |         | %     |
| Thallium   | 203-1 | 0.02     | -0.01    | 0.00     | 0.00       | 417.14  | ppb   |
| Thallium   | 205-1 | 0.02     | 0.01     | 0.00     | 0.01       | 82.03   | ppb   |
| Tin        | 118-1 | 0.03     | 0.07     | 0.03     | 0.05       | 46.72   | ppb   |
| Titanium   | 47-1  | 2.33     | 2.36     | 2.26     | 2.31       | 2.29    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.19    | 0.18    | 0.17    | 0.18       | 5.54    | ppb   |
| Vanadium  | 51-2  | 12.67   | 12.47   | 12.23   | 12.46      | 1.76    | ppb   |
| Yttrium   | 89-1  |         |         |         | 109        |         | %     |
| Yttrium   | 89-2  |         |         |         | 107        |         | %     |
| Zinc      | 66-2  | 74.51   | 70.76   | 71.72   | 72.33      | 2.69    | ppb   |
| Zirconium | 90-1  | 0.20    | 0.21    | 0.19    | 0.20       | 3.99    | ppb   |
| Zirconium | 91-1  | 0.21    | 0.18    | 0.19    | 0.19       | 8.45    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 21536.88 | 21015.98 | 20845.48 | 21132.78   | 1.70    | ppb   |
| Antimony   | 121-1 | 91.34    | 99.17    | 93.94    | 94.82      | 4.21    | ppb   |
| Arsenic    | 75-2  | 140.61   | 138.42   | 137.02   | 138.69     | 1.30    | ppb   |
| Barium     | 135-1 | 438.39   | 479.71   | 434.15   | 450.75     | 5.58    | ppb   |
| Barium     | 137-1 | 437.41   | 472.33   | 448.46   | 452.73     | 3.94    | ppb   |
| Beryllium  | 9-1   | 93.58    | 95.16    | 97.00    | 95.25      | 1.79    | ppb   |
| Bismuth    | 209-1 |          |          |          | 102        |         | %     |
| Bismuth    | 209-2 |          |          |          | 105        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 91.70    | 99.81    | 93.76    | 95.09      | 4.43    | ppb   |
| Cadmium    | 106-1 | 89.57    | 99.13    | 94.06    | 94.25      | 5.08    | ppb   |
| Cadmium    | 111-1 | 94.24    | 103.34   | 95.07    | 97.55      | 5.16    | ppb   |
| Calcium    | 43-1  | 46624.08 | 48312.08 | 50842.24 | 48592.80   | 4.37    | ppb   |
| Calcium    | 44-1  | 46792.29 | 47761.12 | 49436.39 | 47996.60   | 2.79    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 103.74   | 103.00   | 103.78   | 103.51     | 0.43    | ppb   |
| Cobalt     | 59-2  | 117.44   | 117.22   | 117.94   | 117.53     | 0.32    | ppb   |
| Copper     | 63-2  | 942.59   | 947.82   | 950.18   | 946.87     | 0.41    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 108        |         | %     |
| Holmium    | 165-2 |          |          |          | 112        |         | %     |
| Indium     | 115-1 |          |          |          | 109        |         | %     |
| Indium     | 115-2 |          |          |          | 106        |         | %     |
| Iron       | 56-2  | 15598.95 | 15695.99 | 15729.53 | 15674.82   | 0.43    | ppb   |
| Iron       | 57-2  | 16402.30 | 16376.72 | 16375.81 | 16384.94   | 0.09    | ppb   |
| Iron       | 54-2  | 15631.74 | 15656.69 | 15569.01 | 15619.15   | 0.29    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 498.40   | 509.88   | 530.28   | 512.85     | 3.15    | ppb   |
| Lead       | 207-1 | 484.47   | 496.36   | 491.00   | 490.61     | 1.21    | ppb   |
| Lead       | 208-1 | 500.16   | 517.30   | 518.64   | 512.03     | 2.01    | ppb   |
| Lithium    | 6-1   |          |          |          | 89         |         | %     |
| Magnesium  | 24-2  | 16761.23 | 16669.36 | 16768.52 | 16733.04   | 0.33    | ppb   |
| Manganese  | 55-2  | 2851.59  | 2896.84  | 2892.91  | 2880.45    | 0.87    | ppb   |
| Molybdenum | 94-1  | 404.42   | 407.94   | 419.87   | 410.74     | 1.97    | ppb   |
| Molybdenum | 95-1  | 308.83   | 306.90   | 325.30   | 313.67     | 3.22    | ppb   |
| Molybdenum | 96-1  | 314.53   | 314.18   | 335.42   | 321.38     | 3.79    | ppb   |
| Molybdenum | 97-1  | 311.21   | 315.04   | 321.85   | 316.03     | 1.71    | ppb   |
| Molybdenum | 98-1  | 312.18   | 316.09   | 320.94   | 316.40     | 1.39    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 114.27   | 112.27   | 114.89   | 113.81     | 1.20    | ppb   |
| Phosphorus | 31-2  | 1236.03  | 1234.80  | 1195.16  | 1222.00    | 1.90    | ppb   |
| Potassium  | 39-2  | 10460.69 | 10552.31 | 10798.71 | 10603.90   | 1.65    | ppb   |
| Rhodium    | 103-1 |          |          |          | 109        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 105        |         | %     |
| Scandium   | 45-2  |          |          |          | 105        |         | %     |
| Selenium   | 82-1  | 86.76    | 87.53    | 90.64    | 88.31      | 2.32    | ppb   |
| Selenium   | 77-2  | 93.26    | 95.44    | 86.57    | 91.76      | 5.04    | ppb   |
| Selenium   | 78-2  | 93.50    | 92.53    | 88.30    | 91.44      | 3.02    | ppb   |
| Silicon    | 28-1  | 1248.86  | 1283.72  | 1395.55  | 1309.38    | 5.85    | ppb   |
| Silver     | 107-1 | 15.34    | 16.83    | 15.48    | 15.88      | 5.20    | ppb   |
| Silver     | 109-1 | 15.03    | 16.43    | 15.61    | 15.69      | 4.47    | ppb   |
| Sodium     | 23-2  | 11646.14 | 11575.64 | 11668.84 | 11630.20   | 0.42    | ppb   |
| Strontium  | 86-1  | 205.05   | 206.67   | 216.06   | 209.26     | 2.84    | ppb   |
| Strontium  | 88-1  | 211.53   | 219.36   | 220.43   | 217.11     | 2.24    | ppb   |
| Sulfur     | 34-1  | 80323.31 | 81541.25 | 89197.95 | 83687.50   | 5.75    | ppb   |
| Terbium    | 159-1 |          |          |          | 106        |         | %     |
| Terbium    | 159-2 |          |          |          | 107        |         | %     |
| Thallium   | 203-1 | 86.29    | 86.72    | 89.32    | 87.44      | 1.87    | ppb   |
| Thallium   | 205-1 | 82.28    | 84.03    | 88.27    | 84.86      | 3.63    | ppb   |
| Tin        | 118-1 | 86.38    | 94.23    | 87.05    | 89.22      | 4.88    | ppb   |
| Titanium   | 47-1  | 10.18    | 11.20    | 11.63    | 11.00      | 6.80    | ppb   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 75.20   | 78.97   | 79.85   | 78.01      | 3.17    | ppb   |
| Vanadium  | 51-2  | 149.71  | 149.63  | 150.05  | 149.80     | 0.15    | ppb   |
| Yttrium   | 89-1  |         |         |         | 117        |         | %     |
| Yttrium   | 89-2  |         |         |         | 114        |         | %     |
| Zinc      | 66-2  | 1242.56 | 1231.10 | 1255.23 | 1242.96    | 0.97    | ppb   |
| Zirconium | 90-1  | 84.57   | 84.72   | 88.84   | 86.04      | 2.81    | ppb   |
| Zirconium | 91-1  | 81.33   | 82.67   | 89.35   | 84.45      | 5.08    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 21602.34 | 21237.60 | 21681.86 | 21507.27   | 1.10    | ppb   |
| Antimony   | 121-1 | 93.58    | 99.61    | 97.46    | 96.88      | 3.16    | ppb   |
| Arsenic    | 75-2  | 142.13   | 140.96   | 143.60   | 142.23     | 0.93    | ppb   |
| Barium     | 135-1 | 432.40   | 480.60   | 459.49   | 457.49     | 5.28    | ppb   |
| Barium     | 137-1 | 451.40   | 474.97   | 459.13   | 461.83     | 2.60    | ppb   |
| Beryllium  | 9-1   | 94.44    | 98.22    | 97.23    | 96.63      | 2.03    | ppb   |
| Bismuth    | 209-1 |          |          |          | 101        |         | %     |
| Bismuth    | 209-2 |          |          |          | 103        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 90.49    | 104.15   | 95.44    | 96.69      | 7.15    | ppb   |
| Cadmium    | 106-1 | 95.98    | 100.22   | 93.18    | 96.46      | 3.68    | ppb   |
| Cadmium    | 111-1 | 95.35    | 101.93   | 100.01   | 99.09      | 3.41    | ppb   |
| Calcium    | 43-1  | 48384.84 | 51496.49 | 48389.34 | 49423.55   | 3.63    | ppb   |
| Calcium    | 44-1  | 46243.71 | 50927.13 | 46288.47 | 47819.77   | 5.63    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 104.17   | 104.92   | 107.11   | 105.40     | 1.45    | ppb   |
| Cobalt     | 59-2  | 118.64   | 120.96   | 120.84   | 120.15     | 1.09    | ppb   |
| Copper     | 63-2  | 960.94   | 951.58   | 981.72   | 964.74     | 1.60    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 107        |         | %     |
| Holmium    | 165-2 |          |          |          | 110        |         | %     |
| Indium     | 115-1 |          |          |          | 108        |         | %     |
| Indium     | 115-2 |          |          |          | 105        |         | %     |
| Iron       | 56-2  | 15781.82 | 16134.99 | 16173.81 | 16030.21   | 1.35    | ppb   |
| Iron       | 57-2  | 16662.92 | 16573.66 | 16998.53 | 16745.04   | 1.34    | ppb   |
| Iron       | 54-2  | 16306.91 | 15976.87 | 16347.62 | 16210.47   | 1.25    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 506.80   | 547.68   | 525.79   | 526.75     | 3.88    | ppb   |
| Lead       | 207-1 | 480.91   | 529.75   | 521.70   | 510.79     | 5.13    | ppb   |
| Lead       | 208-1 | 509.06   | 561.03   | 524.16   | 531.42     | 5.03    | ppb   |
| Lithium    | 6-1   |          |          |          | 88         |         | %     |
| Magnesium  | 24-2  | 16692.70 | 16869.65 | 16972.73 | 16845.03   | 0.84    | ppb   |
| Manganese  | 55-2  | 2917.90  | 2922.99  | 3021.72  | 2954.20    | 1.98    | ppb   |
| Molybdenum | 94-1  | 413.76   | 435.31   | 417.06   | 422.04     | 2.75    | ppb   |
| Molybdenum | 95-1  | 321.69   | 331.29   | 317.24   | 323.40     | 2.22    | ppb   |
| Molybdenum | 96-1  | 330.25   | 333.64   | 326.43   | 330.11     | 1.09    | ppb   |
| Molybdenum | 97-1  | 319.07   | 334.90   | 322.05   | 325.34     | 2.59    | ppb   |
| Molybdenum | 98-1  | 319.10   | 334.45   | 315.06   | 322.87     | 3.17    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 114.73   | 114.84   | 118.44   | 116.01     | 1.82    | ppb   |
| Phosphorus | 31-2  | 1180.54  | 1287.55  | 1200.53  | 1222.87    | 4.65    | ppb   |
| Potassium  | 39-2  | 10808.52 | 10872.43 | 10584.25 | 10755.07   | 1.41    | ppb   |
| Rhodium    | 103-1 |          |          |          | 106        |         | %     |
| Rhodium    | 103-2 |          |          |          | 107        |         | %     |
| Scandium   | 45-1  |          |          |          | 103        |         | %     |
| Scandium   | 45-2  |          |          |          | 104        |         | %     |
| Selenium   | 82-1  | 90.55    | 92.75    | 89.51    | 90.94      | 1.82    | ppb   |
| Selenium   | 77-2  | 97.08    | 105.72   | 97.66    | 100.15     | 4.82    | ppb   |
| Selenium   | 78-2  | 93.40    | 89.45    | 88.12    | 90.32      | 3.04    | ppb   |
| Silicon    | 28-1  | 1358.65  | 1375.30  | 1316.84  | 1350.26    | 2.23    | ppb   |
| Silver     | 107-1 | 15.52    | 16.58    | 16.13    | 16.08      | 3.31    | ppb   |
| Silver     | 109-1 | 15.72    | 16.38    | 15.90    | 16.00      | 2.12    | ppb   |
| Sodium     | 23-2  | 11592.67 | 11712.26 | 11802.30 | 11702.41   | 0.90    | ppb   |
| Strontium  | 86-1  | 213.67   | 219.39   | 211.99   | 215.02     | 1.80    | ppb   |
| Strontium  | 88-1  | 216.43   | 226.34   | 218.77   | 220.51     | 2.35    | ppb   |
| Sulfur     | 34-1  | 88284.96 | 88754.30 | 83029.16 | 86689.47   | 3.67    | ppb   |
| Terbium    | 159-1 |          |          |          | 106        |         | %     |
| Terbium    | 159-2 |          |          |          | 106        |         | %     |
| Thallium   | 203-1 | 87.79    | 94.38    | 87.04    | 89.74      | 4.50    | ppb   |
| Thallium   | 205-1 | 85.19    | 88.72    | 86.72    | 86.88      | 2.04    | ppb   |
| Tin        | 118-1 | 87.35    | 94.69    | 89.39    | 90.48      | 4.18    | ppb   |
| Titanium   | 47-1  | 10.43    | 11.56    | 11.04    | 11.01      | 5.14    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 76.59   | 82.43   | 79.77   | 79.60      | 3.67    | ppb   |
| Vanadium  | 51-2  | 152.11  | 152.59  | 154.42  | 153.04     | 0.80    | ppb   |
| Yttrium   | 89-1  |         |         |         | 114        |         | %     |
| Yttrium   | 89-2  |         |         |         | 113        |         | %     |
| Zinc      | 66-2  | 1258.15 | 1263.26 | 1282.99 | 1268.14    | 1.03    | ppb   |
| Zirconium | 90-1  | 87.83   | 91.45   | 86.56   | 88.61      | 2.86    | ppb   |
| Zirconium | 91-1  | 87.70   | 88.04   | 85.80   | 87.18      | 1.38    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Aluminium  | 27-2  | 21107.63 | 21593.67 | 21168.51 | 21289.94   | 1.24    | ppb   |
| Antimony   | 121-1 | 92.33    | 97.01    | 95.39    | 94.91      | 2.51    | ppb   |
| Arsenic    | 75-2  | 147.02   | 146.81   | 142.73   | 145.52     | 1.66    | ppb   |
| Barium     | 135-1 | 444.01   | 463.85   | 448.13   | 452.00     | 2.32    | ppb   |
| Barium     | 137-1 | 439.32   | 458.40   | 459.55   | 452.42     | 2.51    | ppb   |
| Beryllium  | 9-1   | 94.00    | 100.74   | 93.73    | 96.16      | 4.13    | ppb   |
| Bismuth    | 209-1 |          |          |          | 103        |         | %     |
| Bismuth    | 209-2 |          |          |          | 104        |         | %     |
| Bromine    | 81-1  |          |          |          |            |         | cps   |
| Bromine    | 81-2  |          |          |          |            |         | cps   |
| Cadmium    | 108-1 | 97.25    | 95.57    | 97.07    | 96.63      | 0.96    | ppb   |
| Cadmium    | 106-1 | 93.49    | 92.64    | 95.48    | 93.87      | 1.55    | ppb   |
| Cadmium    | 111-1 | 96.32    | 98.78    | 97.80    | 97.63      | 1.27    | ppb   |
| Calcium    | 43-1  | 46907.82 | 49163.79 | 48612.75 | 48228.12   | 2.44    | ppb   |
| Calcium    | 44-1  | 45370.62 | 47092.50 | 47110.16 | 46524.43   | 2.15    | ppb   |
| Carbon     | 12-1  |          |          |          |            |         | cps   |
| Carbon     | 12-2  |          |          |          |            |         | cps   |
| Chlorine   | 35-1  |          |          |          |            |         | cps   |
| Chlorine   | 35-2  |          |          |          |            |         | cps   |
| Chromium   | 52-2  | 105.15   | 105.39   | 103.04   | 104.53     | 1.24    | ppb   |
| Cobalt     | 59-2  | 118.79   | 121.40   | 116.65   | 118.95     | 2.00    | ppb   |
| Copper     | 63-2  | 977.60   | 993.52   | 937.02   | 969.38     | 3.01    | ppb   |
| Dysprosium | 156-1 |          |          |          |            |         | cps   |
| Dysprosium | 156-2 |          |          |          |            |         | cps   |
| Erbium     | 164-1 |          |          |          |            |         | cps   |
| Erbium     | 164-2 |          |          |          |            |         | cps   |
| Gadolinium | 160-1 |          |          |          |            |         | cps   |
| Gadolinium | 160-2 |          |          |          |            |         | cps   |
| Holmium    | 165-1 |          |          |          | 106        |         | %     |
| Holmium    | 165-2 |          |          |          | 112        |         | %     |
| Indium     | 115-1 |          |          |          | 109        |         | %     |
| Indium     | 115-2 |          |          |          | 106        |         | %     |
| Iron       | 56-2  | 15868.62 | 16001.49 | 15591.17 | 15820.42   | 1.32    | ppb   |
| Iron       | 57-2  | 16716.71 | 16648.62 | 16226.67 | 16530.67   | 1.61    | ppb   |
| Iron       | 54-2  | 15929.22 | 16081.40 | 15263.16 | 15757.93   | 2.76    | ppb   |
| Krypton    | 83-1  |          |          |          |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter  | Mass  | ConRep1  | ConRep2  | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|----------|----------|------------|---------|-------|
| Lead       | 206-1 | 518.83   | 533.67   | 487.02   | 513.17     | 4.64    | ppb   |
| Lead       | 207-1 | 513.11   | 538.53   | 466.08   | 505.91     | 7.27    | ppb   |
| Lead       | 208-1 | 513.24   | 526.43   | 495.40   | 511.69     | 3.04    | ppb   |
| Lithium    | 6-1   |          |          |          | 88         |         | %     |
| Magnesium  | 24-2  | 16984.21 | 16832.73 | 16715.86 | 16844.27   | 0.80    | ppb   |
| Manganese  | 55-2  | 2928.74  | 2940.82  | 2815.58  | 2895.05    | 2.39    | ppb   |
| Molybdenum | 94-1  | 398.60   | 410.94   | 407.20   | 405.58     | 1.56    | ppb   |
| Molybdenum | 95-1  | 299.71   | 311.53   | 315.16   | 308.80     | 2.62    | ppb   |
| Molybdenum | 96-1  | 306.51   | 325.32   | 319.89   | 317.24     | 3.05    | ppb   |
| Molybdenum | 97-1  | 307.08   | 318.97   | 311.94   | 312.66     | 1.91    | ppb   |
| Molybdenum | 98-1  | 296.78   | 317.54   | 309.48   | 307.93     | 3.40    | ppb   |
| Neodymium  | 150-1 |          |          |          |            |         | cps   |
| Neodymium  | 150-2 |          |          |          |            |         | cps   |
| Nickel     | 60-2  | 114.23   | 116.21   | 113.49   | 114.64     | 1.23    | ppb   |
| Phosphorus | 31-2  | 1233.88  | 1182.03  | 1161.37  | 1192.43    | 3.13    | ppb   |
| Potassium  | 39-2  | 10902.34 | 10919.52 | 10451.62 | 10757.82   | 2.47    | ppb   |
| Rhodium    | 103-1 |          |          |          | 108        |         | %     |
| Rhodium    | 103-2 |          |          |          | 110        |         | %     |
| Scandium   | 45-1  |          |          |          | 106        |         | %     |
| Scandium   | 45-2  |          |          |          | 104        |         | %     |
| Selenium   | 82-1  | 86.01    | 90.06    | 85.76    | 87.28      | 2.77    | ppb   |
| Selenium   | 77-2  | 96.54    | 99.72    | 92.55    | 96.27      | 3.73    | ppb   |
| Selenium   | 78-2  | 85.58    | 90.68    | 90.28    | 88.85      | 3.19    | ppb   |
| Silicon    | 28-1  | 1218.40  | 1323.55  | 1334.53  | 1292.16    | 4.96    | ppb   |
| Silver     | 107-1 | 15.70    | 16.18    | 15.67    | 15.85      | 1.81    | ppb   |
| Silver     | 109-1 | 15.22    | 15.81    | 16.18    | 15.74      | 3.07    | ppb   |
| Sodium     | 23-2  | 11451.76 | 11675.52 | 11511.72 | 11546.33   | 1.00    | ppb   |
| Strontium  | 86-1  | 203.31   | 212.05   | 205.40   | 206.92     | 2.20    | ppb   |
| Strontium  | 88-1  | 210.06   | 216.12   | 214.26   | 213.48     | 1.45    | ppb   |
| Sulfur     | 34-1  | 79360.78 | 84694.59 | 85223.82 | 83093.06   | 3.90    | ppb   |
| Terbium    | 159-1 |          |          |          | 105        |         | %     |
| Terbium    | 159-2 |          |          |          | 108        |         | %     |
| Thallium   | 203-1 | 86.30    | 88.10    | 87.13    | 87.17      | 1.04    | ppb   |
| Thallium   | 205-1 | 83.39    | 87.75    | 81.96    | 84.37      | 3.58    | ppb   |
| Tin        | 118-1 | 86.72    | 89.08    | 91.50    | 89.10      | 2.68    | ppb   |
| Titanium   | 47-1  | 10.51    | 11.00    | 10.89    | 10.80      | 2.38    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 78.08   | 80.76   | 75.00   | 77.95      | 3.70    | ppb   |
| Vanadium  | 51-2  | 154.37  | 152.36  | 149.13  | 151.95     | 1.74    | ppb   |
| Yttrium   | 89-1  |         |         |         | 117        |         | %     |
| Yttrium   | 89-2  |         |         |         | 114        |         | %     |
| Zinc      | 66-2  | 1258.53 | 1282.21 | 1247.88 | 1262.87    | 1.39    | ppb   |
| Zirconium | 90-1  | 81.90   | 85.61   | 86.41   | 84.64      | 2.84    | ppb   |
| Zirconium | 91-1  | 82.02   | 86.16   | 84.33   | 84.17      | 2.46    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Aluminium  | 27-2  | 46689.73  | 45419.74  | 44920.33  | 45676.60   | 2.00    | ppb   |
| Antimony   | 121-1 | 522.10    | 536.05    | 528.65    | 528.94     | 1.32    | ppb   |
| Arsenic    | 75-2  | 488.45    | 500.17    | 494.85    | 494.49     | 1.19    | ppb   |
| Barium     | 135-1 | 2594.38   | 2654.66   | 2652.15   | 2633.73    | 1.29    | ppb   |
| Barium     | 137-1 | 2627.34   | 2752.08   | 2653.30   | 2677.58    | 2.46    | ppb   |
| Beryllium  | 9-1   | 524.69    | 544.10    | 548.34    | 539.04     | 2.34    | ppb   |
| Bismuth    | 209-1 |           |           |           | 99         |         | %     |
| Bismuth    | 209-2 |           |           |           | 102        |         | %     |
| Bromine    | 81-1  |           |           |           |            |         | cps   |
| Bromine    | 81-2  |           |           |           |            |         | cps   |
| Cadmium    | 108-1 | 502.92    | 535.95    | 509.23    | 516.03     | 3.40    | ppb   |
| Cadmium    | 106-1 | 508.06    | 526.73    | 510.30    | 515.03     | 1.98    | ppb   |
| Cadmium    | 111-1 | 502.64    | 532.87    | 514.98    | 516.83     | 2.94    | ppb   |
| Calcium    | 43-1  | 252689.32 | 261022.27 | 252417.46 | 255376.35  | 1.92    | ppb   |
| Calcium    | 44-1  | 255263.88 | 253552.96 | 259517.11 | 256111.31  | 1.20    | ppb   |
| Carbon     | 12-1  |           |           |           |            |         | cps   |
| Carbon     | 12-2  |           |           |           |            |         | cps   |
| Chlorine   | 35-1  |           |           |           |            |         | cps   |
| Chlorine   | 35-2  |           |           |           |            |         | cps   |
| Chromium   | 52-2  | 527.87    | 524.37    | 518.43    | 523.56     | 0.91    | ppb   |
| Cobalt     | 59-2  | 518.15    | 523.21    | 528.38    | 523.24     | 0.98    | ppb   |
| Copper     | 63-2  | 5100.79   | 5187.74   | 5121.09   | 5136.54    | 0.89    | ppb   |
| Dysprosium | 156-1 |           |           |           |            |         | cps   |
| Dysprosium | 156-2 |           |           |           |            |         | cps   |
| Erbium     | 164-1 |           |           |           |            |         | cps   |
| Erbium     | 164-2 |           |           |           |            |         | cps   |
| Gadolinium | 160-1 |           |           |           |            |         | cps   |
| Gadolinium | 160-2 |           |           |           |            |         | cps   |
| Holmium    | 165-1 |           |           |           | 110        |         | %     |
| Holmium    | 165-2 |           |           |           | 114        |         | %     |
| Indium     | 115-1 |           |           |           | 108        |         | %     |
| Indium     | 115-2 |           |           |           | 105        |         | %     |
| Iron       | 56-2  | 124894.88 | 126680.44 | 127027.16 | 126200.83  | 0.91    | ppb   |
| Iron       | 57-2  | 125265.58 | 127363.44 | 127662.82 | 126763.95  | 1.03    | ppb   |
| Iron       | 54-2  | 127566.25 | 124933.37 | 126846.64 | 126448.75  | 1.08    | ppb   |
| Krypton    | 83-1  |           |           |           |            |         | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter  | Mass  | ConRep1   | ConRep2   | ConRep3   | Avg. Conc. | ConcRSD | Units |
|------------|-------|-----------|-----------|-----------|------------|---------|-------|
| Lead       | 206-1 | 2610.17   | 2700.50   | 2645.47   | 2652.05    | 1.72    | ppb   |
| Lead       | 207-1 | 2597.37   | 2688.51   | 2554.92   | 2613.60    | 2.61    | ppb   |
| Lead       | 208-1 | 2564.67   | 2679.84   | 2577.31   | 2607.27    | 2.42    | ppb   |
| Lithium    | 6-1   |           |           |           | 91         |         | %     |
| Magnesium  | 24-2  | 242810.73 | 237178.67 | 239762.11 | 239917.17  | 1.18    | ppb   |
| Manganese  | 55-2  | 5264.26   | 5171.25   | 5171.57   | 5202.36    | 1.03    | ppb   |
| Molybdenum | 94-1  | 5093.32   | 5077.34   | 5230.60   | 5133.75    | 1.64    | ppb   |
| Molybdenum | 95-1  | 4984.00   | 5071.36   | 5195.98   | 5083.78    | 2.10    | ppb   |
| Molybdenum | 96-1  | 5026.99   | 5087.33   | 5210.13   | 5108.15    | 1.83    | ppb   |
| Molybdenum | 97-1  | 5003.89   | 5004.94   | 5144.91   | 5051.25    | 1.61    | ppb   |
| Molybdenum | 98-1  | 5057.16   | 5117.73   | 5256.12   | 5143.67    | 1.98    | ppb   |
| Neodymium  | 150-1 |           |           |           |            |         | cps   |
| Neodymium  | 150-2 |           |           |           |            |         | cps   |
| Nickel     | 60-2  | 513.10    | 517.39    | 516.07    | 515.52     | 0.43    | ppb   |
| Phosphorus | 31-2  | 10001.46  | 10049.90  | 9974.57   | 10008.64   | 0.38    | ppb   |
| Potassium  | 39-2  | 124471.81 | 123992.46 | 123235.26 | 123899.84  | 0.50    | ppb   |
| Rhodium    | 103-1 |           |           |           | 106        |         | %     |
| Rhodium    | 103-2 |           |           |           | 104        |         | %     |
| Scandium   | 45-1  |           |           |           | 108        |         | %     |
| Scandium   | 45-2  |           |           |           | 106        |         | %     |
| Selenium   | 82-1  | 482.13    | 478.76    | 491.53    | 484.14     | 1.37    | ppb   |
| Selenium   | 77-2  | 479.19    | 498.24    | 487.97    | 488.47     | 1.95    | ppb   |
| Selenium   | 78-2  | 488.45    | 504.72    | 487.03    | 493.40     | 1.99    | ppb   |
| Silicon    | 28-1  | 586.51    | 614.67    | 608.06    | 603.08     | 2.44    | ppb   |
| Silver     | 107-1 | 504.92    | 533.53    | 519.54    | 519.33     | 2.75    | ppb   |
| Silver     | 109-1 | 520.07    | 547.34    | 524.57    | 530.66     | 2.76    | ppb   |
| Sodium     | 23-2  | 246982.08 | 242819.29 | 241113.51 | 243638.29  | 1.24    | ppb   |
| Strontium  | 86-1  | 497.62    | 507.14    | 513.50    | 506.09     | 1.58    | ppb   |
| Strontium  | 88-1  | 509.27    | 527.38    | 523.97    | 520.21     | 1.85    | ppb   |
| Sulfur     | 34-1  | 8779.89   | 8786.07   | 8749.60   | 8771.85    | 0.22    | ppb   |
| Terbium    | 159-1 |           |           |           | 107        |         | %     |
| Terbium    | 159-2 |           |           |           | 109        |         | %     |
| Thallium   | 203-1 | 512.39    | 550.42    | 524.04    | 528.95     | 3.68    | ppb   |
| Thallium   | 205-1 | 515.25    | 534.65    | 521.45    | 523.78     | 1.89    | ppb   |
| Tin        | 118-1 | 530.39    | 556.62    | 534.54    | 540.52     | 2.61    | ppb   |
| Titanium   | 47-1  | 5182.05   | 5265.62   | 5161.15   | 5202.94    | 1.06    | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 480.43  | 513.46  | 504.29  | 499.39     | 3.41    | ppb   |
| Vanadium  | 51-2  | 532.51  | 518.39  | 525.49  | 525.46     | 1.34    | ppb   |
| Yttrium   | 89-1  |         |         |         | 112        |         | %     |
| Yttrium   | 89-2  |         |         |         | 109        |         | %     |
| Zinc      | 66-2  | 5095.32 | 5127.91 | 5095.71 | 5106.31    | 0.37    | ppb   |
| Zirconium | 90-1  | 515.72  | 514.62  | 523.22  | 517.85     | 0.90    | ppb   |
| Zirconium | 91-1  | 501.00  | 508.69  | 515.47  | 508.39     | 1.42    | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter  | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|------------|-------|---------|---------|---------|------------|---------|-------|
| Aluminium  | 27-2  | 0.62    | 0.27    | 0.47    | 0.45       | 38.98   | ppb   |
| Antimony   | 121-1 | 0.13    | 0.14    | 0.14    | 0.14       | 5.89    | ppb   |
| Arsenic    | 75-2  | -0.01   | 0.03    | 0.00    | 0.01       | 221.45  | ppb   |
| Barium     | 135-1 | 0.05    | 0.03    | 0.02    | 0.03       | 51.01   | ppb   |
| Barium     | 137-1 | 0.02    | 0.02    | 0.01    | 0.02       | 46.57   | ppb   |
| Beryllium  | 9-1   | 0.01    | 0.01    | -0.01   | 0.00       | 621.79  | ppb   |
| Bismuth    | 209-1 |         |         |         | 99         |         | %     |
| Bismuth    | 209-2 |         |         |         | 102        |         | %     |
| Bromine    | 81-1  |         |         |         |            |         | cps   |
| Bromine    | 81-2  |         |         |         |            |         | cps   |
| Cadmium    | 108-1 | -0.04   | 0.02    | -0.08   | -0.03      |         | ppb   |
| Cadmium    | 106-1 | -3.87   | -4.83   | -5.41   | -4.70      |         | ppb   |
| Cadmium    | 111-1 | -0.25   | -0.32   | -0.36   | -0.31      |         | ppb   |
| Calcium    | 43-1  | 0.10    | 2.41    | 2.94    | 1.82       | 83.34   | ppb   |
| Calcium    | 44-1  | 0.27    | 2.15    | -1.48   | 0.31       | 576.74  | ppb   |
| Carbon     | 12-1  |         |         |         |            |         | cps   |
| Carbon     | 12-2  |         |         |         |            |         | cps   |
| Chlorine   | 35-1  |         |         |         |            |         | cps   |
| Chlorine   | 35-2  |         |         |         |            |         | cps   |
| Chromium   | 52-2  | -0.03   | 0.05    | -0.02   | 0.00       |         | ppb   |
| Cobalt     | 59-2  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Copper     | 63-2  | 0.08    | 0.10    | 0.09    | 0.09       | 15.98   | ppb   |
| Dysprosium | 156-1 |         |         |         |            |         | cps   |
| Dysprosium | 156-2 |         |         |         |            |         | cps   |
| Erbium     | 164-1 |         |         |         |            |         | cps   |
| Erbium     | 164-2 |         |         |         |            |         | cps   |
| Gadolinium | 160-1 |         |         |         |            |         | cps   |
| Gadolinium | 160-2 |         |         |         |            |         | cps   |
| Holmium    | 165-1 |         |         |         | 103        |         | %     |
| Holmium    | 165-2 |         |         |         | 106        |         | %     |
| Indium     | 115-1 |         |         |         | 104        |         | %     |
| Indium     | 115-2 |         |         |         | 102        |         | %     |
| Iron       | 56-2  | 1.58    | 3.63    | 1.72    | 2.31       | 49.59   | ppb   |
| Iron       | 57-2  | 2.45    | 3.19    | 1.10    | 2.25       | 47.09   | ppb   |
| Iron       | 54-2  | 2.09    | 2.89    | 2.93    | 2.64       | 17.95   | ppb   |
| Krypton    | 83-1  |         |         |         |            |         | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter  | Mass  | ConRep1  | ConRep2 | ConRep3  | Avg. Conc. | ConcRSD | Units |
|------------|-------|----------|---------|----------|------------|---------|-------|
| Lead       | 206-1 | 0.04     | 0.02    | 0.05     | 0.04       | 31.59   | ppb   |
| Lead       | 207-1 | 0.05     | 0.04    | 0.04     | 0.05       | 14.49   | ppb   |
| Lead       | 208-1 | 0.06     | 0.04    | 0.04     | 0.05       | 19.87   | ppb   |
| Lithium    | 6-1   |          |         |          | 88         |         | %     |
| Magnesium  | 24-2  | 1.82     | 2.05    | 1.98     | 1.95       | 6.06    | ppb   |
| Manganese  | 55-2  | 0.03     | 0.09    | 0.03     | 0.05       | 75.92   | ppb   |
| Molybdenum | 94-1  | 0.19     | 0.22    | 0.20     | 0.20       | 5.97    | ppb   |
| Molybdenum | 95-1  | 0.18     | 0.18    | 0.14     | 0.17       | 12.71   | ppb   |
| Molybdenum | 96-1  | 0.17     | 0.17    | 0.16     | 0.17       | 5.82    | ppb   |
| Molybdenum | 97-1  | 0.18     | 0.18    | 0.19     | 0.18       | 2.78    | ppb   |
| Molybdenum | 98-1  | 0.21     | 0.16    | 0.16     | 0.18       | 18.87   | ppb   |
| Neodymium  | 150-1 |          |         |          |            |         | cps   |
| Neodymium  | 150-2 |          |         |          |            |         | cps   |
| Nickel     | 60-2  | 0.09     | 0.08    | 0.04     | 0.07       | 33.97   | ppb   |
| Phosphorus | 31-2  | -30.81   | -42.75  | -41.85   | -38.47     |         | ppb   |
| Potassium  | 39-2  | 12.12    | 20.08   | 17.47    | 16.56      | 24.51   | ppb   |
| Rhodium    | 103-1 |          |         |          | 105        |         | %     |
| Rhodium    | 103-2 |          |         |          | 103        |         | %     |
| Scandium   | 45-1  |          |         |          | 100        |         | %     |
| Scandium   | 45-2  |          |         |          | 99         |         | %     |
| Selenium   | 82-1  | 0.00     | -0.46   | -0.62    | -0.36      |         | ppb   |
| Selenium   | 77-2  | -0.09    | 0.17    | -0.09    | 0.00       |         | ppb   |
| Selenium   | 78-2  | 0.08     | -1.36   | 0.67     | -0.20      |         | ppb   |
| Silicon    | 28-1  | -1.80    | -0.58   | -1.07    | -1.15      |         | ppb   |
| Silver     | 107-1 | 0.06     | 0.04    | 0.05     | 0.05       | 16.04   | ppb   |
| Silver     | 109-1 | 0.05     | 0.04    | 0.04     | 0.04       | 24.43   | ppb   |
| Sodium     | 23-2  | 47.98    | 51.34   | 50.01    | 49.77      | 3.40    | ppb   |
| Strontium  | 86-1  | 0.02     | 0.01    | 0.00     | 0.01       | 67.15   | ppb   |
| Strontium  | 88-1  | 0.00     | 0.00    | 0.01     | 0.00       | 46.76   | ppb   |
| Sulfur     | 34-1  | -1167.38 | -976.73 | -1020.90 | -1055.00   |         | ppb   |
| Terbium    | 159-1 |          |         |          | 102        |         | %     |
| Terbium    | 159-2 |          |         |          | 103        |         | %     |
| Thallium   | 203-1 | 0.02     | 0.03    | 0.02     | 0.02       | 35.82   | ppb   |
| Thallium   | 205-1 | 0.02     | 0.02    | 0.02     | 0.02       | 15.68   | ppb   |
| Tin        | 118-1 | 0.03     | 0.04    | 0.01     | 0.03       | 56.50   | ppb   |
| Titanium   | 47-1  | 0.07     | 0.01    | 0.03     | 0.04       | 78.59   | ppb   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter | Mass  | ConRep1 | ConRep2 | ConRep3 | Avg. Conc. | ConcRSD | Units |
|-----------|-------|---------|---------|---------|------------|---------|-------|
| Uranium   | 238-1 | 0.01    | 0.00    | 0.00    | 0.00       | 120.62  | ppb   |
| Vanadium  | 51-2  | 0.00    | 0.00    | 0.00    | 0.00       |         | ppb   |
| Yttrium   | 89-1  |         |         |         | 105        |         | %     |
| Yttrium   | 89-2  |         |         |         | 103        |         | %     |
| Zinc      | 66-2  | 0.17    | 0.01    | 0.67    | 0.28       | 122.34  | ppb   |
| Zirconium | 90-1  | 0.03    | 0.03    | 0.03    | 0.03       | 12.25   | ppb   |
| Zirconium | 91-1  | 0.03    | 0.06    | 0.01    | 0.03       | 66.91   | ppb   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1513    | 1540    | 1470    | 1508    | 2.34   | cps   |
| Antimony   | 121-1 | 37      | 50      | 23      | 37      | 36.37  | cps   |
| Arsenic    | 75-2  | 17      | 7       | 3       | 9       | 78.08  | cps   |
| Barium     | 135-1 | 53      | 70      | 40      | 54      | 27.61  | cps   |
| Barium     | 137-1 | 160     | 113     | 93      | 122     | 27.99  | cps   |
| Beryllium  | 9-1   | 7       | 10      | 10      | 9       | 18.10  | cps   |
| Bismuth    | 209-1 | 4881975 | 4738851 | 4807135 | 4809320 | 1.49   | cps   |
| Bismuth    | 209-2 | 4236803 | 4318844 | 4230476 | 4262041 | 1.16   | cps   |
| Bromine    | 81-1  | 9713    | 9567    | 9356    | 9545    | 1.88   | cps   |
| Bromine    | 81-2  | 190     | 183     | 213     | 196     | 8.06   | cps   |
| Cadmium    | 108-1 | 13      | 3       | 17      | 11      | 62.48  | cps   |
| Cadmium    | 106-1 | 3340    | 3187    | 3304    | 3277    | 2.44   | cps   |
| Cadmium    | 111-1 | 2362    | 2262    | 2334    | 2320    | 2.23   | cps   |
| Calcium    | 43-1  | 337     | 423     | 393     | 384     | 11.45  | cps   |
| Calcium    | 44-1  | 26834   | 26757   | 26347   | 26646   | 0.98   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2424    | 2570    | 2597    | 2530    | 3.69   | cps   |
| Cobalt     | 59-2  | 120     | 93      | 137     | 117     | 18.74  | cps   |
| Copper     | 63-2  | 1357    | 1213    | 1327    | 1299    | 5.82   | cps   |
| Dysprosium | 156-1 | 0       | 13      | 3       | 6       | 124.93 | cps   |
| Dysprosium | 156-2 | 0       | 13      | 0       | 4       | 173.21 | cps   |
| Erbium     | 164-1 | 73      | 50      | 43      | 56      | 28.35  | cps   |
| Erbium     | 164-2 | 23      | 47      | 40      | 37      | 32.79  | cps   |
| Gadolinium | 160-1 | 60      | 50      | 70      | 60      | 16.67  | cps   |
| Gadolinium | 160-2 | 333     | 353     | 367     | 351     | 4.78   | cps   |
| Holmium    | 165-1 | 7690319 | 7730923 | 7543992 | 7655078 | 1.28   | cps   |
| Holmium    | 165-2 | 5734284 | 5600995 | 5623490 | 5652923 | 1.26   | cps   |
| Indium     | 115-1 | 6531741 | 6521016 | 6485230 | 6512662 | 0.37   | cps   |
| Indium     | 115-2 | 2589975 | 2586599 | 2548369 | 2574981 | 0.90   | cps   |
| Iron       | 56-2  | 21809   | 20868   | 21138   | 21272   | 2.28   | cps   |
| Iron       | 57-2  | 1453    | 1563    | 1480    | 1499    | 3.83   | cps   |
| Iron       | 54-2  | 2620    | 2580    | 2554    | 2585    | 1.30   | cps   |
| Krypton    | 83-1  | 523     | 507     | 477     | 502     | 4.71   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 433     | 377     | 473     | 428     | 11.35  | cps   |
| Lead       | 207-1 | 350     | 293     | 357     | 333     | 10.44  | cps   |
| Lead       | 208-1 | 1717    | 1447    | 1593    | 1586    | 8.52   | cps   |
| Lithium    | 6-1   | 458248  | 461982  | 459045  | 459758  | 0.43   | cps   |
| Magnesium  | 24-2  | 353     | 417     | 460     | 410     | 13.08  | cps   |
| Manganese  | 55-2  | 903     | 750     | 813     | 822     | 9.37   | cps   |
| Molybdenum | 94-1  | 380     | 343     | 287     | 337     | 13.97  | cps   |
| Molybdenum | 95-1  | 340     | 263     | 283     | 296     | 13.46  | cps   |
| Molybdenum | 96-1  | 437     | 327     | 290     | 351     | 21.74  | cps   |
| Molybdenum | 97-1  | 170     | 197     | 163     | 177     | 9.98   | cps   |
| Molybdenum | 98-1  | 497     | 437     | 417     | 450     | 9.25   | cps   |
| Neodymium  | 150-1 | 20      | 3       | 10      | 11      | 75.52  | cps   |
| Neodymium  | 150-2 | 7       | 3       | 13      | 8       | 65.47  | cps   |
| Nickel     | 60-2  | 597     | 607     | 627     | 610     | 2.50   | cps   |
| Phosphorus | 31-2  | 853     | 927     | 870     | 883     | 4.35   | cps   |
| Potassium  | 39-2  | 67522   | 68041   | 68376   | 67980   | 0.63   | cps   |
| Rhodium    | 103-1 | 6590621 | 6407083 | 6599499 | 6532401 | 1.66   | cps   |
| Rhodium    | 103-2 | 4227012 | 4230135 | 4195922 | 4217689 | 0.45   | cps   |
| Scandium   | 45-1  | 4060809 | 4070913 | 4049780 | 4060500 | 0.26   | cps   |
| Scandium   | 45-2  | 414388  | 412340  | 414138  | 413622  | 0.27   | cps   |
| Selenium   | 82-1  | 304     | 314     | 346     | 321     | 6.76   | cps   |
| Selenium   | 77-2  | 3       | 0       | 0       | 1       | 173.21 | cps   |
| Selenium   | 78-2  | 507     | 540     | 503     | 517     | 3.92   | cps   |
| Silicon    | 28-1  | 706807  | 690151  | 689927  | 695628  | 1.39   | cps   |
| Silver     | 107-1 | 70      | 90      | 80      | 80      | 12.50  | cps   |
| Silver     | 109-1 | 40      | 70      | 83      | 64      | 34.44  | cps   |
| Sodium     | 23-2  | 32848   | 33005   | 32585   | 32813   | 0.65   | cps   |
| Strontium  | 86-1  | 837     | 823     | 727     | 796     | 7.55   | cps   |
| Strontium  | 88-1  | 340     | 330     | 300     | 323     | 6.44   | cps   |
| Sulfur     | 34-1  | 177252  | 178151  | 177605  | 177669  | 0.26   | cps   |
| Terbium    | 159-1 | 7906882 | 7941187 | 8010099 | 7952723 | 0.66   | cps   |
| Terbium    | 159-2 | 5852453 | 5788986 | 5813678 | 5818373 | 0.55   | cps   |
| Thallium   | 203-1 | 347     | 350     | 390     | 362     | 6.66   | cps   |
| Thallium   | 205-1 | 913     | 870     | 870     | 884     | 2.83   | cps   |
| Tin        | 118-1 | 993     | 973     | 960     | 976     | 1.72   | cps   |
| Titanium   | 47-1  | 63      | 97      | 90      | 83      | 21.17  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S0 Instrumnet Name : P7  
Client Sample ID : S0 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:49:41 DataFile Name : 004CALB.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 190      | 40       | 33       | 88       | 100.93 | cps   |
| Vanadium  | 51-2  | 37       | 7        | 43       | 29       | 67.60  | cps   |
| Yttrium   | 89-1  | 11514771 | 11588831 | 11294677 | 11466093 | 1.33   | cps   |
| Yttrium   | 89-2  | 3374123  | 3350485  | 3309958  | 3344855  | 0.97   | cps   |
| Zinc      | 66-2  | 4551     | 4717     | 4561     | 4610     | 2.03   | cps   |
| Zirconium | 90-1  | 500      | 503      | 523      | 509      | 2.48   | cps   |
| Zirconium | 91-1  | 117      | 117      | 117      | 117      | 0.00   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CAL.S.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 4561    | 4827    | 4661    | 4683    | 2.88   | cps   |
| Antimony   | 121-1 | 10731   | 10637   | 10764   | 10711   | 0.61   | cps   |
| Arsenic    | 75-2  | 490     | 477     | 377     | 448     | 13.83  | cps   |
| Barium     | 135-1 | 13016   | 12956   | 12639   | 12870   | 1.57   | cps   |
| Barium     | 137-1 | 21603   | 22227   | 22418   | 22083   | 1.93   | cps   |
| Beryllium  | 9-1   | 823     | 789     | 629     | 747     | 13.89  | cps   |
| Bismuth    | 209-1 | 4851964 | 5013569 | 4883806 | 4916446 | 1.74   | cps   |
| Bismuth    | 209-2 | 4360426 | 4244087 | 4308667 | 4304393 | 1.35   | cps   |
| Bromine    | 81-1  | 9543    | 9440    | 9760    | 9581    | 1.71   | cps   |
| Bromine    | 81-2  | 157     | 180     | 150     | 162     | 9.71   | cps   |
| Cadmium    | 108-1 | 127     | 130     | 127     | 128     | 1.50   | cps   |
| Cadmium    | 106-1 | 3327    | 3154    | 3317    | 3266    | 2.98   | cps   |
| Cadmium    | 111-1 | 3730    | 3693    | 3767    | 3730    | 0.98   | cps   |
| Calcium    | 43-1  | 8409    | 8626    | 8749    | 8595    | 2.00   | cps   |
| Calcium    | 44-1  | 157604  | 160251  | 157897  | 158584  | 0.91   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 8442    | 8536    | 8069    | 8349    | 2.96   | cps   |
| Cobalt     | 59-2  | 5128    | 4968    | 4834    | 4976    | 2.95   | cps   |
| Copper     | 63-2  | 8252    | 8309    | 8149    | 8237    | 0.99   | cps   |
| Dysprosium | 156-1 | 7       | 10      | 3       | 7       | 50.03  | cps   |
| Dysprosium | 156-2 | 3       | 17      | 3       | 8       | 99.04  | cps   |
| Erbium     | 164-1 | 73      | 63      | 90      | 76      | 17.83  | cps   |
| Erbium     | 164-2 | 50      | 50      | 67      | 56      | 17.32  | cps   |
| Gadolinium | 160-1 | 57      | 53      | 50      | 53      | 6.25   | cps   |
| Gadolinium | 160-2 | 340     | 390     | 387     | 372     | 7.51   | cps   |
| Holmium    | 165-1 | 7654919 | 7692416 | 7545974 | 7631103 | 1.00   | cps   |
| Holmium    | 165-2 | 5842295 | 5724619 | 5682623 | 5749845 | 1.44   | cps   |
| Indium     | 115-1 | 6630859 | 6435140 | 6495199 | 6520399 | 1.54   | cps   |
| Indium     | 115-2 | 2574864 | 2515248 | 2487423 | 2525845 | 1.77   | cps   |
| Iron       | 56-2  | 162068  | 161609  | 158973  | 160883  | 1.04   | cps   |
| Iron       | 57-2  | 4981    | 5094    | 5238    | 5104    | 2.52   | cps   |
| Iron       | 54-2  | 10864   | 11101   | 10430   | 10798   | 3.15   | cps   |
| Krypton    | 83-1  | 453     | 457     | 407     | 439     | 6.37   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CAL.S.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 4431    | 4517    | 4457    | 4469    | 0.99   | cps   |
| Lead       | 207-1 | 3824    | 3787    | 3924    | 3845    | 1.84   | cps   |
| Lead       | 208-1 | 17648   | 17261   | 17761   | 17557   | 1.49   | cps   |
| Lithium    | 6-1   | 473024  | 464292  | 468007  | 468441  | 0.94   | cps   |
| Magnesium  | 24-2  | 135409  | 138150  | 137236  | 136932  | 1.02   | cps   |
| Manganese  | 55-2  | 3124    | 3050    | 2944    | 3039    | 2.98   | cps   |
| Molybdenum | 94-1  | 11972   | 12465   | 12325   | 12254   | 2.08   | cps   |
| Molybdenum | 95-1  | 14664   | 14758   | 14607   | 14676   | 0.52   | cps   |
| Molybdenum | 96-1  | 16473   | 16867   | 16299   | 16546   | 1.76   | cps   |
| Molybdenum | 97-1  | 9486    | 9637    | 9340    | 9488    | 1.56   | cps   |
| Molybdenum | 98-1  | 23339   | 23896   | 23659   | 23631   | 1.18   | cps   |
| Neodymium  | 150-1 | 3       | 3       | 3       | 3       | 0.00   | cps   |
| Neodymium  | 150-2 | 0       | 3       | 7       | 3       | 100.05 | cps   |
| Nickel     | 60-2  | 1870    | 1887    | 1837    | 1865    | 1.37   | cps   |
| Phosphorus | 31-2  | 1060    | 1063    | 1123    | 1082    | 3.29   | cps   |
| Potassium  | 39-2  | 231905  | 234518  | 232105  | 232843  | 0.62   | cps   |
| Rhodium    | 103-1 | 6527161 | 6517458 | 6444647 | 6496422 | 0.69   | cps   |
| Rhodium    | 103-2 | 4215906 | 4195957 | 4145550 | 4185804 | 0.87   | cps   |
| Scandium   | 45-1  | 3997045 | 3990949 | 4040264 | 4009419 | 0.67   | cps   |
| Scandium   | 45-2  | 421374  | 414515  | 415662  | 417184  | 0.88   | cps   |
| Selenium   | 82-1  | 946     | 937     | 900     | 927     | 2.64   | cps   |
| Selenium   | 77-2  | 93      | 53      | 63      | 70      | 29.74  | cps   |
| Selenium   | 78-2  | 773     | 617     | 770     | 720     | 12.43  | cps   |
| Silicon    | 28-1  | 703348  | 700192  | 697483  | 700341  | 0.42   | cps   |
| Silver     | 107-1 | 7479    | 7702    | 7552    | 7578    | 1.50   | cps   |
| Silver     | 109-1 | 7062    | 7122    | 6935    | 7040    | 1.35   | cps   |
| Sodium     | 23-2  | 245282  | 249380  | 245615  | 246759  | 0.92   | cps   |
| Strontium  | 86-1  | 2647    | 2617    | 2550    | 2605    | 1.90   | cps   |
| Strontium  | 88-1  | 16476   | 16279   | 16666   | 16474   | 1.18   | cps   |
| Sulfur     | 34-1  | 177478  | 178627  | 180941  | 179015  | 0.99   | cps   |
| Terbium    | 159-1 | 8087967 | 7833708 | 7845650 | 7922442 | 1.81   | cps   |
| Terbium    | 159-2 | 5904634 | 5771693 | 5847026 | 5841118 | 1.14   | cps   |
| Thallium   | 203-1 | 5348    | 5288    | 5054    | 5230    | 2.96   | cps   |
| Thallium   | 205-1 | 12296   | 12659   | 12559   | 12505   | 1.50   | cps   |
| Tin        | 118-1 | 23439   | 23576   | 23209   | 23408   | 0.79   | cps   |
| Titanium   | 47-1  | 3687    | 3600    | 3787    | 3692    | 2.53   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S2 Instrumnet Name : P7  
Client Sample ID : S2 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:56:16 DataFile Name : 006CAL.S.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 15449    | 15075    | 15115    | 15213    | 1.35   | cps   |
| Vanadium  | 51-2  | 12565    | 12789    | 12769    | 12708    | 0.97   | cps   |
| Yttrium   | 89-1  | 11366032 | 11415133 | 11342084 | 11374416 | 0.33   | cps   |
| Yttrium   | 89-2  | 3348414  | 3264296  | 3324092  | 3312267  | 1.31   | cps   |
| Zinc      | 66-2  | 7649     | 7409     | 7886     | 7648     | 3.12   | cps   |
| Zirconium | 90-1  | 10180    | 10427    | 10027    | 10211    | 1.98   | cps   |
| Zirconium | 91-1  | 2134     | 2284     | 2340     | 2252     | 4.74   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CAL.S.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 154889  | 154243  | 153920  | 154350  | 0.32   | cps   |
| Antimony   | 121-1 | 257631  | 258558  | 258130  | 258106  | 0.18   | cps   |
| Arsenic    | 75-2  | 18659   | 18301   | 17724   | 18228   | 2.59   | cps   |
| Barium     | 135-1 | 300716  | 304853  | 302096  | 302555  | 0.70   | cps   |
| Barium     | 137-1 | 527042  | 525609  | 529927  | 527526  | 0.42   | cps   |
| Beryllium  | 9-1   | 35163   | 36019   | 35739   | 35640   | 1.22   | cps   |
| Bismuth    | 209-1 | 4799143 | 4803805 | 4829966 | 4810971 | 0.35   | cps   |
| Bismuth    | 209-2 | 4274160 | 4213160 | 4249186 | 4245502 | 0.72   | cps   |
| Bromine    | 81-1  | 9293    | 8919    | 9086    | 9100    | 2.06   | cps   |
| Bromine    | 81-2  | 127     | 113     | 120     | 120     | 5.56   | cps   |
| Cadmium    | 108-1 | 5141    | 5368    | 5314    | 5274    | 2.25   | cps   |
| Cadmium    | 106-1 | 10441   | 10174   | 10370   | 10328   | 1.34   | cps   |
| Cadmium    | 111-1 | 75159   | 76585   | 74791   | 75512   | 1.26   | cps   |
| Calcium    | 43-1  | 79163   | 79595   | 79290   | 79349   | 0.28   | cps   |
| Calcium    | 44-1  | 1239452 | 1247277 | 1227646 | 1238125 | 0.80   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 146638  | 142772  | 142828  | 144079  | 1.54   | cps   |
| Cobalt     | 59-2  | 221188  | 222026  | 222767  | 221994  | 0.36   | cps   |
| Copper     | 63-2  | 1717015 | 1708491 | 1705786 | 1710431 | 0.34   | cps   |
| Dysprosium | 156-1 | 7       | 7       | 17      | 10      | 57.72  | cps   |
| Dysprosium | 156-2 | 27      | 20      | 17      | 21      | 24.12  | cps   |
| Erbium     | 164-1 | 47      | 70      | 50      | 56      | 22.71  | cps   |
| Erbium     | 164-2 | 57      | 63      | 40      | 53      | 22.53  | cps   |
| Gadolinium | 160-1 | 63      | 47      | 43      | 51      | 20.96  | cps   |
| Gadolinium | 160-2 | 340     | 387     | 387     | 371     | 7.26   | cps   |
| Holmium    | 165-1 | 7443415 | 7553504 | 7506743 | 7501221 | 0.74   | cps   |
| Holmium    | 165-2 | 5739640 | 5675951 | 5734799 | 5716797 | 0.62   | cps   |
| Indium     | 115-1 | 6325902 | 6342308 | 6374689 | 6347633 | 0.39   | cps   |
| Indium     | 115-2 | 2502893 | 2508728 | 2509746 | 2507122 | 0.15   | cps   |
| Iron       | 56-2  | 6518882 | 6645050 | 6527193 | 6563708 | 1.08   | cps   |
| Iron       | 57-2  | 176856  | 174008  | 172582  | 174482  | 1.25   | cps   |
| Iron       | 54-2  | 390628  | 385209  | 388463  | 388100  | 0.70   | cps   |
| Krypton    | 83-1  | 540     | 480     | 460     | 493     | 8.44   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CAL.S.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 954563  | 966019  | 964930  | 961837  | 0.66   | cps   |
| Lead       | 207-1 | 817463  | 823424  | 828950  | 823279  | 0.70   | cps   |
| Lead       | 208-1 | 3794602 | 3803690 | 3881109 | 3826467 | 1.24   | cps   |
| Lithium    | 6-1   | 475103  | 473848  | 472325  | 473759  | 0.29   | cps   |
| Magnesium  | 24-2  | 1349155 | 1316245 | 1310428 | 1325276 | 1.58   | cps   |
| Manganese  | 55-2  | 1189720 | 1176909 | 1176637 | 1181089 | 0.63   | cps   |
| Molybdenum | 94-1  | 963694  | 982086  | 983099  | 976293  | 1.12   | cps   |
| Molybdenum | 95-1  | 1387134 | 1393071 | 1393474 | 1391226 | 0.26   | cps   |
| Molybdenum | 96-1  | 1478397 | 1498172 | 1489300 | 1488623 | 0.67   | cps   |
| Molybdenum | 97-1  | 868357  | 880780  | 875018  | 874718  | 0.71   | cps   |
| Molybdenum | 98-1  | 2188565 | 2232049 | 2188401 | 2203005 | 1.14   | cps   |
| Neodymium  | 150-1 | 27      | 10      | 13      | 17      | 52.93  | cps   |
| Neodymium  | 150-2 | 10      | 20      | 13      | 14      | 35.26  | cps   |
| Nickel     | 60-2  | 58725   | 58741   | 57855   | 58440   | 0.87   | cps   |
| Phosphorus | 31-2  | 9109    | 9173    | 9433    | 9238    | 1.86   | cps   |
| Potassium  | 39-2  | 865755  | 861017  | 869138  | 865303  | 0.47   | cps   |
| Rhodium    | 103-1 | 6358747 | 6328148 | 6415978 | 6367624 | 0.70   | cps   |
| Rhodium    | 103-2 | 4098459 | 4160270 | 4078125 | 4112285 | 1.04   | cps   |
| Scandium   | 45-1  | 4037854 | 3926835 | 3967686 | 3977458 | 1.41   | cps   |
| Scandium   | 45-2  | 409253  | 408953  | 403549  | 407252  | 0.79   | cps   |
| Selenium   | 82-1  | 5975    | 6033    | 6057    | 6022    | 0.70   | cps   |
| Selenium   | 77-2  | 643     | 737     | 683     | 688     | 6.81   | cps   |
| Selenium   | 78-2  | 2700    | 2814    | 2700    | 2738    | 2.39   | cps   |
| Silicon    | 28-1  | 1593823 | 1622609 | 1620854 | 1612429 | 1.00   | cps   |
| Silver     | 107-1 | 360953  | 366634  | 367311  | 364966  | 0.96   | cps   |
| Silver     | 109-1 | 342414  | 341998  | 345444  | 343285  | 0.55   | cps   |
| Sodium     | 23-2  | 2124113 | 2103929 | 2104149 | 2110730 | 0.55   | cps   |
| Strontium  | 86-1  | 90218   | 90252   | 90715   | 90395   | 0.31   | cps   |
| Strontium  | 88-1  | 781066  | 787412  | 790044  | 786174  | 0.59   | cps   |
| Sulfur     | 34-1  | 200004  | 201375  | 203421  | 201600  | 0.85   | cps   |
| Terbium    | 159-1 | 7732087 | 7761285 | 7830873 | 7774748 | 0.65   | cps   |
| Terbium    | 159-2 | 5756033 | 5785513 | 5590889 | 5710812 | 1.84   | cps   |
| Thallium   | 203-1 | 235010  | 235050  | 237555  | 235871  | 0.62   | cps   |
| Thallium   | 205-1 | 559757  | 562080  | 563352  | 561730  | 0.32   | cps   |
| Tin        | 118-1 | 218853  | 216996  | 220061  | 218637  | 0.71   | cps   |
| Titanium   | 47-1  | 363299  | 369424  | 366205  | 366309  | 0.84   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S3 Instrumnet Name : P7  
Client Sample ID : S3 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 10:59:31 DataFile Name : 007CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 700464   | 710523   | 711885   | 707624   | 0.88   | cps   |
| Vanadium  | 51-2  | 120794   | 118526   | 119102   | 119474   | 0.99   | cps   |
| Yttrium   | 89-1  | 11210967 | 11413535 | 11238419 | 11287640 | 0.97   | cps   |
| Yttrium   | 89-2  | 3224519  | 3311278  | 3238555  | 3258118  | 1.43   | cps   |
| Zinc      | 66-2  | 319088   | 322115   | 320853   | 320685   | 0.47   | cps   |
| Zirconium | 90-1  | 470689   | 476073   | 477549   | 474771   | 0.76   | cps   |
| Zirconium | 91-1  | 104339   | 105151   | 104214   | 104568   | 0.49   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 387943   | 383077   | 379407   | 383476   | 1.12   | cps   |
| Antimony   | 121-1 | 640806   | 650423   | 648670   | 646633   | 0.79   | cps   |
| Arsenic    | 75-2  | 45008    | 45426    | 45199    | 45211    | 0.46   | cps   |
| Barium     | 135-1 | 760091   | 769668   | 762561   | 764107   | 0.65   | cps   |
| Barium     | 137-1 | 1319226  | 1337567  | 1324556  | 1327117  | 0.71   | cps   |
| Beryllium  | 9-1   | 90226    | 92141    | 89235    | 90534    | 1.63   | cps   |
| Bismuth    | 209-1 | 4915545  | 4894275  | 4893213  | 4901011  | 0.26   | cps   |
| Bismuth    | 209-2 | 4194388  | 4190725  | 4359677  | 4248263  | 2.27   | cps   |
| Bromine    | 81-1  | 9196     | 9026     | 9053     | 9092     | 1.01   | cps   |
| Bromine    | 81-2  | 120      | 130      | 120      | 123      | 4.68   | cps   |
| Cadmium    | 108-1 | 13677    | 12976    | 13083    | 13245    | 2.85   | cps   |
| Cadmium    | 106-1 | 21509    | 21282    | 21369    | 21387    | 0.54   | cps   |
| Cadmium    | 111-1 | 185232   | 189457   | 184926   | 186538   | 1.36   | cps   |
| Calcium    | 43-1  | 195685   | 199953   | 196847   | 197495   | 1.12   | cps   |
| Calcium    | 44-1  | 3070720  | 3061075  | 3070058  | 3067284  | 0.18   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 349641   | 349221   | 354090   | 350984   | 0.77   | cps   |
| Cobalt     | 59-2  | 541195   | 540639   | 551563   | 544466   | 1.13   | cps   |
| Copper     | 63-2  | 4240095  | 4212949  | 4249086  | 4234044  | 0.44   | cps   |
| Dysprosium | 156-1 | 17       | 33       | 43       | 31       | 43.29  | cps   |
| Dysprosium | 156-2 | 53       | 50       | 57       | 53       | 6.25   | cps   |
| Erbium     | 164-1 | 63       | 97       | 77       | 79       | 21.27  | cps   |
| Erbium     | 164-2 | 67       | 53       | 77       | 66       | 17.86  | cps   |
| Gadolinium | 160-1 | 63       | 43       | 67       | 58       | 21.85  | cps   |
| Gadolinium | 160-2 | 317      | 407      | 360      | 361      | 12.47  | cps   |
| Holmium    | 165-1 | 7838477  | 7715482  | 7749338  | 7767766  | 0.82   | cps   |
| Holmium    | 165-2 | 5695948  | 5596115  | 5775174  | 5689079  | 1.58   | cps   |
| Indium     | 115-1 | 6390322  | 6613615  | 6432029  | 6478655  | 1.83   | cps   |
| Indium     | 115-2 | 2451637  | 2400280  | 2513740  | 2455219  | 2.31   | cps   |
| Iron       | 56-2  | 16642941 | 16495044 | 16102785 | 16413590 | 1.70   | cps   |
| Iron       | 57-2  | 426950   | 431157   | 427823   | 428643   | 0.52   | cps   |
| Iron       | 54-2  | 963432   | 964959   | 949805   | 959399   | 0.87   | cps   |
| Krypton    | 83-1  | 457      | 457      | 483      | 466      | 3.31   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CAL.S.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 2546391 | 2567404 | 2495678 | 2536491 | 1.45   | cps   |
| Lead       | 207-1 | 2151026 | 2177614 | 2172664 | 2167101 | 0.65   | cps   |
| Lead       | 208-1 | 9963596 | 9997662 | 9923930 | 9961729 | 0.37   | cps   |
| Lithium    | 6-1   | 482464  | 485307  | 482722  | 483498  | 0.33   | cps   |
| Magnesium  | 24-2  | 3375260 | 3296843 | 3281813 | 3317972 | 1.51   | cps   |
| Manganese  | 55-2  | 2936869 | 2920402 | 2822649 | 2893306 | 2.13   | cps   |
| Molybdenum | 94-1  | 2436537 | 2488813 | 2393098 | 2439483 | 1.96   | cps   |
| Molybdenum | 95-1  | 3518982 | 3493758 | 3479564 | 3497435 | 0.57   | cps   |
| Molybdenum | 96-1  | 3803678 | 3798065 | 3860742 | 3820828 | 0.91   | cps   |
| Molybdenum | 97-1  | 2191708 | 2173228 | 2137580 | 2167505 | 1.27   | cps   |
| Molybdenum | 98-1  | 5641414 | 5648382 | 5547855 | 5612551 | 1.00   | cps   |
| Neodymium  | 150-1 | 23      | 30      | 27      | 27      | 12.51  | cps   |
| Neodymium  | 150-2 | 10      | 10      | 3       | 8       | 49.52  | cps   |
| Nickel     | 60-2  | 146482  | 147304  | 143078  | 145621  | 1.54   | cps   |
| Phosphorus | 31-2  | 22019   | 21642   | 21822   | 21828   | 0.86   | cps   |
| Potassium  | 39-2  | 1964407 | 1915697 | 1984788 | 1954964 | 1.82   | cps   |
| Rhodium    | 103-1 | 6601885 | 6379257 | 6433892 | 6471678 | 1.79   | cps   |
| Rhodium    | 103-2 | 4092424 | 4055983 | 4196869 | 4115092 | 1.78   | cps   |
| Scandium   | 45-1  | 4029950 | 4024779 | 3992070 | 4015600 | 0.51   | cps   |
| Scandium   | 45-2  | 416957  | 413213  | 416468  | 415546  | 0.49   | cps   |
| Selenium   | 82-1  | 14510   | 14520   | 14481   | 14504   | 0.14   | cps   |
| Selenium   | 77-2  | 1687    | 1557    | 1577    | 1607    | 4.36   | cps   |
| Selenium   | 78-2  | 5775    | 5641    | 5775    | 5730    | 1.34   | cps   |
| Silicon    | 28-1  | 2626711 | 2678359 | 2697584 | 2667551 | 1.37   | cps   |
| Silver     | 107-1 | 913547  | 925210  | 914291  | 917683  | 0.71   | cps   |
| Silver     | 109-1 | 855331  | 868179  | 855784  | 859765  | 0.85   | cps   |
| Sodium     | 23-2  | 5327491 | 5168383 | 5266759 | 5254211 | 1.53   | cps   |
| Strontium  | 86-1  | 223619  | 228211  | 225595  | 225808  | 1.02   | cps   |
| Strontium  | 88-1  | 1948085 | 1951091 | 1977374 | 1958850 | 0.82   | cps   |
| Sulfur     | 34-1  | 233178  | 234417  | 234418  | 234004  | 0.31   | cps   |
| Terbium    | 159-1 | 8045813 | 8073002 | 8072476 | 8063764 | 0.19   | cps   |
| Terbium    | 159-2 | 5831310 | 5725877 | 5724018 | 5760402 | 1.07   | cps   |
| Thallium   | 203-1 | 594998  | 600272  | 594379  | 596550  | 0.54   | cps   |
| Thallium   | 205-1 | 1406435 | 1444369 | 1411767 | 1420857 | 1.45   | cps   |
| Tin        | 118-1 | 539215  | 551537  | 549624  | 546792  | 1.21   | cps   |
| Titanium   | 47-1  | 911174  | 920018  | 908875  | 913355  | 0.64   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S4 Instrumnet Name : P7  
Client Sample ID : S4 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:02:40 DataFile Name : 008CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 1887616  | 1929789  | 1898076  | 1905160  | 1.15   | cps   |
| Vanadium  | 51-2  | 299308   | 298312   | 294266   | 297296   | 0.90   | cps   |
| Yttrium   | 89-1  | 11558607 | 11494067 | 11285777 | 11446150 | 1.25   | cps   |
| Yttrium   | 89-2  | 3258607  | 3293346  | 3332112  | 3294688  | 1.12   | cps   |
| Zinc      | 66-2  | 768672   | 771630   | 781374   | 773892   | 0.86   | cps   |
| Zirconium | 90-1  | 1191334  | 1205546  | 1192626  | 1196502  | 0.66   | cps   |
| Zirconium | 91-1  | 266337   | 267431   | 266456   | 266741   | 0.23   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 751579   | 748837   | 749602   | 750006   | 0.19   | cps   |
| Antimony   | 121-1 | 1298515  | 1298928  | 1303516  | 1300320  | 0.21   | cps   |
| Arsenic    | 75-2  | 89962    | 88925    | 89847    | 89578    | 0.63   | cps   |
| Barium     | 135-1 | 1523827  | 1534108  | 1526692  | 1528209  | 0.35   | cps   |
| Barium     | 137-1 | 2704164  | 2664918  | 2722128  | 2697070  | 1.08   | cps   |
| Beryllium  | 9-1   | 175080   | 178130   | 179285   | 177498   | 1.22   | cps   |
| Bismuth    | 209-1 | 4628172  | 4917501  | 4903515  | 4816396  | 3.39   | cps   |
| Bismuth    | 209-2 | 4353829  | 4230663  | 4376555  | 4320349  | 1.82   | cps   |
| Bromine    | 81-1  | 9033     | 9096     | 9236     | 9122     | 1.14   | cps   |
| Bromine    | 81-2  | 133      | 117      | 143      | 131      | 10.28  | cps   |
| Cadmium    | 108-1 | 26107    | 25846    | 25893    | 25949    | 0.54   | cps   |
| Cadmium    | 106-1 | 39119    | 39611    | 40787    | 39839    | 2.15   | cps   |
| Cadmium    | 111-1 | 367010   | 371027   | 370688   | 369575   | 0.60   | cps   |
| Calcium    | 43-1  | 391382   | 391820   | 391796   | 391666   | 0.06   | cps   |
| Calcium    | 44-1  | 6116733  | 6181004  | 6100834  | 6132857  | 0.69   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 701463   | 696950   | 693026   | 697146   | 0.61   | cps   |
| Cobalt     | 59-2  | 1092117  | 1081069  | 1078277  | 1083821  | 0.68   | cps   |
| Copper     | 63-2  | 8449263  | 8377843  | 8372789  | 8399965  | 0.51   | cps   |
| Dysprosium | 156-1 | 27       | 50       | 33       | 37       | 32.78  | cps   |
| Dysprosium | 156-2 | 73       | 77       | 90       | 80       | 11.02  | cps   |
| Erbium     | 164-1 | 87       | 93       | 127      | 102      | 20.97  | cps   |
| Erbium     | 164-2 | 73       | 57       | 73       | 68       | 14.19  | cps   |
| Gadolinium | 160-1 | 97       | 57       | 60       | 71       | 31.21  | cps   |
| Gadolinium | 160-2 | 343      | 403      | 270      | 339      | 19.70  | cps   |
| Holmium    | 165-1 | 7321202  | 8050533  | 7572491  | 7648076  | 4.84   | cps   |
| Holmium    | 165-2 | 5893517  | 5682318  | 5888160  | 5821332  | 2.07   | cps   |
| Indium     | 115-1 | 6077873  | 6610592  | 6405583  | 6364683  | 4.22   | cps   |
| Indium     | 115-2 | 2493386  | 2476288  | 2477443  | 2482372  | 0.38   | cps   |
| Iron       | 56-2  | 32602199 | 32236880 | 32291700 | 32376926 | 0.61   | cps   |
| Iron       | 57-2  | 852351   | 832626   | 847996   | 844324   | 1.23   | cps   |
| Iron       | 54-2  | 1815443  | 1810773  | 1809100  | 1811772  | 0.18   | cps   |
| Krypton    | 83-1  | 473      | 413      | 437      | 441      | 6.86   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 4997651  | 5168753  | 5105940  | 5090781  | 1.70   | cps   |
| Lead       | 207-1 | 4355912  | 4437493  | 4435814  | 4409740  | 1.06   | cps   |
| Lead       | 208-1 | 19712523 | 20019454 | 19887992 | 19873323 | 0.77   | cps   |
| Lithium    | 6-1   | 465299   | 489763   | 478510   | 477857   | 2.56   | cps   |
| Magnesium  | 24-2  | 6759525  | 6540087  | 6555026  | 6618212  | 1.85   | cps   |
| Manganese  | 55-2  | 5681993  | 5691187  | 5639184  | 5670788  | 0.49   | cps   |
| Molybdenum | 94-1  | 4746023  | 4897412  | 4944001  | 4862479  | 2.13   | cps   |
| Molybdenum | 95-1  | 6842645  | 6950786  | 6947836  | 6913755  | 0.89   | cps   |
| Molybdenum | 96-1  | 7495344  | 7659168  | 7606420  | 7586978  | 1.10   | cps   |
| Molybdenum | 97-1  | 4362835  | 4362211  | 4387256  | 4370767  | 0.33   | cps   |
| Molybdenum | 98-1  | 11164767 | 11178966 | 11387644 | 11243792 | 1.11   | cps   |
| Neodymium  | 150-1 | 40       | 63       | 73       | 59       | 29.04  | cps   |
| Neodymium  | 150-2 | 10       | 23       | 37       | 23       | 57.15  | cps   |
| Nickel     | 60-2  | 286374   | 282747   | 286025   | 285048   | 0.70   | cps   |
| Phosphorus | 31-2  | 42118    | 42108    | 42145    | 42124    | 0.05   | cps   |
| Potassium  | 39-2  | 3803697  | 3858617  | 3753340  | 3805218  | 1.38   | cps   |
| Rhodium    | 103-1 | 6151154  | 6532039  | 6483807  | 6389000  | 3.25   | cps   |
| Rhodium    | 103-2 | 4208414  | 4047842  | 4115583  | 4123946  | 1.95   | cps   |
| Scandium   | 45-1  | 3802979  | 4074108  | 3931473  | 3936187  | 3.45   | cps   |
| Scandium   | 45-2  | 417281   | 404438   | 409539   | 410419   | 1.58   | cps   |
| Selenium   | 82-1  | 28016    | 28269    | 28497    | 28260    | 0.85   | cps   |
| Selenium   | 77-2  | 3110     | 3400     | 3187     | 3233     | 4.65   | cps   |
| Selenium   | 78-2  | 11181    | 11128    | 11268    | 11192    | 0.63   | cps   |
| Silicon    | 28-1  | 4274959  | 4393147  | 4383975  | 4350694  | 1.51   | cps   |
| Silver     | 107-1 | 1768424  | 1800915  | 1826198  | 1798512  | 1.61   | cps   |
| Silver     | 109-1 | 1712655  | 1732004  | 1738741  | 1727800  | 0.78   | cps   |
| Sodium     | 23-2  | 10287804 | 10377279 | 10437499 | 10367527 | 0.73   | cps   |
| Strontium  | 86-1  | 447179   | 454385   | 456800   | 452788   | 1.11   | cps   |
| Strontium  | 88-1  | 3856640  | 3949506  | 3981144  | 3929096  | 1.65   | cps   |
| Sulfur     | 34-1  | 287150   | 288258   | 286580   | 287329   | 0.30   | cps   |
| Terbium    | 159-1 | 7664339  | 8229433  | 7771988  | 7888587  | 3.80   | cps   |
| Terbium    | 159-2 | 5787315  | 5699927  | 5744410  | 5743884  | 0.76   | cps   |
| Thallium   | 203-1 | 1183373  | 1194320  | 1192000  | 1189898  | 0.48   | cps   |
| Thallium   | 205-1 | 2943832  | 2950527  | 2966369  | 2953576  | 0.39   | cps   |
| Tin        | 118-1 | 1089631  | 1083582  | 1085487  | 1086234  | 0.28   | cps   |
| Titanium   | 47-1  | 1823555  | 1822430  | 1842988  | 1829657  | 0.63   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S5 Instrumnet Name : P7  
Client Sample ID : S5 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:05:38 DataFile Name : 009CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 3780430  | 3826955  | 3842457  | 3816614  | 0.85   | cps   |
| Vanadium  | 51-2  | 587667   | 583275   | 585898   | 585613   | 0.38   | cps   |
| Yttrium   | 89-1  | 10744453 | 11633515 | 11271252 | 11216407 | 3.99   | cps   |
| Yttrium   | 89-2  | 3311279  | 3214771  | 3251744  | 3259264  | 1.49   | cps   |
| Zinc      | 66-2  | 1516319  | 1528303  | 1535108  | 1526577  | 0.62   | cps   |
| Zirconium | 90-1  | 2413093  | 2386399  | 2415118  | 2404870  | 0.67   | cps   |
| Zirconium | 91-1  | 531143   | 535061   | 534694   | 533633   | 0.41   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 1454914  | 1475115  | 1504517  | 1478182  | 1.69   | cps   |
| Antimony   | 121-1 | 2612593  | 2611938  | 2625581  | 2616704  | 0.29   | cps   |
| Arsenic    | 75-2  | 179157   | 179926   | 180903   | 179995   | 0.49   | cps   |
| Barium     | 135-1 | 3094497  | 3127662  | 3137262  | 3119807  | 0.72   | cps   |
| Barium     | 137-1 | 5424412  | 5366981  | 5406042  | 5399145  | 0.54   | cps   |
| Beryllium  | 9-1   | 343010   | 353091   | 347111   | 347737   | 1.46   | cps   |
| Bismuth    | 209-1 | 4981498  | 4978334  | 4980166  | 4979999  | 0.03   | cps   |
| Bismuth    | 209-2 | 4321091  | 4337262  | 4309229  | 4322527  | 0.33   | cps   |
| Bromine    | 81-1  | 9123     | 9000     | 8673     | 8932     | 2.61   | cps   |
| Bromine    | 81-2  | 147      | 130      | 107      | 128      | 15.72  | cps   |
| Cadmium    | 108-1 | 51187    | 52783    | 52037    | 52002    | 1.54   | cps   |
| Cadmium    | 106-1 | 73941    | 75807    | 75476    | 75075    | 1.33   | cps   |
| Cadmium    | 111-1 | 725317   | 736524   | 736557   | 732799   | 0.88   | cps   |
| Calcium    | 43-1  | 765511   | 777081   | 775193   | 772595   | 0.80   | cps   |
| Calcium    | 44-1  | 12010679 | 12216419 | 12148757 | 12125285 | 0.86   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 1354365  | 1378213  | 1393804  | 1375461  | 1.44   | cps   |
| Cobalt     | 59-2  | 2214089  | 2121178  | 2173870  | 2169713  | 2.15   | cps   |
| Copper     | 63-2  | 16512759 | 16791822 | 17251241 | 16851941 | 2.21   | cps   |
| Dysprosium | 156-1 | 83       | 70       | 73       | 76       | 9.18   | cps   |
| Dysprosium | 156-2 | 173      | 197      | 157      | 176      | 11.44  | cps   |
| Erbium     | 164-1 | 147      | 123      | 123      | 131      | 10.28  | cps   |
| Erbium     | 164-2 | 103      | 90       | 70       | 88       | 19.12  | cps   |
| Gadolinium | 160-1 | 93       | 100      | 73       | 89       | 15.61  | cps   |
| Gadolinium | 160-2 | 400      | 360      | 350      | 370      | 7.15   | cps   |
| Holmium    | 165-1 | 8033034  | 7971289  | 7865203  | 7956508  | 1.07   | cps   |
| Holmium    | 165-2 | 5893593  | 5871042  | 5971027  | 5911887  | 0.89   | cps   |
| Indium     | 115-1 | 6590723  | 6332553  | 6453484  | 6458920  | 2.00   | cps   |
| Indium     | 115-2 | 2528573  | 2507467  | 2470125  | 2502055  | 1.18   | cps   |
| Iron       | 56-2  | 65977077 | 64900222 | 65935109 | 65604136 | 0.93   | cps   |
| Iron       | 57-2  | 1627218  | 1608035  | 1648432  | 1627895  | 1.24   | cps   |
| Iron       | 54-2  | 3644031  | 3566673  | 3661343  | 3624015  | 1.39   | cps   |
| Krypton    | 83-1  | 543      | 403      | 543      | 497      | 16.28  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 10104406 | 10280918 | 10280187 | 10221837 | 0.99   | cps   |
| Lead       | 207-1 | 8778713  | 8829442  | 8867934  | 8825363  | 0.51   | cps   |
| Lead       | 208-1 | 39686349 | 40372269 | 40660656 | 40239758 | 1.24   | cps   |
| Lithium    | 6-1   | 496522   | 480950   | 488889   | 488787   | 1.59   | cps   |
| Magnesium  | 24-2  | 13127137 | 13091559 | 13008966 | 13075887 | 0.46   | cps   |
| Manganese  | 55-2  | 11432008 | 11330247 | 11571828 | 11444694 | 1.06   | cps   |
| Molybdenum | 94-1  | 9649198  | 9911884  | 9889243  | 9816775  | 1.48   | cps   |
| Molybdenum | 95-1  | 13567871 | 14165287 | 14080616 | 13937925 | 2.32   | cps   |
| Molybdenum | 96-1  | 15047260 | 15307144 | 15189470 | 15181291 | 0.86   | cps   |
| Molybdenum | 97-1  | 8571036  | 8778549  | 8846774  | 8732119  | 1.64   | cps   |
| Molybdenum | 98-1  | 22272343 | 22425475 | 22803637 | 22500485 | 1.22   | cps   |
| Neodymium  | 150-1 | 97       | 127      | 93       | 106      | 17.39  | cps   |
| Neodymium  | 150-2 | 23       | 23       | 37       | 28       | 27.73  | cps   |
| Nickel     | 60-2  | 567845   | 566667   | 564378   | 566297   | 0.31   | cps   |
| Phosphorus | 31-2  | 82419    | 82124    | 82834    | 82459    | 0.43   | cps   |
| Potassium  | 39-2  | 7579605  | 7408274  | 7431772  | 7473217  | 1.24   | cps   |
| Rhodium    | 103-1 | 6545794  | 6466718  | 6459455  | 6490656  | 0.74   | cps   |
| Rhodium    | 103-2 | 4190535  | 4196781  | 4120742  | 4169353  | 1.01   | cps   |
| Scandium   | 45-1  | 4095577  | 3980803  | 3958507  | 4011629  | 1.83   | cps   |
| Scandium   | 45-2  | 413502   | 410479   | 414619   | 412867   | 0.52   | cps   |
| Selenium   | 82-1  | 55350    | 56445    | 55624    | 55806    | 1.02   | cps   |
| Selenium   | 77-2  | 6538     | 6702     | 6435     | 6558     | 2.05   | cps   |
| Selenium   | 78-2  | 22017    | 22030    | 22698    | 22248    | 1.75   | cps   |
| Silicon    | 28-1  | 7636223  | 7719841  | 7647715  | 7667926  | 0.59   | cps   |
| Silver     | 107-1 | 3618541  | 3642291  | 3629817  | 3630216  | 0.33   | cps   |
| Silver     | 109-1 | 3367130  | 3454891  | 3461341  | 3427787  | 1.54   | cps   |
| Sodium     | 23-2  | 20412593 | 21044923 | 20518381 | 20658632 | 1.64   | cps   |
| Strontium  | 86-1  | 885910   | 903500   | 898615   | 896008   | 1.01   | cps   |
| Strontium  | 88-1  | 7817838  | 7816429  | 7918286  | 7850851  | 0.74   | cps   |
| Sulfur     | 34-1  | 390764   | 393008   | 392835   | 392203   | 0.32   | cps   |
| Terbium    | 159-1 | 8218993  | 8163169  | 8116696  | 8166286  | 0.63   | cps   |
| Terbium    | 159-2 | 5928030  | 5782302  | 5878346  | 5862893  | 1.26   | cps   |
| Thallium   | 203-1 | 2473273  | 2535573  | 2522519  | 2510455  | 1.31   | cps   |
| Thallium   | 205-1 | 6058027  | 6028083  | 6072130  | 6052747  | 0.37   | cps   |
| Tin        | 118-1 | 2165243  | 2144961  | 2163189  | 2157798  | 0.52   | cps   |
| Titanium   | 47-1  | 3609128  | 3671623  | 3654352  | 3645034  | 0.89   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S6 Instrumnet Name : P7  
Client Sample ID : S6 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:08:36 DataFile Name : 010CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 7414398  | 7722043  | 7661702  | 7599381  | 2.15   | cps   |
| Vanadium  | 51-2  | 1177102  | 1171071  | 1181943  | 1176705  | 0.46   | cps   |
| Yttrium   | 89-1  | 11512570 | 11426838 | 11346094 | 11428501 | 0.73   | cps   |
| Yttrium   | 89-2  | 3232752  | 3290966  | 3313104  | 3278941  | 1.27   | cps   |
| Zinc      | 66-2  | 3079189  | 3042510  | 3002098  | 3041266  | 1.27   | cps   |
| Zirconium | 90-1  | 4728876  | 4745541  | 4703516  | 4725977  | 0.45   | cps   |
| Zirconium | 91-1  | 1055700  | 1076366  | 1070985  | 1067684  | 1.00   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CAL.S.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 3093873   | 3116711   | 3035670   | 3082085   | 1.36   | cps   |
| Antimony   | 121-1 | 5303625   | 5401754   | 5318034   | 5341138   | 0.99   | cps   |
| Arsenic    | 75-2  | 368927    | 367168    | 366648    | 367581    | 0.32   | cps   |
| Barium     | 135-1 | 6401379   | 6502809   | 6436847   | 6447012   | 0.80   | cps   |
| Barium     | 137-1 | 11060030  | 11309652  | 11214689  | 11194790  | 1.13   | cps   |
| Beryllium  | 9-1   | 698020    | 702112    | 701267    | 700467    | 0.31   | cps   |
| Bismuth    | 209-1 | 5074382   | 5137858   | 5091947   | 5101396   | 0.64   | cps   |
| Bismuth    | 209-2 | 4509502   | 4372102   | 4236054   | 4372553   | 3.13   | cps   |
| Bromine    | 81-1  | 9506      | 9463      | 9213      | 9394      | 1.69   | cps   |
| Bromine    | 81-2  | 143       | 160       | 143       | 149       | 6.46   | cps   |
| Cadmium    | 108-1 | 106184    | 107637    | 106567    | 106796    | 0.71   | cps   |
| Cadmium    | 106-1 | 149793    | 152470    | 150969    | 151077    | 0.89   | cps   |
| Cadmium    | 111-1 | 1470583   | 1497677   | 1485790   | 1484683   | 0.91   | cps   |
| Calcium    | 43-1  | 1511390   | 1516759   | 1530959   | 1519703   | 0.67   | cps   |
| Calcium    | 44-1  | 24449953  | 24948625  | 24758625  | 24719068  | 1.02   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 2826103   | 2835942   | 2800296   | 2820780   | 0.65   | cps   |
| Cobalt     | 59-2  | 4396204   | 4422961   | 4355278   | 4391481   | 0.78   | cps   |
| Copper     | 63-2  | 34875499  | 34039319  | 33778566  | 34231128  | 1.67   | cps   |
| Dysprosium | 156-1 | 120       | 123       | 100       | 114       | 11.03  | cps   |
| Dysprosium | 156-2 | 373       | 363       | 293       | 343       | 12.70  | cps   |
| Erbium     | 164-1 | 193       | 180       | 227       | 200       | 12.02  | cps   |
| Erbium     | 164-2 | 137       | 170       | 137       | 148       | 13.02  | cps   |
| Gadolinium | 160-1 | 157       | 147       | 133       | 146       | 8.04   | cps   |
| Gadolinium | 160-2 | 407       | 337       | 417       | 387       | 11.27  | cps   |
| Holmium    | 165-1 | 8200655   | 8027124   | 8044052   | 8090610   | 1.18   | cps   |
| Holmium    | 165-2 | 6219742   | 6098482   | 5940984   | 6086403   | 2.30   | cps   |
| Indium     | 115-1 | 6742250   | 6597239   | 6618846   | 6652778   | 1.18   | cps   |
| Indium     | 115-2 | 2604496   | 2573128   | 2529424   | 2569016   | 1.47   | cps   |
| Iron       | 56-2  | 134369771 | 133280485 | 133184038 | 133611431 | 0.49   | cps   |
| Iron       | 57-2  | 3351430   | 3294188   | 3251682   | 3299100   | 1.52   | cps   |
| Iron       | 54-2  | 7383934   | 7473614   | 7344456   | 7400668   | 0.89   | cps   |
| Krypton    | 83-1  | 517       | 497       | 423       | 479       | 10.26  | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CAL.S.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 20485570 | 20989748 | 20989581 | 20821633 | 1.40   | cps   |
| Lead       | 207-1 | 18227281 | 17875584 | 17860788 | 17987884 | 1.15   | cps   |
| Lead       | 208-1 | 81845380 | 83120748 | 82427396 | 82464508 | 0.77   | cps   |
| Lithium    | 6-1   | 491260   | 494253   | 488622   | 491378   | 0.57   | cps   |
| Magnesium  | 24-2  | 26741360 | 26976559 | 26735846 | 26817922 | 0.51   | cps   |
| Manganese  | 55-2  | 23490139 | 23815016 | 23707374 | 23670843 | 0.70   | cps   |
| Molybdenum | 94-1  | 20529323 | 20369593 | 20195236 | 20364717 | 0.82   | cps   |
| Molybdenum | 95-1  | 29078613 | 29403447 | 29460353 | 29314138 | 0.70   | cps   |
| Molybdenum | 96-1  | 31220960 | 31808390 | 31374160 | 31467836 | 0.97   | cps   |
| Molybdenum | 97-1  | 17920147 | 18177553 | 17922921 | 18006874 | 0.82   | cps   |
| Molybdenum | 98-1  | 46119263 | 47037264 | 46173248 | 46443258 | 1.11   | cps   |
| Neodymium  | 150-1 | 203      | 213      | 257      | 224      | 12.63  | cps   |
| Neodymium  | 150-2 | 67       | 60       | 73       | 67       | 10.00  | cps   |
| Nickel     | 60-2  | 1153960  | 1146817  | 1138421  | 1146399  | 0.68   | cps   |
| Phosphorus | 31-2  | 168901   | 167822   | 168447   | 168390   | 0.32   | cps   |
| Potassium  | 39-2  | 15330716 | 15398633 | 15722210 | 15483853 | 1.35   | cps   |
| Rhodium    | 103-1 | 6728209  | 6685364  | 6657661  | 6690411  | 0.53   | cps   |
| Rhodium    | 103-2 | 4315473  | 4263172  | 4268277  | 4282307  | 0.67   | cps   |
| Scandium   | 45-1  | 4188126  | 4164554  | 4198314  | 4183665  | 0.41   | cps   |
| Scandium   | 45-2  | 434769   | 432476   | 423483   | 430242   | 1.39   | cps   |
| Selenium   | 82-1  | 112003   | 114044   | 112864   | 112971   | 0.91   | cps   |
| Selenium   | 77-2  | 13216    | 13046    | 12959    | 13074    | 1.00   | cps   |
| Selenium   | 78-2  | 44447    | 44129    | 43381    | 43986    | 1.24   | cps   |
| Silicon    | 28-1  | 15444215 | 15729587 | 15319428 | 15497743 | 1.36   | cps   |
| Silver     | 107-1 | 7286442  | 7449909  | 7327254  | 7354535  | 1.16   | cps   |
| Silver     | 109-1 | 6942160  | 6918967  | 7094952  | 6985360  | 1.37   | cps   |
| Sodium     | 23-2  | 41970042 | 42507274 | 41869237 | 42115517 | 0.81   | cps   |
| Strontium  | 86-1  | 1875118  | 1883445  | 1851042  | 1869868  | 0.90   | cps   |
| Strontium  | 88-1  | 16126361 | 16241991 | 16094824 | 16154392 | 0.48   | cps   |
| Sulfur     | 34-1  | 610356   | 623325   | 618155   | 617279   | 1.06   | cps   |
| Terbium    | 159-1 | 8594271  | 8340274  | 8346113  | 8426886  | 1.72   | cps   |
| Terbium    | 159-2 | 6188843  | 6091653  | 6093756  | 6124751  | 0.91   | cps   |
| Thallium   | 203-1 | 5151444  | 5155150  | 5113483  | 5140026  | 0.45   | cps   |
| Thallium   | 205-1 | 12370009 | 12344611 | 12271080 | 12328567 | 0.42   | cps   |
| Tin        | 118-1 | 4394050  | 4474631  | 4496288  | 4454990  | 1.21   | cps   |
| Titanium   | 47-1  | 7466423  | 7457157  | 7446644  | 7456741  | 0.13   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S7 Instrumnet Name : P7  
Client Sample ID : S7 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:11:20 DataFile Name : 011CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 15888036 | 15883596 | 16026624 | 15932752 | 0.51   | cps   |
| Vanadium  | 51-2  | 2379001  | 2391778  | 2389228  | 2386669  | 0.28   | cps   |
| Yttrium   | 89-1  | 12157983 | 12009961 | 11945975 | 12037973 | 0.90   | cps   |
| Yttrium   | 89-2  | 3542441  | 3449324  | 3392723  | 3461496  | 2.18   | cps   |
| Zinc      | 66-2  | 6120272  | 6158584  | 6033580  | 6104145  | 1.05   | cps   |
| Zirconium | 90-1  | 9910664  | 9930898  | 9960998  | 9934187  | 0.25   | cps   |
| Zirconium | 91-1  | 2192389  | 2232744  | 2222732  | 2215955  | 0.95   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CAL.S.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 15302792  | 15549141  | 15528700  | 15460211  | 0.88   | cps   |
| Antimony   | 121-1 | 4654      | 4421      | 4214      | 4430      | 4.97   | cps   |
| Arsenic    | 75-2  | 437       | 393       | 497       | 442       | 11.73  | cps   |
| Barium     | 135-1 | 3854      | 3957      | 3974      | 3928      | 1.66   | cps   |
| Barium     | 137-1 | 6838      | 6585      | 6748      | 6724      | 1.91   | cps   |
| Beryllium  | 9-1   | 96        | 71        | 121       | 96        | 26.02  | cps   |
| Bismuth    | 209-1 | 4814440   | 4691046   | 4552791   | 4686092   | 2.79   | cps   |
| Bismuth    | 209-2 | 4095926   | 4120006   | 4041045   | 4085659   | 0.99   | cps   |
| Bromine    | 81-1  | 9607      | 9767      | 10090     | 9821      | 2.51   | cps   |
| Bromine    | 81-2  | 197       | 170       | 227       | 198       | 14.33  | cps   |
| Cadmium    | 108-1 | 100       | 110       | 107       | 106       | 4.82   | cps   |
| Cadmium    | 106-1 | 3257      | 3314      | 3194      | 3255      | 1.84   | cps   |
| Cadmium    | 111-1 | 2930      | 2953      | 2861      | 2915      | 1.64   | cps   |
| Calcium    | 43-1  | 7362860   | 7469222   | 7541746   | 7457942   | 1.21   | cps   |
| Calcium    | 44-1  | 120676585 | 120806482 | 122783808 | 121422292 | 0.97   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 14948     | 14684     | 14961     | 14864     | 1.05   | cps   |
| Cobalt     | 59-2  | 8086      | 8086      | 8006      | 8059      | 0.57   | cps   |
| Copper     | 63-2  | 4444      | 4467      | 4371      | 4427      | 1.14   | cps   |
| Dysprosium | 156-1 | 200       | 297       | 300       | 266       | 21.39  | cps   |
| Dysprosium | 156-2 | 253       | 237       | 250       | 247       | 3.58   | cps   |
| Erbium     | 164-1 | 570       | 697       | 590       | 619       | 11.00  | cps   |
| Erbium     | 164-2 | 503       | 460       | 470       | 478       | 4.75   | cps   |
| Gadolinium | 160-1 | 403       | 397       | 327       | 376       | 11.31  | cps   |
| Gadolinium | 160-2 | 633       | 523       | 523       | 560       | 11.34  | cps   |
| Holmium    | 165-1 | 7961719   | 7918866   | 7946964   | 7942516   | 0.27   | cps   |
| Holmium    | 165-2 | 6030256   | 6065579   | 5978672   | 6024836   | 0.73   | cps   |
| Indium     | 115-1 | 6349841   | 6454133   | 6399873   | 6401282   | 0.81   | cps   |
| Indium     | 115-2 | 2531851   | 2563203   | 2583377   | 2559477   | 1.01   | cps   |
| Iron       | 56-2  | 637976017 | 643375150 | 643386804 | 641579324 | 0.49   | cps   |
| Iron       | 57-2  | 16289201  | 15996321  | 15815901  | 16033808  | 1.49   | cps   |
| Iron       | 54-2  | 35637730  | 35464968  | 35326759  | 35476486  | 0.44   | cps   |
| Krypton    | 83-1  | 483       | 460       | 387       | 443       | 11.38  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CAL.S.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Lead       | 206-1 | 5638      | 5428      | 5234      | 5433      | 3.71   | cps   |
| Lead       | 207-1 | 4621      | 4537      | 4591      | 4583      | 0.92   | cps   |
| Lead       | 208-1 | 22267     | 21113     | 20813     | 21398     | 3.59   | cps   |
| Lithium    | 6-1   | 492547    | 478190    | 469071    | 479936    | 2.47   | cps   |
| Magnesium  | 24-2  | 133276361 | 134358248 | 134229858 | 133954822 | 0.44   | cps   |
| Manganese  | 55-2  | 10791     | 10887     | 10841     | 10840     | 0.45   | cps   |
| Molybdenum | 94-1  | 6375      | 6091      | 6238      | 6235      | 2.27   | cps   |
| Molybdenum | 95-1  | 5334      | 5071      | 4761      | 5055      | 5.68   | cps   |
| Molybdenum | 96-1  | 10054     | 9927      | 9456      | 9812      | 3.21   | cps   |
| Molybdenum | 97-1  | 3507      | 3340      | 3140      | 3329      | 5.52   | cps   |
| Molybdenum | 98-1  | 8479      | 7819      | 7515      | 7938      | 6.21   | cps   |
| Neodymium  | 150-1 | 93        | 130       | 140       | 121       | 20.29  | cps   |
| Neodymium  | 150-2 | 70        | 107       | 73        | 83        | 24.33  | cps   |
| Nickel     | 60-2  | 4564      | 4581      | 4471      | 4539      | 1.31   | cps   |
| Phosphorus | 31-2  | 883       | 900       | 947       | 910       | 3.61   | cps   |
| Potassium  | 39-2  | 77830576  | 76368912  | 76016421  | 76738636  | 1.25   | cps   |
| Rhodium    | 103-1 | 6243178   | 6190665   | 6335429   | 6256424   | 1.17   | cps   |
| Rhodium    | 103-2 | 4099880   | 4135111   | 4044894   | 4093295   | 1.11   | cps   |
| Scandium   | 45-1  | 4161289   | 4202855   | 4229537   | 4197894   | 0.82   | cps   |
| Scandium   | 45-2  | 436029    | 437060    | 430619    | 434569    | 0.80   | cps   |
| Selenium   | 82-1  | 433       | 567       | 581       | 527       | 15.56  | cps   |
| Selenium   | 77-2  | 17        | 13        | 27        | 19        | 36.75  | cps   |
| Selenium   | 78-2  | 550       | 530       | 570       | 550       | 3.64   | cps   |
| Silicon    | 28-1  | 759988    | 750763    | 754658    | 755136    | 0.61   | cps   |
| Silver     | 107-1 | 2944      | 1670      | 1257      | 1957      | 44.93  | cps   |
| Silver     | 109-1 | 2754      | 1397      | 1203      | 1785      | 47.34  | cps   |
| Sodium     | 23-2  | 207933097 | 208267450 | 200758430 | 205652992 | 2.06   | cps   |
| Strontium  | 86-1  | 23312     | 23803     | 23960     | 23691     | 1.43   | cps   |
| Strontium  | 88-1  | 202670    | 201717    | 204894    | 203094    | 0.80   | cps   |
| Sulfur     | 34-1  | 168963    | 171844    | 169649    | 170152    | 0.88   | cps   |
| Terbium    | 159-1 | 8135548   | 8115907   | 8029702   | 8093719   | 0.70   | cps   |
| Terbium    | 159-2 | 5975404   | 6049518   | 6016639   | 6013854   | 0.62   | cps   |
| Thallium   | 203-1 | 7125      | 6942      | 6969      | 7012      | 1.41   | cps   |
| Thallium   | 205-1 | 17909     | 16510     | 16811     | 17076     | 4.31   | cps   |
| Tin        | 118-1 | 1867      | 1973      | 1870      | 1903      | 3.19   | cps   |
| Titanium   | 47-1  | 760       | 670       | 660       | 697       | 7.91   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : S8 Instrumnet Name : P7  
Client Sample ID : S8 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:14:08 DataFile Name : 012CALS.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 857      | 440      | 460      | 586      | 40.14  | cps   |
| Vanadium  | 51-2  | 983      | 1023     | 1040     | 1016     | 2.87   | cps   |
| Yttrium   | 89-1  | 11612909 | 11634297 | 11710101 | 11652436 | 0.44   | cps   |
| Yttrium   | 89-2  | 3506919  | 3560732  | 3424773  | 3497475  | 1.96   | cps   |
| Zinc      | 66-2  | 8042     | 7622     | 7755     | 7807     | 2.75   | cps   |
| Zirconium | 90-1  | 8746     | 8836     | 8609     | 8730     | 1.31   | cps   |
| Zirconium | 91-1  | 1943     | 1933     | 1937     | 1938     | 0.26   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 228106  | 226423  | 228807  | 227779  | 0.54   | cps   |
| Antimony   | 121-1 | 2039681 | 2076783 | 2057632 | 2058032 | 0.90   | cps   |
| Arsenic    | 75-2  | 145645  | 143532  | 146596  | 145257  | 1.08   | cps   |
| Barium     | 135-1 | 1950933 | 1973540 | 1975761 | 1966745 | 0.70   | cps   |
| Barium     | 137-1 | 3393056 | 3433665 | 3352779 | 3393166 | 1.19   | cps   |
| Beryllium  | 9-1   | 24634   | 24753   | 24677   | 24688   | 0.25   | cps   |
| Bismuth    | 209-1 | 4867615 | 4756583 | 4809029 | 4811075 | 1.15   | cps   |
| Bismuth    | 209-2 | 4339427 | 4322632 | 4319218 | 4327092 | 0.25   | cps   |
| Bromine    | 81-1  | 10184   | 10067   | 9960    | 10070   | 1.11   | cps   |
| Bromine    | 81-2  | 237     | 217     | 180     | 211     | 13.61  | cps   |
| Cadmium    | 108-1 | 18759   | 18886   | 19413   | 19019   | 1.82   | cps   |
| Cadmium    | 106-1 | 28518   | 29086   | 29049   | 28884   | 1.10   | cps   |
| Cadmium    | 111-1 | 291546  | 293276  | 289679  | 291500  | 0.62   | cps   |
| Calcium    | 43-1  | 61889   | 60909   | 62027   | 61608   | 0.99   | cps   |
| Calcium    | 44-1  | 1023170 | 1031274 | 1025897 | 1026780 | 0.40   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 460213  | 448832  | 449619  | 452888  | 1.40   | cps   |
| Cobalt     | 59-2  | 1776131 | 1744552 | 1792681 | 1771121 | 1.38   | cps   |
| Copper     | 63-2  | 640019  | 636547  | 639921  | 638829  | 0.31   | cps   |
| Dysprosium | 156-1 | 17      | 10      | 20      | 16      | 32.73  | cps   |
| Dysprosium | 156-2 | 117     | 123     | 87      | 109     | 17.94  | cps   |
| Erbium     | 164-1 | 73      | 83      | 57      | 71      | 18.94  | cps   |
| Erbium     | 164-2 | 37      | 53      | 47      | 46      | 18.41  | cps   |
| Gadolinium | 160-1 | 43      | 73      | 67      | 61      | 25.78  | cps   |
| Gadolinium | 160-2 | 397     | 317     | 323     | 346     | 12.85  | cps   |
| Holmium    | 165-1 | 7746936 | 7643252 | 7633016 | 7674401 | 0.82   | cps   |
| Holmium    | 165-2 | 5876132 | 5816426 | 5791721 | 5828093 | 0.74   | cps   |
| Indium     | 115-1 | 6658027 | 6522482 | 6599734 | 6593414 | 1.03   | cps   |
| Indium     | 115-2 | 2630602 | 2629948 | 2623597 | 2628049 | 0.15   | cps   |
| Iron       | 56-2  | 2082955 | 2043071 | 2045724 | 2057250 | 1.08   | cps   |
| Iron       | 57-2  | 56178   | 54690   | 55686   | 55518   | 1.37   | cps   |
| Iron       | 54-2  | 135256  | 134385  | 134168  | 134603  | 0.43   | cps   |
| Krypton    | 83-1  | 413     | 513     | 400     | 442     | 14.01  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 1466722 | 1481339 | 1471850 | 1473304 | 0.50   | cps   |
| Lead       | 207-1 | 1258963 | 1264278 | 1263074 | 1262105 | 0.22   | cps   |
| Lead       | 208-1 | 5968785 | 5952663 | 5916507 | 5945985 | 0.45   | cps   |
| Lithium    | 6-1   | 439732  | 433077  | 432104  | 434971  | 0.95   | cps   |
| Magnesium  | 24-2  | 952927  | 950512  | 953719  | 952386  | 0.18   | cps   |
| Manganese  | 55-2  | 845775  | 841250  | 836195  | 841073  | 0.57   | cps   |
| Molybdenum | 94-1  | 687     | 767     | 700     | 718     | 5.97   | cps   |
| Molybdenum | 95-1  | 767     | 820     | 797     | 794     | 3.37   | cps   |
| Molybdenum | 96-1  | 1170    | 1013    | 973     | 1052    | 9.88   | cps   |
| Molybdenum | 97-1  | 570     | 620     | 583     | 591     | 4.38   | cps   |
| Molybdenum | 98-1  | 1223    | 1360    | 1227    | 1270    | 6.14   | cps   |
| Neodymium  | 150-1 | 47      | 53      | 57      | 52      | 9.75   | cps   |
| Neodymium  | 150-2 | 7       | 17      | 7       | 10      | 57.72  | cps   |
| Nickel     | 60-2  | 465083  | 461044  | 464204  | 463443  | 0.46   | cps   |
| Phosphorus | 31-2  | 833     | 860     | 900     | 864     | 3.88   | cps   |
| Potassium  | 39-2  | 1259166 | 1238702 | 1255526 | 1251131 | 0.87   | cps   |
| Rhodium    | 103-1 | 6772984 | 6599622 | 6705348 | 6692651 | 1.31   | cps   |
| Rhodium    | 103-2 | 4378460 | 4302525 | 4315544 | 4332176 | 0.94   | cps   |
| Scandium   | 45-1  | 4118658 | 4110194 | 4061201 | 4096684 | 0.76   | cps   |
| Scandium   | 45-2  | 421803  | 421004  | 420684  | 421164  | 0.14   | cps   |
| Selenium   | 82-1  | 45542   | 45668   | 46093   | 45768   | 0.63   | cps   |
| Selenium   | 77-2  | 5371    | 5358    | 5544    | 5424    | 1.92   | cps   |
| Selenium   | 78-2  | 18265   | 18338   | 18462   | 18355   | 0.54   | cps   |
| Silicon    | 28-1  | 712280  | 700095  | 709910  | 707428  | 0.91   | cps   |
| Silver     | 107-1 | 1468896 | 1486014 | 1482564 | 1479158 | 0.61   | cps   |
| Silver     | 109-1 | 1392331 | 1391355 | 1385865 | 1389850 | 0.25   | cps   |
| Sodium     | 23-2  | 1649864 | 1632538 | 1654772 | 1645725 | 0.71   | cps   |
| Strontium  | 86-1  | 900     | 833     | 963     | 899     | 7.23   | cps   |
| Strontium  | 88-1  | 1043    | 1080    | 1100    | 1074    | 2.67   | cps   |
| Sulfur     | 34-1  | 167432  | 168120  | 168366  | 167973  | 0.29   | cps   |
| Terbium    | 159-1 | 7894996 | 7985013 | 7863357 | 7914455 | 0.80   | cps   |
| Terbium    | 159-2 | 5911976 | 5853373 | 5836699 | 5867349 | 0.67   | cps   |
| Thallium   | 203-1 | 1843210 | 1817230 | 1759940 | 1806793 | 2.36   | cps   |
| Thallium   | 205-1 | 4487388 | 4447426 | 4404133 | 4446316 | 0.94   | cps   |
| Tin        | 118-1 | 1727    | 1843    | 1660    | 1743    | 5.32   | cps   |
| Titanium   | 47-1  | 210     | 220     | 223     | 218     | 3.19   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICV01 Instrumnet Name : P7  
Client Sample ID : ICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:35:30 DataFile Name : 014ICV.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 160      | 23       | 20       | 68       | 117.87 | cps   |
| Vanadium  | 51-2  | 955732   | 943205   | 953127   | 950688   | 0.70   | cps   |
| Yttrium   | 89-1  | 11831127 | 11739216 | 11379415 | 11649920 | 2.05   | cps   |
| Yttrium   | 89-2  | 3430707  | 3378964  | 3406955  | 3405542  | 0.76   | cps   |
| Zinc      | 66-2  | 233733   | 233390   | 233904   | 233676   | 0.11   | cps   |
| Zirconium | 90-1  | 587      | 707      | 600      | 631      | 10.42  | cps   |
| Zirconium | 91-1  | 310      | 260      | 287      | 286      | 8.76   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 4377    | 4571    | 4451    | 4466    | 2.19   | cps   |
| Antimony   | 121-1 | 10294   | 11124   | 10891   | 10770   | 3.98   | cps   |
| Arsenic    | 75-2  | 360     | 363     | 357     | 360     | 0.93   | cps   |
| Barium     | 135-1 | 12175   | 12215   | 12786   | 12392   | 2.76   | cps   |
| Barium     | 137-1 | 21116   | 21339   | 21219   | 21225   | 0.53   | cps   |
| Beryllium  | 9-1   | 655     | 765     | 715     | 711     | 7.74   | cps   |
| Bismuth    | 209-1 | 4715312 | 4739683 | 4711025 | 4722007 | 0.33   | cps   |
| Bismuth    | 209-2 | 4224919 | 4263109 | 4303963 | 4263997 | 0.93   | cps   |
| Bromine    | 81-1  | 9403    | 9540    | 10187   | 9710    | 4.31   | cps   |
| Bromine    | 81-2  | 123     | 133     | 117     | 124     | 6.74   | cps   |
| Cadmium    | 108-1 | 167     | 173     | 110     | 150     | 23.20  | cps   |
| Cadmium    | 106-1 | 2840    | 2944    | 2774    | 2853    | 3.00   | cps   |
| Cadmium    | 111-1 | 3488    | 3846    | 3478    | 3604    | 5.81   | cps   |
| Calcium    | 43-1  | 8282    | 8362    | 8316    | 8320    | 0.48   | cps   |
| Calcium    | 44-1  | 153678  | 154600  | 155117  | 154465  | 0.47   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 7992    | 8279    | 7919    | 8063    | 2.36   | cps   |
| Cobalt     | 59-2  | 4794    | 4531    | 4687    | 4671    | 2.84   | cps   |
| Copper     | 63-2  | 7962    | 7799    | 7695    | 7819    | 1.72   | cps   |
| Dysprosium | 156-1 | 7       | 7       | 13      | 9       | 43.25  | cps   |
| Dysprosium | 156-2 | 3       | 3       | 3       | 3       | 0.00   | cps   |
| Erbium     | 164-1 | 67      | 50      | 63      | 60      | 14.70  | cps   |
| Erbium     | 164-2 | 53      | 60      | 40      | 51      | 19.92  | cps   |
| Gadolinium | 160-1 | 33      | 57      | 33      | 41      | 32.78  | cps   |
| Gadolinium | 160-2 | 347     | 367     | 350     | 354     | 3.02   | cps   |
| Holmium    | 165-1 | 7544830 | 7388056 | 7764188 | 7565692 | 2.50   | cps   |
| Holmium    | 165-2 | 5683576 | 5728279 | 5792331 | 5734729 | 0.95   | cps   |
| Indium     | 115-1 | 6522861 | 6518414 | 6537581 | 6526285 | 0.15   | cps   |
| Indium     | 115-2 | 2536340 | 2481655 | 2479857 | 2499284 | 1.28   | cps   |
| Iron       | 56-2  | 159144  | 161432  | 165530  | 162035  | 2.00   | cps   |
| Iron       | 57-2  | 5394    | 4984    | 4904    | 5094    | 5.16   | cps   |
| Iron       | 54-2  | 10450   | 10794   | 10975   | 10740   | 2.48   | cps   |
| Krypton    | 83-1  | 477     | 510     | 470     | 486     | 4.41   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 4021    | 3814    | 3854    | 3896    | 2.81   | cps   |
| Lead       | 207-1 | 3380    | 3417    | 3277    | 3358    | 2.16   | cps   |
| Lead       | 208-1 | 15354   | 15547   | 15410   | 15437   | 0.64   | cps   |
| Lithium    | 6-1   | 438773  | 444977  | 442567  | 442106  | 0.71   | cps   |
| Magnesium  | 24-2  | 128483  | 128503  | 128897  | 128628  | 0.18   | cps   |
| Manganese  | 55-2  | 3434    | 3214    | 3177    | 3275    | 4.24   | cps   |
| Molybdenum | 94-1  | 12262   | 11925   | 12179   | 12122   | 1.45   | cps   |
| Molybdenum | 95-1  | 14457   | 14651   | 14371   | 14493   | 0.99   | cps   |
| Molybdenum | 96-1  | 15755   | 16142   | 15402   | 15766   | 2.35   | cps   |
| Molybdenum | 97-1  | 8779    | 9136    | 8983    | 8966    | 2.00   | cps   |
| Molybdenum | 98-1  | 22538   | 23406   | 22721   | 22888   | 2.00   | cps   |
| Neodymium  | 150-1 | 7       | 13      | 17      | 12      | 41.65  | cps   |
| Neodymium  | 150-2 | 0       | 0       | 10      | 3       | 173.21 | cps   |
| Nickel     | 60-2  | 1620    | 1560    | 1637    | 1606    | 2.51   | cps   |
| Phosphorus | 31-2  | 2847    | 2940    | 2897    | 2895    | 1.61   | cps   |
| Potassium  | 39-2  | 223701  | 222888  | 220583  | 222391  | 0.73   | cps   |
| Rhodium    | 103-1 | 6535653 | 6550408 | 6491966 | 6526009 | 0.47   | cps   |
| Rhodium    | 103-2 | 4236117 | 4163955 | 4142129 | 4180734 | 1.18   | cps   |
| Scandium   | 45-1  | 4014885 | 4005383 | 4003702 | 4007990 | 0.15   | cps   |
| Scandium   | 45-2  | 405536  | 408588  | 408108  | 407411  | 0.40   | cps   |
| Selenium   | 82-1  | 911     | 855     | 863     | 877     | 3.43   | cps   |
| Selenium   | 77-2  | 43      | 50      | 70      | 54      | 25.49  | cps   |
| Selenium   | 78-2  | 700     | 693     | 743     | 712     | 3.81   | cps   |
| Silicon    | 28-1  | 689183  | 690763  | 687561  | 689169  | 0.23   | cps   |
| Silver     | 107-1 | 7886    | 8403    | 7589    | 7959    | 5.17   | cps   |
| Silver     | 109-1 | 7152    | 7432    | 7165    | 7250    | 2.18   | cps   |
| Sodium     | 23-2  | 231365  | 232137  | 230553  | 231352  | 0.34   | cps   |
| Strontium  | 86-1  | 2590    | 2504    | 2757    | 2617    | 4.92   | cps   |
| Strontium  | 88-1  | 16109   | 16826   | 15815   | 16250   | 3.20   | cps   |
| Sulfur     | 34-1  | 174871  | 177599  | 175933  | 176134  | 0.78   | cps   |
| Terbium    | 159-1 | 7911820 | 7859846 | 7852372 | 7874679 | 0.41   | cps   |
| Terbium    | 159-2 | 5758943 | 5781570 | 5818147 | 5786220 | 0.52   | cps   |
| Thallium   | 203-1 | 5194    | 5161    | 5351    | 5236    | 1.94   | cps   |
| Thallium   | 205-1 | 12036   | 12499   | 12433   | 12322   | 2.03   | cps   |
| Tin        | 118-1 | 23436   | 23857   | 23416   | 23569   | 1.06   | cps   |
| Titanium   | 47-1  | 3677    | 3720    | 3747    | 3715    | 0.95   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : LLICV01 Instrumnet Name : P7  
Client Sample ID : LLICV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:50:16 DataFile Name : 017LLIC.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 13827    | 13814    | 13781    | 13807    | 0.17   | cps   |
| Vanadium  | 51-2  | 11865    | 12168    | 11898    | 11977    | 1.39   | cps   |
| Yttrium   | 89-1  | 11439977 | 11420236 | 11749797 | 11536670 | 1.60   | cps   |
| Yttrium   | 89-2  | 3316218  | 3352881  | 3287086  | 3318729  | 0.99   | cps   |
| Zinc      | 66-2  | 7145     | 6802     | 6748     | 6898     | 3.12   | cps   |
| Zirconium | 90-1  | 10254    | 10697    | 10477    | 10476    | 2.12   | cps   |
| Zirconium | 91-1  | 2214     | 2400     | 2344     | 2319     | 4.13   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1413    | 1533    | 1597    | 1515    | 6.15   | cps   |
| Antimony   | 121-1 | 77      | 103     | 47      | 76      | 37.52  | cps   |
| Arsenic    | 75-2  | 10      | 10      | 7       | 9       | 21.63  | cps   |
| Barium     | 135-1 | 80      | 50      | 43      | 58      | 33.81  | cps   |
| Barium     | 137-1 | 87      | 113     | 107     | 102     | 13.58  | cps   |
| Beryllium  | 9-1   | 17      | 3       | 3       | 8       | 99.58  | cps   |
| Bismuth    | 209-1 | 4812255 | 4743492 | 4654271 | 4736672 | 1.67   | cps   |
| Bismuth    | 209-2 | 4131411 | 4197635 | 4206438 | 4178495 | 0.98   | cps   |
| Bromine    | 81-1  | 10087   | 9797    | 10080   | 9988    | 1.66   | cps   |
| Bromine    | 81-2  | 177     | 143     | 197     | 172     | 15.64  | cps   |
| Cadmium    | 108-1 | 10      | 7       | 10      | 9       | 21.63  | cps   |
| Cadmium    | 106-1 | 2614    | 2784    | 2460    | 2619    | 6.18   | cps   |
| Cadmium    | 111-1 | 1853    | 1954    | 1732    | 1846    | 6.02   | cps   |
| Calcium    | 43-1  | 337     | 433     | 313     | 361     | 17.62  | cps   |
| Calcium    | 44-1  | 25024   | 25906   | 26607   | 25846   | 3.07   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2290    | 2507    | 2404    | 2400    | 4.52   | cps   |
| Cobalt     | 59-2  | 123     | 100     | 87      | 103     | 17.96  | cps   |
| Copper     | 63-2  | 1360    | 1240    | 1190    | 1263    | 6.92   | cps   |
| Dysprosium | 156-1 | 7       | 13      | 3       | 8       | 65.47  | cps   |
| Dysprosium | 156-2 | 3       | 0       | 3       | 2       | 86.60  | cps   |
| Erbium     | 164-1 | 50      | 60      | 73      | 61      | 19.15  | cps   |
| Erbium     | 164-2 | 53      | 30      | 20      | 34      | 49.66  | cps   |
| Gadolinium | 160-1 | 53      | 30      | 33      | 39      | 32.45  | cps   |
| Gadolinium | 160-2 | 297     | 313     | 357     | 322     | 9.61   | cps   |
| Holmium    | 165-1 | 7760967 | 7549634 | 7538120 | 7616240 | 1.65   | cps   |
| Holmium    | 165-2 | 5673663 | 5724638 | 5570018 | 5656106 | 1.39   | cps   |
| Indium     | 115-1 | 6619635 | 6498637 | 6391239 | 6503171 | 1.76   | cps   |
| Indium     | 115-2 | 2537698 | 2467438 | 2496676 | 2500604 | 1.41   | cps   |
| Iron       | 56-2  | 22010   | 21909   | 22060   | 21993   | 0.35   | cps   |
| Iron       | 57-2  | 1437    | 1420    | 1410    | 1422    | 0.95   | cps   |
| Iron       | 54-2  | 2740    | 2727    | 2737    | 2735    | 0.25   | cps   |
| Krypton    | 83-1  | 510     | 510     | 457     | 492     | 6.26   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 473     | 543     | 507     | 508     | 6.90   | cps   |
| Lead       | 207-1 | 430     | 437     | 403     | 423     | 4.17   | cps   |
| Lead       | 208-1 | 2007    | 2057    | 1953    | 2006    | 2.58   | cps   |
| Lithium    | 6-1   | 440083  | 441304  | 433857  | 438415  | 0.91   | cps   |
| Magnesium  | 24-2  | 383     | 463     | 397     | 414     | 10.34  | cps   |
| Manganese  | 55-2  | 843     | 780     | 757     | 793     | 5.65   | cps   |
| Molybdenum | 94-1  | 463     | 380     | 447     | 430     | 10.26  | cps   |
| Molybdenum | 95-1  | 317     | 277     | 270     | 288     | 8.77   | cps   |
| Molybdenum | 96-1  | 360     | 393     | 360     | 371     | 5.19   | cps   |
| Molybdenum | 97-1  | 227     | 267     | 217     | 237     | 11.18  | cps   |
| Molybdenum | 98-1  | 613     | 527     | 457     | 532     | 14.75  | cps   |
| Neodymium  | 150-1 | 0       | 3       | 13      | 6       | 124.93 | cps   |
| Neodymium  | 150-2 | 3       | 3       | 3       | 3       | 0.00   | cps   |
| Nickel     | 60-2  | 547     | 573     | 560     | 560     | 2.38   | cps   |
| Phosphorus | 31-2  | 740     | 827     | 817     | 794     | 5.97   | cps   |
| Potassium  | 39-2  | 65821   | 67773   | 66340   | 66645   | 1.52   | cps   |
| Rhodium    | 103-1 | 6588726 | 6557742 | 6440699 | 6529056 | 1.20   | cps   |
| Rhodium    | 103-2 | 4133427 | 4121461 | 4116689 | 4123859 | 0.21   | cps   |
| Scandium   | 45-1  | 4080036 | 3991019 | 3948613 | 4006556 | 1.67   | cps   |
| Scandium   | 45-2  | 403583  | 404692  | 401127  | 403134  | 0.45   | cps   |
| Selenium   | 82-1  | 289     | 310     | 390     | 330     | 16.25  | cps   |
| Selenium   | 77-2  | 3       | 3       | 3       | 3       | 0.00   | cps   |
| Selenium   | 78-2  | 403     | 493     | 470     | 456     | 10.25  | cps   |
| Silicon    | 28-1  | 673265  | 676425  | 903310  | 751000  | 17.57  | cps   |
| Silver     | 107-1 | 130     | 107     | 130     | 122     | 11.02  | cps   |
| Silver     | 109-1 | 113     | 97      | 90      | 100     | 12.02  | cps   |
| Sodium     | 23-2  | 35594   | 35615   | 35087   | 35432   | 0.84   | cps   |
| Strontium  | 86-1  | 777     | 877     | 790     | 814     | 6.67   | cps   |
| Strontium  | 88-1  | 297     | 307     | 333     | 312     | 6.07   | cps   |
| Sulfur     | 34-1  | 171187  | 173472  | 174028  | 172896  | 0.87   | cps   |
| Terbium    | 159-1 | 7827624 | 7687435 | 7706982 | 7740680 | 0.98   | cps   |
| Terbium    | 159-2 | 5698294 | 5547176 | 5655801 | 5633757 | 1.38   | cps   |
| Thallium   | 203-1 | 350     | 350     | 357     | 352     | 1.09   | cps   |
| Thallium   | 205-1 | 753     | 757     | 710     | 740     | 3.52   | cps   |
| Tin        | 118-1 | 1087    | 933     | 980     | 1000    | 7.86   | cps   |
| Titanium   | 47-1  | 107     | 93      | 100     | 100     | 6.67   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICB01 Instrumnet Name : P7  
Client Sample ID : ICB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 11:56:00 DataFile Name : 018CCBE.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 150      | 13       | 23       | 62       | 122.44 | cps   |
| Vanadium  | 51-2  | 30       | 10       | 23       | 21       | 48.24  | cps   |
| Yttrium   | 89-1  | 11802893 | 11391218 | 11279190 | 11491100 | 2.40   | cps   |
| Yttrium   | 89-2  | 3287347  | 3306583  | 3265503  | 3286478  | 0.63   | cps   |
| Zinc      | 66-2  | 4274     | 4387     | 4444     | 4368     | 1.98   | cps   |
| Zirconium | 90-1  | 460      | 483      | 650      | 531      | 19.51  | cps   |
| Zirconium | 91-1  | 90       | 147      | 107      | 114      | 25.45  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 13158787  | 13693729  | 13245616  | 13366044  | 2.15   | cps   |
| Antimony   | 121-1 | 5645      | 5831      | 5911      | 5796      | 2.36   | cps   |
| Arsenic    | 75-2  | 93        | 160       | 123       | 126       | 26.59  | cps   |
| Barium     | 135-1 | 1923      | 1863      | 1957      | 1915      | 2.47   | cps   |
| Barium     | 137-1 | 3060      | 3114      | 3047      | 3074      | 1.15   | cps   |
| Beryllium  | 9-1   | 185       | 214       | 184       | 194       | 8.87   | cps   |
| Bismuth    | 209-1 | 4658870   | 4732961   | 4850570   | 4747467   | 2.04   | cps   |
| Bismuth    | 209-2 | 4172098   | 4175907   | 4154991   | 4167665   | 0.27   | cps   |
| Bromine    | 81-1  | 10210     | 11471     | 11375     | 11019     | 6.37   | cps   |
| Bromine    | 81-2  | 387       | 480       | 453       | 440       | 10.93  | cps   |
| Cadmium    | 108-1 | 727       | 733       | 640       | 700       | 7.44   | cps   |
| Cadmium    | 106-1 | 2744      | 2567      | 2534      | 2615      | 4.32   | cps   |
| Cadmium    | 111-1 | 2299      | 2197      | 2182      | 2226      | 2.85   | cps   |
| Calcium    | 43-1  | 1438987   | 1404270   | 1422343   | 1421866   | 1.22   | cps   |
| Calcium    | 44-1  | 22868151  | 22955941  | 23446065  | 23090053  | 1.35   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 57781     | 57275     | 57369     | 57475     | 0.47   | cps   |
| Cobalt     | 59-2  | 5548      | 5564      | 5564      | 5559      | 0.17   | cps   |
| Copper     | 63-2  | 26243     | 26083     | 26507     | 26278     | 0.82   | cps   |
| Dysprosium | 156-1 | 33        | 27        | 37        | 32        | 15.80  | cps   |
| Dysprosium | 156-2 | 17        | 13        | 17        | 16        | 12.40  | cps   |
| Erbium     | 164-1 | 93        | 80        | 53        | 76        | 26.96  | cps   |
| Erbium     | 164-2 | 47        | 43        | 57        | 49        | 14.20  | cps   |
| Gadolinium | 160-1 | 87        | 60        | 67        | 71        | 19.52  | cps   |
| Gadolinium | 160-2 | 350       | 347       | 323       | 340       | 4.27   | cps   |
| Holmium    | 165-1 | 7801704   | 7715997   | 8138547   | 7885416   | 2.83   | cps   |
| Holmium    | 165-2 | 5886654   | 5967005   | 6070002   | 5974554   | 1.54   | cps   |
| Indium     | 115-1 | 6460679   | 6571683   | 6594849   | 6542404   | 1.10   | cps   |
| Indium     | 115-2 | 2464387   | 2500856   | 2521231   | 2495491   | 1.15   | cps   |
| Iron       | 56-2  | 243878976 | 245467190 | 249218203 | 246188123 | 1.11   | cps   |
| Iron       | 57-2  | 6106183   | 6133569   | 6183037   | 6140929   | 0.63   | cps   |
| Iron       | 54-2  | 13672212  | 13738328  | 13871411  | 13760650  | 0.74   | cps   |
| Krypton    | 83-1  | 517       | 460       | 407       | 461       | 11.93  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 17592    | 17648    | 17899    | 17713    | 0.92   | cps   |
| Lead       | 207-1 | 13821    | 13373    | 14338    | 13844    | 3.49   | cps   |
| Lead       | 208-1 | 64727    | 65011    | 66724    | 65487    | 1.65   | cps   |
| Lithium    | 6-1   | 446436   | 442740   | 446266   | 445147   | 0.47   | cps   |
| Magnesium  | 24-2  | 22856890 | 23377320 | 23369004 | 23201072 | 1.28   | cps   |
| Manganese  | 55-2  | 17313    | 17564    | 17060    | 17312    | 1.46   | cps   |
| Molybdenum | 94-1  | 3091978  | 3143480  | 3170921  | 3135460  | 1.28   | cps   |
| Molybdenum | 95-1  | 5304919  | 5508089  | 5592317  | 5468441  | 2.70   | cps   |
| Molybdenum | 96-1  | 5643266  | 5936959  | 5908763  | 5829663  | 2.78   | cps   |
| Molybdenum | 97-1  | 3277329  | 3440940  | 3471007  | 3396425  | 3.07   | cps   |
| Molybdenum | 98-1  | 8513666  | 8743036  | 8647784  | 8634829  | 1.33   | cps   |
| Neodymium  | 150-1 | 23       | 33       | 37       | 31       | 22.31  | cps   |
| Neodymium  | 150-2 | 13       | 17       | 13       | 14       | 13.35  | cps   |
| Nickel     | 60-2  | 6622     | 6165     | 6662     | 6483     | 4.26   | cps   |
| Phosphorus | 31-2  | 785218   | 782700   | 786216   | 784711   | 0.23   | cps   |
| Potassium  | 39-2  | 29287168 | 29106552 | 28634196 | 29009305 | 1.16   | cps   |
| Rhodium    | 103-1 | 6370870  | 6505879  | 6409066  | 6428605  | 1.08   | cps   |
| Rhodium    | 103-2 | 4133707  | 4169078  | 4196518  | 4166434  | 0.76   | cps   |
| Scandium   | 45-1  | 4038737  | 3887091  | 3992813  | 3972880  | 1.96   | cps   |
| Scandium   | 45-2  | 410472   | 413475   | 414709   | 412885   | 0.53   | cps   |
| Selenium   | 82-1  | 341      | 349      | 396      | 362      | 8.16   | cps   |
| Selenium   | 77-2  | 0        | 0        | 10       | 3        | 173.21 | cps   |
| Selenium   | 78-2  | 410      | 393      | 463      | 422      | 8.66   | cps   |
| Silicon    | 28-1  | 688682   | 684771   | 681878   | 685110   | 0.50   | cps   |
| Silver     | 107-1 | 380      | 337      | 313      | 343      | 9.85   | cps   |
| Silver     | 109-1 | 347      | 283      | 320      | 317      | 10.04  | cps   |
| Sodium     | 23-2  | 39550628 | 39940348 | 40325633 | 39938869 | 0.97   | cps   |
| Strontium  | 86-1  | 57709    | 58255    | 58931    | 58299    | 1.05   | cps   |
| Strontium  | 88-1  | 500964   | 518298   | 519355   | 512872   | 2.01   | cps   |
| Sulfur     | 34-1  | 2342232  | 2306546  | 2342487  | 2330422  | 0.89   | cps   |
| Terbium    | 159-1 | 7937094  | 7957279  | 7949168  | 7947847  | 0.13   | cps   |
| Terbium    | 159-2 | 5760183  | 5834558  | 5925589  | 5840110  | 1.42   | cps   |
| Thallium   | 203-1 | 457      | 447      | 563      | 489      | 13.23  | cps   |
| Thallium   | 205-1 | 877      | 920      | 1253     | 1017     | 20.27  | cps   |
| Tin        | 118-1 | 3097     | 4284     | 4788     | 4056     | 21.40  | cps   |
| Titanium   | 47-1  | 1405409  | 1421331  | 1457203  | 1427981  | 1.86   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSA01 Instrumnet Name : P7  
Client Sample ID : ICSA01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:00:23 DataFile Name : 019ICSA.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 407      | 273      | 250      | 310      | 27.27  | cps   |
| Vanadium  | 51-2  | 483      | 513      | 507      | 501      | 3.14   | cps   |
| Yttrium   | 89-1  | 11503702 | 11683496 | 11514771 | 11567323 | 0.87   | cps   |
| Yttrium   | 89-2  | 3327483  | 3358668  | 3375296  | 3353816  | 0.72   | cps   |
| Zinc      | 66-2  | 9713     | 10080    | 10107    | 9967     | 2.21   | cps   |
| Zirconium | 90-1  | 717      | 683      | 447      | 616      | 23.91  | cps   |
| Zirconium | 91-1  | 160      | 130      | 113      | 134      | 17.59  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 13702799  | 14036304  | 13707198  | 13815434  | 1.38   | cps   |
| Antimony   | 121-1 | 113811    | 113491    | 114764    | 114022    | 0.58   | cps   |
| Arsenic    | 75-2  | 6875      | 7459      | 7492      | 7275      | 4.77   | cps   |
| Barium     | 135-1 | 27483     | 28211     | 27377     | 27690     | 1.64   | cps   |
| Barium     | 137-1 | 49075     | 48142     | 48921     | 48712     | 1.03   | cps   |
| Beryllium  | 9-1   | 12756     | 12306     | 13009     | 12691     | 2.81   | cps   |
| Bismuth    | 209-1 | 4850153   | 4996670   | 4877875   | 4908233   | 1.59   | cps   |
| Bismuth    | 209-2 | 4456598   | 4274160   | 4370437   | 4367065   | 2.09   | cps   |
| Bromine    | 81-1  | 11161     | 11705     | 11758     | 11541     | 2.86   | cps   |
| Bromine    | 81-2  | 390       | 467       | 417       | 424       | 9.17   | cps   |
| Cadmium    | 108-1 | 2680      | 2717      | 2670      | 2689      | 0.91   | cps   |
| Cadmium    | 106-1 | 5604      | 5354      | 5371      | 5443      | 2.57   | cps   |
| Cadmium    | 111-1 | 32586     | 32833     | 32466     | 32628     | 0.57   | cps   |
| Calcium    | 43-1  | 1514526   | 1480916   | 1538119   | 1511187   | 1.90   | cps   |
| Calcium    | 44-1  | 24212144  | 24603310  | 24965391  | 24593615  | 1.53   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 116426    | 116282    | 116729    | 116479    | 0.20   | cps   |
| Cobalt     | 59-2  | 96240     | 96643     | 96164     | 96349     | 0.27   | cps   |
| Copper     | 63-2  | 90835     | 91036     | 89383     | 90418     | 1.00   | cps   |
| Dysprosium | 156-1 | 30        | 20        | 30        | 27        | 21.65  | cps   |
| Dysprosium | 156-2 | 30        | 27        | 20        | 26        | 19.92  | cps   |
| Erbium     | 164-1 | 87        | 93        | 67        | 82        | 16.87  | cps   |
| Erbium     | 164-2 | 93        | 37        | 47        | 59        | 51.35  | cps   |
| Gadolinium | 160-1 | 70        | 63        | 63        | 66        | 5.87   | cps   |
| Gadolinium | 160-2 | 300       | 323       | 327       | 317       | 4.59   | cps   |
| Holmium    | 165-1 | 8201341   | 8201684   | 7996909   | 8133311   | 1.45   | cps   |
| Holmium    | 165-2 | 6209543   | 6086454   | 6099893   | 6131963   | 1.10   | cps   |
| Indium     | 115-1 | 6845086   | 6927911   | 6800678   | 6857892   | 0.94   | cps   |
| Indium     | 115-2 | 2642828   | 2553573   | 2567074   | 2587825   | 1.86   | cps   |
| Iron       | 56-2  | 255142890 | 258714196 | 257343816 | 257066967 | 0.70   | cps   |
| Iron       | 57-2  | 6376951   | 6320077   | 6272878   | 6323302   | 0.82   | cps   |
| Iron       | 54-2  | 14133881  | 14272061  | 14236188  | 14214043  | 0.50   | cps   |
| Krypton    | 83-1  | 483       | 507       | 510       | 500       | 2.91   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 100918   | 105352   | 102633   | 102968   | 2.17   | cps   |
| Lead       | 207-1 | 86875    | 84483    | 86911    | 86090    | 1.62   | cps   |
| Lead       | 208-1 | 394129   | 395756   | 398933   | 396272   | 0.62   | cps   |
| Lithium    | 6-1   | 434691   | 443344   | 427296   | 435110   | 1.85   | cps   |
| Magnesium  | 24-2  | 24182539 | 23678870 | 23507762 | 23789724 | 1.47   | cps   |
| Manganese  | 55-2  | 61894    | 61184    | 60404    | 61161    | 1.22   | cps   |
| Molybdenum | 94-1  | 3186853  | 3359087  | 3204075  | 3250005  | 2.92   | cps   |
| Molybdenum | 95-1  | 5614722  | 5821072  | 5561406  | 5665733  | 2.42   | cps   |
| Molybdenum | 96-1  | 5996124  | 6164626  | 5902691  | 6021147  | 2.20   | cps   |
| Molybdenum | 97-1  | 3503683  | 3540019  | 3492392  | 3512031  | 0.71   | cps   |
| Molybdenum | 98-1  | 9079522  | 9219523  | 8997467  | 9098837  | 1.23   | cps   |
| Neodymium  | 150-1 | 33       | 30       | 37       | 33       | 10.01  | cps   |
| Neodymium  | 150-2 | 23       | 20       | 30       | 24       | 20.83  | cps   |
| Nickel     | 60-2  | 29733    | 30090    | 29629    | 29818    | 0.81   | cps   |
| Phosphorus | 31-2  | 815584   | 808149   | 805479   | 809737   | 0.65   | cps   |
| Potassium  | 39-2  | 30025603 | 30158518 | 29995595 | 30059905 | 0.29   | cps   |
| Rhodium    | 103-1 | 6919450  | 6693242  | 6795600  | 6802764  | 1.67   | cps   |
| Rhodium    | 103-2 | 4324070  | 4265944  | 4350019  | 4313345  | 1.00   | cps   |
| Scandium   | 45-1  | 4192470  | 4186668  | 4140534  | 4173224  | 0.68   | cps   |
| Scandium   | 45-2  | 432181   | 428382   | 424020   | 428194   | 0.95   | cps   |
| Selenium   | 82-1  | 2628     | 2548     | 2617     | 2598     | 1.68   | cps   |
| Selenium   | 77-2  | 250      | 253      | 373      | 292      | 24.05  | cps   |
| Selenium   | 78-2  | 1463     | 1433     | 1450     | 1449     | 1.04   | cps   |
| Silicon    | 28-1  | 689834   | 695646   | 692745   | 692742   | 0.42   | cps   |
| Silver     | 107-1 | 144753   | 149817   | 147844   | 147471   | 1.73   | cps   |
| Silver     | 109-1 | 139247   | 137161   | 138483   | 138297   | 0.76   | cps   |
| Sodium     | 23-2  | 40911392 | 40985784 | 39990619 | 40629265 | 1.36   | cps   |
| Strontium  | 86-1  | 61735    | 62285    | 62586    | 62202    | 0.69   | cps   |
| Strontium  | 88-1  | 527376   | 548399   | 528280   | 534685   | 2.22   | cps   |
| Sulfur     | 34-1  | 2476502  | 2399918  | 2431454  | 2435958  | 1.58   | cps   |
| Terbium    | 159-1 | 8540005  | 8308165  | 8388474  | 8412215  | 1.40   | cps   |
| Terbium    | 159-2 | 6157560  | 6060427  | 5955088  | 6057692  | 1.67   | cps   |
| Thallium   | 203-1 | 110328   | 109795   | 111145   | 110423   | 0.62   | cps   |
| Thallium   | 205-1 | 265284   | 261366   | 264330   | 263660   | 0.77   | cps   |
| Tin        | 118-1 | 3587     | 3667     | 3961     | 3738     | 5.26   | cps   |
| Titanium   | 47-1  | 1455446  | 1504670  | 1442732  | 1467616  | 2.23   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : ICSAB01 Instrumnet Name : P7  
Client Sample ID : ICSAB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:03:27 DataFile Name : 020ICSB.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 337      | 260      | 210      | 269      | 23.73  | cps   |
| Vanadium  | 51-2  | 48421    | 48043    | 47528    | 47997    | 0.93   | cps   |
| Yttrium   | 89-1  | 12415505 | 12262038 | 12222066 | 12299870 | 0.83   | cps   |
| Yttrium   | 89-2  | 3562981  | 3503658  | 3507000  | 3524547  | 0.95   | cps   |
| Zinc      | 66-2  | 22390    | 21763    | 22157    | 22103    | 1.43   | cps   |
| Zirconium | 90-1  | 613      | 587      | 570      | 590      | 3.70   | cps   |
| Zirconium | 91-1  | 117      | 167      | 107      | 130      | 24.73  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 7438478   | 7181398   | 7350206   | 7323361   | 1.78   | cps   |
| Antimony   | 121-1 | 2810401   | 2852425   | 2834282   | 2832369   | 0.74   | cps   |
| Arsenic    | 75-2  | 194199    | 191869    | 193867    | 193312    | 0.65   | cps   |
| Barium     | 135-1 | 3343456   | 3451868   | 3443227   | 3412850   | 1.77   | cps   |
| Barium     | 137-1 | 5843765   | 6058361   | 5986780   | 5962969   | 1.83   | cps   |
| Beryllium  | 9-1   | 335278    | 336153    | 338250    | 336561    | 0.45   | cps   |
| Bismuth    | 209-1 | 5115423   | 4901018   | 4908073   | 4974838   | 2.45   | cps   |
| Bismuth    | 209-2 | 4364214   | 4279093   | 4417326   | 4353544   | 1.60   | cps   |
| Bromine    | 81-1  | 11331     | 10827     | 11164     | 11108     | 2.31   | cps   |
| Bromine    | 81-2  | 190       | 187       | 183       | 187       | 1.78   | cps   |
| Cadmium    | 108-1 | 55001     | 55617     | 56239     | 55619     | 1.11   | cps   |
| Cadmium    | 106-1 | 79085     | 81481     | 80153     | 80240     | 1.50   | cps   |
| Cadmium    | 111-1 | 772453    | 784373    | 778258    | 778361    | 0.77   | cps   |
| Calcium    | 43-1  | 3880268   | 3900611   | 3930409   | 3903762   | 0.65   | cps   |
| Calcium    | 44-1  | 62776099  | 63831122  | 64350562  | 63652595  | 1.26   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 1528541   | 1464461   | 1473809   | 1488937   | 2.32   | cps   |
| Cobalt     | 59-2  | 2307263   | 2299312   | 2305601   | 2304058   | 0.18   | cps   |
| Copper     | 63-2  | 18135631  | 17958028  | 17730348  | 17941336  | 1.13   | cps   |
| Dysprosium | 156-1 | 163       | 173       | 170       | 169       | 3.01   | cps   |
| Dysprosium | 156-2 | 273       | 303       | 253       | 277       | 9.10   | cps   |
| Erbium     | 164-1 | 387       | 360       | 407       | 384       | 6.09   | cps   |
| Erbium     | 164-2 | 277       | 307       | 313       | 299       | 6.54   | cps   |
| Gadolinium | 160-1 | 220       | 213       | 210       | 214       | 2.37   | cps   |
| Gadolinium | 160-2 | 457       | 553       | 457       | 489       | 11.42  | cps   |
| Holmium    | 165-1 | 8653763   | 8399673   | 8424893   | 8492776   | 1.65   | cps   |
| Holmium    | 165-2 | 6324303   | 6177575   | 6274891   | 6258923   | 1.19   | cps   |
| Indium     | 115-1 | 7040690   | 6907556   | 6996224   | 6981490   | 0.97   | cps   |
| Indium     | 115-2 | 2640928   | 2690717   | 2695969   | 2675872   | 1.14   | cps   |
| Iron       | 56-2  | 328462795 | 324115682 | 322094522 | 324891000 | 1.00   | cps   |
| Iron       | 57-2  | 8174065   | 7913939   | 8062034   | 8050013   | 1.62   | cps   |
| Iron       | 54-2  | 18085594  | 17634696  | 17821831  | 17847374  | 1.27   | cps   |
| Krypton    | 83-1  | 540       | 497       | 530       | 522       | 4.35   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Lead       | 206-1 | 10680420  | 10719671  | 10466977  | 10622356  | 1.28   | cps   |
| Lead       | 207-1 | 8970964   | 9163885   | 9153349   | 9096066   | 1.19   | cps   |
| Lead       | 208-1 | 41452376  | 41330982  | 41437424  | 41406927  | 0.16   | cps   |
| Lithium    | 6-1   | 455592    | 445416    | 449670    | 450226    | 1.14   | cps   |
| Magnesium  | 24-2  | 67687509  | 66464114  | 66748696  | 66966773  | 0.96   | cps   |
| Manganese  | 55-2  | 12566488  | 12398981  | 12377204  | 12447558  | 0.83   | cps   |
| Molybdenum | 94-1  | 10990704  | 10996874  | 10917116  | 10968231  | 0.40   | cps   |
| Molybdenum | 95-1  | 15548963  | 15724697  | 15893186  | 15722282  | 1.09   | cps   |
| Molybdenum | 96-1  | 16746296  | 16961506  | 17009921  | 16905908  | 0.83   | cps   |
| Molybdenum | 97-1  | 9790135   | 9742245   | 9671674   | 9734685   | 0.61   | cps   |
| Molybdenum | 98-1  | 25111382  | 25094126  | 24920780  | 25042096  | 0.42   | cps   |
| Neodymium  | 150-1 | 150       | 150       | 140       | 147       | 3.94   | cps   |
| Neodymium  | 150-2 | 73        | 83        | 67        | 74        | 11.26  | cps   |
| Nickel     | 60-2  | 601227    | 597729    | 597268    | 598741    | 0.36   | cps   |
| Phosphorus | 31-2  | 88405     | 87631     | 89331     | 88455     | 0.96   | cps   |
| Potassium  | 39-2  | 39481074  | 38290047  | 38375760  | 38715627  | 1.72   | cps   |
| Rhodium    | 103-1 | 6905133   | 6891097   | 6775651   | 6857294   | 1.04   | cps   |
| Rhodium    | 103-2 | 4356283   | 4397549   | 4229222   | 4327685   | 2.03   | cps   |
| Scandium   | 45-1  | 4356770   | 4271131   | 4322352   | 4316751   | 1.00   | cps   |
| Scandium   | 45-2  | 447727    | 440153    | 444121    | 444000    | 0.85   | cps   |
| Selenium   | 82-1  | 58190     | 59013     | 58656     | 58620     | 0.70   | cps   |
| Selenium   | 77-2  | 6948      | 6848      | 6315      | 6704      | 5.08   | cps   |
| Selenium   | 78-2  | 23683     | 22901     | 22541     | 23041     | 2.53   | cps   |
| Silicon    | 28-1  | 9919448   | 10207886  | 10100443  | 10075926  | 1.45   | cps   |
| Silver     | 107-1 | 3830686   | 3857366   | 3866191   | 3851414   | 0.48   | cps   |
| Silver     | 109-1 | 3617072   | 3672161   | 3610086   | 3633106   | 0.94   | cps   |
| Sodium     | 23-2  | 104439818 | 103447712 | 102061932 | 103316487 | 1.16   | cps   |
| Strontium  | 86-1  | 1002912   | 1025967   | 1014061   | 1014313   | 1.14   | cps   |
| Strontium  | 88-1  | 8843512   | 8920291   | 8858777   | 8874193   | 0.46   | cps   |
| Sulfur     | 34-1  | 385573    | 390232    | 390953    | 388919    | 0.75   | cps   |
| Terbium    | 159-1 | 8773666   | 8628163   | 8592111   | 8664647   | 1.11   | cps   |
| Terbium    | 159-2 | 6279292   | 6112101   | 6269246   | 6220213   | 1.51   | cps   |
| Thallium   | 203-1 | 2597875   | 2651601   | 2563998   | 2604491   | 1.70   | cps   |
| Thallium   | 205-1 | 6242997   | 6317995   | 6169487   | 6243493   | 1.19   | cps   |
| Tin        | 118-1 | 2453140   | 2436523   | 2377387   | 2422350   | 1.64   | cps   |
| Titanium   | 47-1  | 3907293   | 3997997   | 4032369   | 3979220   | 1.62   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV01 Instrumnet Name : P7  
Client Sample ID : CCV01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:06:30 DataFile Name : 021CCV.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 8013590  | 7851400  | 7860404  | 7908465  | 1.15   | cps   |
| Vanadium  | 51-2  | 1295671  | 1255411  | 1283543  | 1278208  | 1.62   | cps   |
| Yttrium   | 89-1  | 12711468 | 12522169 | 12586220 | 12606619 | 0.76   | cps   |
| Yttrium   | 89-2  | 3672596  | 3624684  | 3527965  | 3608415  | 2.04   | cps   |
| Zinc      | 66-2  | 3176529  | 3175910  | 3126793  | 3159744  | 0.90   | cps   |
| Zirconium | 90-1  | 5363182  | 5451749  | 5440403  | 5418445  | 0.89   | cps   |
| Zirconium | 91-1  | 1189603  | 1205676  | 1206296  | 1200525  | 0.79   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1520    | 1560    | 1593    | 1558    | 2.36   | cps   |
| Antimony   | 121-1 | 647     | 637     | 557     | 613     | 8.04   | cps   |
| Arsenic    | 75-2  | 13      | 3       | 10      | 9       | 57.30  | cps   |
| Barium     | 135-1 | 50      | 60      | 53      | 54      | 9.35   | cps   |
| Barium     | 137-1 | 147     | 117     | 127     | 130     | 11.75  | cps   |
| Beryllium  | 9-1   | 24      | 7       | 3       | 11      | 95.75  | cps   |
| Bismuth    | 209-1 | 4952278 | 4978334 | 4661263 | 4863959 | 3.62   | cps   |
| Bismuth    | 209-2 | 4273057 | 4279634 | 4377097 | 4309929 | 1.35   | cps   |
| Bromine    | 81-1  | 11004   | 11068   | 10407   | 10826   | 3.37   | cps   |
| Bromine    | 81-2  | 183     | 223     | 197     | 201     | 10.13  | cps   |
| Cadmium    | 108-1 | 17      | 3       | 10      | 10      | 66.70  | cps   |
| Cadmium    | 106-1 | 2730    | 2930    | 2684    | 2781    | 4.71   | cps   |
| Cadmium    | 111-1 | 1960    | 2109    | 1935    | 2001    | 4.71   | cps   |
| Calcium    | 43-1  | 450     | 420     | 463     | 444     | 4.99   | cps   |
| Calcium    | 44-1  | 28407   | 28136   | 28253   | 28265   | 0.48   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2500    | 2544    | 2534    | 2526    | 0.90   | cps   |
| Cobalt     | 59-2  | 110     | 107     | 117     | 111     | 4.58   | cps   |
| Copper     | 63-2  | 1817    | 1780    | 1697    | 1765    | 3.49   | cps   |
| Dysprosium | 156-1 | 3       | 3       | 0       | 2       | 86.60  | cps   |
| Dysprosium | 156-2 | 0       | 0       | 3       | 1       | 173.21 | cps   |
| Erbium     | 164-1 | 53      | 50      | 67      | 57      | 15.57  | cps   |
| Erbium     | 164-2 | 40      | 43      | 37      | 40      | 8.32   | cps   |
| Gadolinium | 160-1 | 53      | 90      | 53      | 66      | 32.30  | cps   |
| Gadolinium | 160-2 | 350     | 377     | 323     | 350     | 7.62   | cps   |
| Holmium    | 165-1 | 8192229 | 7722478 | 7746936 | 7887214 | 3.35   | cps   |
| Holmium    | 165-2 | 5876093 | 5890829 | 6028998 | 5931973 | 1.42   | cps   |
| Indium     | 115-1 | 6887110 | 6874021 | 6763558 | 6841563 | 0.99   | cps   |
| Indium     | 115-2 | 2592416 | 2614373 | 2638670 | 2615153 | 0.88   | cps   |
| Iron       | 56-2  | 25612   | 24761   | 24867   | 25080   | 1.85   | cps   |
| Iron       | 57-2  | 1517    | 1593    | 1557    | 1556    | 2.47   | cps   |
| Iron       | 54-2  | 2900    | 2790    | 3117    | 2936    | 5.66   | cps   |
| Krypton    | 83-1  | 463     | 490     | 443     | 466     | 5.03   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 593     | 703     | 623     | 640     | 8.89   | cps   |
| Lead       | 207-1 | 480     | 540     | 557     | 526     | 7.67   | cps   |
| Lead       | 208-1 | 2447    | 2523    | 2457    | 2476    | 1.68   | cps   |
| Lithium    | 6-1   | 427684  | 428649  | 415440  | 423924  | 1.74   | cps   |
| Magnesium  | 24-2  | 933     | 850     | 910     | 898     | 4.79   | cps   |
| Manganese  | 55-2  | 670     | 887     | 913     | 823     | 16.21  | cps   |
| Molybdenum | 94-1  | 757     | 713     | 683     | 718     | 5.14   | cps   |
| Molybdenum | 95-1  | 833     | 787     | 583     | 734     | 18.10  | cps   |
| Molybdenum | 96-1  | 887     | 797     | 797     | 827     | 6.29   | cps   |
| Molybdenum | 97-1  | 587     | 483     | 470     | 513     | 12.44  | cps   |
| Molybdenum | 98-1  | 1173    | 1223    | 983     | 1127    | 11.24  | cps   |
| Neodymium  | 150-1 | 3       | 3       | 7       | 4       | 43.40  | cps   |
| Neodymium  | 150-2 | 0       | 3       | 0       | 1       | 173.21 | cps   |
| Nickel     | 60-2  | 597     | 603     | 553     | 584     | 4.64   | cps   |
| Phosphorus | 31-2  | 857     | 730     | 713     | 767     | 10.22  | cps   |
| Potassium  | 39-2  | 74015   | 73597   | 73680   | 73764   | 0.30   | cps   |
| Rhodium    | 103-1 | 6966751 | 6918643 | 6781704 | 6889032 | 1.39   | cps   |
| Rhodium    | 103-2 | 4297297 | 4369407 | 4381407 | 4349370 | 1.05   | cps   |
| Scandium   | 45-1  | 4230588 | 4117355 | 4085978 | 4144640 | 1.84   | cps   |
| Scandium   | 45-2  | 416834  | 412309  | 413037  | 414060  | 0.59   | cps   |
| Selenium   | 82-1  | 324     | 350     | 373     | 349     | 6.94   | cps   |
| Selenium   | 77-2  | 0       | 0       | 3       | 1       | 173.21 | cps   |
| Selenium   | 78-2  | 533     | 580     | 463     | 526     | 11.17  | cps   |
| Silicon    | 28-1  | 695793  | 688656  | 675939  | 686796  | 1.46   | cps   |
| Silver     | 107-1 | 413     | 360     | 333     | 369     | 11.04  | cps   |
| Silver     | 109-1 | 400     | 317     | 257     | 324     | 22.19  | cps   |
| Sodium     | 23-2  | 56483   | 55305   | 55690   | 55826   | 1.08   | cps   |
| Strontium  | 86-1  | 867     | 787     | 893     | 849     | 6.54   | cps   |
| Strontium  | 88-1  | 410     | 350     | 377     | 379     | 7.93   | cps   |
| Sulfur     | 34-1  | 156629  | 156104  | 156050  | 156261  | 0.20   | cps   |
| Terbium    | 159-1 | 8284675 | 8003396 | 7964978 | 8084350 | 2.16   | cps   |
| Terbium    | 159-2 | 5912051 | 5856358 | 6018911 | 5929107 | 1.39   | cps   |
| Thallium   | 203-1 | 630     | 577     | 603     | 603     | 4.42   | cps   |
| Thallium   | 205-1 | 1397    | 1693    | 1343    | 1478    | 12.76  | cps   |
| Tin        | 118-1 | 1477    | 1267    | 1333    | 1359    | 7.90   | cps   |
| Titanium   | 47-1  | 127     | 153     | 117     | 132     | 14.34  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB01 Instrumnet Name : P7  
Client Sample ID : CCB01 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:09:47 DataFile Name : 022CCBE.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 170      | 60       | 53       | 94       | 69.37  | cps   |
| Vanadium  | 51-2  | 37       | 33       | 33       | 34       | 5.60   | cps   |
| Yttrium   | 89-1  | 12382722 | 12187538 | 11818526 | 12129595 | 2.36   | cps   |
| Yttrium   | 89-2  | 3443064  | 3465740  | 3429908  | 3446237  | 0.53   | cps   |
| Zinc      | 66-2  | 4574     | 4874     | 4367     | 4605     | 5.53   | cps   |
| Zirconium | 90-1  | 763      | 650      | 703      | 706      | 8.04   | cps   |
| Zirconium | 91-1  | 173      | 133      | 180      | 162      | 15.56  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 4821    | 4821    | 4747    | 4796    | 0.88   | cps   |
| Antimony   | 121-1 | 11144   | 11421   | 11144   | 11237   | 1.42   | cps   |
| Arsenic    | 75-2  | 430     | 427     | 327     | 394     | 14.89  | cps   |
| Barium     | 135-1 | 13376   | 13013   | 12949   | 13113   | 1.76   | cps   |
| Barium     | 137-1 | 23136   | 22742   | 22642   | 22840   | 1.14   | cps   |
| Beryllium  | 9-1   | 747     | 748     | 721     | 739     | 2.03   | cps   |
| Bismuth    | 209-1 | 4884410 | 4947657 | 4794440 | 4875502 | 1.58   | cps   |
| Bismuth    | 209-2 | 4269561 | 4438138 | 4370832 | 4359510 | 1.95   | cps   |
| Bromine    | 81-1  | 10577   | 10140   | 10440   | 10386   | 2.15   | cps   |
| Bromine    | 81-2  | 183     | 137     | 120     | 147     | 22.39  | cps   |
| Cadmium    | 108-1 | 107     | 93      | 107     | 102     | 7.53   | cps   |
| Cadmium    | 106-1 | 2790    | 2747    | 2787    | 2775    | 0.87   | cps   |
| Cadmium    | 111-1 | 3405    | 3374    | 3313    | 3364    | 1.40   | cps   |
| Calcium    | 43-1  | 9043    | 8773    | 8466    | 8760    | 3.30   | cps   |
| Calcium    | 44-1  | 163593  | 163549  | 164739  | 163960  | 0.41   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 8946    | 8412    | 8269    | 8543    | 4.18   | cps   |
| Cobalt     | 59-2  | 4924    | 4901    | 4931    | 4919    | 0.32   | cps   |
| Copper     | 63-2  | 8209    | 8212    | 8703    | 8375    | 3.39   | cps   |
| Dysprosium | 156-1 | 7       | 7       | 7       | 7       | 0.00   | cps   |
| Dysprosium | 156-2 | 10      | 3       | 3       | 6       | 69.34  | cps   |
| Erbium     | 164-1 | 50      | 67      | 53      | 57      | 15.57  | cps   |
| Erbium     | 164-2 | 37      | 50      | 60      | 49      | 23.94  | cps   |
| Gadolinium | 160-1 | 47      | 47      | 57      | 50      | 11.55  | cps   |
| Gadolinium | 160-2 | 333     | 387     | 333     | 351     | 8.77   | cps   |
| Holmium    | 165-1 | 7805898 | 8029622 | 7822159 | 7885893 | 1.58   | cps   |
| Holmium    | 165-2 | 6004426 | 5994341 | 5978576 | 5992448 | 0.22   | cps   |
| Indium     | 115-1 | 6867497 | 6778415 | 6754465 | 6800125 | 0.88   | cps   |
| Indium     | 115-2 | 2583674 | 2596886 | 2644492 | 2608350 | 1.23   | cps   |
| Iron       | 56-2  | 169179  | 169365  | 168958  | 169167  | 0.12   | cps   |
| Iron       | 57-2  | 5251    | 5374    | 5588    | 5404    | 3.15   | cps   |
| Iron       | 54-2  | 10681   | 10807   | 11101   | 10863   | 1.98   | cps   |
| Krypton    | 83-1  | 540     | 487     | 490     | 506     | 5.91   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 4171    | 4214    | 3941    | 4108    | 3.58   | cps   |
| Lead       | 207-1 | 3424    | 3457    | 3621    | 3500    | 3.01   | cps   |
| Lead       | 208-1 | 16197   | 16227   | 15887   | 16104   | 1.17   | cps   |
| Lithium    | 6-1   | 432657  | 424859  | 431146  | 429554  | 0.96   | cps   |
| Magnesium  | 24-2  | 134185  | 135789  | 133580  | 134518  | 0.85   | cps   |
| Manganese  | 55-2  | 3590    | 3454    | 3470    | 3505    | 2.13   | cps   |
| Molybdenum | 94-1  | 12689   | 13006   | 12916   | 12870   | 1.27   | cps   |
| Molybdenum | 95-1  | 15452   | 15445   | 15422   | 15439   | 0.10   | cps   |
| Molybdenum | 96-1  | 17337   | 17117   | 16826   | 17093   | 1.50   | cps   |
| Molybdenum | 97-1  | 9483    | 10097   | 9770    | 9783    | 3.14   | cps   |
| Molybdenum | 98-1  | 25015   | 25015   | 24260   | 24763   | 1.76   | cps   |
| Neodymium  | 150-1 | 3       | 0       | 10      | 4       | 114.60 | cps   |
| Neodymium  | 150-2 | 0       | 7       | 10      | 6       | 91.64  | cps   |
| Nickel     | 60-2  | 1800    | 1787    | 1753    | 1780    | 1.35   | cps   |
| Phosphorus | 31-2  | 2824    | 2817    | 2844    | 2828    | 0.49   | cps   |
| Potassium  | 39-2  | 235148  | 237909  | 235696  | 236251  | 0.62   | cps   |
| Rhodium    | 103-1 | 6834269 | 6917467 | 6718998 | 6823578 | 1.46   | cps   |
| Rhodium    | 103-2 | 4263014 | 4364740 | 4385741 | 4337832 | 1.51   | cps   |
| Scandium   | 45-1  | 4124488 | 4190004 | 4093167 | 4135886 | 1.19   | cps   |
| Scandium   | 45-2  | 414853  | 425326  | 425157  | 421779  | 1.42   | cps   |
| Selenium   | 82-1  | 822     | 947     | 916     | 895     | 7.28   | cps   |
| Selenium   | 77-2  | 47      | 80      | 87      | 71      | 30.13  | cps   |
| Selenium   | 78-2  | 823     | 697     | 717     | 746     | 9.13   | cps   |
| Silicon    | 28-1  | 684959  | 694250  | 687840  | 689016  | 0.69   | cps   |
| Silver     | 107-1 | 8586    | 8586    | 8316    | 8496    | 1.84   | cps   |
| Silver     | 109-1 | 7699    | 7812    | 8079    | 7863    | 2.48   | cps   |
| Sodium     | 23-2  | 249058  | 250953  | 249328  | 249780  | 0.41   | cps   |
| Strontium  | 86-1  | 2860    | 2837    | 2857    | 2851    | 0.44   | cps   |
| Strontium  | 88-1  | 18125   | 17494   | 17434   | 17684   | 2.16   | cps   |
| Sulfur     | 34-1  | 169417  | 169673  | 170128  | 169740  | 0.21   | cps   |
| Terbium    | 159-1 | 8034641 | 7974723 | 8143453 | 8050939 | 1.06   | cps   |
| Terbium    | 159-2 | 5804102 | 5923900 | 5875736 | 5867913 | 1.03   | cps   |
| Thallium   | 203-1 | 5708    | 5505    | 5341    | 5518    | 3.33   | cps   |
| Thallium   | 205-1 | 12736   | 13066   | 13347   | 13050   | 2.34   | cps   |
| Tin        | 118-1 | 25236   | 24655   | 25763   | 25218   | 2.20   | cps   |
| Titanium   | 47-1  | 3941    | 3727    | 3927    | 3865    | 3.09   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CRI Instrumnet Name : P7  
Client Sample ID : CRI Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:15:12 DataFile Name : 023LLCC.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 14515    | 14735    | 13764    | 14338    | 3.55   | cps   |
| Vanadium  | 51-2  | 12709    | 12949    | 12645    | 12768    | 1.25   | cps   |
| Yttrium   | 89-1  | 11795507 | 12036321 | 12006684 | 11946171 | 1.10   | cps   |
| Yttrium   | 89-2  | 3399423  | 3519732  | 3411846  | 3443667  | 1.92   | cps   |
| Zinc      | 66-2  | 7188     | 7372     | 7322     | 7294     | 1.30   | cps   |
| Zirconium | 90-1  | 11471    | 11461    | 11298    | 11410    | 0.85   | cps   |
| Zirconium | 91-1  | 2440     | 2450     | 2437     | 2442     | 0.28   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1520    | 1547    | 1450    | 1506    | 3.32   | cps   |
| Antimony   | 121-1 | 117     | 110     | 170     | 132     | 24.87  | cps   |
| Arsenic    | 75-2  | 0       | 3       | 7       | 3       | 100.05 | cps   |
| Barium     | 135-1 | 73      | 73      | 80      | 76      | 5.10   | cps   |
| Barium     | 137-1 | 107     | 127     | 100     | 111     | 12.49  | cps   |
| Beryllium  | 9-1   | 20      | 10      | 7       | 12      | 57.61  | cps   |
| Bismuth    | 209-1 | 4784200 | 4762639 | 4726884 | 4757908 | 0.61   | cps   |
| Bismuth    | 209-2 | 4354557 | 4214138 | 4342902 | 4303866 | 1.81   | cps   |
| Bromine    | 81-1  | 10551   | 10324   | 11014   | 10629   | 3.31   | cps   |
| Bromine    | 81-2  | 153     | 177     | 180     | 170     | 8.54   | cps   |
| Cadmium    | 108-1 | 3       | 3       | 17      | 8       | 99.04  | cps   |
| Cadmium    | 106-1 | 2670    | 2627    | 2684    | 2660    | 1.11   | cps   |
| Cadmium    | 111-1 | 1904    | 1847    | 1904    | 1885    | 1.75   | cps   |
| Calcium    | 43-1  | 350     | 400     | 363     | 371     | 6.98   | cps   |
| Calcium    | 44-1  | 27138   | 27408   | 27903   | 27483   | 1.41   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2570    | 2394    | 2530    | 2498    | 3.71   | cps   |
| Cobalt     | 59-2  | 110     | 113     | 137     | 120     | 12.11  | cps   |
| Copper     | 63-2  | 1317    | 1363    | 1460    | 1380    | 5.30   | cps   |
| Dysprosium | 156-1 | 3       | 7       | 3       | 4       | 43.40  | cps   |
| Dysprosium | 156-2 | 7       | 3       | 0       | 3       | 100.05 | cps   |
| Erbium     | 164-1 | 87      | 50      | 67      | 68      | 27.09  | cps   |
| Erbium     | 164-2 | 53      | 27      | 73      | 51      | 45.80  | cps   |
| Gadolinium | 160-1 | 43      | 27      | 53      | 41      | 32.76  | cps   |
| Gadolinium | 160-2 | 243     | 370     | 350     | 321     | 21.21  | cps   |
| Holmium    | 165-1 | 7750730 | 7659952 | 7727149 | 7712610 | 0.61   | cps   |
| Holmium    | 165-2 | 5931662 | 5843648 | 5942509 | 5905940 | 0.92   | cps   |
| Indium     | 115-1 | 6627605 | 6721704 | 6661657 | 6670322 | 0.71   | cps   |
| Indium     | 115-2 | 2633108 | 2552155 | 2608448 | 2597904 | 1.60   | cps   |
| Iron       | 56-2  | 23185   | 22410   | 22410   | 22668   | 1.97   | cps   |
| Iron       | 57-2  | 1627    | 1533    | 1450    | 1537    | 5.75   | cps   |
| Iron       | 54-2  | 2667    | 2690    | 2754    | 2704    | 1.66   | cps   |
| Krypton    | 83-1  | 513     | 483     | 510     | 502     | 3.27   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 567     | 497     | 427     | 497     | 14.09  | cps   |
| Lead       | 207-1 | 470     | 427     | 440     | 446     | 4.98   | cps   |
| Lead       | 208-1 | 2073    | 1993    | 1880    | 1982    | 4.90   | cps   |
| Lithium    | 6-1   | 419625  | 413353  | 424526  | 419168  | 1.34   | cps   |
| Magnesium  | 24-2  | 533     | 463     | 523     | 507     | 7.47   | cps   |
| Manganese  | 55-2  | 843     | 763     | 773     | 793     | 5.49   | cps   |
| Molybdenum | 94-1  | 403     | 387     | 417     | 402     | 3.74   | cps   |
| Molybdenum | 95-1  | 357     | 433     | 387     | 392     | 9.85   | cps   |
| Molybdenum | 96-1  | 450     | 500     | 443     | 464     | 6.67   | cps   |
| Molybdenum | 97-1  | 243     | 240     | 277     | 253     | 8.00   | cps   |
| Molybdenum | 98-1  | 603     | 563     | 560     | 576     | 4.19   | cps   |
| Neodymium  | 150-1 | 3       | 7       | 7       | 6       | 34.70  | cps   |
| Neodymium  | 150-2 | 0       | 3       | 0       | 1       | 173.21 | cps   |
| Nickel     | 60-2  | 643     | 697     | 577     | 639     | 9.41   | cps   |
| Phosphorus | 31-2  | 707     | 727     | 797     | 743     | 6.36   | cps   |
| Potassium  | 39-2  | 71647   | 69377   | 69069   | 70031   | 2.01   | cps   |
| Rhodium    | 103-1 | 6727578 | 6568041 | 6684873 | 6660164 | 1.24   | cps   |
| Rhodium    | 103-2 | 4369284 | 4339317 | 4298472 | 4335691 | 0.82   | cps   |
| Scandium   | 45-1  | 4163826 | 4035219 | 4076799 | 4091948 | 1.60   | cps   |
| Scandium   | 45-2  | 417857  | 413698  | 418617  | 416724  | 0.64   | cps   |
| Selenium   | 82-1  | 331     | 306     | 312     | 316     | 4.19   | cps   |
| Selenium   | 77-2  | 0       | 0       | 0       | 0       | 0.00   | cps   |
| Selenium   | 78-2  | 573     | 583     | 547     | 568     | 3.34   | cps   |
| Silicon    | 28-1  | 679486  | 692685  | 675730  | 682634  | 1.30   | cps   |
| Silver     | 107-1 | 207     | 213     | 157     | 192     | 16.11  | cps   |
| Silver     | 109-1 | 190     | 133     | 130     | 151     | 22.31  | cps   |
| Sodium     | 23-2  | 41883   | 41693   | 42582   | 42053   | 1.11   | cps   |
| Strontium  | 86-1  | 947     | 737     | 837     | 840     | 12.50  | cps   |
| Strontium  | 88-1  | 390     | 380     | 300     | 357     | 13.83  | cps   |
| Sulfur     | 34-1  | 164067  | 166378  | 166893  | 165779  | 0.91   | cps   |
| Terbium    | 159-1 | 7915801 | 7851283 | 7970893 | 7912659 | 0.76   | cps   |
| Terbium    | 159-2 | 5780950 | 5792273 | 5884937 | 5819387 | 0.98   | cps   |
| Thallium   | 203-1 | 347     | 337     | 383     | 356     | 6.91   | cps   |
| Thallium   | 205-1 | 847     | 847     | 857     | 850     | 0.68   | cps   |
| Tin        | 118-1 | 1120    | 1137    | 1177    | 1144    | 2.54   | cps   |
| Titanium   | 47-1  | 123     | 93      | 87      | 101     | 19.31  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BL Instrumnet Name : P7  
Client Sample ID : PB169300BL Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:19:36 DataFile Name : 024CCBD.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 157      | 37       | 17       | 70       | 108.16 | cps   |
| Vanadium  | 51-2  | 13       | 23       | 30       | 22       | 37.76  | cps   |
| Yttrium   | 89-1  | 11765919 | 11745672 | 11829497 | 11780363 | 0.37   | cps   |
| Yttrium   | 89-2  | 3516961  | 3370993  | 3417160  | 3435038  | 2.17   | cps   |
| Zinc      | 66-2  | 4717     | 4764     | 4541     | 4674     | 2.52   | cps   |
| Zirconium | 90-1  | 597      | 563      | 577      | 579      | 2.90   | cps   |
| Zirconium | 91-1  | 120      | 163      | 143      | 142      | 15.25  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 1522945  | 1502367  | 1550174  | 1525162  | 1.57   | cps   |
| Antimony   | 121-1 | 2649626  | 2723183  | 2732345  | 2701718  | 1.68   | cps   |
| Arsenic    | 75-2  | 186894   | 186455   | 186635   | 186661   | 0.12   | cps   |
| Barium     | 135-1 | 3147801  | 3279171  | 3233753  | 3220242  | 2.07   | cps   |
| Barium     | 137-1 | 5483022  | 5539016  | 5670220  | 5564086  | 1.73   | cps   |
| Beryllium  | 9-1   | 317788   | 326629   | 324456   | 322958   | 1.43   | cps   |
| Bismuth    | 209-1 | 4906387  | 4933297  | 4858790  | 4899492  | 0.77   | cps   |
| Bismuth    | 209-2 | 4445068  | 4355598  | 4380489  | 4393718  | 1.05   | cps   |
| Bromine    | 81-1  | 10657    | 10647    | 10160    | 10488    | 2.71   | cps   |
| Bromine    | 81-2  | 140      | 130      | 177      | 149      | 16.50  | cps   |
| Cadmium    | 108-1 | 53000    | 54579    | 54271    | 53950    | 1.55   | cps   |
| Cadmium    | 106-1 | 77934    | 77808    | 77881    | 77875    | 0.08   | cps   |
| Cadmium    | 111-1 | 749165   | 761585   | 760201   | 756984   | 0.90   | cps   |
| Calcium    | 43-1  | 792657   | 802817   | 803408   | 799627   | 0.76   | cps   |
| Calcium    | 44-1  | 12519957 | 12528427 | 12456956 | 12501780 | 0.31   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 1454927  | 1425457  | 1454484  | 1444956  | 1.17   | cps   |
| Cobalt     | 59-2  | 2295250  | 2267703  | 2282612  | 2281855  | 0.60   | cps   |
| Copper     | 63-2  | 17666629 | 17487336 | 17505021 | 17552995 | 0.56   | cps   |
| Dysprosium | 156-1 | 60       | 63       | 70       | 64       | 7.90   | cps   |
| Dysprosium | 156-2 | 127      | 147      | 153      | 142      | 9.76   | cps   |
| Erbium     | 164-1 | 123      | 150      | 133      | 136      | 9.94   | cps   |
| Erbium     | 164-2 | 117      | 107      | 110      | 111      | 4.58   | cps   |
| Gadolinium | 160-1 | 53       | 87       | 117      | 86       | 37.03  | cps   |
| Gadolinium | 160-2 | 340      | 390      | 347      | 359      | 7.56   | cps   |
| Holmium    | 165-1 | 7996928  | 8033739  | 8074057  | 8034908  | 0.48   | cps   |
| Holmium    | 165-2 | 6140688  | 6114858  | 6128430  | 6127992  | 0.21   | cps   |
| Indium     | 115-1 | 6807511  | 6692774  | 6714031  | 6738105  | 0.91   | cps   |
| Indium     | 115-2 | 2623693  | 2622968  | 2632846  | 2626502  | 0.21   | cps   |
| Iron       | 56-2  | 68442632 | 66033894 | 68477594 | 67651373 | 2.07   | cps   |
| Iron       | 57-2  | 1684955  | 1665018  | 1668772  | 1672915  | 0.63   | cps   |
| Iron       | 54-2  | 3822464  | 3740435  | 3709644  | 3757515  | 1.55   | cps   |
| Krypton    | 83-1  | 470      | 560      | 550      | 527      | 9.37   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 10093126 | 10108479 | 10354802 | 10185469 | 1.44   | cps   |
| Lead       | 207-1 | 8444144  | 8671843  | 8797624  | 8637870  | 2.07   | cps   |
| Lead       | 208-1 | 38623359 | 39435198 | 40106579 | 39388379 | 1.89   | cps   |
| Lithium    | 6-1   | 434176   | 446131   | 436847   | 439051   | 1.43   | cps   |
| Magnesium  | 24-2  | 13434855 | 13448844 | 13534431 | 13472710 | 0.40   | cps   |
| Manganese  | 55-2  | 12117392 | 11692022 | 12129139 | 11979518 | 2.08   | cps   |
| Molybdenum | 94-1  | 10072006 | 10438969 | 10396527 | 10302501 | 1.95   | cps   |
| Molybdenum | 95-1  | 14685489 | 14617388 | 14652496 | 14651791 | 0.23   | cps   |
| Molybdenum | 96-1  | 15895695 | 15825255 | 16079526 | 15933492 | 0.82   | cps   |
| Molybdenum | 97-1  | 8971702  | 9139399  | 9238905  | 9116669  | 1.48   | cps   |
| Molybdenum | 98-1  | 23304677 | 23419090 | 23642872 | 23455547 | 0.73   | cps   |
| Neodymium  | 150-1 | 113      | 103      | 123      | 113      | 8.83   | cps   |
| Neodymium  | 150-2 | 27       | 13       | 47       | 29       | 58.08  | cps   |
| Nickel     | 60-2  | 590490   | 585353   | 588631   | 588158   | 0.44   | cps   |
| Phosphorus | 31-2  | 83977    | 82961    | 84524    | 83821    | 0.95   | cps   |
| Potassium  | 39-2  | 7799066  | 7756429  | 7931323  | 7828939  | 1.16   | cps   |
| Rhodium    | 103-1 | 6699119  | 6733209  | 6756948  | 6729759  | 0.43   | cps   |
| Rhodium    | 103-2 | 4344949  | 4288682  | 4347265  | 4326965  | 0.77   | cps   |
| Scandium   | 45-1  | 4179746  | 4116388  | 4173229  | 4156454  | 0.84   | cps   |
| Scandium   | 45-2  | 431386   | 421385   | 427155   | 426642   | 1.18   | cps   |
| Selenium   | 82-1  | 57046    | 58159    | 58393    | 57866    | 1.24   | cps   |
| Selenium   | 77-2  | 6715     | 6825     | 6612     | 6717     | 1.59   | cps   |
| Selenium   | 78-2  | 22988    | 23028    | 23663    | 23226    | 1.63   | cps   |
| Silicon    | 28-1  | 9866240  | 9675272  | 9755744  | 9765752  | 0.98   | cps   |
| Silver     | 107-1 | 3824588  | 3735798  | 3654580  | 3738322  | 2.27   | cps   |
| Silver     | 109-1 | 3503013  | 3571593  | 3550063  | 3541556  | 0.99   | cps   |
| Sodium     | 23-2  | 20980283 | 20680687 | 21043484 | 20901485 | 0.93   | cps   |
| Strontium  | 86-1  | 922970   | 938094   | 942995   | 934686   | 1.12   | cps   |
| Strontium  | 88-1  | 8225252  | 8233841  | 8296378  | 8251824  | 0.47   | cps   |
| Sulfur     | 34-1  | 386206   | 390181   | 388764   | 388384   | 0.52   | cps   |
| Terbium    | 159-1 | 8258876  | 8270423  | 8194039  | 8241113  | 0.50   | cps   |
| Terbium    | 159-2 | 6106919  | 6016226  | 5989149  | 6037431  | 1.02   | cps   |
| Thallium   | 203-1 | 2413452  | 2481340  | 2517751  | 2470847  | 2.14   | cps   |
| Thallium   | 205-1 | 5887642  | 5971148  | 5995079  | 5951290  | 0.95   | cps   |
| Tin        | 118-1 | 2237489  | 2242018  | 2304019  | 2261175  | 1.64   | cps   |
| Titanium   | 47-1  | 3691047  | 3795225  | 3777203  | 3754492  | 1.48   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300BS Instrumnet Name : P7  
Client Sample ID : PB169300BS Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:22:53 DataFile Name : 025LCS6.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 7309958  | 7264091  | 7436293  | 7336781  | 1.22   | cps   |
| Vanadium  | 51-2  | 1227070  | 1220141  | 1230395  | 1225869  | 0.43   | cps   |
| Yttrium   | 89-1  | 12210980 | 12421276 | 11942144 | 12191467 | 1.97   | cps   |
| Yttrium   | 89-2  | 3517254  | 3433429  | 3481129  | 3477271  | 1.21   | cps   |
| Zinc      | 66-2  | 3217337  | 3166603  | 3213587  | 3199176  | 0.88   | cps   |
| Zirconium | 90-1  | 5026591  | 5007900  | 5085716  | 5040069  | 0.81   | cps   |
| Zirconium | 91-1  | 1096390  | 1114333  | 1115726  | 1108816  | 0.97   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1347    | 1627    | 1483    | 1486    | 9.43   | cps   |
| Antimony   | 121-1 | 673     | 773     | 673     | 707     | 8.17   | cps   |
| Arsenic    | 75-2  | 7       | 0       | 7       | 4       | 86.60  | cps   |
| Barium     | 135-1 | 97      | 73      | 60      | 77      | 24.21  | cps   |
| Barium     | 137-1 | 143     | 117     | 117     | 126     | 12.26  | cps   |
| Beryllium  | 9-1   | 7       | 10      | 7       | 8       | 23.07  | cps   |
| Bismuth    | 209-1 | 4776895 | 4803847 | 4788737 | 4789826 | 0.28   | cps   |
| Bismuth    | 209-2 | 4206230 | 4417888 | 4254868 | 4292995 | 2.58   | cps   |
| Bromine    | 81-1  | 10274   | 10424   | 10831   | 10509   | 2.74   | cps   |
| Bromine    | 81-2  | 167     | 190     | 220     | 192     | 13.91  | cps   |
| Cadmium    | 108-1 | 3       | 13      | 7       | 8       | 65.47  | cps   |
| Cadmium    | 106-1 | 2564    | 2680    | 2704    | 2649    | 2.83   | cps   |
| Cadmium    | 111-1 | 1849    | 1907    | 1951    | 1902    | 2.70   | cps   |
| Calcium    | 43-1  | 430     | 343     | 383     | 386     | 11.25  | cps   |
| Calcium    | 44-1  | 28574   | 28814   | 27479   | 28289   | 2.52   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2487    | 2547    | 2444    | 2492    | 2.08   | cps   |
| Cobalt     | 59-2  | 110     | 107     | 90      | 102     | 10.48  | cps   |
| Copper     | 63-2  | 1650    | 1640    | 1493    | 1595    | 5.50   | cps   |
| Dysprosium | 156-1 | 7       | 7       | 3       | 6       | 34.70  | cps   |
| Dysprosium | 156-2 | 7       | 3       | 3       | 4       | 43.40  | cps   |
| Erbium     | 164-1 | 57      | 53      | 67      | 59      | 11.79  | cps   |
| Erbium     | 164-2 | 27      | 33      | 17      | 26      | 32.81  | cps   |
| Gadolinium | 160-1 | 50      | 43      | 40      | 44      | 11.46  | cps   |
| Gadolinium | 160-2 | 287     | 363     | 430     | 360     | 19.92  | cps   |
| Holmium    | 165-1 | 7867567 | 7707457 | 7837428 | 7804151 | 1.09   | cps   |
| Holmium    | 165-2 | 5832878 | 6082031 | 5801977 | 5905628 | 2.60   | cps   |
| Indium     | 115-1 | 6642561 | 6528271 | 6717236 | 6629356 | 1.44   | cps   |
| Indium     | 115-2 | 2530910 | 2646462 | 2516303 | 2564559 | 2.78   | cps   |
| Iron       | 56-2  | 22757   | 22550   | 22500   | 22603   | 0.60   | cps   |
| Iron       | 57-2  | 1413    | 1603    | 1377    | 1465    | 8.31   | cps   |
| Iron       | 54-2  | 2724    | 2707    | 2750    | 2727    | 0.80   | cps   |
| Krypton    | 83-1  | 550     | 527     | 560     | 546     | 3.14   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 613     | 517     | 663     | 598     | 12.47  | cps   |
| Lead       | 207-1 | 567     | 520     | 523     | 537     | 4.85   | cps   |
| Lead       | 208-1 | 2360    | 2320    | 2263    | 2315    | 2.10   | cps   |
| Lithium    | 6-1   | 425192  | 415668  | 418479  | 419780  | 1.17   | cps   |
| Magnesium  | 24-2  | 480     | 567     | 533     | 527     | 8.30   | cps   |
| Manganese  | 55-2  | 797     | 837     | 897     | 843     | 5.97   | cps   |
| Molybdenum | 94-1  | 780     | 667     | 700     | 716     | 8.14   | cps   |
| Molybdenum | 95-1  | 830     | 783     | 707     | 773     | 8.05   | cps   |
| Molybdenum | 96-1  | 830     | 933     | 910     | 891     | 6.08   | cps   |
| Molybdenum | 97-1  | 553     | 490     | 497     | 513     | 6.78   | cps   |
| Molybdenum | 98-1  | 1380    | 1180    | 1217    | 1259    | 8.46   | cps   |
| Neodymium  | 150-1 | 13      | 0       | 10      | 8       | 89.21  | cps   |
| Neodymium  | 150-2 | 7       | 0       | 17      | 8       | 107.84 | cps   |
| Nickel     | 60-2  | 523     | 557     | 590     | 557     | 5.99   | cps   |
| Phosphorus | 31-2  | 723     | 740     | 743     | 736     | 1.46   | cps   |
| Potassium  | 39-2  | 71283   | 69655   | 69796   | 70245   | 1.28   | cps   |
| Rhodium    | 103-1 | 6586744 | 6563953 | 6571831 | 6574176 | 0.18   | cps   |
| Rhodium    | 103-2 | 4248241 | 4308666 | 4245486 | 4267464 | 0.84   | cps   |
| Scandium   | 45-1  | 4046024 | 4028198 | 4026657 | 4033626 | 0.27   | cps   |
| Scandium   | 45-2  | 410721  | 413855  | 411501  | 412026  | 0.40   | cps   |
| Selenium   | 82-1  | 229     | 299     | 251     | 260     | 13.83  | cps   |
| Selenium   | 77-2  | 3       | 0       | 0       | 1       | 173.21 | cps   |
| Selenium   | 78-2  | 503     | 553     | 557     | 538     | 5.56   | cps   |
| Silicon    | 28-1  | 699611  | 704468  | 695995  | 700025  | 0.61   | cps   |
| Silver     | 107-1 | 493     | 340     | 313     | 382     | 25.42  | cps   |
| Silver     | 109-1 | 513     | 313     | 270     | 366     | 35.51  | cps   |
| Sodium     | 23-2  | 43177   | 45657   | 41726   | 43520   | 4.57   | cps   |
| Strontium  | 86-1  | 843     | 933     | 803     | 860     | 7.74   | cps   |
| Strontium  | 88-1  | 360     | 343     | 307     | 337     | 8.11   | cps   |
| Sulfur     | 34-1  | 154781  | 155067  | 155498  | 155115  | 0.23   | cps   |
| Terbium    | 159-1 | 7828788 | 7848392 | 7926692 | 7867957 | 0.66   | cps   |
| Terbium    | 159-2 | 5839084 | 5934189 | 5684549 | 5819274 | 2.17   | cps   |
| Thallium   | 203-1 | 540     | 447     | 460     | 482     | 10.47  | cps   |
| Thallium   | 205-1 | 1140    | 1107    | 1077    | 1108    | 2.86   | cps   |
| Tin        | 118-1 | 1143    | 1127    | 1113    | 1128    | 1.33   | cps   |
| Titanium   | 47-1  | 117     | 97      | 153     | 122     | 23.51  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : PB169300TB Instrumnet Name : P7  
Client Sample ID : PB169300TB Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:25:37 DataFile Name : 026CCBD.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 153      | 83       | 80       | 106      | 39.23  | cps   |
| Vanadium  | 51-2  | 37       | 20       | 23       | 27       | 33.08  | cps   |
| Yttrium   | 89-1  | 11712204 | 11791025 | 11641894 | 11715041 | 0.64   | cps   |
| Yttrium   | 89-2  | 3424349  | 3457002  | 3329455  | 3403602  | 1.95   | cps   |
| Zinc      | 66-2  | 4637     | 4701     | 4904     | 4747     | 2.94   | cps   |
| Zirconium | 90-1  | 790      | 657      | 700      | 716      | 9.51   | cps   |
| Zirconium | 91-1  | 103      | 180      | 160      | 148      | 26.91  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3444973  | 3407836  | 3393919  | 3415576  | 0.77   | cps   |
| Antimony   | 121-1 | 1073     | 1173     | 1213     | 1153     | 6.25   | cps   |
| Arsenic    | 75-2  | 2564     | 2474     | 2344     | 2460     | 4.50   | cps   |
| Barium     | 135-1 | 28552    | 28762    | 28265    | 28526    | 0.88   | cps   |
| Barium     | 137-1 | 49566    | 49633    | 49306    | 49502    | 0.35   | cps   |
| Beryllium  | 9-1   | 1746     | 1746     | 1812     | 1768     | 2.14   | cps   |
| Bismuth    | 209-1 | 4837583  | 4898874  | 4861579  | 4866012  | 0.63   | cps   |
| Bismuth    | 209-2 | 4412435  | 4381842  | 4510044  | 4434773  | 1.51   | cps   |
| Bromine    | 81-1  | 17327    | 20241    | 21022    | 19530    | 9.97   | cps   |
| Bromine    | 81-2  | 2524     | 2677     | 2757     | 2652     | 4.47   | cps   |
| Cadmium    | 108-1 | 300      | 260      | 260      | 273      | 8.45   | cps   |
| Cadmium    | 106-1 | 3190     | 3144     | 3177     | 3170     | 0.76   | cps   |
| Cadmium    | 111-1 | 5554     | 5639     | 5746     | 5646     | 1.70   | cps   |
| Calcium    | 43-1  | 913093   | 915080   | 908079   | 912084   | 0.40   | cps   |
| Calcium    | 44-1  | 14368270 | 14656086 | 14488249 | 14504201 | 1.00   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 34076    | 32475    | 32906    | 33152    | 2.50   | cps   |
| Cobalt     | 59-2  | 119453   | 118509   | 119493   | 119152   | 0.47   | cps   |
| Copper     | 63-2  | 136459   | 135380   | 136773   | 136204   | 0.54   | cps   |
| Dysprosium | 156-1 | 27026    | 27554    | 26749    | 27110    | 1.51   | cps   |
| Dysprosium | 156-2 | 25012    | 25226    | 25433    | 25224    | 0.83   | cps   |
| Erbium     | 164-1 | 36678    | 36531    | 37460    | 36890    | 1.35   | cps   |
| Erbium     | 164-2 | 28566    | 28830    | 28770    | 28722    | 0.48   | cps   |
| Gadolinium | 160-1 | 29301    | 29605    | 29672    | 29526    | 0.67   | cps   |
| Gadolinium | 160-2 | 23847    | 23714    | 23870    | 23810    | 0.36   | cps   |
| Holmium    | 165-1 | 8191752  | 8115996  | 8022034  | 8109928  | 1.05   | cps   |
| Holmium    | 165-2 | 6216330  | 6173057  | 6285452  | 6224946  | 0.91   | cps   |
| Indium     | 115-1 | 6947123  | 6873592  | 6773521  | 6864746  | 1.27   | cps   |
| Indium     | 115-2 | 2706897  | 2662065  | 2642876  | 2670613  | 1.23   | cps   |
| Iron       | 56-2  | 29590944 | 28280742 | 29434840 | 29102175 | 2.46   | cps   |
| Iron       | 57-2  | 764982   | 760622   | 766976   | 764193   | 0.43   | cps   |
| Iron       | 54-2  | 1608701  | 1616585  | 1622103  | 1615796  | 0.42   | cps   |
| Krypton    | 83-1  | 550      | 540      | 547      | 546      | 0.93   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 167959   | 166230   | 165188   | 166459   | 0.84   | cps   |
| Lead       | 207-1 | 138264   | 138675   | 137581   | 138173   | 0.40   | cps   |
| Lead       | 208-1 | 642078   | 643097   | 638805   | 641327   | 0.35   | cps   |
| Lithium    | 6-1   | 437667   | 429131   | 419230   | 428676   | 2.15   | cps   |
| Magnesium  | 24-2  | 2856002  | 2867414  | 2914834  | 2879417  | 1.08   | cps   |
| Manganese  | 55-2  | 6504209  | 6540224  | 6701340  | 6581924  | 1.59   | cps   |
| Molybdenum | 94-1  | 4004     | 4217     | 4051     | 4091     | 2.74   | cps   |
| Molybdenum | 95-1  | 687      | 800      | 783      | 757      | 8.09   | cps   |
| Molybdenum | 96-1  | 1513     | 1407     | 1497     | 1472     | 3.90   | cps   |
| Molybdenum | 97-1  | 377      | 350      | 380      | 369      | 4.46   | cps   |
| Molybdenum | 98-1  | 987      | 1027     | 867      | 960      | 8.67   | cps   |
| Neodymium  | 150-1 | 37624    | 37717    | 37029    | 37456    | 1.00   | cps   |
| Neodymium  | 150-2 | 24408    | 24782    | 24605    | 24598    | 0.76   | cps   |
| Nickel     | 60-2  | 25071    | 24116    | 24927    | 24705    | 2.08   | cps   |
| Phosphorus | 31-2  | 10617    | 11017    | 10947    | 10861    | 1.97   | cps   |
| Potassium  | 39-2  | 2576955  | 2523264  | 2522036  | 2540752  | 1.23   | cps   |
| Rhodium    | 103-1 | 6912116  | 6885781  | 6862270  | 6886722  | 0.36   | cps   |
| Rhodium    | 103-2 | 4522434  | 4426182  | 4481642  | 4476753  | 1.08   | cps   |
| Scandium   | 45-1  | 4268903  | 4177784  | 4168618  | 4205102  | 1.32   | cps   |
| Scandium   | 45-2  | 438293   | 428030   | 437504   | 434609   | 1.31   | cps   |
| Selenium   | 82-1  | 467      | 470      | 397      | 445      | 9.36   | cps   |
| Selenium   | 77-2  | 90       | 107      | 83       | 93       | 12.88  | cps   |
| Selenium   | 78-2  | 623      | 550      | 720      | 631      | 13.51  | cps   |
| Silicon    | 28-1  | 23195838 | 22706035 | 22595861 | 22832578 | 1.40   | cps   |
| Silver     | 107-1 | 733      | 447      | 443      | 541      | 30.77  | cps   |
| Silver     | 109-1 | 590      | 397      | 323      | 437      | 31.55  | cps   |
| Sodium     | 23-2  | 1667322  | 1645151  | 1653991  | 1655488  | 0.67   | cps   |
| Strontium  | 86-1  | 348279   | 352780   | 353102   | 351387   | 0.77   | cps   |
| Strontium  | 88-1  | 3118305  | 3151049  | 3175189  | 3148181  | 0.91   | cps   |
| Sulfur     | 34-1  | 2378523  | 2317237  | 2320930  | 2338897  | 1.47   | cps   |
| Terbium    | 159-1 | 8448692  | 8212440  | 8156879  | 8272670  | 1.87   | cps   |
| Terbium    | 159-2 | 6236649  | 6042044  | 6170009  | 6149567  | 1.61   | cps   |
| Thallium   | 203-1 | 980      | 903      | 1123     | 1002     | 11.14  | cps   |
| Thallium   | 205-1 | 2380     | 2474     | 2470     | 2441     | 2.17   | cps   |
| Tin        | 118-1 | 2430     | 3144     | 3354     | 2976     | 16.27  | cps   |
| Titanium   | 47-1  | 4964     | 5374     | 4804     | 5048     | 5.83   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-02DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:28:55 DataFile Name : 027SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 9834     | 9794     | 9474     | 9700     | 2.04   | cps   |
| Vanadium  | 51-2  | 128291   | 128299   | 127448   | 128013   | 0.38   | cps   |
| Yttrium   | 89-1  | 13099358 | 13272729 | 13218754 | 13196947 | 0.67   | cps   |
| Yttrium   | 89-2  | 3860591  | 3700440  | 3796687  | 3785906  | 2.13   | cps   |
| Zinc      | 66-2  | 308180   | 308349   | 308553   | 308360   | 0.06   | cps   |
| Zirconium | 90-1  | 10814    | 10781    | 10541    | 10712    | 1.39   | cps   |
| Zirconium | 91-1  | 2330     | 2310     | 2480     | 2374     | 3.92   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3161337  | 3273454  | 3112176  | 3182322  | 2.60   | cps   |
| Antimony   | 121-1 | 990      | 940      | 1050     | 993      | 5.54   | cps   |
| Arsenic    | 75-2  | 2904     | 3214     | 3000     | 3039     | 5.22   | cps   |
| Barium     | 135-1 | 33800    | 34004    | 33289    | 33698    | 1.09   | cps   |
| Barium     | 137-1 | 59023    | 59367    | 59444    | 59278    | 0.38   | cps   |
| Beryllium  | 9-1   | 1650     | 1691     | 1507     | 1616     | 5.99   | cps   |
| Bismuth    | 209-1 | 4917314  | 4587985  | 4758393  | 4754564  | 3.46   | cps   |
| Bismuth    | 209-2 | 4440760  | 4015280  | 4478722  | 4311587  | 5.97   | cps   |
| Bromine    | 81-1  | 19096    | 20758    | 21780    | 20544    | 6.59   | cps   |
| Bromine    | 81-2  | 2680     | 2630     | 2697     | 2669     | 1.30   | cps   |
| Cadmium    | 108-1 | 300      | 267      | 233      | 267      | 12.50  | cps   |
| Cadmium    | 106-1 | 3414     | 2987     | 3227     | 3209     | 6.67   | cps   |
| Cadmium    | 111-1 | 5743     | 5335     | 5666     | 5581     | 3.89   | cps   |
| Calcium    | 43-1  | 889484   | 896098   | 887346   | 890976   | 0.51   | cps   |
| Calcium    | 44-1  | 13932934 | 14493165 | 14157586 | 14194562 | 1.99   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 31493    | 32181    | 31082    | 31585    | 1.76   | cps   |
| Cobalt     | 59-2  | 109729   | 112056   | 109444   | 110410   | 1.30   | cps   |
| Copper     | 63-2  | 128092   | 130182   | 128851   | 129042   | 0.82   | cps   |
| Dysprosium | 156-1 | 23210    | 24235    | 23717    | 23720    | 2.16   | cps   |
| Dysprosium | 156-2 | 22378    | 22615    | 22301    | 22431    | 0.73   | cps   |
| Erbium     | 164-1 | 31947    | 33330    | 32708    | 32662    | 2.12   | cps   |
| Erbium     | 164-2 | 24976    | 25066    | 25086    | 25043    | 0.23   | cps   |
| Gadolinium | 160-1 | 26101    | 26555    | 25964    | 26207    | 1.18   | cps   |
| Gadolinium | 160-2 | 21206    | 21213    | 21280    | 21233    | 0.19   | cps   |
| Holmium    | 165-1 | 8186129  | 7813142  | 7998473  | 7999248  | 2.33   | cps   |
| Holmium    | 165-2 | 6185982  | 5592398  | 6219914  | 5999431  | 5.88   | cps   |
| Indium     | 115-1 | 7011007  | 6716319  | 6941265  | 6889530  | 2.24   | cps   |
| Indium     | 115-2 | 2714677  | 2466189  | 2658023  | 2612963  | 4.98   | cps   |
| Iron       | 56-2  | 26668096 | 27584885 | 26668356 | 26973779 | 1.96   | cps   |
| Iron       | 57-2  | 713692   | 731810   | 709452   | 718318   | 1.65   | cps   |
| Iron       | 54-2  | 1480251  | 1511435  | 1482336  | 1491341  | 1.17   | cps   |
| Krypton    | 83-1  | 543      | 600      | 597      | 580      | 5.48   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 142461   | 145897   | 143236   | 143865   | 1.25   | cps   |
| Lead       | 207-1 | 117893   | 120175   | 118006   | 118691   | 1.08   | cps   |
| Lead       | 208-1 | 549454   | 556908   | 548573   | 551645   | 0.83   | cps   |
| Lithium    | 6-1   | 421523   | 396820   | 410775   | 409706   | 3.02   | cps   |
| Magnesium  | 24-2  | 2608781  | 2722307  | 2614520  | 2648536  | 2.41   | cps   |
| Manganese  | 55-2  | 6423744  | 6747322  | 6550052  | 6573706  | 2.48   | cps   |
| Molybdenum | 94-1  | 3881     | 4077     | 4144     | 4034     | 3.40   | cps   |
| Molybdenum | 95-1  | 730      | 737      | 637      | 701      | 7.97   | cps   |
| Molybdenum | 96-1  | 1457     | 1423     | 1307     | 1396     | 5.64   | cps   |
| Molybdenum | 97-1  | 333      | 330      | 313      | 326      | 3.29   | cps   |
| Molybdenum | 98-1  | 870      | 887      | 873      | 877      | 1.01   | cps   |
| Neodymium  | 150-1 | 32912    | 33329    | 32912    | 33051    | 0.73   | cps   |
| Neodymium  | 150-2 | 21270    | 21917    | 20992    | 21393    | 2.22   | cps   |
| Nickel     | 60-2  | 24036    | 23809    | 23479    | 23775    | 1.18   | cps   |
| Phosphorus | 31-2  | 16362    | 16506    | 16656    | 16508    | 0.89   | cps   |
| Potassium  | 39-2  | 2837420  | 2804839  | 2754117  | 2798792  | 1.50   | cps   |
| Rhodium    | 103-1 | 6869639  | 6803828  | 6998876  | 6890781  | 1.44   | cps   |
| Rhodium    | 103-2 | 4453149  | 4113127  | 4560103  | 4375460  | 5.33   | cps   |
| Scandium   | 45-1  | 4232060  | 4087477  | 4287051  | 4202196  | 2.45   | cps   |
| Scandium   | 45-2  | 434356   | 389155   | 437709   | 420407   | 6.45   | cps   |
| Selenium   | 82-1  | 430      | 382      | 368      | 393      | 8.28   | cps   |
| Selenium   | 77-2  | 93       | 90       | 87       | 90       | 3.70   | cps   |
| Selenium   | 78-2  | 643      | 650      | 723      | 672      | 6.60   | cps   |
| Silicon    | 28-1  | 20712022 | 20312008 | 20073446 | 20365825 | 1.58   | cps   |
| Silver     | 107-1 | 257      | 267      | 303      | 276      | 8.92   | cps   |
| Silver     | 109-1 | 183      | 247      | 237      | 222      | 15.32  | cps   |
| Sodium     | 23-2  | 1323649  | 1355025  | 1298347  | 1325674  | 2.14   | cps   |
| Strontium  | 86-1  | 416444   | 429314   | 422679   | 422812   | 1.52   | cps   |
| Strontium  | 88-1  | 3661966  | 3735759  | 3709003  | 3702242  | 1.01   | cps   |
| Sulfur     | 34-1  | 2269476  | 2214651  | 2214476  | 2232868  | 1.42   | cps   |
| Terbium    | 159-1 | 8344461  | 7937470  | 8231780  | 8171237  | 2.57   | cps   |
| Terbium    | 159-2 | 6255182  | 5613027  | 6116983  | 5995064  | 5.64   | cps   |
| Thallium   | 203-1 | 1030     | 967      | 847      | 948      | 9.82   | cps   |
| Thallium   | 205-1 | 2304     | 2354     | 2287     | 2315     | 1.50   | cps   |
| Tin        | 118-1 | 2214     | 2354     | 2530     | 2366     | 6.71   | cps   |
| Titanium   | 47-1  | 4694     | 4844     | 4544     | 4694     | 3.20   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-04DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:32:01 DataFile Name : 028SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 7809     | 8036     | 7779     | 7875     | 1.78   | cps   |
| Vanadium  | 51-2  | 121665   | 123940   | 121261   | 122288   | 1.18   | cps   |
| Yttrium   | 89-1  | 13145623 | 12555751 | 13004154 | 12901843 | 2.39   | cps   |
| Yttrium   | 89-2  | 3899862  | 3411210  | 3870584  | 3727219  | 7.35   | cps   |
| Zinc      | 66-2  | 245475   | 248041   | 242802   | 245439   | 1.07   | cps   |
| Zirconium | 90-1  | 10130    | 10384    | 9957     | 10157    | 2.11   | cps   |
| Zirconium | 91-1  | 2134     | 2217     | 2257     | 2202     | 2.86   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3390582  | 3335579  | 3363592  | 3363251  | 0.82   | cps   |
| Antimony   | 121-1 | 1093     | 1060     | 917      | 1023     | 9.17   | cps   |
| Arsenic    | 75-2  | 2460     | 2470     | 2307     | 2412     | 3.80   | cps   |
| Barium     | 135-1 | 33359    | 32878    | 32621    | 32953    | 1.14   | cps   |
| Barium     | 137-1 | 58083    | 57911    | 57921    | 57972    | 0.17   | cps   |
| Beryllium  | 9-1   | 1751     | 1605     | 1591     | 1649     | 5.39   | cps   |
| Bismuth    | 209-1 | 4833150  | 4723283  | 4804346  | 4786926  | 1.19   | cps   |
| Bismuth    | 209-2 | 4464819  | 4334016  | 4351727  | 4383520  | 1.62   | cps   |
| Bromine    | 81-1  | 19954    | 22133    | 22658    | 21582    | 6.64   | cps   |
| Bromine    | 81-2  | 2847     | 2760     | 2880     | 2829     | 2.19   | cps   |
| Cadmium    | 108-1 | 270      | 223      | 250      | 248      | 9.45   | cps   |
| Cadmium    | 106-1 | 3317     | 3340     | 3250     | 3303     | 1.41   | cps   |
| Cadmium    | 111-1 | 5640     | 5739     | 5697     | 5692     | 0.87   | cps   |
| Calcium    | 43-1  | 811845   | 816348   | 809337   | 812510   | 0.44   | cps   |
| Calcium    | 44-1  | 12863925 | 12677717 | 12724360 | 12755334 | 0.76   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 35271    | 34947    | 34303    | 34840    | 1.42   | cps   |
| Cobalt     | 59-2  | 114485   | 114740   | 113450   | 114225   | 0.60   | cps   |
| Copper     | 63-2  | 157323   | 161542   | 158807   | 159224   | 1.34   | cps   |
| Dysprosium | 156-1 | 29431    | 29555    | 30052    | 29679    | 1.11   | cps   |
| Dysprosium | 156-2 | 27484    | 27754    | 28519    | 27919    | 1.92   | cps   |
| Erbium     | 164-1 | 41144    | 40713    | 41519    | 41125    | 0.98   | cps   |
| Erbium     | 164-2 | 31152    | 32010    | 31472    | 31545    | 1.38   | cps   |
| Gadolinium | 160-1 | 31846    | 32545    | 32902    | 32431    | 1.66   | cps   |
| Gadolinium | 160-2 | 26225    | 25744    | 26021    | 25997    | 0.93   | cps   |
| Holmium    | 165-1 | 8196804  | 7889546  | 7924927  | 8003759  | 2.10   | cps   |
| Holmium    | 165-2 | 6121568  | 6089370  | 6126581  | 6112506  | 0.33   | cps   |
| Indium     | 115-1 | 6999915  | 6890299  | 6806492  | 6898902  | 1.41   | cps   |
| Indium     | 115-2 | 2672701  | 2675479  | 2637062  | 2661747  | 0.80   | cps   |
| Iron       | 56-2  | 28016214 | 27147405 | 27272760 | 27478793 | 1.71   | cps   |
| Iron       | 57-2  | 728095   | 723959   | 719523   | 723859   | 0.59   | cps   |
| Iron       | 54-2  | 1509570  | 1536101  | 1515222  | 1520298  | 0.92   | cps   |
| Krypton    | 83-1  | 560      | 677      | 593      | 610      | 9.85   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 219390   | 215404   | 218506   | 217767   | 0.96   | cps   |
| Lead       | 207-1 | 180530   | 175867   | 179043   | 178480   | 1.33   | cps   |
| Lead       | 208-1 | 834167   | 822737   | 836971   | 831292   | 0.91   | cps   |
| Lithium    | 6-1   | 404650   | 402458   | 395881   | 400996   | 1.14   | cps   |
| Magnesium  | 24-2  | 2971545  | 2985573  | 2828935  | 2928684  | 2.96   | cps   |
| Manganese  | 55-2  | 6312851  | 6288723  | 6215733  | 6272436  | 0.81   | cps   |
| Molybdenum | 94-1  | 4134     | 4147     | 3977     | 4086     | 2.31   | cps   |
| Molybdenum | 95-1  | 620      | 613      | 583      | 606      | 3.23   | cps   |
| Molybdenum | 96-1  | 1400     | 1457     | 1410     | 1422     | 2.13   | cps   |
| Molybdenum | 97-1  | 430      | 330      | 373      | 378      | 13.27  | cps   |
| Molybdenum | 98-1  | 823      | 853      | 823      | 833      | 2.08   | cps   |
| Neodymium  | 150-1 | 40030    | 40565    | 40304    | 40300    | 0.66   | cps   |
| Neodymium  | 150-2 | 27039    | 27110    | 26358    | 26836    | 1.55   | cps   |
| Nickel     | 60-2  | 22881    | 23245    | 22574    | 22900    | 1.47   | cps   |
| Phosphorus | 31-2  | 10437    | 10917    | 10557    | 10637    | 2.35   | cps   |
| Potassium  | 39-2  | 2279198  | 2293950  | 2281155  | 2284768  | 0.35   | cps   |
| Rhodium    | 103-1 | 7082706  | 6949223  | 6713892  | 6915274  | 2.70   | cps   |
| Rhodium    | 103-2 | 4495994  | 4540628  | 4517504  | 4518042  | 0.49   | cps   |
| Scandium   | 45-1  | 4221521  | 4073547  | 4172767  | 4155945  | 1.81   | cps   |
| Scandium   | 45-2  | 429572   | 427368   | 426564   | 427835   | 0.36   | cps   |
| Selenium   | 82-1  | 457      | 358      | 360      | 392      | 14.52  | cps   |
| Selenium   | 77-2  | 90       | 123      | 113      | 109      | 15.71  | cps   |
| Selenium   | 78-2  | 703      | 640      | 767      | 703      | 9.00   | cps   |
| Silicon    | 28-1  | 22577889 | 22953332 | 22779164 | 22770128 | 0.83   | cps   |
| Silver     | 107-1 | 263      | 250      | 290      | 268      | 7.61   | cps   |
| Silver     | 109-1 | 177      | 247      | 240      | 221      | 17.47  | cps   |
| Sodium     | 23-2  | 1271783  | 1272007  | 1243405  | 1262398  | 1.30   | cps   |
| Strontium  | 86-1  | 300356   | 297825   | 299973   | 299384   | 0.46   | cps   |
| Strontium  | 88-1  | 2657210  | 2606164  | 2561358  | 2608244  | 1.84   | cps   |
| Sulfur     | 34-1  | 2301241  | 2315263  | 2323402  | 2313302  | 0.48   | cps   |
| Terbium    | 159-1 | 8291641  | 7906093  | 8448336  | 8215357  | 3.40   | cps   |
| Terbium    | 159-2 | 6171362  | 6034177  | 6055395  | 6086978  | 1.21   | cps   |
| Thallium   | 203-1 | 1110     | 1057     | 1000     | 1056     | 5.21   | cps   |
| Thallium   | 205-1 | 2500     | 2340     | 2614     | 2485     | 5.53   | cps   |
| Tin        | 118-1 | 2280     | 2624     | 2470     | 2458     | 7.00   | cps   |
| Titanium   | 47-1  | 5901     | 5991     | 6035     | 5976     | 1.14   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-06DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:35:09 DataFile Name : 029SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 11458    | 11499    | 11305    | 11421    | 0.89   | cps   |
| Vanadium  | 51-2  | 136840   | 135095   | 134708   | 135548   | 0.84   | cps   |
| Yttrium   | 89-1  | 13304095 | 12866484 | 12749403 | 12973327 | 2.25   | cps   |
| Yttrium   | 89-2  | 3832828  | 3754644  | 3790557  | 3792677  | 1.03   | cps   |
| Zinc      | 66-2  | 227547   | 226049   | 226029   | 226542   | 0.38   | cps   |
| Zirconium | 90-1  | 9937     | 10404    | 10417    | 10253    | 2.67   | cps   |
| Zirconium | 91-1  | 2284     | 2224     | 2307     | 2271     | 1.89   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3413134  | 3344376  | 3288189  | 3348566  | 1.87   | cps   |
| Antimony   | 121-1 | 1020     | 870      | 1003     | 964      | 8.52   | cps   |
| Arsenic    | 75-2  | 2844     | 2800     | 2664     | 2769     | 3.39   | cps   |
| Barium     | 135-1 | 31104    | 31582    | 31301    | 31329    | 0.77   | cps   |
| Barium     | 137-1 | 54267    | 55274    | 53838    | 54460    | 1.35   | cps   |
| Beryllium  | 9-1   | 1637     | 1587     | 1678     | 1634     | 2.78   | cps   |
| Bismuth    | 209-1 | 4933006  | 4912901  | 4790652  | 4878853  | 1.58   | cps   |
| Bismuth    | 209-2 | 4627652  | 4455204  | 4488233  | 4523696  | 2.02   | cps   |
| Bromine    | 81-1  | 20645    | 22524    | 23088    | 22086    | 5.79   | cps   |
| Bromine    | 81-2  | 2887     | 3064     | 3097     | 3016     | 3.74   | cps   |
| Cadmium    | 108-1 | 253      | 317      | 270      | 280      | 11.72  | cps   |
| Cadmium    | 106-1 | 3374     | 3297     | 3227     | 3299     | 2.22   | cps   |
| Cadmium    | 111-1 | 5975     | 5643     | 5677     | 5765     | 3.16   | cps   |
| Calcium    | 43-1  | 863372   | 873258   | 872296   | 869642   | 0.63   | cps   |
| Calcium    | 44-1  | 13699151 | 13781834 | 13658506 | 13713164 | 0.46   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 36681    | 37219    | 37423    | 37108    | 1.03   | cps   |
| Cobalt     | 59-2  | 117846   | 118895   | 119221   | 118654   | 0.61   | cps   |
| Copper     | 63-2  | 151745   | 150467   | 150637   | 150950   | 0.46   | cps   |
| Dysprosium | 156-1 | 26646    | 27758    | 27009    | 27138    | 2.09   | cps   |
| Dysprosium | 156-2 | 25296    | 25690    | 25260    | 25415    | 0.94   | cps   |
| Erbium     | 164-1 | 36348    | 37016    | 37310    | 36891    | 1.34   | cps   |
| Erbium     | 164-2 | 28546    | 28232    | 27928    | 28235    | 1.09   | cps   |
| Gadolinium | 160-1 | 30042    | 30062    | 29872    | 29992    | 0.35   | cps   |
| Gadolinium | 160-2 | 24375    | 23637    | 22926    | 23646    | 3.06   | cps   |
| Holmium    | 165-1 | 8002113  | 8012141  | 8045634  | 8019963  | 0.28   | cps   |
| Holmium    | 165-2 | 6444323  | 6200698  | 6228949  | 6291324  | 2.12   | cps   |
| Indium     | 115-1 | 6997956  | 6912037  | 6883586  | 6931193  | 0.86   | cps   |
| Indium     | 115-2 | 2789077  | 2688665  | 2721478  | 2733073  | 1.87   | cps   |
| Iron       | 56-2  | 32677874 | 31933636 | 31684020 | 32098510 | 1.61   | cps   |
| Iron       | 57-2  | 835871   | 838635   | 843193   | 839233   | 0.44   | cps   |
| Iron       | 54-2  | 1771706  | 1794506  | 1762744  | 1776319  | 0.92   | cps   |
| Krypton    | 83-1  | 560      | 540      | 667      | 589      | 11.56  | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 170656   | 175505   | 174604   | 173588   | 1.49   | cps   |
| Lead       | 207-1 | 142510   | 143102   | 142641   | 142751   | 0.22   | cps   |
| Lead       | 208-1 | 654894   | 668174   | 667040   | 663369   | 1.11   | cps   |
| Lithium    | 6-1   | 405213   | 395732   | 395663   | 398869   | 1.38   | cps   |
| Magnesium  | 24-2  | 2610824  | 2658491  | 2667275  | 2645530  | 1.15   | cps   |
| Manganese  | 55-2  | 6424394  | 6478982  | 6272658  | 6392011  | 1.67   | cps   |
| Molybdenum | 94-1  | 3867     | 3877     | 4184     | 3976     | 4.53   | cps   |
| Molybdenum | 95-1  | 647      | 620      | 683      | 650      | 4.89   | cps   |
| Molybdenum | 96-1  | 1587     | 1357     | 1433     | 1459     | 8.03   | cps   |
| Molybdenum | 97-1  | 330      | 323      | 320      | 324      | 1.57   | cps   |
| Molybdenum | 98-1  | 847      | 810      | 703      | 787      | 9.47   | cps   |
| Neodymium  | 150-1 | 36855    | 36808    | 37250    | 36971    | 0.66   | cps   |
| Neodymium  | 150-2 | 24812    | 23961    | 24371    | 24381    | 1.75   | cps   |
| Nickel     | 60-2  | 25993    | 26066    | 25792    | 25950    | 0.55   | cps   |
| Phosphorus | 31-2  | 11868    | 11875    | 12125    | 11956    | 1.22   | cps   |
| Potassium  | 39-2  | 2451986  | 2471395  | 2459882  | 2461088  | 0.40   | cps   |
| Rhodium    | 103-1 | 6999560  | 6898747  | 6879114  | 6925807  | 0.93   | cps   |
| Rhodium    | 103-2 | 4604176  | 4399689  | 4543804  | 4515890  | 2.33   | cps   |
| Scandium   | 45-1  | 4236166  | 4191770  | 4159355  | 4195764  | 0.92   | cps   |
| Scandium   | 45-2  | 435670   | 431365   | 431687   | 432907   | 0.55   | cps   |
| Selenium   | 82-1  | 382      | 492      | 309      | 394      | 23.42  | cps   |
| Selenium   | 77-2  | 107      | 80       | 97       | 94       | 14.27  | cps   |
| Selenium   | 78-2  | 693      | 617      | 700      | 670      | 6.91   | cps   |
| Silicon    | 28-1  | 22716340 | 22784242 | 22951530 | 22817371 | 0.53   | cps   |
| Silver     | 107-1 | 260      | 330      | 320      | 303      | 12.48  | cps   |
| Silver     | 109-1 | 223      | 267      | 297      | 262      | 14.06  | cps   |
| Sodium     | 23-2  | 1448204  | 1416494  | 1417166  | 1427288  | 1.27   | cps   |
| Strontium  | 86-1  | 342682   | 346491   | 342937   | 344036   | 0.62   | cps   |
| Strontium  | 88-1  | 2982226  | 3011549  | 3040821  | 3011532  | 0.97   | cps   |
| Sulfur     | 34-1  | 2318459  | 2357221  | 2357812  | 2344497  | 0.96   | cps   |
| Terbium    | 159-1 | 8116414  | 8285107  | 8237977  | 8213166  | 1.06   | cps   |
| Terbium    | 159-2 | 6312489  | 6187829  | 6199471  | 6233263  | 1.10   | cps   |
| Thallium   | 203-1 | 1163     | 1223     | 1170     | 1186     | 2.77   | cps   |
| Thallium   | 205-1 | 2524     | 2737     | 2754     | 2671     | 4.80   | cps   |
| Tin        | 118-1 | 2474     | 2764     | 2654     | 2630     | 5.57   | cps   |
| Titanium   | 47-1  | 5778     | 5524     | 5738     | 5680     | 2.40   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-08DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:38:15 DataFile Name : 030SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 10081    | 10097    | 10321    | 10166    | 1.32   | cps   |
| Vanadium  | 51-2  | 137186   | 135421   | 136793   | 136467   | 0.68   | cps   |
| Yttrium   | 89-1  | 13119409 | 13217939 | 13182808 | 13173385 | 0.38   | cps   |
| Yttrium   | 89-2  | 3866997  | 3821825  | 3758540  | 3815787  | 1.43   | cps   |
| Zinc      | 66-2  | 253531   | 252575   | 252817   | 252975   | 0.20   | cps   |
| Zirconium | 90-1  | 9630     | 10301    | 10014    | 9981     | 3.37   | cps   |
| Zirconium | 91-1  | 2200     | 2287     | 2324     | 2270     | 2.79   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 719443   | 707462   | 705133   | 710680   | 1.08   | cps   |
| Antimony   | 121-1 | 787      | 793      | 893      | 824      | 7.25   | cps   |
| Arsenic    | 75-2  | 843      | 807      | 787      | 812      | 3.54   | cps   |
| Barium     | 135-1 | 25894    | 26522    | 26158    | 26191    | 1.20   | cps   |
| Barium     | 137-1 | 45556    | 46285    | 46305    | 46049    | 0.93   | cps   |
| Beryllium  | 9-1   | 549      | 532      | 585      | 555      | 4.92   | cps   |
| Bismuth    | 209-1 | 4826969  | 4804533  | 4776770  | 4802757  | 0.52   | cps   |
| Bismuth    | 209-2 | 4511251  | 4508566  | 4534040  | 4517952  | 0.31   | cps   |
| Bromine    | 81-1  | 19233    | 20728    | 21042    | 20334    | 4.75   | cps   |
| Bromine    | 81-2  | 2384     | 2500     | 2364     | 2416     | 3.06   | cps   |
| Cadmium    | 108-1 | 143      | 140      | 167      | 150      | 9.69   | cps   |
| Cadmium    | 106-1 | 3250     | 3094     | 3264     | 3203     | 2.95   | cps   |
| Cadmium    | 111-1 | 4652     | 4438     | 4605     | 4565     | 2.46   | cps   |
| Calcium    | 43-1  | 1514838  | 1532388  | 1511279  | 1519502  | 0.74   | cps   |
| Calcium    | 44-1  | 25177455 | 24828204 | 24811969 | 24939209 | 0.83   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 8256     | 8382     | 8422     | 8353     | 1.04   | cps   |
| Cobalt     | 59-2  | 84929    | 84560    | 84635    | 84708    | 0.23   | cps   |
| Copper     | 63-2  | 19927    | 19980    | 19313    | 19740    | 1.88   | cps   |
| Dysprosium | 156-1 | 6968     | 6365     | 6745     | 6693     | 4.56   | cps   |
| Dysprosium | 156-2 | 6388     | 6535     | 6608     | 6510     | 1.72   | cps   |
| Erbium     | 164-1 | 8536     | 8606     | 8543     | 8562     | 0.45   | cps   |
| Erbium     | 164-2 | 6848     | 6832     | 6538     | 6739     | 2.59   | cps   |
| Gadolinium | 160-1 | 7062     | 7079     | 7069     | 7070     | 0.12   | cps   |
| Gadolinium | 160-2 | 6081     | 5881     | 6071     | 6011     | 1.88   | cps   |
| Holmium    | 165-1 | 7989113  | 8075906  | 7863640  | 7976220  | 1.34   | cps   |
| Holmium    | 165-2 | 6306402  | 6315133  | 6189737  | 6270424  | 1.12   | cps   |
| Indium     | 115-1 | 7041723  | 6998931  | 7228976  | 7089877  | 1.73   | cps   |
| Indium     | 115-2 | 2765351  | 2744247  | 2692755  | 2734118  | 1.37   | cps   |
| Iron       | 56-2  | 9949297  | 9976837  | 9897882  | 9941339  | 0.40   | cps   |
| Iron       | 57-2  | 291024   | 289250   | 289327   | 289867   | 0.35   | cps   |
| Iron       | 54-2  | 574536   | 563508   | 565429   | 567824   | 1.04   | cps   |
| Krypton    | 83-1  | 503      | 520      | 530      | 518      | 2.60   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 20155    | 21110    | 21110    | 20792    | 2.65   | cps   |
| Lead       | 207-1 | 17118    | 17144    | 17321    | 17194    | 0.64   | cps   |
| Lead       | 208-1 | 79115    | 80561    | 79517    | 79731    | 0.94   | cps   |
| Lithium    | 6-1   | 399680   | 399742   | 396266   | 398563   | 0.50   | cps   |
| Magnesium  | 24-2  | 7037586  | 6986341  | 6838839  | 6954255  | 1.48   | cps   |
| Manganese  | 55-2  | 5785674  | 5678697  | 5697811  | 5720727  | 1.00   | cps   |
| Molybdenum | 94-1  | 1960     | 1950     | 1967     | 1959     | 0.43   | cps   |
| Molybdenum | 95-1  | 523      | 467      | 483      | 491      | 5.93   | cps   |
| Molybdenum | 96-1  | 853      | 787      | 817      | 819      | 4.08   | cps   |
| Molybdenum | 97-1  | 327      | 290      | 240      | 286      | 15.24  | cps   |
| Molybdenum | 98-1  | 593      | 567      | 553      | 571      | 3.57   | cps   |
| Neodymium  | 150-1 | 9687     | 9003     | 9493     | 9394     | 3.75   | cps   |
| Neodymium  | 150-2 | 6161     | 6168     | 6008     | 6112     | 1.48   | cps   |
| Nickel     | 60-2  | 14367    | 14380    | 14911    | 14553    | 2.13   | cps   |
| Phosphorus | 31-2  | 1110     | 1080     | 1123     | 1104     | 2.01   | cps   |
| Potassium  | 39-2  | 1972047  | 1957699  | 1938534  | 1956093  | 0.86   | cps   |
| Rhodium    | 103-1 | 6985805  | 6985138  | 7071670  | 7014204  | 0.71   | cps   |
| Rhodium    | 103-2 | 4597211  | 4525154  | 4476484  | 4532950  | 1.34   | cps   |
| Scandium   | 45-1  | 4175023  | 4187579  | 4230883  | 4197828  | 0.70   | cps   |
| Scandium   | 45-2  | 441735   | 429004   | 433088   | 434609   | 1.50   | cps   |
| Selenium   | 82-1  | 378      | 333      | 375      | 362      | 6.94   | cps   |
| Selenium   | 77-2  | 67       | 53       | 27       | 49       | 41.66  | cps   |
| Selenium   | 78-2  | 580      | 637      | 563      | 593      | 6.48   | cps   |
| Silicon    | 28-1  | 17823871 | 18161130 | 17663660 | 17882887 | 1.42   | cps   |
| Silver     | 107-1 | 313      | 297      | 283      | 298      | 5.05   | cps   |
| Silver     | 109-1 | 223      | 230      | 237      | 230      | 2.90   | cps   |
| Sodium     | 23-2  | 1188685  | 1169403  | 1209450  | 1189179  | 1.68   | cps   |
| Strontium  | 86-1  | 355007   | 356344   | 353914   | 355088   | 0.34   | cps   |
| Strontium  | 88-1  | 3122129  | 3177638  | 3186646  | 3162138  | 1.10   | cps   |
| Sulfur     | 34-1  | 2352319  | 2363950  | 2371606  | 2362625  | 0.41   | cps   |
| Terbium    | 159-1 | 8401562  | 8112866  | 8314268  | 8276232  | 1.79   | cps   |
| Terbium    | 159-2 | 6268683  | 6195978  | 6069327  | 6177996  | 1.63   | cps   |
| Thallium   | 203-1 | 770      | 673      | 717      | 720      | 6.72   | cps   |
| Thallium   | 205-1 | 1830     | 1673     | 1787     | 1763     | 4.59   | cps   |
| Tin        | 118-1 | 2204     | 2244     | 2120     | 2189     | 2.87   | cps   |
| Titanium   | 47-1  | 927      | 890      | 940      | 919      | 2.82   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-10DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:41:25 DataFile Name : 031SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 677      | 630      | 680      | 662      | 4.22   | cps   |
| Vanadium  | 51-2  | 7712     | 7819     | 7512     | 7681     | 2.03   | cps   |
| Yttrium   | 89-1  | 12834450 | 12570977 | 12655112 | 12686846 | 1.06   | cps   |
| Yttrium   | 89-2  | 3753682  | 3677943  | 3658674  | 3696766  | 1.36   | cps   |
| Zinc      | 66-2  | 206012   | 204622   | 206365   | 205666   | 0.45   | cps   |
| Zirconium | 90-1  | 4754     | 4764     | 4751     | 4756     | 0.15   | cps   |
| Zirconium | 91-1  | 1057     | 1100     | 1060     | 1072     | 2.25   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3103052  | 3084463  | 3085525  | 3091014  | 0.34   | cps   |
| Antimony   | 121-1 | 853      | 893      | 857      | 868      | 2.56   | cps   |
| Arsenic    | 75-2  | 2580     | 2627     | 2497     | 2568     | 2.57   | cps   |
| Barium     | 135-1 | 31111    | 30503    | 30860    | 30825    | 0.99   | cps   |
| Barium     | 137-1 | 53702    | 54645    | 54401    | 54249    | 0.90   | cps   |
| Beryllium  | 9-1   | 1520     | 1530     | 1506     | 1519     | 0.82   | cps   |
| Bismuth    | 209-1 | 4895981  | 4888572  | 4785886  | 4856813  | 1.27   | cps   |
| Bismuth    | 209-2 | 4506360  | 4507317  | 4486235  | 4499971  | 0.26   | cps   |
| Bromine    | 81-1  | 20344    | 22317    | 23319    | 21993    | 6.88   | cps   |
| Bromine    | 81-2  | 2917     | 2870     | 2867     | 2885     | 0.97   | cps   |
| Cadmium    | 108-1 | 267      | 317      | 217      | 267      | 18.75  | cps   |
| Cadmium    | 106-1 | 3370     | 3344     | 3330     | 3348     | 0.61   | cps   |
| Cadmium    | 111-1 | 5760     | 5543     | 5650     | 5651     | 1.92   | cps   |
| Calcium    | 43-1  | 1035571  | 1035461  | 1036082  | 1035705  | 0.03   | cps   |
| Calcium    | 44-1  | 16147071 | 16443815 | 16421661 | 16337516 | 1.01   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 30702    | 29943    | 30013    | 30219    | 1.39   | cps   |
| Cobalt     | 59-2  | 114551   | 113121   | 112654   | 113442   | 0.87   | cps   |
| Copper     | 63-2  | 120294   | 119188   | 119282   | 119588   | 0.51   | cps   |
| Dysprosium | 156-1 | 26078    | 25964    | 25854    | 25965    | 0.43   | cps   |
| Dysprosium | 156-2 | 24508    | 24355    | 24067    | 24310    | 0.92   | cps   |
| Erbium     | 164-1 | 35358    | 36735    | 35205    | 35766    | 2.36   | cps   |
| Erbium     | 164-2 | 28175    | 27691    | 27297    | 27721    | 1.59   | cps   |
| Gadolinium | 160-1 | 27577    | 28282    | 28389    | 28083    | 1.57   | cps   |
| Gadolinium | 160-2 | 22962    | 23006    | 23286    | 23085    | 0.76   | cps   |
| Holmium    | 165-1 | 8242307  | 8132009  | 7990714  | 8121676  | 1.55   | cps   |
| Holmium    | 165-2 | 6328897  | 6372074  | 6314885  | 6338619  | 0.47   | cps   |
| Indium     | 115-1 | 7072021  | 7001211  | 7013314  | 7028849  | 0.54   | cps   |
| Indium     | 115-2 | 2744112  | 2785428  | 2759308  | 2762949  | 0.76   | cps   |
| Iron       | 56-2  | 27519054 | 27599805 | 27565473 | 27561444 | 0.15   | cps   |
| Iron       | 57-2  | 740445   | 736685   | 733343   | 736824   | 0.48   | cps   |
| Iron       | 54-2  | 1602466  | 1516949  | 1529447  | 1549621  | 2.98   | cps   |
| Krypton    | 83-1  | 533      | 520      | 507      | 520      | 2.56   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 145676   | 145123   | 144070   | 144956   | 0.56   | cps   |
| Lead       | 207-1 | 118848   | 119425   | 116640   | 118304   | 1.24   | cps   |
| Lead       | 208-1 | 552911   | 553973   | 550756   | 552547   | 0.30   | cps   |
| Lithium    | 6-1   | 409878   | 397899   | 396326   | 401368   | 1.85   | cps   |
| Magnesium  | 24-2  | 2494696  | 2466861  | 2416241  | 2459266  | 1.62   | cps   |
| Manganese  | 55-2  | 6678511  | 6571968  | 6552915  | 6601131  | 1.03   | cps   |
| Molybdenum | 94-1  | 3687     | 3717     | 3537     | 3647     | 2.64   | cps   |
| Molybdenum | 95-1  | 657      | 600      | 560      | 606      | 8.02   | cps   |
| Molybdenum | 96-1  | 1373     | 1387     | 1357     | 1372     | 1.10   | cps   |
| Molybdenum | 97-1  | 313      | 293      | 410      | 339      | 18.41  | cps   |
| Molybdenum | 98-1  | 683      | 757      | 657      | 699      | 7.41   | cps   |
| Neodymium  | 150-1 | 35308    | 34726    | 35645    | 35226    | 1.32   | cps   |
| Neodymium  | 150-2 | 23830    | 23199    | 23643    | 23558    | 1.38   | cps   |
| Nickel     | 60-2  | 23031    | 22661    | 23365    | 23019    | 1.53   | cps   |
| Phosphorus | 31-2  | 10701    | 10647    | 10834    | 10727    | 0.90   | cps   |
| Potassium  | 39-2  | 2472839  | 2436451  | 2425843  | 2445044  | 1.01   | cps   |
| Rhodium    | 103-1 | 7135814  | 7056301  | 7076056  | 7089391  | 0.58   | cps   |
| Rhodium    | 103-2 | 4639108  | 4553173  | 4529715  | 4573999  | 1.26   | cps   |
| Scandium   | 45-1  | 4319227  | 4196787  | 4144542  | 4220185  | 2.12   | cps   |
| Scandium   | 45-2  | 441329   | 437271   | 436202   | 438267   | 0.62   | cps   |
| Selenium   | 82-1  | 477      | 505      | 454      | 478      | 5.33   | cps   |
| Selenium   | 77-2  | 93       | 100      | 73       | 89       | 15.61  | cps   |
| Selenium   | 78-2  | 603      | 647      | 683      | 644      | 6.21   | cps   |
| Silicon    | 28-1  | 20442462 | 20610686 | 20160624 | 20404590 | 1.11   | cps   |
| Silver     | 107-1 | 313      | 223      | 340      | 292      | 20.92  | cps   |
| Silver     | 109-1 | 237      | 290      | 287      | 271      | 11.02  | cps   |
| Sodium     | 23-2  | 1428570  | 1379815  | 1364309  | 1390898  | 2.41   | cps   |
| Strontium  | 86-1  | 398662   | 404102   | 393385   | 398716   | 1.34   | cps   |
| Strontium  | 88-1  | 3569871  | 3572773  | 3569032  | 3570559  | 0.05   | cps   |
| Sulfur     | 34-1  | 2279926  | 2352493  | 2292067  | 2308162  | 1.68   | cps   |
| Terbium    | 159-1 | 8554576  | 8402989  | 8468727  | 8475431  | 0.90   | cps   |
| Terbium    | 159-2 | 6322422  | 6322460  | 6213572  | 6286151  | 1.00   | cps   |
| Thallium   | 203-1 | 1063     | 1033     | 1017     | 1038     | 2.28   | cps   |
| Thallium   | 205-1 | 2314     | 2574     | 2657     | 2515     | 7.12   | cps   |
| Tin        | 118-1 | 2694     | 2770     | 3007     | 2824     | 5.79   | cps   |
| Titanium   | 47-1  | 4294     | 4317     | 4244     | 4285     | 0.87   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-12DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:44:34 DataFile Name : 032SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 8890     | 8973     | 8476     | 8780     | 3.03   | cps   |
| Vanadium  | 51-2  | 130113   | 128158   | 129240   | 129170   | 0.76   | cps   |
| Yttrium   | 89-1  | 13688789 | 13135956 | 13313811 | 13379518 | 2.11   | cps   |
| Yttrium   | 89-2  | 3839806  | 3890048  | 3810707  | 3846854  | 1.04   | cps   |
| Zinc      | 66-2  | 238727   | 234662   | 236007   | 236466   | 0.88   | cps   |
| Zirconium | 90-1  | 9486     | 9500     | 9196     | 9394     | 1.83   | cps   |
| Zirconium | 91-1  | 2174     | 2220     | 2144     | 2179     | 1.77   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 7367951   | 7230858   | 7379158   | 7325989   | 1.13   | cps   |
| Antimony   | 121-1 | 2778049   | 2913467   | 2847033   | 2846183   | 2.38   | cps   |
| Arsenic    | 75-2  | 194528    | 194220    | 191179    | 193309    | 0.96   | cps   |
| Barium     | 135-1 | 3438234   | 3498889   | 3448589   | 3461904   | 0.94   | cps   |
| Barium     | 137-1 | 6036988   | 5950151   | 5983518   | 5990219   | 0.73   | cps   |
| Beryllium  | 9-1   | 314047    | 321368    | 323190    | 319535    | 1.51   | cps   |
| Bismuth    | 209-1 | 4846241   | 4845637   | 4836355   | 4842744   | 0.11   | cps   |
| Bismuth    | 209-2 | 4373121   | 4347689   | 4305566   | 4342125   | 0.79   | cps   |
| Bromine    | 81-1  | 13726     | 13506     | 13023     | 13418     | 2.68   | cps   |
| Bromine    | 81-2  | 497       | 540       | 487       | 508       | 5.58   | cps   |
| Cadmium    | 108-1 | 56279     | 55363     | 55918     | 55853     | 0.83   | cps   |
| Cadmium    | 106-1 | 79685     | 80838     | 79868     | 80130     | 0.77   | cps   |
| Cadmium    | 111-1 | 778863    | 794354    | 782467    | 785228    | 1.03   | cps   |
| Calcium    | 43-1  | 3912484   | 3957803   | 3949847   | 3940045   | 0.61   | cps   |
| Calcium    | 44-1  | 64247564  | 63774319  | 64119422  | 64047102  | 0.38   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 1500711   | 1530974   | 1490331   | 1507339   | 1.40   | cps   |
| Cobalt     | 59-2  | 2396076   | 2328392   | 2309764   | 2344744   | 1.94   | cps   |
| Copper     | 63-2  | 18186178  | 17886136  | 17870594  | 17980969  | 0.99   | cps   |
| Dysprosium | 156-1 | 150       | 180       | 177       | 169       | 9.74   | cps   |
| Dysprosium | 156-2 | 237       | 253       | 273       | 254       | 7.22   | cps   |
| Erbium     | 164-1 | 387       | 353       | 363       | 368       | 4.65   | cps   |
| Erbium     | 164-2 | 283       | 280       | 240       | 268       | 9.01   | cps   |
| Gadolinium | 160-1 | 240       | 220       | 193       | 218       | 10.75  | cps   |
| Gadolinium | 160-2 | 477       | 543       | 450       | 490       | 9.81   | cps   |
| Holmium    | 165-1 | 8412464   | 8106712   | 8245548   | 8254908   | 1.85   | cps   |
| Holmium    | 165-2 | 6317936   | 6393158   | 6218903   | 6309999   | 1.39   | cps   |
| Indium     | 115-1 | 7020465   | 6894843   | 6843833   | 6919714   | 1.31   | cps   |
| Indium     | 115-2 | 2634852   | 2631571   | 2649260   | 2638561   | 0.36   | cps   |
| Iron       | 56-2  | 326574308 | 328013508 | 326792455 | 327126757 | 0.24   | cps   |
| Iron       | 57-2  | 8141419   | 8045734   | 8027625   | 8071593   | 0.76   | cps   |
| Iron       | 54-2  | 18125833  | 18046816  | 17862633  | 18011761  | 0.75   | cps   |
| Krypton    | 83-1  | 450       | 517       | 570       | 512       | 11.74  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Lead       | 206-1 | 10409887  | 10373770  | 10194542  | 10326066  | 1.12   | cps   |
| Lead       | 207-1 | 8788704   | 8695370   | 8671213   | 8718429   | 0.71   | cps   |
| Lead       | 208-1 | 40557593  | 40221927  | 40164430  | 40314650  | 0.53   | cps   |
| Lithium    | 6-1   | 424551    | 420362    | 418841    | 421251    | 0.70   | cps   |
| Magnesium  | 24-2  | 65261836  | 66199114  | 65831311  | 65764087  | 0.72   | cps   |
| Manganese  | 55-2  | 12625099  | 12825295  | 12396798  | 12615731  | 1.70   | cps   |
| Molybdenum | 94-1  | 11056572  | 11167559  | 10851722  | 11025284  | 1.45   | cps   |
| Molybdenum | 95-1  | 15746791  | 16020307  | 15675675  | 15814258  | 1.15   | cps   |
| Molybdenum | 96-1  | 17007214  | 17168068  | 17104225  | 17093169  | 0.47   | cps   |
| Molybdenum | 97-1  | 9776005   | 9840455   | 9943161   | 9853207   | 0.86   | cps   |
| Molybdenum | 98-1  | 25431615  | 25425863  | 25191645  | 25349708  | 0.54   | cps   |
| Neodymium  | 150-1 | 193       | 147       | 157       | 166       | 14.84  | cps   |
| Neodymium  | 150-2 | 60        | 57        | 50        | 56        | 9.17   | cps   |
| Nickel     | 60-2  | 605374    | 599594    | 595967    | 600311    | 0.79   | cps   |
| Phosphorus | 31-2  | 87449     | 88854     | 88099     | 88134     | 0.80   | cps   |
| Potassium  | 39-2  | 39032382  | 39102506  | 38529968  | 38888285  | 0.80   | cps   |
| Rhodium    | 103-1 | 6939732   | 6780037   | 6839795   | 6853188   | 1.18   | cps   |
| Rhodium    | 103-2 | 4379618   | 4361143   | 4367915   | 4369559   | 0.21   | cps   |
| Scandium   | 45-1  | 4385821   | 4293441   | 4291956   | 4323739   | 1.24   | cps   |
| Scandium   | 45-2  | 440598    | 444959    | 445852    | 443803    | 0.63   | cps   |
| Selenium   | 82-1  | 59288     | 59589     | 58997     | 59291     | 0.50   | cps   |
| Selenium   | 77-2  | 7148      | 6795      | 6965      | 6969      | 2.54   | cps   |
| Selenium   | 78-2  | 23098     | 23289     | 22925     | 23104     | 0.79   | cps   |
| Silicon    | 28-1  | 9838936   | 9883225   | 9979855   | 9900672   | 0.73   | cps   |
| Silver     | 107-1 | 3972172   | 3914336   | 3933701   | 3940069   | 0.75   | cps   |
| Silver     | 109-1 | 3727250   | 3727730   | 3722094   | 3725691   | 0.08   | cps   |
| Sodium     | 23-2  | 105192655 | 103309215 | 102029418 | 103510430 | 1.54   | cps   |
| Strontium  | 86-1  | 1015319   | 1015517   | 1017431   | 1016089   | 0.11   | cps   |
| Strontium  | 88-1  | 8849148   | 9021159   | 8895044   | 8921784   | 1.00   | cps   |
| Sulfur     | 34-1  | 395573    | 396166    | 391774    | 394504    | 0.60   | cps   |
| Terbium    | 159-1 | 8542070   | 8305874   | 8498357   | 8448767   | 1.49   | cps   |
| Terbium    | 159-2 | 6366098   | 6320188   | 6152659   | 6279648   | 1.79   | cps   |
| Thallium   | 203-1 | 2531852   | 2541822   | 2505632   | 2526435   | 0.74   | cps   |
| Thallium   | 205-1 | 6014609   | 6202198   | 6137028   | 6117945   | 1.56   | cps   |
| Tin        | 118-1 | 2389729   | 2420966   | 2409498   | 2406731   | 0.66   | cps   |
| Titanium   | 47-1  | 3964093   | 4079562   | 3930430   | 3991362   | 1.96   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV02 Instrumnet Name : P7  
Client Sample ID : CCV02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:47:41 DataFile Name : 033CCV.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 7493571  | 7758329  | 7774961  | 7675620  | 2.06   | cps   |
| Vanadium  | 51-2  | 1270792  | 1294730  | 1265868  | 1277130  | 1.21   | cps   |
| Yttrium   | 89-1  | 12804830 | 12301065 | 12734634 | 12613510 | 2.16   | cps   |
| Yttrium   | 89-2  | 3606263  | 3625712  | 3592977  | 3608317  | 0.46   | cps   |
| Zinc      | 66-2  | 3172830  | 3216357  | 3169820  | 3186336  | 0.82   | cps   |
| Zirconium | 90-1  | 5388976  | 5387594  | 5412391  | 5396320  | 0.26   | cps   |
| Zirconium | 91-1  | 1192974  | 1210112  | 1218239  | 1207108  | 1.07   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1617    | 1403    | 1390    | 1470    | 8.65   | cps   |
| Antimony   | 121-1 | 487     | 427     | 403     | 439     | 9.80   | cps   |
| Arsenic    | 75-2  | 3       | 10      | 10      | 8       | 49.52  | cps   |
| Barium     | 135-1 | 87      | 90      | 83      | 87      | 3.85   | cps   |
| Barium     | 137-1 | 150     | 103     | 103     | 119     | 22.66  | cps   |
| Beryllium  | 9-1   | 7       | 0       | 0       | 2       | 167.88 | cps   |
| Bismuth    | 209-1 | 4838894 | 4754522 | 4737415 | 4776944 | 1.14   | cps   |
| Bismuth    | 209-2 | 4265981 | 4309166 | 4270435 | 4281861 | 0.55   | cps   |
| Bromine    | 81-1  | 11268   | 11208   | 11528   | 11334   | 1.50   | cps   |
| Bromine    | 81-2  | 273     | 270     | 233     | 259     | 8.57   | cps   |
| Cadmium    | 108-1 | 10      | 0       | 17      | 9       | 94.38  | cps   |
| Cadmium    | 106-1 | 2470    | 2450    | 2627    | 2516    | 3.85   | cps   |
| Cadmium    | 111-1 | 1775    | 1762    | 1851    | 1796    | 2.66   | cps   |
| Calcium    | 43-1  | 433     | 360     | 323     | 372     | 15.05  | cps   |
| Calcium    | 44-1  | 28046   | 27532   | 27702   | 27760   | 0.94   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2504    | 2617    | 2457    | 2526    | 3.26   | cps   |
| Cobalt     | 59-2  | 103     | 83      | 60      | 82      | 26.38  | cps   |
| Copper     | 63-2  | 1390    | 1467    | 1613    | 1490    | 7.62   | cps   |
| Dysprosium | 156-1 | 13      | 13      | 7       | 11      | 34.61  | cps   |
| Dysprosium | 156-2 | 0       | 10      | 0       | 3       | 173.21 | cps   |
| Erbium     | 164-1 | 37      | 83      | 60      | 60      | 38.88  | cps   |
| Erbium     | 164-2 | 53      | 33      | 53      | 47      | 24.75  | cps   |
| Gadolinium | 160-1 | 77      | 30      | 57      | 54      | 43.00  | cps   |
| Gadolinium | 160-2 | 330     | 377     | 317     | 341     | 9.24   | cps   |
| Holmium    | 165-1 | 7878395 | 7790857 | 7710030 | 7793094 | 1.08   | cps   |
| Holmium    | 165-2 | 5826206 | 5834365 | 5916373 | 5858981 | 0.85   | cps   |
| Indium     | 115-1 | 6841229 | 6681123 | 6642727 | 6721693 | 1.57   | cps   |
| Indium     | 115-2 | 2597929 | 2562687 | 2595355 | 2585324 | 0.76   | cps   |
| Iron       | 56-2  | 23862   | 23469   | 23789   | 23707   | 0.88   | cps   |
| Iron       | 57-2  | 1573    | 1433    | 1610    | 1539    | 6.06   | cps   |
| Iron       | 54-2  | 2734    | 2744    | 2887    | 2788    | 3.08   | cps   |
| Krypton    | 83-1  | 503     | 563     | 487     | 518     | 7.79   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 557     | 507     | 417     | 493     | 14.38  | cps   |
| Lead       | 207-1 | 420     | 377     | 400     | 399     | 5.44   | cps   |
| Lead       | 208-1 | 2077    | 1937    | 1947    | 1987    | 3.93   | cps   |
| Lithium    | 6-1   | 413967  | 414396  | 408777  | 412380  | 0.76   | cps   |
| Magnesium  | 24-2  | 670     | 637     | 533     | 613     | 11.62  | cps   |
| Manganese  | 55-2  | 833     | 993     | 830     | 886     | 10.54  | cps   |
| Molybdenum | 94-1  | 477     | 577     | 467     | 507     | 12.01  | cps   |
| Molybdenum | 95-1  | 537     | 513     | 453     | 501     | 8.58   | cps   |
| Molybdenum | 96-1  | 537     | 543     | 563     | 548     | 2.53   | cps   |
| Molybdenum | 97-1  | 323     | 333     | 267     | 308     | 11.68  | cps   |
| Molybdenum | 98-1  | 713     | 820     | 683     | 739     | 9.72   | cps   |
| Neodymium  | 150-1 | 3       | 7       | 13      | 8       | 65.47  | cps   |
| Neodymium  | 150-2 | 0       | 0       | 3       | 1       | 173.21 | cps   |
| Nickel     | 60-2  | 557     | 543     | 637     | 579     | 8.72   | cps   |
| Phosphorus | 31-2  | 800     | 703     | 673     | 726     | 9.12   | cps   |
| Potassium  | 39-2  | 71892   | 71892   | 71132   | 71639   | 0.61   | cps   |
| Rhodium    | 103-1 | 6987559 | 6636431 | 6724226 | 6782739 | 2.69   | cps   |
| Rhodium    | 103-2 | 4308122 | 4294209 | 4361722 | 4321351 | 0.82   | cps   |
| Scandium   | 45-1  | 4134410 | 4063878 | 3995181 | 4064490 | 1.71   | cps   |
| Scandium   | 45-2  | 414606  | 401894  | 407972  | 408157  | 1.56   | cps   |
| Selenium   | 82-1  | 340     | 251     | 317     | 303     | 15.15  | cps   |
| Selenium   | 77-2  | 0       | 0       | 3       | 1       | 173.21 | cps   |
| Selenium   | 78-2  | 520     | 507     | 490     | 506     | 2.97   | cps   |
| Silicon    | 28-1  | 662233  | 686189  | 669818  | 672747  | 1.82   | cps   |
| Silver     | 107-1 | 283     | 293     | 227     | 268     | 13.43  | cps   |
| Silver     | 109-1 | 243     | 203     | 273     | 240     | 14.63  | cps   |
| Sodium     | 23-2  | 46082   | 45851   | 45413   | 45782   | 0.74   | cps   |
| Strontium  | 86-1  | 890     | 930     | 833     | 884     | 5.49   | cps   |
| Strontium  | 88-1  | 373     | 373     | 410     | 386     | 5.49   | cps   |
| Sulfur     | 34-1  | 159300  | 159146  | 161603  | 160016  | 0.86   | cps   |
| Terbium    | 159-1 | 8178247 | 8033007 | 7876782 | 8029346 | 1.88   | cps   |
| Terbium    | 159-2 | 5953999 | 5906887 | 5824907 | 5895264 | 1.11   | cps   |
| Thallium   | 203-1 | 427     | 433     | 460     | 440     | 4.01   | cps   |
| Thallium   | 205-1 | 1093    | 907     | 993     | 998     | 9.36   | cps   |
| Tin        | 118-1 | 1180    | 1063    | 1103    | 1116    | 5.31   | cps   |
| Titanium   | 47-1  | 127     | 143     | 123     | 131     | 8.17   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB02 Instrumnet Name : P7  
Client Sample ID : CCB02 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 12:52:49 DataFile Name : 034CCBE.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 163      | 13       | 37       | 71       | 113.51 | cps   |
| Vanadium  | 51-2  | 30       | 23       | 20       | 24       | 20.83  | cps   |
| Yttrium   | 89-1  | 11721888 | 11951289 | 11789965 | 11821047 | 1.00   | cps   |
| Yttrium   | 89-2  | 3417323  | 3396603  | 3387849  | 3400592  | 0.45   | cps   |
| Zinc      | 66-2  | 4707     | 4554     | 4614     | 4625     | 1.67   | cps   |
| Zirconium | 90-1  | 610      | 590      | 560      | 587      | 4.29   | cps   |
| Zirconium | 91-1  | 150      | 150      | 110      | 137      | 16.90  | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 2965006  | 2981961  | 3011280  | 2986082  | 0.78   | cps   |
| Antimony   | 121-1 | 880      | 1023     | 1050     | 984      | 9.29   | cps   |
| Arsenic    | 75-2  | 2170     | 2200     | 2147     | 2172     | 1.23   | cps   |
| Barium     | 135-1 | 31201    | 31495    | 31582    | 31426    | 0.63   | cps   |
| Barium     | 137-1 | 53795    | 54260    | 54387    | 54147    | 0.58   | cps   |
| Beryllium  | 9-1   | 1553     | 1662     | 1456     | 1557     | 6.63   | cps   |
| Bismuth    | 209-1 | 4969323  | 4771088  | 4933672  | 4891361  | 2.16   | cps   |
| Bismuth    | 209-2 | 4503342  | 4591751  | 4483425  | 4526173  | 1.27   | cps   |
| Bromine    | 81-1  | 17708    | 19974    | 20708    | 19463    | 8.04   | cps   |
| Bromine    | 81-2  | 2507     | 2644     | 2627     | 2592     | 2.88   | cps   |
| Cadmium    | 108-1 | 287      | 267      | 307      | 287      | 6.98   | cps   |
| Cadmium    | 106-1 | 3567     | 3220     | 3360     | 3383     | 5.16   | cps   |
| Cadmium    | 111-1 | 5847     | 5701     | 5738     | 5762     | 1.31   | cps   |
| Calcium    | 43-1  | 1018878  | 1028388  | 1021995  | 1023087  | 0.47   | cps   |
| Calcium    | 44-1  | 15991175 | 16329767 | 16368197 | 16229713 | 1.28   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 28921    | 29195    | 28928    | 29015    | 0.54   | cps   |
| Cobalt     | 59-2  | 119811   | 119707   | 118845   | 119455   | 0.44   | cps   |
| Copper     | 63-2  | 101271   | 99791    | 100500   | 100521   | 0.74   | cps   |
| Dysprosium | 156-1 | 21400    | 21614    | 21543    | 21519    | 0.51   | cps   |
| Dysprosium | 156-2 | 20635    | 20505    | 20866    | 20669    | 0.88   | cps   |
| Erbium     | 164-1 | 29615    | 29959    | 29515    | 29696    | 0.79   | cps   |
| Erbium     | 164-2 | 22886    | 22682    | 22432    | 22666    | 1.00   | cps   |
| Gadolinium | 160-1 | 23600    | 23573    | 24078    | 23750    | 1.19   | cps   |
| Gadolinium | 160-2 | 19303    | 18709    | 18996    | 19003    | 1.56   | cps   |
| Holmium    | 165-1 | 8326337  | 8145887  | 8080901  | 8184375  | 1.55   | cps   |
| Holmium    | 165-2 | 6149857  | 6421372  | 6211640  | 6260956  | 2.27   | cps   |
| Indium     | 115-1 | 7043487  | 6994088  | 6945621  | 6994399  | 0.70   | cps   |
| Indium     | 115-2 | 2707442  | 2743225  | 2726212  | 2725626  | 0.66   | cps   |
| Iron       | 56-2  | 23911395 | 24002264 | 24229942 | 24047867 | 0.68   | cps   |
| Iron       | 57-2  | 643605   | 635026   | 640546   | 639726   | 0.68   | cps   |
| Iron       | 54-2  | 1351417  | 1393516  | 1397058  | 1380664  | 1.84   | cps   |
| Krypton    | 83-1  | 603      | 587      | 613      | 601      | 2.24   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 149046   | 150311   | 147954   | 149104   | 0.79   | cps   |
| Lead       | 207-1 | 121915   | 121572   | 120795   | 121427   | 0.47   | cps   |
| Lead       | 208-1 | 571410   | 566730   | 563468   | 567203   | 0.70   | cps   |
| Lithium    | 6-1   | 429751   | 421252   | 415972   | 422325   | 1.65   | cps   |
| Magnesium  | 24-2  | 3344185  | 3427143  | 3386503  | 3385944  | 1.23   | cps   |
| Manganese  | 55-2  | 6696588  | 6775242  | 6685244  | 6719025  | 0.73   | cps   |
| Molybdenum | 94-1  | 3831     | 3767     | 3767     | 3788     | 0.97   | cps   |
| Molybdenum | 95-1  | 630      | 643      | 687      | 653      | 4.54   | cps   |
| Molybdenum | 96-1  | 1397     | 1240     | 1403     | 1347     | 6.86   | cps   |
| Molybdenum | 97-1  | 353      | 343      | 363      | 353      | 2.83   | cps   |
| Molybdenum | 98-1  | 810      | 867      | 787      | 821      | 5.01   | cps   |
| Neodymium  | 150-1 | 29594    | 29207    | 29615    | 29472    | 0.78   | cps   |
| Neodymium  | 150-2 | 19637    | 19460    | 18953    | 19350    | 1.84   | cps   |
| Nickel     | 60-2  | 24263    | 23622    | 23849    | 23911    | 1.36   | cps   |
| Phosphorus | 31-2  | 9210     | 8609     | 8763     | 8860     | 3.52   | cps   |
| Potassium  | 39-2  | 2591087  | 2578980  | 2510874  | 2560313  | 1.69   | cps   |
| Rhodium    | 103-1 | 6881816  | 6918414  | 6906361  | 6902197  | 0.27   | cps   |
| Rhodium    | 103-2 | 4520785  | 4521224  | 4440499  | 4494169  | 1.03   | cps   |
| Scandium   | 45-1  | 4247223  | 4214458  | 4135643  | 4199108  | 1.37   | cps   |
| Scandium   | 45-2  | 428929   | 434837   | 430479   | 431415   | 0.71   | cps   |
| Selenium   | 82-1  | 335      | 391      | 379      | 368      | 8.04   | cps   |
| Selenium   | 77-2  | 80       | 73       | 80       | 78       | 4.95   | cps   |
| Selenium   | 78-2  | 653      | 600      | 717      | 657      | 8.89   | cps   |
| Silicon    | 28-1  | 21302802 | 21295564 | 21334211 | 21310859 | 0.10   | cps   |
| Silver     | 107-1 | 467      | 387      | 340      | 398      | 16.10  | cps   |
| Silver     | 109-1 | 427      | 297      | 267      | 330      | 25.77  | cps   |
| Sodium     | 23-2  | 1379786  | 1365113  | 1370351  | 1371750  | 0.54   | cps   |
| Strontium  | 86-1  | 356644   | 361285   | 364081   | 360670   | 1.04   | cps   |
| Strontium  | 88-1  | 3191209  | 3226973  | 3197734  | 3205305  | 0.59   | cps   |
| Sulfur     | 34-1  | 2310025  | 2338619  | 2262412  | 2303685  | 1.67   | cps   |
| Terbium    | 159-1 | 8302832  | 8320727  | 8355127  | 8326229  | 0.32   | cps   |
| Terbium    | 159-2 | 6157110  | 6173596  | 6155776  | 6162161  | 0.16   | cps   |
| Thallium   | 203-1 | 873      | 867      | 767      | 836      | 7.15   | cps   |
| Thallium   | 205-1 | 2180     | 2330     | 2190     | 2234     | 3.76   | cps   |
| Tin        | 118-1 | 1837     | 1984     | 2087     | 1969     | 6.38   | cps   |
| Titanium   | 47-1  | 3240     | 3017     | 3170     | 3143     | 3.64   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-14DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP0 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:56:05 DataFile Name : 035SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 6475     | 6195     | 6322     | 6330     | 2.22   | cps   |
| Vanadium  | 51-2  | 102969   | 102443   | 102852   | 102755   | 0.27   | cps   |
| Yttrium   | 89-1  | 12947390 | 12932800 | 13172016 | 13017402 | 1.03   | cps   |
| Yttrium   | 89-2  | 3735342  | 3799067  | 3694017  | 3742809  | 1.41   | cps   |
| Zinc      | 66-2  | 251913   | 256000   | 252519   | 253478   | 0.87   | cps   |
| Zirconium | 90-1  | 9230     | 9153     | 9156     | 9180     | 0.47   | cps   |
| Zirconium | 91-1  | 2284     | 2053     | 2204     | 2180     | 5.36   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3460184  | 3407373  | 3415408  | 3427655  | 0.83   | cps   |
| Antimony   | 121-1 | 883      | 993      | 1103     | 993      | 11.07  | cps   |
| Arsenic    | 75-2  | 2614     | 2454     | 2464     | 2510     | 3.57   | cps   |
| Barium     | 135-1 | 29327    | 29791    | 29441    | 29520    | 0.82   | cps   |
| Barium     | 137-1 | 51282    | 50807    | 51015    | 51035    | 0.47   | cps   |
| Beryllium  | 9-1   | 1758     | 1747     | 1608     | 1704     | 4.90   | cps   |
| Bismuth    | 209-1 | 4886970  | 4995275  | 4906720  | 4929655  | 1.17   | cps   |
| Bismuth    | 209-2 | 4562323  | 4402196  | 4402612  | 4455710  | 2.07   | cps   |
| Bromine    | 81-1  | 20324    | 21693    | 23439    | 21819    | 7.16   | cps   |
| Bromine    | 81-2  | 2707     | 2997     | 2880     | 2861     | 5.10   | cps   |
| Cadmium    | 108-1 | 267      | 327      | 323      | 306      | 11.04  | cps   |
| Cadmium    | 106-1 | 3440     | 3410     | 3284     | 3378     | 2.46   | cps   |
| Cadmium    | 111-1 | 5899     | 5876     | 5763     | 5846     | 1.25   | cps   |
| Calcium    | 43-1  | 812846   | 809549   | 808076   | 810157   | 0.30   | cps   |
| Calcium    | 44-1  | 12800181 | 12769139 | 12687349 | 12752223 | 0.46   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 34880    | 34530    | 35057    | 34823    | 0.77   | cps   |
| Cobalt     | 59-2  | 127031   | 124507   | 126695   | 126077   | 1.09   | cps   |
| Copper     | 63-2  | 142437   | 141265   | 141692   | 141798   | 0.42   | cps   |
| Dysprosium | 156-1 | 28526    | 28282    | 28339    | 28382    | 0.45   | cps   |
| Dysprosium | 156-2 | 25977    | 26181    | 26038    | 26065    | 0.40   | cps   |
| Erbium     | 164-1 | 38430    | 39596    | 38898    | 38975    | 1.51   | cps   |
| Erbium     | 164-2 | 29942    | 29712    | 29668    | 29774    | 0.49   | cps   |
| Gadolinium | 160-1 | 31085    | 31322    | 31699    | 31369    | 0.99   | cps   |
| Gadolinium | 160-2 | 24902    | 24919    | 24512    | 24778    | 0.93   | cps   |
| Holmium    | 165-1 | 8274086  | 8536449  | 8140930  | 8317155  | 2.42   | cps   |
| Holmium    | 165-2 | 6373962  | 6141527  | 6295804  | 6270431  | 1.89   | cps   |
| Indium     | 115-1 | 6981352  | 6971051  | 6956838  | 6969747  | 0.18   | cps   |
| Indium     | 115-2 | 2754888  | 2677729  | 2637131  | 2689916  | 2.22   | cps   |
| Iron       | 56-2  | 30208259 | 30814055 | 30479683 | 30500665 | 0.99   | cps   |
| Iron       | 57-2  | 806398   | 802155   | 801009   | 803187   | 0.35   | cps   |
| Iron       | 54-2  | 1727148  | 1689083  | 1672422  | 1696218  | 1.65   | cps   |
| Krypton    | 83-1  | 597      | 487      | 583      | 556      | 10.81  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 220409   | 221605   | 221359   | 221124   | 0.29   | cps   |
| Lead       | 207-1 | 178154   | 181465   | 181889   | 180503   | 1.13   | cps   |
| Lead       | 208-1 | 835109   | 845608   | 839956   | 840224   | 0.63   | cps   |
| Lithium    | 6-1   | 412524   | 409141   | 406725   | 409463   | 0.71   | cps   |
| Magnesium  | 24-2  | 2434199  | 2403072  | 2403852  | 2413708  | 0.74   | cps   |
| Manganese  | 55-2  | 6658824  | 6624481  | 6549278  | 6610861  | 0.85   | cps   |
| Molybdenum | 94-1  | 4014     | 3924     | 3947     | 3962     | 1.18   | cps   |
| Molybdenum | 95-1  | 670      | 693      | 680      | 681      | 1.72   | cps   |
| Molybdenum | 96-1  | 1420     | 1503     | 1527     | 1483     | 3.78   | cps   |
| Molybdenum | 97-1  | 343      | 337      | 330      | 337      | 1.98   | cps   |
| Molybdenum | 98-1  | 827      | 697      | 723      | 749      | 9.17   | cps   |
| Neodymium  | 150-1 | 37560    | 38182    | 37102    | 37615    | 1.44   | cps   |
| Neodymium  | 150-2 | 24932    | 24889    | 25303    | 25041    | 0.91   | cps   |
| Nickel     | 60-2  | 24958    | 25412    | 25816    | 25395    | 1.69   | cps   |
| Phosphorus | 31-2  | 10757    | 10320    | 10344    | 10474    | 2.35   | cps   |
| Potassium  | 39-2  | 2465780  | 2375337  | 2426275  | 2422464  | 1.87   | cps   |
| Rhodium    | 103-1 | 7014965  | 6964716  | 6924310  | 6967997  | 0.65   | cps   |
| Rhodium    | 103-2 | 4550611  | 4537190  | 4532435  | 4540079  | 0.21   | cps   |
| Scandium   | 45-1  | 4222152  | 4191167  | 4264740  | 4226020  | 0.87   | cps   |
| Scandium   | 45-2  | 437492   | 425808   | 427388   | 430229   | 1.47   | cps   |
| Selenium   | 82-1  | 361      | 502      | 394      | 419      | 17.56  | cps   |
| Selenium   | 77-2  | 93       | 117      | 173      | 128      | 32.20  | cps   |
| Selenium   | 78-2  | 747      | 680      | 657      | 694      | 6.73   | cps   |
| Silicon    | 28-1  | 23056521 | 22964890 | 23054307 | 23025239 | 0.23   | cps   |
| Silver     | 107-1 | 227      | 283      | 297      | 269      | 13.82  | cps   |
| Silver     | 109-1 | 233      | 283      | 283      | 267      | 10.83  | cps   |
| Sodium     | 23-2  | 1401267  | 1379274  | 1396206  | 1392249  | 0.83   | cps   |
| Strontium  | 86-1  | 327382   | 325274   | 323610   | 325422   | 0.58   | cps   |
| Strontium  | 88-1  | 2890970  | 2903669  | 2857185  | 2883941  | 0.83   | cps   |
| Sulfur     | 34-1  | 2313570  | 2236450  | 2227813  | 2259278  | 2.09   | cps   |
| Terbium    | 159-1 | 8341645  | 8361529  | 8347597  | 8350257  | 0.12   | cps   |
| Terbium    | 159-2 | 6206944  | 6177201  | 6202606  | 6195584  | 0.26   | cps   |
| Thallium   | 203-1 | 923      | 983      | 987      | 964      | 3.70   | cps   |
| Thallium   | 205-1 | 2374     | 2444     | 2350     | 2389     | 2.03   | cps   |
| Tin        | 118-1 | 2120     | 1987     | 2107     | 2071     | 3.55   | cps   |
| Titanium   | 47-1  | 5161     | 5131     | 4991     | 5094     | 1.78   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-16DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 12:59:13 DataFile Name : 036SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 10251    | 10081    | 10388    | 10240    | 1.50   | cps   |
| Vanadium  | 51-2  | 139702   | 136850   | 138376   | 138309   | 1.03   | cps   |
| Yttrium   | 89-1  | 13237370 | 13453372 | 13389370 | 13360038 | 0.83   | cps   |
| Yttrium   | 89-2  | 3886674  | 3836007  | 3809419  | 3844033  | 1.02   | cps   |
| Zinc      | 66-2  | 259612   | 258368   | 257807   | 258596   | 0.36   | cps   |
| Zirconium | 90-1  | 9923     | 10017    | 10304    | 10081    | 1.97   | cps   |
| Zirconium | 91-1  | 2247     | 2174     | 2174     | 2198     | 1.93   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3335457  | 3333387  | 3343696  | 3337513  | 0.16   | cps   |
| Antimony   | 121-1 | 867      | 813      | 863      | 848      | 3.52   | cps   |
| Arsenic    | 75-2  | 2640     | 2760     | 2480     | 2627     | 5.35   | cps   |
| Barium     | 135-1 | 33540    | 32805    | 33266    | 33203    | 1.12   | cps   |
| Barium     | 137-1 | 57771    | 58025    | 57413    | 57736    | 0.53   | cps   |
| Beryllium  | 9-1   | 1343     | 1506     | 1406     | 1418     | 5.78   | cps   |
| Bismuth    | 209-1 | 4843577  | 4877396  | 4906637  | 4875870  | 0.65   | cps   |
| Bismuth    | 209-2 | 4310831  | 4471583  | 4469460  | 4417291  | 2.09   | cps   |
| Bromine    | 81-1  | 18972    | 20958    | 22344    | 20758    | 8.16   | cps   |
| Bromine    | 81-2  | 2687     | 2630     | 2624     | 2647     | 1.32   | cps   |
| Cadmium    | 108-1 | 223      | 273      | 220      | 239      | 12.51  | cps   |
| Cadmium    | 106-1 | 3274     | 3284     | 3470     | 3343     | 3.31   | cps   |
| Cadmium    | 111-1 | 5212     | 5161     | 5299     | 5224     | 1.34   | cps   |
| Calcium    | 43-1  | 640511   | 649107   | 645379   | 644999   | 0.67   | cps   |
| Calcium    | 44-1  | 10016790 | 10316208 | 10280209 | 10204402 | 1.60   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 38215    | 39712    | 38877    | 38935    | 1.93   | cps   |
| Cobalt     | 59-2  | 110773   | 109037   | 108601   | 109470   | 1.05   | cps   |
| Copper     | 63-2  | 173046   | 170679   | 171120   | 171615   | 0.73   | cps   |
| Dysprosium | 156-1 | 31505    | 31943    | 31740    | 31729    | 0.69   | cps   |
| Dysprosium | 156-2 | 29695    | 29534    | 29003    | 29411    | 1.23   | cps   |
| Erbium     | 164-1 | 41773    | 42237    | 42742    | 42251    | 1.15   | cps   |
| Erbium     | 164-2 | 33403    | 32495    | 32341    | 32746    | 1.75   | cps   |
| Gadolinium | 160-1 | 34212    | 34941    | 34579    | 34577    | 1.05   | cps   |
| Gadolinium | 160-2 | 27848    | 27604    | 28015    | 27822    | 0.74   | cps   |
| Holmium    | 165-1 | 8204277  | 8247226  | 8167390  | 8206297  | 0.49   | cps   |
| Holmium    | 165-2 | 6177727  | 6271994  | 6291877  | 6247199  | 0.98   | cps   |
| Indium     | 115-1 | 7042345  | 6915344  | 6992802  | 6983497  | 0.92   | cps   |
| Indium     | 115-2 | 2708048  | 2752516  | 2688551  | 2716372  | 1.21   | cps   |
| Iron       | 56-2  | 31722335 | 32218530 | 31921490 | 31954119 | 0.78   | cps   |
| Iron       | 57-2  | 829007   | 835517   | 829111   | 831211   | 0.45   | cps   |
| Iron       | 54-2  | 1749227  | 1724512  | 1765251  | 1746330  | 1.18   | cps   |
| Krypton    | 83-1  | 613      | 590      | 587      | 597      | 2.44   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 230885   | 231340   | 234074   | 232100   | 0.74   | cps   |
| Lead       | 207-1 | 190395   | 190867   | 188587   | 189950   | 0.63   | cps   |
| Lead       | 208-1 | 878876   | 885400   | 887625   | 883967   | 0.51   | cps   |
| Lithium    | 6-1   | 408552   | 405935   | 396853   | 403780   | 1.52   | cps   |
| Magnesium  | 24-2  | 2194694  | 2172885  | 2197102  | 2188227  | 0.61   | cps   |
| Manganese  | 55-2  | 5271048  | 5267489  | 5239909  | 5259482  | 0.32   | cps   |
| Molybdenum | 94-1  | 4284     | 4441     | 4177     | 4301     | 3.08   | cps   |
| Molybdenum | 95-1  | 693      | 607      | 667      | 656      | 6.77   | cps   |
| Molybdenum | 96-1  | 1530     | 1393     | 1560     | 1495     | 5.94   | cps   |
| Molybdenum | 97-1  | 487      | 340      | 337      | 388      | 22.09  | cps   |
| Molybdenum | 98-1  | 867      | 883      | 787      | 846      | 6.11   | cps   |
| Neodymium  | 150-1 | 43521    | 43681    | 44106    | 43769    | 0.69   | cps   |
| Neodymium  | 150-2 | 28980    | 28369    | 28806    | 28718    | 1.10   | cps   |
| Nickel     | 60-2  | 23836    | 23248    | 23816    | 23633    | 1.41   | cps   |
| Phosphorus | 31-2  | 12669    | 11738    | 12145    | 12184    | 3.83   | cps   |
| Potassium  | 39-2  | 2175730  | 2200780  | 2164838  | 2180449  | 0.85   | cps   |
| Rhodium    | 103-1 | 7024141  | 6863271  | 6936135  | 6941182  | 1.16   | cps   |
| Rhodium    | 103-2 | 4487976  | 4620598  | 4506609  | 4538394  | 1.58   | cps   |
| Scandium   | 45-1  | 4198384  | 4206975  | 4225291  | 4210217  | 0.33   | cps   |
| Scandium   | 45-2  | 425038   | 429505   | 429543   | 428029   | 0.61   | cps   |
| Selenium   | 82-1  | 372      | 433      | 379      | 395      | 8.55   | cps   |
| Selenium   | 77-2  | 177      | 83       | 113      | 124      | 38.29  | cps   |
| Selenium   | 78-2  | 743      | 653      | 643      | 680      | 8.10   | cps   |
| Silicon    | 28-1  | 22649161 | 22673186 | 22701436 | 22674594 | 0.12   | cps   |
| Silver     | 107-1 | 263      | 257      | 267      | 262      | 1.94   | cps   |
| Silver     | 109-1 | 203      | 257      | 230      | 230      | 11.59  | cps   |
| Sodium     | 23-2  | 1114269  | 1095665  | 1105646  | 1105194  | 0.84   | cps   |
| Strontium  | 86-1  | 252696   | 254238   | 253478   | 253471   | 0.30   | cps   |
| Strontium  | 88-1  | 2237802  | 2249561  | 2235403  | 2240922  | 0.34   | cps   |
| Sulfur     | 34-1  | 2179368  | 2223314  | 2246147  | 2216276  | 1.53   | cps   |
| Terbium    | 159-1 | 8231461  | 8209755  | 8209342  | 8216853  | 0.15   | cps   |
| Terbium    | 159-2 | 6231298  | 6274334  | 6222754  | 6242795  | 0.44   | cps   |
| Thallium   | 203-1 | 943      | 1040     | 963      | 982      | 5.19   | cps   |
| Thallium   | 205-1 | 2294     | 2397     | 2577     | 2422     | 5.92   | cps   |
| Tin        | 118-1 | 1607     | 1530     | 1727     | 1621     | 6.11   | cps   |
| Titanium   | 47-1  | 8739     | 8462     | 8983     | 8728     | 2.98   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:02:18 DataFile Name : 037SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 14478    | 14188    | 14144    | 14270    | 1.27   | cps   |
| Vanadium  | 51-2  | 144807   | 144395   | 144152   | 144451   | 0.23   | cps   |
| Yttrium   | 89-1  | 13607393 | 13214922 | 13343709 | 13388675 | 1.49   | cps   |
| Yttrium   | 89-2  | 3836007  | 3845348  | 3821417  | 3834257  | 0.31   | cps   |
| Zinc      | 66-2  | 223704   | 219317   | 216137   | 219720   | 1.73   | cps   |
| Zirconium | 90-1  | 10547    | 10637    | 10791    | 10658    | 1.16   | cps   |
| Zirconium | 91-1  | 2540     | 2297     | 2344     | 2394     | 5.40   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3245319  | 3364082  | 3340713  | 3316705  | 1.90   | cps   |
| Antimony   | 121-1 | 893      | 877      | 883      | 884      | 0.95   | cps   |
| Arsenic    | 75-2  | 2627     | 2624     | 2750     | 2667     | 2.71   | cps   |
| Barium     | 135-1 | 32882    | 33673    | 33102    | 33219    | 1.23   | cps   |
| Barium     | 137-1 | 57854    | 58135    | 57419    | 57803    | 0.62   | cps   |
| Beryllium  | 9-1   | 1414     | 1556     | 1519     | 1497     | 4.94   | cps   |
| Bismuth    | 209-1 | 4813295  | 4878832  | 4580097  | 4757408  | 3.30   | cps   |
| Bismuth    | 209-2 | 4508649  | 4423861  | 4421426  | 4451312  | 1.12   | cps   |
| Bromine    | 81-1  | 19500    | 21329    | 22514    | 21114    | 7.19   | cps   |
| Bromine    | 81-2  | 2614     | 2700     | 2770     | 2695     | 2.91   | cps   |
| Cadmium    | 108-1 | 250      | 220      | 233      | 234      | 6.41   | cps   |
| Cadmium    | 106-1 | 3454     | 3237     | 3194     | 3295     | 4.23   | cps   |
| Cadmium    | 111-1 | 5416     | 5156     | 5113     | 5228     | 3.14   | cps   |
| Calcium    | 43-1  | 651791   | 657028   | 647249   | 652023   | 0.75   | cps   |
| Calcium    | 44-1  | 10238672 | 10387314 | 10189570 | 10271852 | 1.00   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 38910    | 39448    | 38239    | 38866    | 1.56   | cps   |
| Cobalt     | 59-2  | 110468   | 111683   | 109050   | 110400   | 1.19   | cps   |
| Copper     | 63-2  | 170602   | 172851   | 172605   | 172019   | 0.72   | cps   |
| Dysprosium | 156-1 | 31893    | 32535    | 32748    | 32392    | 1.37   | cps   |
| Dysprosium | 156-2 | 29341    | 29865    | 29608    | 29605    | 0.89   | cps   |
| Erbium     | 164-1 | 42398    | 43622    | 41860    | 42626    | 2.12   | cps   |
| Erbium     | 164-2 | 33283    | 33504    | 32555    | 33114    | 1.50   | cps   |
| Gadolinium | 160-1 | 35097    | 35341    | 35104    | 35181    | 0.40   | cps   |
| Gadolinium | 160-2 | 27821    | 27975    | 28399    | 28065    | 1.07   | cps   |
| Holmium    | 165-1 | 8102556  | 8041764  | 7887850  | 8010724  | 1.38   | cps   |
| Holmium    | 165-2 | 6291362  | 6213413  | 6094574  | 6199783  | 1.60   | cps   |
| Indium     | 115-1 | 7118509  | 6730494  | 6880446  | 6909816  | 2.83   | cps   |
| Indium     | 115-2 | 2713101  | 2699766  | 2679595  | 2697487  | 0.63   | cps   |
| Iron       | 56-2  | 31498611 | 31386200 | 31961590 | 31615467 | 0.96   | cps   |
| Iron       | 57-2  | 827374   | 827074   | 833821   | 829423   | 0.46   | cps   |
| Iron       | 54-2  | 1764667  | 1741074  | 1771143  | 1758961  | 0.90   | cps   |
| Krypton    | 83-1  | 563      | 720      | 667      | 650      | 12.25  | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 235800   | 233860   | 230705   | 233455   | 1.10   | cps   |
| Lead       | 207-1 | 191894   | 188908   | 188093   | 189632   | 1.06   | cps   |
| Lead       | 208-1 | 894238   | 889237   | 880128   | 887868   | 0.81   | cps   |
| Lithium    | 6-1   | 412375   | 399524   | 398812   | 403570   | 1.89   | cps   |
| Magnesium  | 24-2  | 2241320  | 2171037  | 2249622  | 2220660  | 1.94   | cps   |
| Manganese  | 55-2  | 5342443  | 5185832  | 5267767  | 5265347  | 1.49   | cps   |
| Molybdenum | 94-1  | 4051     | 4521     | 4191     | 4254     | 5.67   | cps   |
| Molybdenum | 95-1  | 693      | 663      | 623      | 660      | 5.32   | cps   |
| Molybdenum | 96-1  | 1517     | 1573     | 1480     | 1523     | 3.09   | cps   |
| Molybdenum | 97-1  | 337      | 350      | 317      | 334      | 5.02   | cps   |
| Molybdenum | 98-1  | 797      | 980      | 733      | 837      | 15.31  | cps   |
| Neodymium  | 150-1 | 44413    | 45366    | 43918    | 44566    | 1.65   | cps   |
| Neodymium  | 150-2 | 29027    | 29715    | 28853    | 29198    | 1.56   | cps   |
| Nickel     | 60-2  | 23822    | 23779    | 24056    | 23886    | 0.62   | cps   |
| Phosphorus | 31-2  | 12502    | 12602    | 12705    | 12603    | 0.81   | cps   |
| Potassium  | 39-2  | 2196677  | 2180832  | 2166754  | 2181421  | 0.69   | cps   |
| Rhodium    | 103-1 | 7046124  | 6968260  | 6762527  | 6925637  | 2.12   | cps   |
| Rhodium    | 103-2 | 4611036  | 4502275  | 4420691  | 4511334  | 2.12   | cps   |
| Scandium   | 45-1  | 4256668  | 4212510  | 4083918  | 4184365  | 2.14   | cps   |
| Scandium   | 45-2  | 423354   | 420667   | 423537   | 422520   | 0.38   | cps   |
| Selenium   | 82-1  | 480      | 316      | 383      | 393      | 21.00  | cps   |
| Selenium   | 77-2  | 130      | 110      | 147      | 129      | 14.24  | cps   |
| Selenium   | 78-2  | 650      | 563      | 673      | 629      | 9.22   | cps   |
| Silicon    | 28-1  | 23013696 | 22595341 | 22032810 | 22547282 | 2.18   | cps   |
| Silver     | 107-1 | 267      | 293      | 343      | 301      | 12.93  | cps   |
| Silver     | 109-1 | 197      | 220      | 247      | 221      | 11.31  | cps   |
| Sodium     | 23-2  | 1108084  | 1068057  | 1113234  | 1096458  | 2.26   | cps   |
| Strontium  | 86-1  | 256872   | 257313   | 254231   | 256139   | 0.65   | cps   |
| Strontium  | 88-1  | 2264306  | 2287540  | 2242549  | 2264798  | 0.99   | cps   |
| Sulfur     | 34-1  | 2300287  | 2264614  | 2269033  | 2277978  | 0.85   | cps   |
| Terbium    | 159-1 | 8357511  | 8406087  | 8369209  | 8377603  | 0.30   | cps   |
| Terbium    | 159-2 | 6213516  | 6190552  | 6269152  | 6224406  | 0.65   | cps   |
| Thallium   | 203-1 | 1010     | 970      | 1053     | 1011     | 4.12   | cps   |
| Thallium   | 205-1 | 2400     | 2367     | 2280     | 2349     | 2.64   | cps   |
| Tin        | 118-1 | 1770     | 1733     | 1677     | 1727     | 2.72   | cps   |
| Titanium   | 47-1  | 8646     | 8733     | 8876     | 8752     | 1.33   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18DUPDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:05:26 DataFile Name : 038SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 14662    | 14331    | 14228    | 14407    | 1.57   | cps   |
| Vanadium  | 51-2  | 145150   | 145641   | 144742   | 145178   | 0.31   | cps   |
| Yttrium   | 89-1  | 13480026 | 13248929 | 13072019 | 13266991 | 1.54   | cps   |
| Yttrium   | 89-2  | 3844827  | 3786889  | 3808245  | 3813320  | 0.77   | cps   |
| Zinc      | 66-2  | 221586   | 222374   | 217810   | 220590   | 1.11   | cps   |
| Zirconium | 90-1  | 11665    | 11331    | 11194    | 11397    | 2.12   | cps   |
| Zirconium | 91-1  | 2370     | 2507     | 2430     | 2436     | 2.81   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 660084  | 664371  | 667804  | 664086  | 0.58   | cps   |
| Antimony   | 121-1 | 337     | 297     | 327     | 320     | 6.51   | cps   |
| Arsenic    | 75-2  | 573     | 560     | 523     | 552     | 4.69   | cps   |
| Barium     | 135-1 | 6535    | 6965    | 6612    | 6704    | 3.42   | cps   |
| Barium     | 137-1 | 12099   | 10908   | 11265   | 11424   | 5.35   | cps   |
| Beryllium  | 9-1   | 322     | 292     | 305     | 306     | 4.94   | cps   |
| Bismuth    | 209-1 | 4702242 | 4911590 | 4884493 | 4832775 | 2.36   | cps   |
| Bismuth    | 209-2 | 4394599 | 4466172 | 4310623 | 4390465 | 1.77   | cps   |
| Bromine    | 81-1  | 14264   | 14861   | 14714   | 14613   | 2.13   | cps   |
| Bromine    | 81-2  | 860     | 887     | 917     | 888     | 3.19   | cps   |
| Cadmium    | 108-1 | 60      | 53      | 57      | 57      | 5.89   | cps   |
| Cadmium    | 106-1 | 2717    | 2874    | 2577    | 2723    | 5.45   | cps   |
| Cadmium    | 111-1 | 2423    | 2648    | 2384    | 2485    | 5.72   | cps   |
| Calcium    | 43-1  | 130907  | 130242  | 130265  | 130471  | 0.29   | cps   |
| Calcium    | 44-1  | 2065049 | 2119905 | 2134602 | 2106519 | 1.74   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 9510    | 9443    | 9817    | 9590    | 2.08   | cps   |
| Cobalt     | 59-2  | 21839   | 21826   | 21776   | 21814   | 0.15   | cps   |
| Copper     | 63-2  | 36010   | 36505   | 35392   | 35969   | 1.55   | cps   |
| Dysprosium | 156-1 | 5975    | 6458    | 6295    | 6243    | 3.94   | cps   |
| Dysprosium | 156-2 | 6148    | 5621    | 5771    | 5847    | 4.64   | cps   |
| Erbium     | 164-1 | 8012    | 8609    | 8609    | 8410    | 4.10   | cps   |
| Erbium     | 164-2 | 6492    | 6775    | 6802    | 6689    | 2.57   | cps   |
| Gadolinium | 160-1 | 7015    | 6835    | 6818    | 6890    | 1.58   | cps   |
| Gadolinium | 160-2 | 5811    | 5955    | 5961    | 5909    | 1.43   | cps   |
| Holmium    | 165-1 | 7698554 | 8097162 | 8019957 | 7938558 | 2.66   | cps   |
| Holmium    | 165-2 | 6303124 | 6166537 | 5958350 | 6142670 | 2.83   | cps   |
| Indium     | 115-1 | 6928779 | 6921700 | 6987970 | 6946149 | 0.52   | cps   |
| Indium     | 115-2 | 2713457 | 2693048 | 2647975 | 2684827 | 1.25   | cps   |
| Iron       | 56-2  | 6481099 | 6298026 | 6357752 | 6378959 | 1.46   | cps   |
| Iron       | 57-2  | 167777  | 167015  | 168284  | 167692  | 0.38   | cps   |
| Iron       | 54-2  | 365427  | 368482  | 363958  | 365956  | 0.63   | cps   |
| Krypton    | 83-1  | 560     | 547     | 487     | 531     | 7.36   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 45236   | 48437   | 47246   | 46973   | 3.44   | cps   |
| Lead       | 207-1 | 38000   | 37763   | 36383   | 37382   | 2.34   | cps   |
| Lead       | 208-1 | 174346  | 177408  | 174085  | 175280  | 1.05   | cps   |
| Lithium    | 6-1   | 386103  | 407140  | 404662  | 399301  | 2.88   | cps   |
| Magnesium  | 24-2  | 433862  | 427113  | 439205  | 433393  | 1.40   | cps   |
| Manganese  | 55-2  | 1062008 | 1056513 | 1052060 | 1056860 | 0.47   | cps   |
| Molybdenum | 94-1  | 1147    | 1133    | 1103    | 1128    | 1.97   | cps   |
| Molybdenum | 95-1  | 367     | 377     | 330     | 358     | 6.87   | cps   |
| Molybdenum | 96-1  | 670     | 580     | 497     | 582     | 14.89  | cps   |
| Molybdenum | 97-1  | 253     | 250     | 280     | 261     | 6.30   | cps   |
| Molybdenum | 98-1  | 543     | 530     | 507     | 527     | 3.52   | cps   |
| Neodymium  | 150-1 | 8343    | 8873    | 8639    | 8618    | 3.08   | cps   |
| Neodymium  | 150-2 | 5665    | 5808    | 5655    | 5709    | 1.50   | cps   |
| Nickel     | 60-2  | 5374    | 5431    | 5214    | 5340    | 2.10   | cps   |
| Phosphorus | 31-2  | 3097    | 2924    | 2847    | 2956    | 4.33   | cps   |
| Potassium  | 39-2  | 510742  | 510287  | 512680  | 511236  | 0.25   | cps   |
| Rhodium    | 103-1 | 7138517 | 6771984 | 6872429 | 6927643 | 2.73   | cps   |
| Rhodium    | 103-2 | 4514592 | 4491362 | 4458711 | 4488221 | 0.63   | cps   |
| Scandium   | 45-1  | 4134312 | 4299145 | 4219882 | 4217779 | 1.95   | cps   |
| Scandium   | 45-2  | 419928  | 426050  | 419039  | 421672  | 0.91   | cps   |
| Selenium   | 82-1  | 361     | 279     | 380     | 340     | 15.74  | cps   |
| Selenium   | 77-2  | 23      | 37      | 27      | 29      | 24.03  | cps   |
| Selenium   | 78-2  | 510     | 517     | 603     | 543     | 9.58   | cps   |
| Silicon    | 28-1  | 5166977 | 5215612 | 5214518 | 5199036 | 0.53   | cps   |
| Silver     | 107-1 | 180     | 170     | 170     | 173     | 3.33   | cps   |
| Silver     | 109-1 | 163     | 187     | 173     | 174     | 6.71   | cps   |
| Sodium     | 23-2  | 249237  | 249388  | 251588  | 250071  | 0.53   | cps   |
| Strontium  | 86-1  | 51938   | 52360   | 50961   | 51753   | 1.39   | cps   |
| Strontium  | 88-1  | 444990  | 440733  | 441554  | 442425  | 0.51   | cps   |
| Sulfur     | 34-1  | 549480  | 534556  | 531102  | 538379  | 1.81   | cps   |
| Terbium    | 159-1 | 8611132 | 7878191 | 8084756 | 8191360 | 4.61   | cps   |
| Terbium    | 159-2 | 6114711 | 6246713 | 5916783 | 6092736 | 2.73   | cps   |
| Thallium   | 203-1 | 430     | 343     | 357     | 377     | 12.39  | cps   |
| Thallium   | 205-1 | 1060    | 983     | 933     | 992     | 6.43   | cps   |
| Tin        | 118-1 | 1213    | 1270    | 1140    | 1208    | 5.40   | cps   |
| Titanium   | 47-1  | 1810    | 1907    | 1793    | 1837    | 3.33   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18LDLX25 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 25  
Date & Time Acquired : 2025-08-20 13:08:33 DataFile Name : 039SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 2874     | 2820     | 2684     | 2793     | 3.51   | cps   |
| Vanadium  | 51-2  | 29750    | 29719    | 28664    | 29378    | 2.10   | cps   |
| Yttrium   | 89-1  | 12431742 | 12719146 | 12445207 | 12532032 | 1.29   | cps   |
| Yttrium   | 89-2  | 3528177  | 3626901  | 3585853  | 3580310  | 1.39   | cps   |
| Zinc      | 66-2  | 49482    | 47917    | 47703    | 48367    | 2.01   | cps   |
| Zirconium | 90-1  | 2580     | 2747     | 2527     | 2618     | 4.38   | cps   |
| Zirconium | 91-1  | 617      | 560      | 557      | 578      | 5.84   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3325257  | 3241234  | 3201074  | 3255855  | 1.95   | cps   |
| Antimony   | 121-1 | 506134   | 509561   | 516288   | 510661   | 1.01   | cps   |
| Arsenic    | 75-2  | 57304    | 55935    | 56320    | 56520    | 1.25   | cps   |
| Barium     | 135-1 | 584173   | 592727   | 573784   | 583562   | 1.63   | cps   |
| Barium     | 137-1 | 1012341  | 1013621  | 1029406  | 1018456  | 0.93   | cps   |
| Beryllium  | 9-1   | 54860    | 55329    | 56928    | 55706    | 1.95   | cps   |
| Bismuth    | 209-1 | 5011759  | 4904701  | 4838228  | 4918229  | 1.78   | cps   |
| Bismuth    | 209-2 | 4510772  | 4445339  | 4443320  | 4466477  | 0.86   | cps   |
| Bromine    | 81-1  | 18802    | 20287    | 21292    | 20127    | 6.22   | cps   |
| Bromine    | 81-2  | 2544     | 2374     | 2287     | 2401     | 5.44   | cps   |
| Cadmium    | 108-1 | 10160    | 10254    | 10304    | 10239    | 0.71   | cps   |
| Cadmium    | 106-1 | 17294    | 17394    | 17834    | 17507    | 1.64   | cps   |
| Cadmium    | 111-1 | 147784   | 150037   | 147842   | 148554   | 0.86   | cps   |
| Calcium    | 43-1  | 733073   | 744487   | 744388   | 740649   | 0.89   | cps   |
| Calcium    | 44-1  | 11991349 | 11995550 | 11796212 | 11927703 | 0.95   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 298781   | 296316   | 297266   | 297454   | 0.42   | cps   |
| Cobalt     | 59-2  | 523918   | 522349   | 523320   | 523195   | 0.15   | cps   |
| Copper     | 63-2  | 3274928  | 3289407  | 3283361  | 3282565  | 0.22   | cps   |
| Dysprosium | 156-1 | 29588    | 30213    | 28773    | 29525    | 2.45   | cps   |
| Dysprosium | 156-2 | 27397    | 26479    | 26502    | 26792    | 1.95   | cps   |
| Erbium     | 164-1 | 38286    | 39129    | 37390    | 38268    | 2.27   | cps   |
| Erbium     | 164-2 | 30580    | 30353    | 30320    | 30418    | 0.47   | cps   |
| Gadolinium | 160-1 | 31606    | 31766    | 32384    | 31919    | 1.29   | cps   |
| Gadolinium | 160-2 | 25614    | 25680    | 25253    | 25516    | 0.90   | cps   |
| Holmium    | 165-1 | 8314213  | 8351557  | 8033339  | 8233036  | 2.11   | cps   |
| Holmium    | 165-2 | 6309586  | 6356347  | 6359703  | 6341879  | 0.44   | cps   |
| Indium     | 115-1 | 7267926  | 7102337  | 6852447  | 7074237  | 2.96   | cps   |
| Indium     | 115-2 | 2684194  | 2750164  | 2735634  | 2723331  | 1.27   | cps   |
| Iron       | 56-2  | 40085372 | 40289382 | 40201192 | 40191982 | 0.25   | cps   |
| Iron       | 57-2  | 1053775  | 1050955  | 1046361  | 1050364  | 0.36   | cps   |
| Iron       | 54-2  | 2222787  | 2223836  | 2201854  | 2216159  | 0.56   | cps   |
| Krypton    | 83-1  | 590      | 627      | 673      | 630      | 6.63   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 2045331  | 2047744  | 2100815  | 2064630  | 1.52   | cps   |
| Lead       | 207-1 | 1717443  | 1722001  | 1680319  | 1706588  | 1.34   | cps   |
| Lead       | 208-1 | 8113680  | 8212459  | 8122036  | 8149392  | 0.67   | cps   |
| Lithium    | 6-1   | 410197   | 406837   | 410673   | 409236   | 0.51   | cps   |
| Magnesium  | 24-2  | 4485256  | 4455677  | 4462834  | 4467922  | 0.35   | cps   |
| Manganese  | 55-2  | 6817649  | 6918064  | 6878845  | 6871520  | 0.74   | cps   |
| Molybdenum | 94-1  | 940011   | 949279   | 923591   | 937627   | 1.39   | cps   |
| Molybdenum | 95-1  | 1029919  | 1024678  | 1026674  | 1027090  | 0.26   | cps   |
| Molybdenum | 96-1  | 1130539  | 1130559  | 1140975  | 1134024  | 0.53   | cps   |
| Molybdenum | 97-1  | 640881   | 649509   | 627262   | 639218   | 1.75   | cps   |
| Molybdenum | 98-1  | 1657607  | 1680267  | 1612726  | 1650200  | 2.08   | cps   |
| Neodymium  | 150-1 | 38954    | 40702    | 40254    | 39970    | 2.27   | cps   |
| Neodymium  | 150-2 | 26311    | 26792    | 26538    | 26547    | 0.91   | cps   |
| Nickel     | 60-2  | 133672   | 131200   | 133661   | 132844   | 1.07   | cps   |
| Phosphorus | 31-2  | 11501    | 11478    | 11094    | 11358    | 2.01   | cps   |
| Potassium  | 39-2  | 3275182  | 3299544  | 3360362  | 3311696  | 1.32   | cps   |
| Rhodium    | 103-1 | 7378602  | 7083618  | 6966225  | 7142815  | 2.97   | cps   |
| Rhodium    | 103-2 | 4522680  | 4548418  | 4488309  | 4519802  | 0.67   | cps   |
| Scandium   | 45-1  | 4414060  | 4326248  | 4110516  | 4283608  | 3.65   | cps   |
| Scandium   | 45-2  | 433646   | 433160   | 431291   | 432699   | 0.29   | cps   |
| Selenium   | 82-1  | 11609    | 11722    | 11461    | 11597    | 1.13   | cps   |
| Selenium   | 77-2  | 1360     | 1380     | 1273     | 1338     | 4.24   | cps   |
| Selenium   | 78-2  | 5111     | 5021     | 4901     | 5011     | 2.10   | cps   |
| Silicon    | 28-1  | 20269506 | 20400133 | 21010072 | 20559904 | 1.92   | cps   |
| Silver     | 107-1 | 117393   | 119425   | 117436   | 118085   | 0.98   | cps   |
| Silver     | 109-1 | 109147   | 110593   | 112404   | 110715   | 1.47   | cps   |
| Sodium     | 23-2  | 4822840  | 4788481  | 4805929  | 4805750  | 0.36   | cps   |
| Strontium  | 86-1  | 437970   | 441923   | 436705   | 438866   | 0.62   | cps   |
| Strontium  | 88-1  | 3909229  | 4058661  | 3855247  | 3941046  | 2.67   | cps   |
| Sulfur     | 34-1  | 2052814  | 2039584  | 2102784  | 2065061  | 1.61   | cps   |
| Terbium    | 159-1 | 8703271  | 8070185  | 8631993  | 8468483  | 4.09   | cps   |
| Terbium    | 159-2 | 6246920  | 6251596  | 6262636  | 6253717  | 0.13   | cps   |
| Thallium   | 203-1 | 435540   | 428389   | 435221   | 433050   | 0.93   | cps   |
| Thallium   | 205-1 | 998676   | 998103   | 1034216  | 1010332  | 2.05   | cps   |
| Tin        | 118-1 | 399416   | 403947   | 399209   | 400857   | 0.67   | cps   |
| Titanium   | 47-1  | 8146     | 8779     | 8659     | 8528     | 3.95   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:11:50 DataFile Name : 040SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 1172753  | 1205371  | 1202249  | 1193458  | 1.51   | cps   |
| Vanadium  | 51-2  | 362725   | 362131   | 361570   | 362142   | 0.16   | cps   |
| Yttrium   | 89-1  | 13675585 | 13691349 | 12942500 | 13436478 | 3.18   | cps   |
| Yttrium   | 89-2  | 3803990  | 3771745  | 3836562  | 3804099  | 0.85   | cps   |
| Zinc      | 66-2  | 776347   | 768373   | 779954   | 774891   | 0.76   | cps   |
| Zirconium | 90-1  | 957433   | 960214   | 951753   | 956467   | 0.45   | cps   |
| Zirconium | 91-1  | 205823   | 209471   | 213983   | 209759   | 1.95   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3333319  | 3248942  | 3254116  | 3278792  | 1.44   | cps   |
| Antimony   | 121-1 | 512666   | 513341   | 528796   | 518268   | 1.76   | cps   |
| Arsenic    | 75-2  | 58505    | 56896    | 57802    | 57734    | 1.40   | cps   |
| Barium     | 135-1 | 569652   | 595589   | 599494   | 588245   | 2.76   | cps   |
| Barium     | 137-1 | 1032861  | 1022318  | 1040415  | 1031865  | 0.88   | cps   |
| Beryllium  | 9-1   | 55712    | 54572    | 56419    | 55568    | 1.68   | cps   |
| Bismuth    | 209-1 | 4922808  | 4658017  | 4926637  | 4835821  | 3.18   | cps   |
| Bismuth    | 209-2 | 4409480  | 4422675  | 4356722  | 4396292  | 0.79   | cps   |
| Bromine    | 81-1  | 19460    | 20908    | 21236    | 20534    | 4.60   | cps   |
| Bromine    | 81-2  | 2480     | 2367     | 2424     | 2424     | 2.34   | cps   |
| Cadmium    | 108-1 | 9913     | 10731    | 10354    | 10333    | 3.96   | cps   |
| Cadmium    | 106-1 | 18068    | 17601    | 17474    | 17714    | 1.77   | cps   |
| Cadmium    | 111-1 | 147801   | 148464   | 153404   | 149889   | 2.04   | cps   |
| Calcium    | 43-1  | 724337   | 738536   | 738148   | 733674   | 1.10   | cps   |
| Calcium    | 44-1  | 11283975 | 11902506 | 11509167 | 11565216 | 2.71   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 299814   | 299367   | 299773   | 299651   | 0.08   | cps   |
| Cobalt     | 59-2  | 528970   | 534663   | 524044   | 529226   | 1.00   | cps   |
| Copper     | 63-2  | 3336591  | 3275764  | 3315526  | 3309294  | 0.93   | cps   |
| Dysprosium | 156-1 | 28773    | 30072    | 30643    | 29830    | 3.21   | cps   |
| Dysprosium | 156-2 | 27400    | 27393    | 27614    | 27469    | 0.46   | cps   |
| Erbium     | 164-1 | 38236    | 38995    | 40984    | 39405    | 3.60   | cps   |
| Erbium     | 164-2 | 30487    | 30604    | 30300    | 30463    | 0.50   | cps   |
| Gadolinium | 160-1 | 32712    | 32231    | 32718    | 32553    | 0.86   | cps   |
| Gadolinium | 160-2 | 25493    | 26422    | 25323    | 25746    | 2.30   | cps   |
| Holmium    | 165-1 | 7994736  | 8077107  | 8388120  | 8153321  | 2.54   | cps   |
| Holmium    | 165-2 | 6290199  | 6250986  | 6100179  | 6213788  | 1.61   | cps   |
| Indium     | 115-1 | 7050455  | 6933857  | 7076503  | 7020272  | 1.08   | cps   |
| Indium     | 115-2 | 2713884  | 2729423  | 2636941  | 2693416  | 1.84   | cps   |
| Iron       | 56-2  | 40530214 | 41081119 | 40400782 | 40670705 | 0.89   | cps   |
| Iron       | 57-2  | 1069839  | 1054985  | 1061518  | 1062114  | 0.70   | cps   |
| Iron       | 54-2  | 2317259  | 2250931  | 2259526  | 2275905  | 1.58   | cps   |
| Krypton    | 83-1  | 603      | 597      | 560      | 587      | 3.98   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 2042896  | 2088890  | 2121068  | 2084285  | 1.89   | cps   |
| Lead       | 207-1 | 1674596  | 1745381  | 1818000  | 1745992  | 4.11   | cps   |
| Lead       | 208-1 | 8111514  | 8458489  | 8358470  | 8309491  | 2.15   | cps   |
| Lithium    | 6-1   | 412789   | 388771   | 406041   | 402534   | 3.08   | cps   |
| Magnesium  | 24-2  | 4464188  | 4472789  | 4414973  | 4450650  | 0.70   | cps   |
| Manganese  | 55-2  | 6971893  | 6924116  | 7022534  | 6972847  | 0.71   | cps   |
| Molybdenum | 94-1  | 920256   | 950561   | 934417   | 935078   | 1.62   | cps   |
| Molybdenum | 95-1  | 1026557  | 1037945  | 1019821  | 1028108  | 0.89   | cps   |
| Molybdenum | 96-1  | 1135835  | 1126642  | 1131002  | 1131160  | 0.41   | cps   |
| Molybdenum | 97-1  | 628741   | 647911   | 639284   | 638645   | 1.50   | cps   |
| Molybdenum | 98-1  | 1621310  | 1668362  | 1612551  | 1634075  | 1.84   | cps   |
| Neodymium  | 150-1 | 41404    | 39726    | 41651    | 40927    | 2.56   | cps   |
| Neodymium  | 150-2 | 26759    | 26462    | 26341    | 26521    | 0.81   | cps   |
| Nickel     | 60-2  | 134130   | 133104   | 134664   | 133966   | 0.59   | cps   |
| Phosphorus | 31-2  | 11024    | 11828    | 10887    | 11246    | 4.52   | cps   |
| Potassium  | 39-2  | 3379649  | 3370039  | 3220479  | 3323389  | 2.69   | cps   |
| Rhodium    | 103-1 | 7084864  | 6772054  | 6940854  | 6932591  | 2.26   | cps   |
| Rhodium    | 103-2 | 4551506  | 4566700  | 4459623  | 4525943  | 1.28   | cps   |
| Scandium   | 45-1  | 4202827  | 4026418  | 4282566  | 4170604  | 3.14   | cps   |
| Scandium   | 45-2  | 433381   | 429662   | 421532   | 428192   | 1.42   | cps   |
| Selenium   | 82-1  | 11577    | 11634    | 11533    | 11581    | 0.44   | cps   |
| Selenium   | 77-2  | 1430     | 1527     | 1407     | 1455     | 4.37   | cps   |
| Selenium   | 78-2  | 5158     | 4868     | 4791     | 4939     | 3.92   | cps   |
| Silicon    | 28-1  | 20932867 | 20291543 | 20696316 | 20640242 | 1.57   | cps   |
| Silver     | 107-1 | 117418   | 118001   | 120815   | 118745   | 1.53   | cps   |
| Silver     | 109-1 | 112830   | 110576   | 113020   | 112142   | 1.21   | cps   |
| Sodium     | 23-2  | 4797919  | 4805465  | 4750532  | 4784639  | 0.62   | cps   |
| Strontium  | 86-1  | 436669   | 440183   | 436435   | 437762   | 0.48   | cps   |
| Strontium  | 88-1  | 3827300  | 3929846  | 3897285  | 3884810  | 1.35   | cps   |
| Sulfur     | 34-1  | 2129901  | 2050403  | 2052378  | 2077561  | 2.18   | cps   |
| Terbium    | 159-1 | 8604579  | 8094239  | 8521528  | 8406782  | 3.26   | cps   |
| Terbium    | 159-2 | 6209159  | 6144604  | 6089813  | 6147859  | 0.97   | cps   |
| Thallium   | 203-1 | 435266   | 442710   | 431875   | 436617   | 1.27   | cps   |
| Thallium   | 205-1 | 1015678  | 1000843  | 1034639  | 1017054  | 1.67   | cps   |
| Tin        | 118-1 | 399333   | 407093   | 404660   | 403695   | 0.98   | cps   |
| Titanium   | 47-1  | 7946     | 8429     | 8563     | 8312     | 3.91   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18MSDDLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:14:52 DataFile Name : 041SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 1173341  | 1194831  | 1223011  | 1197061  | 2.08   | cps   |
| Vanadium  | 51-2  | 368305   | 366311   | 363682   | 366099   | 0.63   | cps   |
| Yttrium   | 89-1  | 13086071 | 12848030 | 13182547 | 13038883 | 1.32   | cps   |
| Yttrium   | 89-2  | 3842316  | 3767376  | 3757252  | 3788981  | 1.23   | cps   |
| Zinc      | 66-2  | 785551   | 781949   | 779067   | 782189   | 0.42   | cps   |
| Zirconium | 90-1  | 951400   | 972604   | 944631   | 956212   | 1.53   | cps   |
| Zirconium | 91-1  | 212367   | 209308   | 209302   | 210326   | 0.84   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Aluminium  | 27-2  | 3247144  | 3270785  | 3262083  | 3260004  | 0.37   | cps   |
| Antimony   | 121-1 | 497297   | 514137   | 505586   | 505673   | 1.67   | cps   |
| Arsenic    | 75-2  | 60292    | 59382    | 58037    | 59237    | 1.92   | cps   |
| Barium     | 135-1 | 575102   | 591144   | 571193   | 579146   | 1.83   | cps   |
| Barium     | 137-1 | 988304   | 1014652  | 1017323  | 1006760  | 1.59   | cps   |
| Beryllium  | 9-1   | 55020    | 57574    | 54915    | 55836    | 2.70   | cps   |
| Bismuth    | 209-1 | 4949697  | 4920914  | 5032321  | 4967644  | 1.16   | cps   |
| Bismuth    | 209-2 | 4453851  | 4388168  | 4413538  | 4418519  | 0.75   | cps   |
| Bromine    | 81-1  | 18845    | 20394    | 22290    | 20510    | 8.41   | cps   |
| Bromine    | 81-2  | 2380     | 2427     | 2430     | 2412     | 1.16   | cps   |
| Cadmium    | 108-1 | 10474    | 10127    | 10287    | 10296    | 1.69   | cps   |
| Cadmium    | 106-1 | 17394    | 16990    | 17407    | 17264    | 1.37   | cps   |
| Cadmium    | 111-1 | 146766   | 148036   | 146617   | 147140   | 0.53   | cps   |
| Calcium    | 43-1  | 745318   | 741398   | 726932   | 737882   | 1.31   | cps   |
| Calcium    | 44-1  | 11750649 | 11574991 | 11482002 | 11602548 | 1.18   | cps   |
| Carbon     | 12-1  |          |          |          |          |        | cps   |
| Carbon     | 12-2  |          |          |          |          |        | cps   |
| Chlorine   | 35-1  |          |          |          |          |        | cps   |
| Chlorine   | 35-2  |          |          |          |          |        | cps   |
| Chromium   | 52-2  | 301696   | 297729   | 296198   | 298541   | 0.95   | cps   |
| Cobalt     | 59-2  | 528039   | 531307   | 519418   | 526255   | 1.17   | cps   |
| Copper     | 63-2  | 3384124  | 3386319  | 3249262  | 3339902  | 2.35   | cps   |
| Dysprosium | 156-1 | 28857    | 29691    | 28262    | 28937    | 2.48   | cps   |
| Dysprosium | 156-2 | 26996    | 27093    | 27387    | 27159    | 0.75   | cps   |
| Erbium     | 164-1 | 39513    | 39529    | 38199    | 39080    | 1.95   | cps   |
| Erbium     | 164-2 | 30734    | 30978    | 30189    | 30634    | 1.32   | cps   |
| Gadolinium | 160-1 | 30497    | 32084    | 31897    | 31492    | 2.75   | cps   |
| Gadolinium | 160-2 | 25934    | 25640    | 25260    | 25611    | 1.32   | cps   |
| Holmium    | 165-1 | 8352834  | 8134468  | 7942694  | 8143332  | 2.52   | cps   |
| Holmium    | 165-2 | 6390528  | 6250834  | 6433553  | 6358305  | 1.50   | cps   |
| Indium     | 115-1 | 7259828  | 6990684  | 7011369  | 7087294  | 2.11   | cps   |
| Indium     | 115-2 | 2707254  | 2702862  | 2762525  | 2724214  | 1.22   | cps   |
| Iron       | 56-2  | 40629452 | 40339290 | 39987834 | 40318859 | 0.80   | cps   |
| Iron       | 57-2  | 1070034  | 1049290  | 1040491  | 1053272  | 1.44   | cps   |
| Iron       | 54-2  | 2256788  | 2243279  | 2166240  | 2222102  | 2.20   | cps   |
| Krypton    | 83-1  | 573      | 647      | 567      | 596      | 7.45   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter  | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|------------|-------|----------|----------|----------|----------|--------|-------|
| Lead       | 206-1 | 2102808  | 2150359  | 2006837  | 2086668  | 3.50   | cps   |
| Lead       | 207-1 | 1796460  | 1874463  | 1659043  | 1776655  | 6.14   | cps   |
| Lead       | 208-1 | 8222622  | 8384879  | 8069406  | 8225636  | 1.92   | cps   |
| Lithium    | 6-1   | 409575   | 399896   | 409946   | 406472   | 1.40   | cps   |
| Magnesium  | 24-2  | 4528368  | 4418955  | 4464461  | 4470594  | 1.23   | cps   |
| Manganese  | 55-2  | 6976583  | 6897588  | 6718535  | 6864235  | 1.93   | cps   |
| Molybdenum | 94-1  | 928659   | 916133   | 929302   | 924698   | 0.80   | cps   |
| Molybdenum | 95-1  | 1001850  | 996470   | 1031984  | 1010101  | 1.89   | cps   |
| Molybdenum | 96-1  | 1104269  | 1121508  | 1128947  | 1118241  | 1.13   | cps   |
| Molybdenum | 97-1  | 633863   | 630010   | 630734   | 631536   | 0.32   | cps   |
| Molybdenum | 98-1  | 1579528  | 1617158  | 1613470  | 1603385  | 1.29   | cps   |
| Neodymium  | 150-1 | 39161    | 41662    | 39318    | 40047    | 3.50   | cps   |
| Neodymium  | 150-2 | 26298    | 26452    | 26782    | 26511    | 0.93   | cps   |
| Nickel     | 60-2  | 133147   | 133352   | 132505   | 133001   | 0.33   | cps   |
| Phosphorus | 31-2  | 11441    | 10834    | 10847    | 11041    | 3.14   | cps   |
| Potassium  | 39-2  | 3398032  | 3350927  | 3266071  | 3338343  | 2.00   | cps   |
| Rhodium    | 103-1 | 7078442  | 6894220  | 7166799  | 7046487  | 1.97   | cps   |
| Rhodium    | 103-2 | 4637108  | 4539751  | 4700341  | 4625733  | 1.75   | cps   |
| Scandium   | 45-1  | 4460656  | 4233700  | 4198118  | 4297491  | 3.31   | cps   |
| Scandium   | 45-2  | 432067   | 425421   | 432807   | 430098   | 0.95   | cps   |
| Selenium   | 82-1  | 11538    | 11544    | 11271    | 11451    | 1.36   | cps   |
| Selenium   | 77-2  | 1417     | 1443     | 1347     | 1402     | 3.56   | cps   |
| Selenium   | 78-2  | 4757     | 4938     | 4944     | 4880     | 2.17   | cps   |
| Silicon    | 28-1  | 20002519 | 20560703 | 20551077 | 20371433 | 1.57   | cps   |
| Silver     | 107-1 | 116730   | 118397   | 114681   | 116603   | 1.60   | cps   |
| Silver     | 109-1 | 107450   | 109787   | 112391   | 109876   | 2.25   | cps   |
| Sodium     | 23-2  | 4725648  | 4743219  | 4758347  | 4742405  | 0.35   | cps   |
| Strontium  | 86-1  | 435277   | 434373   | 430762   | 433471   | 0.55   | cps   |
| Strontium  | 88-1  | 3891213  | 3830923  | 3887891  | 3870009  | 0.88   | cps   |
| Sulfur     | 34-1  | 2051988  | 2065903  | 2060181  | 2059357  | 0.34   | cps   |
| Terbium    | 159-1 | 8459733  | 8323863  | 8324933  | 8369510  | 0.93   | cps   |
| Terbium    | 159-2 | 6272382  | 6254224  | 6316695  | 6281100  | 0.51   | cps   |
| Thallium   | 203-1 | 430192   | 436632   | 441576   | 436133   | 1.31   | cps   |
| Thallium   | 205-1 | 999676   | 1045763  | 998877   | 1014772  | 2.65   | cps   |
| Tin        | 118-1 | 389764   | 393928   | 404624   | 396105   | 1.94   | cps   |
| Titanium   | 47-1  | 8499     | 8439     | 8286     | 8408     | 1.31   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : Q2879-18ADLX5 Instrumnet Name : P7  
Client Sample ID : OU4-TS-GRILLO-TSCP1 Dilution Factor : 5  
Date & Time Acquired : 2025-08-20 13:17:54 DataFile Name : 042SMPL.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 1202694  | 1236699  | 1174452  | 1204615  | 2.59   | cps   |
| Vanadium  | 51-2  | 372649   | 362137   | 360614   | 365134   | 1.79   | cps   |
| Yttrium   | 89-1  | 13707488 | 13116736 | 13427615 | 13417280 | 2.20   | cps   |
| Yttrium   | 89-2  | 3827840  | 3775592  | 3795480  | 3799637  | 0.69   | cps   |
| Zinc      | 66-2  | 783401   | 785774   | 778141   | 782439   | 0.50   | cps   |
| Zirconium | 90-1  | 929399   | 929514   | 960475   | 939796   | 1.91   | cps   |
| Zirconium | 91-1  | 208061   | 209134   | 209542   | 208912   | 0.37   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Aluminium  | 27-2  | 7326525   | 7092486   | 7015517   | 7144843   | 2.27   | cps   |
| Antimony   | 121-1 | 2840949   | 2852188   | 2898639   | 2863926   | 1.07   | cps   |
| Arsenic    | 75-2  | 194148    | 193825    | 192676    | 193550    | 0.40   | cps   |
| Barium     | 135-1 | 3394659   | 3396520   | 3496881   | 3429353   | 1.71   | cps   |
| Barium     | 137-1 | 5970713   | 6115515   | 6075976   | 6054068   | 1.24   | cps   |
| Beryllium  | 9-1   | 313386    | 325699    | 325346    | 321477    | 2.18   | cps   |
| Bismuth    | 209-1 | 4757790   | 4681805   | 4867906   | 4769167   | 1.96   | cps   |
| Bismuth    | 209-2 | 4331289   | 4337096   | 4341196   | 4336527   | 0.11   | cps   |
| Bromine    | 81-1  | 11621     | 11685     | 11615     | 11640     | 0.33   | cps   |
| Bromine    | 81-2  | 203       | 270       | 227       | 233       | 14.50  | cps   |
| Cadmium    | 108-1 | 54670     | 56968     | 55780     | 55806     | 2.06   | cps   |
| Cadmium    | 106-1 | 79879     | 80851     | 80831     | 80521     | 0.69   | cps   |
| Cadmium    | 111-1 | 763283    | 791092    | 787955    | 780777    | 1.95   | cps   |
| Calcium    | 43-1  | 3959073   | 4107513   | 3948240   | 4004942   | 2.22   | cps   |
| Calcium    | 44-1  | 65087417  | 64934247  | 66061429  | 65361031  | 0.94   | cps   |
| Carbon     | 12-1  |           |           |           |           |        | cps   |
| Carbon     | 12-2  |           |           |           |           |        | cps   |
| Chlorine   | 35-1  |           |           |           |           |        | cps   |
| Chlorine   | 35-2  |           |           |           |           |        | cps   |
| Chromium   | 52-2  | 1534454   | 1516860   | 1499935   | 1517083   | 1.14   | cps   |
| Cobalt     | 59-2  | 2349522   | 2360876   | 2384526   | 2364975   | 0.76   | cps   |
| Copper     | 63-2  | 18009986  | 18227560  | 17995942  | 18077829  | 0.72   | cps   |
| Dysprosium | 156-1 | 183       | 167       | 170       | 173       | 5.09   | cps   |
| Dysprosium | 156-2 | 257       | 280       | 290       | 276       | 6.21   | cps   |
| Erbium     | 164-1 | 367       | 387       | 413       | 389       | 6.02   | cps   |
| Erbium     | 164-2 | 223       | 280       | 290       | 264       | 13.60  | cps   |
| Gadolinium | 160-1 | 187       | 193       | 187       | 189       | 2.04   | cps   |
| Gadolinium | 160-2 | 533       | 493       | 503       | 510       | 4.08   | cps   |
| Holmium    | 165-1 | 8401064   | 8450018   | 8301860   | 8384314   | 0.90   | cps   |
| Holmium    | 165-2 | 6474919   | 6441369   | 6399449   | 6438579   | 0.59   | cps   |
| Indium     | 115-1 | 7088758   | 7046694   | 6968272   | 7034574   | 0.87   | cps   |
| Indium     | 115-2 | 2715840   | 2672610   | 2689606   | 2692685   | 0.81   | cps   |
| Iron       | 56-2  | 326113702 | 329160762 | 330108615 | 328461026 | 0.64   | cps   |
| Iron       | 57-2  | 8170661   | 8266912   | 8287521   | 8241698   | 0.76   | cps   |
| Iron       | 54-2  | 18420737  | 17952526  | 18230011  | 18201092  | 1.29   | cps   |
| Krypton    | 83-1  | 443       | 517       | 520       | 493       | 8.78   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter  | Mass  | CPS1      | CPS2      | CPS3      | CPSMean   | CPSRSD | Units |
|------------|-------|-----------|-----------|-----------|-----------|--------|-------|
| Lead       | 206-1 | 10167094  | 10350917  | 10543075  | 10353695  | 1.82   | cps   |
| Lead       | 207-1 | 8739718   | 8901892   | 8795840   | 8812483   | 0.93   | cps   |
| Lead       | 208-1 | 39489579  | 40603937  | 40602768  | 40232095  | 1.60   | cps   |
| Lithium    | 6-1   | 417976    | 418902    | 415213    | 417364    | 0.46   | cps   |
| Magnesium  | 24-2  | 66047446  | 64200491  | 64909029  | 65052322  | 1.43   | cps   |
| Manganese  | 55-2  | 12793954  | 12506577  | 12509115  | 12603215  | 1.31   | cps   |
| Molybdenum | 94-1  | 11155805  | 11159576  | 11312728  | 11209370  | 0.80   | cps   |
| Molybdenum | 95-1  | 15663906  | 15994050  | 16125203  | 15927720  | 1.49   | cps   |
| Molybdenum | 96-1  | 17027450  | 17291929  | 17426343  | 17248574  | 1.18   | cps   |
| Molybdenum | 97-1  | 9711144   | 9747054   | 9859525   | 9772575   | 0.79   | cps   |
| Molybdenum | 98-1  | 25305813  | 25698191  | 25971372  | 25658459  | 1.30   | cps   |
| Neodymium  | 150-1 | 147       | 193       | 177       | 172       | 13.73  | cps   |
| Neodymium  | 150-2 | 80        | 70        | 50        | 67        | 22.91  | cps   |
| Nickel     | 60-2  | 607920    | 610001    | 608535    | 608818    | 0.18   | cps   |
| Phosphorus | 31-2  | 87212     | 87201     | 86568     | 86994     | 0.42   | cps   |
| Potassium  | 39-2  | 38828250  | 38490164  | 38261001  | 38526472  | 0.74   | cps   |
| Rhodium    | 103-1 | 7166869   | 6950768   | 6727332   | 6948323   | 3.16   | cps   |
| Rhodium    | 103-2 | 4472782   | 4290840   | 4424533   | 4396052   | 2.14   | cps   |
| Scandium   | 45-1  | 4400578   | 4419833   | 4393263   | 4404558   | 0.31   | cps   |
| Scandium   | 45-2  | 440840    | 438688    | 438750    | 439426    | 0.28   | cps   |
| Selenium   | 82-1  | 59164     | 58959     | 59555     | 59226     | 0.51   | cps   |
| Selenium   | 77-2  | 6812      | 6905      | 6795      | 6837      | 0.87   | cps   |
| Selenium   | 78-2  | 23622     | 23779     | 23075     | 23492     | 1.57   | cps   |
| Silicon    | 28-1  | 9890144   | 10373949  | 10208712  | 10157602  | 2.42   | cps   |
| Silver     | 107-1 | 3790962   | 3916915   | 3930624   | 3879500   | 1.98   | cps   |
| Silver     | 109-1 | 3705887   | 3813755   | 3766631   | 3762091   | 1.44   | cps   |
| Sodium     | 23-2  | 103269018 | 101033368 | 100338155 | 101546847 | 1.51   | cps   |
| Strontium  | 86-1  | 1000677   | 1023368   | 1019632   | 1014559   | 1.20   | cps   |
| Strontium  | 88-1  | 8871878   | 9219456   | 9013409   | 9034914   | 1.93   | cps   |
| Sulfur     | 34-1  | 396954    | 398834    | 395597    | 397128    | 0.41   | cps   |
| Terbium    | 159-1 | 8546821   | 8357323   | 8612409   | 8505518   | 1.56   | cps   |
| Terbium    | 159-2 | 6385100   | 6327041   | 6310386   | 6340843   | 0.62   | cps   |
| Thallium   | 203-1 | 2453491   | 2593463   | 2567330   | 2538095   | 2.93   | cps   |
| Thallium   | 205-1 | 5932486   | 6057483   | 6142770   | 6044246   | 1.75   | cps   |
| Tin        | 118-1 | 2403052   | 2465922   | 2440431   | 2436468   | 1.30   | cps   |
| Titanium   | 47-1  | 4089381   | 4173510   | 4066117   | 4109669   | 1.37   | cps   |



LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCV03 Instrumnet Name : P7  
Client Sample ID : CCV03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:27:08 DataFile Name : 043CCV.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 7112653  | 7480289  | 7638717  | 7410553  | 3.64   | cps   |
| Vanadium  | 51-2  | 1311531  | 1270508  | 1288104  | 1290048  | 1.60   | cps   |
| Yttrium   | 89-1  | 12891915 | 12936876 | 12730150 | 12852980 | 0.85   | cps   |
| Yttrium   | 89-2  | 3710515  | 3617560  | 3634824  | 3654300  | 1.35   | cps   |
| Zinc      | 66-2  | 3221122  | 3225870  | 3206103  | 3217698  | 0.32   | cps   |
| Zirconium | 90-1  | 5500878  | 5508287  | 5510874  | 5506680  | 0.09   | cps   |
| Zirconium | 91-1  | 1194587  | 1217161  | 1213664  | 1208471  | 1.01   | cps   |

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LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Aluminium  | 27-2  | 1623    | 1517    | 1560    | 1567    | 3.42   | cps   |
| Antimony   | 121-1 | 700     | 777     | 763     | 747     | 5.49   | cps   |
| Arsenic    | 75-2  | 7       | 20      | 10      | 12      | 56.76  | cps   |
| Barium     | 135-1 | 117     | 90      | 77      | 94      | 21.56  | cps   |
| Barium     | 137-1 | 173     | 173     | 140     | 162     | 11.87  | cps   |
| Beryllium  | 9-1   | 14      | 14      | 0       | 9       | 83.93  | cps   |
| Bismuth    | 209-1 | 4845949 | 4747384 | 4738913 | 4777415 | 1.25   | cps   |
| Bismuth    | 209-2 | 4354578 | 4343756 | 4350998 | 4349777 | 0.13   | cps   |
| Bromine    | 81-1  | 11091   | 10884   | 11124   | 11033   | 1.18   | cps   |
| Bromine    | 81-2  | 223     | 253     | 223     | 233     | 7.42   | cps   |
| Cadmium    | 108-1 | 7       | 13      | 3       | 8       | 65.47  | cps   |
| Cadmium    | 106-1 | 2784    | 2667    | 2527    | 2659    | 4.83   | cps   |
| Cadmium    | 111-1 | 2001    | 1921    | 1820    | 1914    | 4.73   | cps   |
| Calcium    | 43-1  | 390     | 417     | 427     | 411     | 4.61   | cps   |
| Calcium    | 44-1  | 27001   | 26981   | 26280   | 26754   | 1.54   | cps   |
| Carbon     | 12-1  |         |         |         |         |        | cps   |
| Carbon     | 12-2  |         |         |         |         |        | cps   |
| Chlorine   | 35-1  |         |         |         |         |        | cps   |
| Chlorine   | 35-2  |         |         |         |         |        | cps   |
| Chromium   | 52-2  | 2490    | 2604    | 2450    | 2515    | 3.16   | cps   |
| Cobalt     | 59-2  | 113     | 100     | 113     | 109     | 7.07   | cps   |
| Copper     | 63-2  | 1573    | 1610    | 1567    | 1583    | 1.47   | cps   |
| Dysprosium | 156-1 | 10      | 7       | 10      | 9       | 21.63  | cps   |
| Dysprosium | 156-2 | 0       | 3       | 3       | 2       | 86.60  | cps   |
| Erbium     | 164-1 | 57      | 50      | 63      | 57      | 11.76  | cps   |
| Erbium     | 164-2 | 40      | 57      | 47      | 48      | 17.56  | cps   |
| Gadolinium | 160-1 | 53      | 80      | 60      | 64      | 21.54  | cps   |
| Gadolinium | 160-2 | 390     | 347     | 370     | 369     | 5.88   | cps   |
| Holmium    | 165-1 | 8080138 | 7870808 | 7817450 | 7922799 | 1.75   | cps   |
| Holmium    | 165-2 | 6136570 | 5979148 | 5909378 | 6008365 | 1.94   | cps   |
| Indium     | 115-1 | 7006867 | 6696696 | 6710837 | 6804800 | 2.57   | cps   |
| Indium     | 115-2 | 2625961 | 2648266 | 2594497 | 2622908 | 1.03   | cps   |
| Iron       | 56-2  | 25518   | 29562   | 25215   | 26765   | 9.07   | cps   |
| Iron       | 57-2  | 1673    | 1660    | 1550    | 1628    | 4.16   | cps   |
| Iron       | 54-2  | 2910    | 2917    | 2950    | 2926    | 0.73   | cps   |
| Krypton    | 83-1  | 527     | 570     | 530     | 542     | 4.45   | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter  | Mass  | CPS1    | CPS2    | CPS3    | CPSMean | CPSRSD | Units |
|------------|-------|---------|---------|---------|---------|--------|-------|
| Lead       | 206-1 | 600     | 517     | 603     | 573     | 8.56   | cps   |
| Lead       | 207-1 | 517     | 473     | 463     | 484     | 5.85   | cps   |
| Lead       | 208-1 | 2460    | 2143    | 2213    | 2272    | 7.32   | cps   |
| Lithium    | 6-1   | 408745  | 401509  | 401954  | 404069  | 1.00   | cps   |
| Magnesium  | 24-2  | 887     | 913     | 907     | 902     | 1.54   | cps   |
| Manganese  | 55-2  | 903     | 1010    | 870     | 928     | 7.88   | cps   |
| Molybdenum | 94-1  | 760     | 807     | 750     | 772     | 3.92   | cps   |
| Molybdenum | 95-1  | 847     | 843     | 717     | 802     | 9.24   | cps   |
| Molybdenum | 96-1  | 923     | 923     | 847     | 898     | 4.93   | cps   |
| Molybdenum | 97-1  | 517     | 520     | 520     | 519     | 0.37   | cps   |
| Molybdenum | 98-1  | 1487    | 1213    | 1183    | 1295    | 12.91  | cps   |
| Neodymium  | 150-1 | 13      | 10      | 3       | 9       | 57.30  | cps   |
| Neodymium  | 150-2 | 0       | 3       | 3       | 2       | 86.60  | cps   |
| Nickel     | 60-2  | 717     | 680     | 650     | 682     | 4.89   | cps   |
| Phosphorus | 31-2  | 740     | 620     | 633     | 664     | 9.90   | cps   |
| Potassium  | 39-2  | 72575   | 72364   | 72321   | 72420   | 0.19   | cps   |
| Rhodium    | 103-1 | 6847462 | 6815320 | 6882973 | 6848585 | 0.49   | cps   |
| Rhodium    | 103-2 | 4248609 | 4363880 | 4381214 | 4331235 | 1.66   | cps   |
| Scandium   | 45-1  | 4104729 | 4034981 | 4057712 | 4065807 | 0.87   | cps   |
| Scandium   | 45-2  | 419715  | 405314  | 409297  | 411442  | 1.81   | cps   |
| Selenium   | 82-1  | 341     | 288     | 263     | 297     | 13.50  | cps   |
| Selenium   | 77-2  | 0       | 3       | 0       | 1       | 173.21 | cps   |
| Selenium   | 78-2  | 533     | 473     | 560     | 522     | 8.50   | cps   |
| Silicon    | 28-1  | 677046  | 682924  | 679755  | 679908  | 0.43   | cps   |
| Silver     | 107-1 | 490     | 387     | 403     | 427     | 13.00  | cps   |
| Silver     | 109-1 | 433     | 323     | 300     | 352     | 20.22  | cps   |
| Sodium     | 23-2  | 52389   | 51884   | 51877   | 52050   | 0.56   | cps   |
| Strontium  | 86-1  | 883     | 863     | 830     | 859     | 3.14   | cps   |
| Strontium  | 88-1  | 420     | 380     | 437     | 412     | 7.07   | cps   |
| Sulfur     | 34-1  | 156330  | 157704  | 157654  | 157229  | 0.50   | cps   |
| Terbium    | 159-1 | 8089357 | 8153781 | 7973277 | 8072138 | 1.13   | cps   |
| Terbium    | 159-2 | 6022028 | 5967593 | 6020394 | 6003339 | 0.52   | cps   |
| Thallium   | 203-1 | 447     | 500     | 437     | 461     | 7.38   | cps   |
| Thallium   | 205-1 | 1083    | 1117    | 1127    | 1109    | 2.05   | cps   |
| Tin        | 118-1 | 1120    | 1187    | 1027    | 1111    | 7.23   | cps   |
| Titanium   | 47-1  | 137     | 93      | 103     | 111     | 20.42  | cps   |

LB Number : LB136893 Operator : Jaswal  
Lab Sample ID : CCB03 Instrumnet Name : P7  
Client Sample ID : CCB03 Dilution Factor : 1  
Date & Time Acquired : 2025-08-20 13:30:00 DataFile Name : 044CCBE.d

| Parameter | Mass  | CPS1     | CPS2     | CPS3     | CPSMean  | CPSRSD | Units |
|-----------|-------|----------|----------|----------|----------|--------|-------|
| Uranium   | 238-1 | 227      | 110      | 97       | 144      | 49.51  | cps   |
| Vanadium  | 51-2  | 30       | 33       | 20       | 28       | 24.98  | cps   |
| Yttrium   | 89-1  | 12178490 | 12156809 | 11846810 | 12060703 | 1.54   | cps   |
| Yttrium   | 89-2  | 3429191  | 3449112  | 3436331  | 3438211  | 0.29   | cps   |
| Zinc      | 66-2  | 4781     | 4521     | 4954     | 4752     | 4.59   | cps   |
| Zirconium | 90-1  | 800      | 800      | 837      | 812      | 2.61   | cps   |
| Zirconium | 91-1  | 190      | 253      | 150      | 198      | 26.35  | cps   |

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SOP ID : M7470A-Mercury-20

SDG No : N/A

Matrix : WATER

Pipette ID: HG A

Balance ID : N/A

Filter paper ID : N/A

pH Strip ID : M6069

Hood ID : #1

Block ID: 1. HOT BLOCK #1 2. N/A

Start Digest Date: 08/19/2025 Time : 11:30 Temp : 96 °C

End Digest Date: 08/19/2025 Time : 13:30 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: *W*

Supervisor Signature: *MO*

Temp : 1. 96°C 2. N/A

| Standard Name | MLS USED | STD REF. # FROM LOG |
|---------------|----------|---------------------|
| ICV           | 30mL     | MP86838             |
| CCV           | 30mL     | MP86840             |
| CRA           | 30mL     | MP86842             |
| Blank Spike   | 0.48mL   | MP86831             |
| Matrix Spike  | 0.48mL   | MP86831             |

| Chemical Used           | ML/SAMPLE USED | Lot Number |
|-------------------------|----------------|------------|
| HNO3/H2SO4(1:2)         | 2.25mL         | MP85892    |
| KMnO4 (5%)              | 4.5mL          | MP85893    |
| K2S2O8 (5%)             | 2.4mL          | MP85894    |
| Hydroxylamine HCL (12%) | 1.8mL          | MP86830    |
| 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        |

| LAB SAMPLE ID | CLIENT SAMPLE ID | Wt(g)/Vol(ml) | Comment |
|---------------|------------------|---------------|---------|
| 0.0 ppb       | S0               | 30mL          | MP86832 |
| 0.05 ppb      | S0.05            | N/A           | N/A     |
| 0.2 ppb       | S0.2             | 30mL          | MP86833 |
| 2.5 ppb       | S2.5             | 30mL          | MP86834 |
| 5.0 ppb       | S5.0             | 30mL          | MP86835 |
| 7.5 ppb       | S7.5             | 30mL          | MP86836 |
| 10.0 ppb      | S10.0            | 30mL          | MP86837 |
| ICV           | ICV              | 30mL          | MP86838 |
| ICB           | ICB              | 30mL          | MP86839 |
| CCV           | CCV              | 30mL          | MP86840 |
| CCB           | CCB              | 30mL          | MP86841 |
| CRI           | CRI              | 30mL          | MP86842 |
| CHK STD       | CHK STD          | 30mL          | MP86843 |

## Extraction Conformance/Non-Conformance Comments:

| N/A            |                                         |                      |
|----------------|-----------------------------------------|----------------------|
| Date / Time    | Prepped Sample Relinquished By/Location | Received By/Location |
| 08/19/25 13:50 | <i>W</i> <i>bid lab</i>                 | <i>ms - met dig.</i> |
| 13:50          | Preparation Group                       | Analysis Group       |

| Lab Sample ID | Client Sample ID               | Initial Vol (ml) | Final Vol (ml) | pH | Comment | Prep Pos |
|---------------|--------------------------------|------------------|----------------|----|---------|----------|
| PB169293BL    | PBW293                         | 30               | 30             | <2 | N/A     | 3-1      |
| PB169293BS    | LCS293                         | 30               | 30             | <2 | MP86831 | 2        |
| PB169293TB    | LEB293                         | 30               | 30             | <2 | N/A     | 3        |
| Q2818-04      | B-2-5-1                        | 30               | 30             | <2 | N/A     | 4        |
| Q2818-05      | B-3-5-2                        | 30               | 30             | <2 | N/A     | 5        |
| Q2879-02      | OU4-TS-GRILLO-TSCP03-081425    | 30               | 30             | <2 | N/A     | 6        |
| Q2879-04      | OU4-TS-GRILLO-TSCP04-081425    | 30               | 30             | <2 | N/A     | 7        |
| Q2879-06      | OU4-TS-GRILLO-TSCP05-081425    | 30               | 30             | <2 | N/A     | 8        |
| Q2879-08      | OU4-TS-GRILLO-TSCP06-081425    | 30               | 30             | <2 | N/A     | 9        |
| Q2879-10      | OU4-TS-GRILLO-TSCP07-081425    | 30               | 30             | <2 | N/A     | 10       |
| Q2879-12      | OU4-TS-GRILLO-TSCP08-081425    | 30               | 30             | <2 | N/A     | 11       |
| Q2879-14      | OU4-TS-GRILLO-TSCP09-081425    | 30               | 30             | <2 | N/A     | 12       |
| Q2879-16      | OU4-TS-GRILLO-TSCP10-081425    | 30               | 30             | <2 | N/A     | 13       |
| Q2879-18      | OU4-TS-GRILLO-TSCP11-081425    | 30               | 30             | <2 | N/A     | 14       |
| Q2879-18DUP   | OU4-TS-GRILLO-TSCP11-081425DUP | 30               | 30             | <2 | N/A     | 15       |
| Q2879-18MS    | OU4-TS-GRILLO-TSCP11-081425MS  | 30               | 30             | <2 | MP86831 | 16       |
| Q2879-18MSD   | OU4-TS-GRILLO-TSCP11-081425MSD | 30               | 30             | <2 | MP86831 | 17       |

| Sample ID  | ClientID                    | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|------------|-----------------------------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|----------|
| PB169276TB | LEB276                      | 10             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.24              | 1.5                     | T-1      |
| Q2879-02   | OU4-TS-GRILLO-TSCP03-081425 | 01             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-04   | OU4-TS-GRILLO-TSCP04-081425 | 02             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.0                     | T-1      |
| Q2879-06   | OU4-TS-GRILLO-TSCP05-081425 | 03             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-08   | OU4-TS-GRILLO-TSCP06-081425 | 04             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.5                     | T-1      |
| Q2879-10   | OU4-TS-GRILLO-TSCP07-081425 | 05             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1      |
| Q2879-12   | OU4-TS-GRILLO-TSCP08-081425 | 06             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 4.5               | 1.5                     | T-1      |
| Q2879-14   | OU4-TS-GRILLO-TSCP09-081425 | 07             | 100.01        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-16   | OU4-TS-GRILLO-TSCP10-081425 | 08             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | T-1      |
| Q2879-18   | OU4-TS-GRILLO-TSCP11-081425 | 09             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1      |

| Sample ID  | ClientID | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|------------|----------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|----------|
| PB169294TB | LEB294   | 13             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.23              | 1.5                     | T-2      |
| Q2818-04   | B-2-5-1  | 11             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.0               | 1.0                     | T-2      |
| Q2818-05   | B-3-5-2  | 12             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 3.0               | 1.0                     | T-2      |



SOP ID : M3010A-Digestion-17

SDG No : N/A

Matrix : WATER

Pipette 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: 08/18/2025 Time : 12:30 Temp : 96 °C

End Digest Date: 08/18/2025 Time : 14:32 Temp : 96 °C

Digestion tube ID: M5595

Block thermometer ID: MET-DIG. #1

Dig Technician Signature: SKS

Supervisor Signature: [Signature]

Temp : 1. 96°C 2. N/A

| Standard Name | MLS USED | STD REF. # FROM LOG |
|---------------|----------|---------------------|
| Spike Sol 1   | 0.50     | MP86790             |
| Spike Sol 2   | 1.00     | MP86791             |
| Spike Sol 3   | 1.00     | MP86792             |
| Spike Sol 4   | 1.00     | MP86793             |
| N/A           | N/A      | N/A                 |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---------------|----------------|------------|
| Conc. HNO3    | 3.00           | M6158      |
| 1:1 HCL       | 5.00           | MP85156    |
| 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 96C

| Date / Time    | Prepped Sample Relinquished By/Location | Received By/Location     |
|----------------|-----------------------------------------|--------------------------|
| 08/18/25 15:32 | SKS met dig                             | [Signature] (metals lab) |
|                | Preparation Group                       | Analysis Group           |

| Lab Sample ID | Client Sample ID                   | pH | Initial Vol (ml) | Final Vol (ml) | Color Before | Color After  | Clarity Before | Clarity After | Comment            | Prep Pos |
|---------------|------------------------------------|----|------------------|----------------|--------------|--------------|----------------|---------------|--------------------|----------|
| PB169300BL    | PBW300                             | <2 | 50               | 50             | Colorless    | Colorless    | Clear          | Clear         | N/A                | 1        |
| PB169300BS    | LCS300                             | <2 | 50               | 50             | Colorless    | Colorless    | Clear          | Clear         | MP86790,MP86791,X* | 2        |
| PB169300TB    | LEB300                             | <2 | 50               | 50             | Colorless    | Colorless    | Clear          | Clear         | N/A                | 3        |
| Q2879-02      | OU4-TS-GRILLO-TSCP03-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 4        |
| Q2879-04      | OU4-TS-GRILLO-TSCP04-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 5        |
| Q2879-06      | OU4-TS-GRILLO-TSCP05-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 6        |
| Q2879-08      | OU4-TS-GRILLO-TSCP06-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 7        |
| Q2879-10      | OU4-TS-GRILLO-TSCP07-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 8        |
| Q2879-12      | OU4-TS-GRILLO-TSCP08-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 9        |
| Q2879-14      | OU4-TS-GRILLO-TSCP09-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 10       |
| Q2879-16      | OU4-TS-GRILLO-TSCP10-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 11       |
| Q2879-18      | OU4-TS-GRILLO-TSCP11-08<br>1425    | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 12       |
| Q2879-18MS    | OU4-TS-GRILLO-TSCP11-08<br>1425MS  | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | MP86790,MP86791,X* | 14       |
| Q2879-18MSD   | OU4-TS-GRILLO-TSCP11-08<br>1425MSD | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | MP86790,MP86791,X* | 15       |
| Q2879-18DUP   | OU4-TS-GRILLO-TSCP11-08<br>1425DUP | <2 | 50               | 50             | Light Yellow | Light Yellow | Clear          | Clear         | N/A                | 13       |

| Sample ID  | ClientID                    | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Pre Po |
|------------|-----------------------------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|--------|
| PB169276TB | LEB276                      | 10             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.24              | 1.5                     | T-1    |
| Q2879-02   | OU4-TS-GRILLO-TSCP03-081425 | 01             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1    |
| Q2879-04   | OU4-TS-GRILLO-TSCP04-081425 | 02             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.0                     | T-1    |
| Q2879-06   | OU4-TS-GRILLO-TSCP05-081425 | 03             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1    |
| Q2879-08   | OU4-TS-GRILLO-TSCP06-081425 | 04             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.5                     | T-1    |
| Q2879-10   | OU4-TS-GRILLO-TSCP07-081425 | 05             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1    |
| Q2879-12   | OU4-TS-GRILLO-TSCP08-081425 | 06             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 4.5               | 1.5                     | T-1    |
| Q2879-14   | OU4-TS-GRILLO-TSCP09-081425 | 07             | 100.01        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1    |
| Q2879-16   | OU4-TS-GRILLO-TSCP10-081425 | 08             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | T-1    |
| Q2879-18   | OU4-TS-GRILLO-TSCP11-081425 | 09             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1    |

Instrument ID: CV1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB136879**

|                  |                                                 |              |                       |
|------------------|-------------------------------------------------|--------------|-----------------------|
| Review By        | MOHAN                                           | Review On    | 8/20/2025 1:01:55 PM  |
| Supervise By     | jaswal                                          | Supervise On | 8/20/2025 10:35:11 PM |
| <b>STD. NAME</b> | <b>STD REF.#</b>                                |              |                       |
| ICAL Standard    | MP86832,MP86833,MP86834,MP86835,MP86836,MP86837 |              |                       |
| ICV Standard     | MP86838                                         |              |                       |
| CCV Standard     | MP86840                                         |              |                       |
| ICSA Standard    |                                                 |              |                       |
| CRI Standard     | MP86842                                         |              |                       |
| LCS Standard     |                                                 |              |                       |
| Chk Standard     | MP86839,MP86841,MP86843,MP86845                 |              |                       |

| Sr# | SampleId   | ClientID          | QcType   | Date           | Comment | Operator | Status |
|-----|------------|-------------------|----------|----------------|---------|----------|--------|
| 1   | S0         | S0                | CAL1     | 08/19/25 13:52 |         | MOHAN    | OK     |
| 2   | S0.2       | S0.2              | CAL2     | 08/19/25 13:55 |         | MOHAN    | OK     |
| 3   | S2.5       | S2.5              | CAL3     | 08/19/25 13:57 |         | MOHAN    | OK     |
| 4   | S5         | S5                | CAL4     | 08/19/25 13:59 |         | MOHAN    | OK     |
| 5   | S7.5       | S7.5              | CAL5     | 08/19/25 14:01 |         | MOHAN    | OK     |
| 6   | S10        | S10               | CAL6     | 08/19/25 14:04 |         | MOHAN    | OK     |
| 7   | ICV23      | ICV23             | ICV      | 08/19/25 14:07 |         | MOHAN    | OK     |
| 8   | ICB23      | ICB23             | ICB      | 08/19/25 14:09 |         | MOHAN    | OK     |
| 9   | CCV71      | CCV71             | CCV      | 08/19/25 14:11 |         | MOHAN    | OK     |
| 10  | CCB71      | CCB71             | CCB      | 08/19/25 14:14 |         | MOHAN    | OK     |
| 11  | CRA        | CRA               | CRDL     | 08/19/25 14:16 |         | MOHAN    | OK     |
| 12  | HighStd    | HighStd           | HIGH STD | 08/19/25 14:18 |         | MOHAN    | OK     |
| 13  | ChkStd     | ChkStd            | SAM      | 08/19/25 14:20 |         | MOHAN    | OK     |
| 14  | PB169293BL | PB169293BL        | MB       | 08/19/25 14:25 |         | MOHAN    | OK     |
| 15  | PB169293BS | PB169293BS        | LCS      | 08/19/25 14:31 |         | MOHAN    | OK     |
| 16  | Q2818-04   | B-2-5-1           | SAM      | 08/19/25 14:33 |         | MOHAN    | OK     |
| 17  | Q2818-05   | B-3-5-2           | SAM      | 08/19/25 14:36 |         | MOHAN    | OK     |
| 18  | Q2879-02   | OU4-TS-GRILLO-TSC | SAM      | 08/19/25 14:38 |         | MOHAN    | OK     |

Instrument ID: CV1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB136879**

|              |        |              |                       |
|--------------|--------|--------------|-----------------------|
| Review By    | MOHAN  | Review On    | 8/20/2025 1:01:55 PM  |
| Supervise By | jaswal | Supervise On | 8/20/2025 10:35:11 PM |

| STD. NAME     | STD REF.#                                       |
|---------------|-------------------------------------------------|
| ICAL Standard | MP86832,MP86833,MP86834,MP86835,MP86836,MP86837 |
| ICV Standard  | MP86838                                         |
| CCV Standard  | MP86840                                         |
| ICSA Standard |                                                 |
| CRI Standard  | MP86842                                         |
| LCS Standard  |                                                 |
| Chk Standard  | MP86839,MP86841,MP86843,MP86845                 |

|    |             |                   |     |                |  |       |    |
|----|-------------|-------------------|-----|----------------|--|-------|----|
| 19 | Q2879-04    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:40 |  | MOHAN | OK |
| 20 | Q2879-06    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:43 |  | MOHAN | OK |
| 21 | CCV72       | CCV72             | CCV | 08/19/25 14:45 |  | MOHAN | OK |
| 22 | CCB72       | CCB72             | CCB | 08/19/25 14:47 |  | MOHAN | OK |
| 23 | Q2879-08    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:50 |  | MOHAN | OK |
| 24 | Q2879-10    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:52 |  | MOHAN | OK |
| 25 | Q2879-12    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:54 |  | MOHAN | OK |
| 26 | Q2879-14    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:57 |  | MOHAN | OK |
| 27 | Q2879-16    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 14:59 |  | MOHAN | OK |
| 28 | Q2879-18    | OU4-TS-GRILLO-TSC | SAM | 08/19/25 15:01 |  | MOHAN | OK |
| 29 | Q2879-18DUP | OU4-TS-GRILLO-TSC | DUP | 08/19/25 15:03 |  | MOHAN | OK |
| 30 | Q2879-18MS  | OU4-TS-GRILLO-TSC | MS  | 08/19/25 15:09 |  | MOHAN | OK |
| 31 | Q2879-18MSD | OU4-TS-GRILLO-TSC | MSD | 08/19/25 15:12 |  | MOHAN | OK |
| 32 | CCV73       | CCV73             | CCV | 08/19/25 15:14 |  | MOHAN | OK |
| 33 | CCB73       | CCB73             | CCB | 08/19/25 15:16 |  | MOHAN | OK |
| 34 | PB169293TB  | PB169293TB        | MB  | 08/19/25 15:26 |  | MOHAN | OK |
| 35 | Q2879-18L   | OU4-TS-GRILLO-TSC | SD  | 08/19/25 15:29 |  | MOHAN | OK |
| 36 | Q2879-18A   | OU4-TS-GRILLO-TSC | PS  | 08/19/25 15:31 |  | MOHAN | OK |
| 37 | CCV74       | CCV74             | CCV | 08/19/25 15:37 |  | MOHAN | OK |
| 38 | CCB74       | CCB74             | CCB | 08/19/25 15:39 |  | MOHAN | OK |

Instrument ID: P7

**Daily Analysis Runlog For Sequence/QC Batch ID # LB136893**

|                  |                                                                         |              |                       |
|------------------|-------------------------------------------------------------------------|--------------|-----------------------|
| Review By        | Janvi                                                                   | Review On    | 8/25/2025 10:24:20 AM |
| Supervise By     | jaswal                                                                  | Supervise On | 8/25/2025 3:47:01 PM  |
| <b>STD. NAME</b> | <b>STD REF.#</b>                                                        |              |                       |
| ICAL Standard    | MP86739,MP86789,MP86788,MP86745,MP86744,MP86743,MP86742,MP86741,MP86740 |              |                       |
| ICV Standard     | MP86751,MP86788                                                         |              |                       |
| CCV Standard     | MP86794                                                                 |              |                       |
| ICSA Standard    | MP86746,MP86747                                                         |              |                       |
| CRI Standard     | MP86788                                                                 |              |                       |
| LCS Standard     |                                                                         |              |                       |
| Chk Standard     | MP86750,MP86748                                                         |              |                       |

| Sr# | SampleId   | ClientID   | QcType | Date           | Comment | Operator | Status |
|-----|------------|------------|--------|----------------|---------|----------|--------|
| 1   | TUNE       | TUNE       | TUNE   | 08/20/25 10:19 |         | Jaswal   | OK     |
| 2   | S0         | S0         | CAL1   | 08/20/25 10:49 |         | Jaswal   | OK     |
| 3   | S2         | S2         | CAL3   | 08/20/25 10:56 |         | Jaswal   | OK     |
| 4   | S3         | S3         | CAL4   | 08/20/25 10:59 |         | Jaswal   | OK     |
| 5   | S4         | S4         | CAL5   | 08/20/25 11:02 |         | Jaswal   | OK     |
| 6   | S5         | S5         | CAL6   | 08/20/25 11:05 |         | Jaswal   | OK     |
| 7   | S6         | S6         | CAL7   | 08/20/25 11:08 |         | Jaswal   | OK     |
| 8   | S7         | S7         | CAL8   | 08/20/25 11:11 |         | Jaswal   | OK     |
| 9   | S8         | S8         | CAL9   | 08/20/25 11:14 |         | Jaswal   | OK     |
| 10  | ICV01      | ICV01      | ICV    | 08/20/25 11:35 |         | Jaswal   | OK     |
| 11  | LLICV01    | LLICV01    | LLICV  | 08/20/25 11:50 |         | Jaswal   | OK     |
| 12  | ICB01      | ICB01      | ICB    | 08/20/25 11:56 |         | Jaswal   | OK     |
| 13  | ICSA01     | ICSA01     | ICSA   | 08/20/25 12:00 |         | Jaswal   | OK     |
| 14  | ICSAB01    | ICSAB01    | ICSAB  | 08/20/25 12:03 |         | Jaswal   | OK     |
| 15  | CCV01      | CCV01      | CCV    | 08/20/25 12:06 |         | Jaswal   | OK     |
| 16  | CCB01      | CCB01      | CCB    | 08/20/25 12:09 |         | Jaswal   | OK     |
| 17  | CRI        | CRI        | CRDL   | 08/20/25 12:15 |         | Jaswal   | OK     |
| 18  | PB169300BL | PB169300BL | MB     | 08/20/25 12:19 |         | Jaswal   | OK     |

Instrument ID: P7

**Daily Analysis Runlog For Sequence/QC Batch ID # LB136893**

|              |        |              |                       |
|--------------|--------|--------------|-----------------------|
| Review By    | Janvi  | Review On    | 8/25/2025 10:24:20 AM |
| Supervise By | jaswal | Supervise On | 8/25/2025 3:47:01 PM  |

| STD. NAME     | STD REF.#                                                               |
|---------------|-------------------------------------------------------------------------|
| ICAL Standard | MP86739,MP86789,MP86788,MP86745,MP86744,MP86743,MP86742,MP86741,MP86740 |
| ICV Standard  | MP86751,MP86788                                                         |
| CCV Standard  | MP86794                                                                 |
| ICSA Standard | MP86746,MP86747                                                         |
| CRI Standard  | MP86788                                                                 |
| LCS Standard  |                                                                         |
| Chk Standard  | MP86750,MP86748                                                         |

|    |               |                   |     |                |                              |        |    |
|----|---------------|-------------------|-----|----------------|------------------------------|--------|----|
| 19 | PB169300BS    | PB169300BS        | LCS | 08/20/25 12:22 |                              | Jaswal | OK |
| 20 | PB169300TB    | PB169300TB        | MB  | 08/20/25 12:25 |                              | Jaswal | OK |
| 21 | Q2879-02DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:28 | 5X Report Straight Dilution  | Jaswal | OK |
| 22 | Q2879-04DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:32 | 5X Report Straight Dilution  | Jaswal | OK |
| 23 | Q2879-06DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:35 | 5X Report Straight Dilution  | Jaswal | OK |
| 24 | Q2879-08DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:38 | 5X Report Straight Dilution  | Jaswal | OK |
| 25 | Q2879-10DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:41 | 5X Report Straight Dilution  | Jaswal | OK |
| 26 | Q2879-12DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:44 | 5X Report Straight Dilution  | Jaswal | OK |
| 27 | CCV02         | CCV02             | CCV | 08/20/25 12:47 |                              | Jaswal | OK |
| 28 | CCB02         | CCB02             | CCB | 08/20/25 12:52 |                              | Jaswal | OK |
| 29 | Q2879-14DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:56 | 5X Report Straight Dilution  | Jaswal | OK |
| 30 | Q2879-16DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 12:59 | 5X Report Straight Dilution  | Jaswal | OK |
| 31 | Q2879-18DL    | OU4-TS-GRILLO-TSC | SAM | 08/20/25 13:02 | 5X Report Straight Dilution  | Jaswal | OK |
| 32 | Q2879-18DUPDL | OU4-TS-GRILLO-TSC | DUP | 08/20/25 13:05 | 5X Report Straight Dilution  | Jaswal | OK |
| 33 | Q2879-18LDL   | OU4-TS-GRILLO-TSC | SD  | 08/20/25 13:08 | 25X Report Straight Dilution | Jaswal | OK |
| 34 | Q2879-18MSDL  | OU4-TS-GRILLO-TSC | MS  | 08/20/25 13:11 | 5X Report Straight Dilution  | Jaswal | OK |
| 35 | Q2879-18MSDDL | OU4-TS-GRILLO-TSC | MSD | 08/20/25 13:14 | 5X Report Straight Dilution  | Jaswal | OK |
|    |               |                   |     |                |                              |        |    |

Instrument ID: P7

**Daily Analysis Runlog For Sequence/QC Batch ID # LB136893**

|              |        |              |                       |
|--------------|--------|--------------|-----------------------|
| Review By    | Janvi  | Review On    | 8/25/2025 10:24:20 AM |
| Supervise By | jaswal | Supervise On | 8/25/2025 3:47:01 PM  |

| STD. NAME     | STD REF.#                                                               |
|---------------|-------------------------------------------------------------------------|
| ICAL Standard | MP86739,MP86789,MP86788,MP86745,MP86744,MP86743,MP86742,MP86741,MP86740 |
| ICV Standard  | MP86751,MP86788                                                         |
| CCV Standard  | MP86794                                                                 |
| ICSA Standard | MP86746,MP86747                                                         |
| CRI Standard  | MP86788                                                                 |
| LCS Standard  |                                                                         |
| Chk Standard  | MP86750,MP86748                                                         |

|    |             |                     |                |                                                                                                                                                   |        |    |
|----|-------------|---------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------|----|
| 36 | Q2879-18ADL | OU4-TS-GRILLO-TSCPS | 08/20/25 13:17 | 5X Report Straight Dilution,<br>(0.1ML OF MP86790 AND<br>0.2ML OF EACH<br>MP86791,MP86792 AND<br>MP86793 IN 10ML OF<br>SAMPLE BEFORE<br>DILUTION) | Jaswal | OK |
| 37 | CCV03       | CCV03               | CCV            | 08/20/25 13:27                                                                                                                                    | Jaswal | OK |
| 38 | CCB03       | CCB03               | CCB            | 08/20/25 13:30                                                                                                                                    | Jaswal | OK |



**SOP ID :** M1312-SPLP-10

**SDG No :** N/A

**Weigh By :** JP

**Balance ID :** WC SC-7

**pH Meter ID :** WC PH METER-1

**Extraction By :** JP

**Filter By :** JP

**Pipette ID :** WC

**Tumbler ID :** T-1

**TCLP Filter ID :** 115525

**Start Prep Date :** 08/15/2025 **Time :** 17:00

**End Prep Date :** 08/16/2025 **Time :** 11:25

**Combination Ratio :** 20

**ZHE Cleaning Batch :** N/A

**Initial Room Temperature:** 24 °C

**Final Room Temperature:** 21 °C

**TCLP Technician Signature :** [Signature]

**Supervisor By :** RM

| Standard Name | MLS USED | STD REF. # FROM LOG |
|---------------|----------|---------------------|
| 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                 |

| Chemical Used        | ML/SAMPLE U       | Lot Number              |
|----------------------|-------------------|-------------------------|
| SPLP FLUID           | N/A               | WP112802                |
| N/A                  | N/A               | N/A                     |
| HNO3-TCLP, 1N        | N/A               | WP112799                |
| pH Strips            | N/A               | W1931,W1934,W3171,W3172 |
| pH Strips            | W1940,W1941,W1942 | W3166,W1938,W1939,      |
| N/A                  | N/A               | N/A                     |
| 120ml Plastic bottle | N/A               | 2738                    |
| 1:1 HNO3             | N/A               | MP84041                 |

**Extraction Conformance/Non-Conformance Comments:**

Matrix spikes are added after filtration and before preservation. TUMBLER T-1 checked, 30 rpm. q2879-18 is used for MS-MSD.

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|-------------|-----------------------------------------|----------------------|
| 08/18/25    | [Signature] / TCLP Room                 | S/S, [Signature]     |
| 08/18/25    | Preparation Group                       | Analysis Group       |

11:30

| Sample ID  | ClientID                    | TCLP Vessel ID | Sample Wt (g) | Volume Extraction Fluid #1 (mL) | Multi phasic | Phase Miscible | Phases Combined | Final Leachate PH | Metals Leachate Adj. PH | Prep Pos |
|------------|-----------------------------|----------------|---------------|---------------------------------|--------------|----------------|-----------------|-------------------|-------------------------|----------|
| PB169276TB | LEB276                      | 10             | N/A           | 2000                            | N/A          | N/A            | N/A             | 4.24              | 1.5                     | T-1      |
| Q2879-02   | OU4-TS-GRILLO-TSCP03-081425 | 01             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-04   | OU4-TS-GRILLO-TSCP04-081425 | 02             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.0                     | T-1      |
| Q2879-06   | OU4-TS-GRILLO-TSCP05-081425 | 03             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-08   | OU4-TS-GRILLO-TSCP06-081425 | 04             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.5                     | T-1      |
| Q2879-10   | OU4-TS-GRILLO-TSCP07-081425 | 05             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1      |
| Q2879-12   | OU4-TS-GRILLO-TSCP08-081425 | 06             | 100.02        | 2000                            | N/A          | N/A            | N/A             | 4.5               | 1.5                     | T-1      |
| Q2879-14   | OU4-TS-GRILLO-TSCP09-081425 | 07             | 100.01        | 2000                            | N/A          | N/A            | N/A             | 3.5               | 1.0                     | T-1      |
| Q2879-16   | OU4-TS-GRILLO-TSCP10-081425 | 08             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 4.0               | 1.5                     | T-1      |
| Q2879-18   | OU4-TS-GRILLO-TSCP11-081425 | 09             | 100.03        | 2000                            | N/A          | N/A            | N/A             | 5.0               | 1.0                     | T-1      |

| SampleID   | ClientID                    | Sample Weight (g) | Filter Weight (g) | Filtrate (mL) | Filter + Solid (After 100°C) | % solids | % Dry Solids |
|------------|-----------------------------|-------------------|-------------------|---------------|------------------------------|----------|--------------|
| PB169276TB | LEB276                      | N/A               | N/A               | N/A           | N/A                          | N/A      | N/A          |
| Q2879-02   | OU4-TS-GRILLO-TSCP03-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-04   | OU4-TS-GRILLO-TSCP04-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-06   | OU4-TS-GRILLO-TSCP05-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-08   | OU4-TS-GRILLO-TSCP06-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-10   | OU4-TS-GRILLO-TSCP07-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-12   | OU4-TS-GRILLO-TSCP08-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-14   | OU4-TS-GRILLO-TSCP09-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-16   | OU4-TS-GRILLO-TSCP10-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |
| Q2879-18   | OU4-TS-GRILLO-TSCP11-081425 | N/A               | N/A               | N/A           | N/A                          | 100      | N/A          |

Hot Block ID : WC S-1 / WC S-2

Thermometer ID : FLASHPOINT

| SampleID   | ClientID                    | Sample Weight (g) | Volume DI Water (mL) | PH after 5 min stir | PH after 10 min stir | Extraction Fluid 1 or 2 | pH Extraction Fluid |
|------------|-----------------------------|-------------------|----------------------|---------------------|----------------------|-------------------------|---------------------|
| PB169276TB | LEB276                      | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-02   | OU4-TS-GRILLO-TSCP03-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-04   | OU4-TS-GRILLO-TSCP04-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-06   | OU4-TS-GRILLO-TSCP05-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-08   | OU4-TS-GRILLO-TSCP06-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-10   | OU4-TS-GRILLO-TSCP07-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-12   | OU4-TS-GRILLO-TSCP08-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-14   | OU4-TS-GRILLO-TSCP09-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-16   | OU4-TS-GRILLO-TSCP10-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |
| Q2879-18   | OU4-TS-GRILLO-TSCP11-081425 | N/A               | N/A                  | N/A                 | N/A                  | #1                      | 4.24                |

## Prep Standard - Chemical Standard Summary

**Order ID :** Q2879  
**Test :** SPLP Mercury,SPLP MetalGroup3  
**Prepbatch ID :** PB169293,PB169300,  
**Sequence ID/Qc Batch ID:** LB136879,LB136893,

**Standard ID :**  
 MP85156,MP85892,MP85893,MP85894,MP86739,MP86740,MP86741,MP86742,MP86743,MP86744,MP86745,MP86746,MP86747,MP86748,MP86750,MP86751,MP86787,MP86788,MP86789,MP86790,MP86791,MP86792,MP86793,MP86794,MP86830,MP86831,MP86832,MP86833,MP86834,MP86835,MP86836,MP86837,MP86838,MP86839,MP86840,MP86841,MP86842,MP86843,MP86845,

**Chemical ID :**  
 M4465,M4916,M5062,M5245,M5305,M5501,M5658,M5697,M5798,M5799,M5800,M5801,M5815,M5817,M5882,M5962,M5979,M5981,M6021,M6023,M6025,M6026,M6027,M6028,M6030,M6032,M6041,M6055,M6079,M6086,M6128,M6137,M6140,M6142,M6144,M6145,M6146,M6151,M6153,M6158,M6159,M6160,M6162,M6163,M6164,M6165,M6171,M6172,M6175,M6176,M6178,M6185,W3112,

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 170              | 1:1HCL      | <a href="#">MP85156</a> | 04/07/2025       | 09/06/2025             | Kareem Khairalla   | None           | None             | Sarabjit Jaswal      |
|                  |             |                         |                  |                        |                    |                |                  | 04/07/2025           |

**FROM** 1250.00000ml of M6151 + 1250.00000ml of W3112 = Final Quantity: 2500.000 ml

| <u>Recipe ID</u> | <u>NAME</u>      | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3965             | 2:1 H2SO4 : HNO3 | <a href="#">MP85892</a> | 06/05/2025       | 11/27/2025             | Mohan Bera         | None           | None             | Sarabjit Jaswal      |
|                  |                  |                         |                  |                        |                    |                |                  | 06/14/2025           |

**FROM** 1600.00000ml of M6041 + 800.00000ml of M6162 = Final Quantity: 3200.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>          | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|-------------------------------------|-------------------------|------------------|------------------------|--------------------|-------------------------|------------------|----------------------|
| 65               | POTASSIUM PERMANGANATE SOLUTION 5 % | <a href="#">MP85893</a> | 06/05/2025       | 12/05/2025             | Mohan Bera         | METALS_SCALE_3 (M SC-3) | None             | Sarabjit Jaswal      |
| 06/14/2025       |                                     |                         |                  |                        |                    |                         |                  |                      |

**FROM** 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                       | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u>          | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|-----------------------------------|-------------------------|------------------|------------------------|--------------------|-------------------------|------------------|----------------------|
| 66               | POTASSIUM PERSULFATE SOLUTION 5 % | <a href="#">MP85894</a> | 06/05/2025       | 08/31/2025             | Mohan Bera         | METALS_SCALE_3 (M SC-3) | None             | Sarabjit Jaswal      |
| 06/14/2025       |                                   |                         |                  |                        |                    |                         |                  |                      |

**FROM** 100.00000ml of M4465 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                      | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>                | <u>Supervised By</u>          |
|------------------|----------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|---------------------------------|-------------------------------|
| 1122             | ICPMS CALIB<br>BLANK(S0/ICB/CCB) | <a href="#">MP86739</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIP<br>ETTE_1 (ICP<br>A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 25.00000ml of M6151 + 4925.00000ml of W3112 + 50.00000ml of M6162 = Final Quantity: 5000.000 ml

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>                | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|---------------------------------|-------------------------------|
| 2902             | S8 ICPMS    | <a href="#">MP86740</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIP<br>ETTE_1 (ICP<br>A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 1.00000ml of M6159 + 2.50000ml of M6140 + 2.50000ml of M6142 + 5.00000ml of M6086 + 5.00000ml of M6171 + 5.00000ml of M6172 + 79.00000ml of MP86739 = Final Quantity: 100.000 ml



## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>                | <u>Supervised By</u>          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|---------------------------------|-------------------------------|
| 3947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | S7(SFAM,6020,200.8) | <a href="#">MP86741</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIP<br>ETTE_1 (ICP<br>A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 0.10000ml of M6153 + 0.40000ml of M6026 + 1.00000ml of M5799 + 1.00000ml of M5981 + 1.00000ml of M6079 + 1.00000ml of M6137 + 1.90000ml of M6159 + 10.00000ml of M5979 + 10.00000ml of M6162 + 10.00000ml of M6178 + 2.00000ml of M5815 + 2.00000ml of M5817 + 4.00000ml of M6032 + 4.90000ml of M6140 + 4.90000ml of M6142 + 47.00000ml of M5305 + 47.00000ml of M6175 + 5.00000ml of M6151 + 834.10000ml of W3112 + 9.00000ml of M5697 + 9.00000ml of M6128 + 9.00000ml of M6145 + 9.90000ml of M6086 + 9.90000ml of M6171 + 9.90000ml of M6172 = Final Quantity: 1000.000 ml |                     |                         |                  |                        |                    |                |                                 |                               |

| <u>Recipe ID</u>                                                                                                               | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>                | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|---------------------------------|-------------------------------|
| 3948                                                                                                                           | S6(SFAM,6020,200.8) | <a href="#">MP86742</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIP<br>ETTE_1 (ICP<br>A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 0.50000ml of M6151 + 1.00000ml of M6162 + 48.50000ml of W3112 + 50.00000ml of MP86741 = Final Quantity: 100.000 ml |                     |                         |                  |                        |                    |                |                                 |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                                               | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3949                                                                                                                           | S5(SFAM,6020,200.8) | <a href="#">MP86743</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 0.50000ml of M6151 + 1.00000ml of M6162 + 73.50000ml of W3112 + 25.00000ml of MP86741 = Final Quantity: 100.000 ml |                     |                         |                  |                        |                    |                |                          |                               |

| <u>Recipe ID</u>                                                                                                               | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3954                                                                                                                           | S4(SFAM,6020,200.8) | <a href="#">MP86744</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 0.50000ml of M6151 + 1.00000ml of M6162 + 86.00000ml of W3112 + 12.50000ml of MP86741 = Final Quantity: 100.000 ml |                     |                         |                  |                        |                    |                |                          |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                                               | <u>NAME</u>          | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3951                                                                                                                           | S3(SFAM, 6020,200.8) | <a href="#">MP86745</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 0.50000ml of M6151 + 1.00000ml of M6162 + 88.50000ml of W3112 + 10.00000ml of MP86742 = Final Quantity: 100.000 ml |                      |                         |                  |                        |                    |                |                          |                               |

| <u>Recipe ID</u>                                                                     | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 1142                                                                                 | ICSA ICPMS  | <a href="#">MP86746</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |
| <b>FROM</b> 10.00000ml of M6185 + 90.00000ml of MP86739 = Final Quantity: 100.000 ml |             |                         |                  |                        |                    |                |                          |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 1143             | ICSAB ICPMS | <a href="#">MP86747</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 10.00000ml of M5245 + 10.00000ml of M6185 + 80.00000ml of MP86739 = Final Quantity: 100.000 ml

| <u>Recipe ID</u> | <u>NAME</u>       | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|-------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3962             | MG 10PPM FOR TUNE | <a href="#">MP86748</a> | 08/12/2025       | 08/26/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 0.01000ml of M6171 + 9.99000ml of MP86739 = Final Quantity: 100.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3894             | TUNE 200PPB | <a href="#">MP86750</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 2.00000ml of M6055 + 2.00000ml of MP86748 + 96.00000ml of MP86739 = Final Quantity: 100.000 ml

| <u>Recipe ID</u> | <u>NAME</u>   | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|---------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 4213             | NEW ICV-6020B | <a href="#">MP86751</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/14/2025 |

**FROM** 0.00800ml of M6163 + 0.00800ml of M6164 + 0.01600ml of M6165 + 49.96800ml of MP86739 = Final Quantity: 50.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u>NAME</u>             | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3955                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | S2CONC(SFAM,6020,200.8) | <a href="#">MP86787</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/18/2025 |
| <b>FROM</b> 0.05000ml of M5798 + 0.05000ml of M5800 + 0.05000ml of M5801 + 0.05000ml of M5981 + 0.05000ml of M6023 + 0.05000ml of M6025 + 0.05000ml of M6027 + 0.05000ml of M6028 + 0.05000ml of M6030 + 0.05000ml of M6079 + 0.05000ml of M6128 + 0.05000ml of M6176 + 0.10000ml of M5658 + 0.10000ml of M5697 + 0.10000ml of M6146 + 0.10000ml of M6159 + 0.25000ml of M5799 + 0.25000ml of M5962 + 0.25000ml of M5979 + 0.25000ml of M6021 + 0.25000ml of M6140 + 0.25000ml of M6145 + 0.25000ml of M6178 + 0.50000ml of M6032 + 0.50000ml of M6137 + 1.25000ml of M5815 + 1.25000ml of M5817 + 1.25000ml of M6151 + 2.50000ml of M6086 + 2.50000ml of M6142 + 2.50000ml of M6162 + 2.50000ml of M6171 + 2.50000ml of M6172 + 230.00000ml of W3112 = Final Quantity: 250.000 ml |                         |                         |                  |                        |                    |                |                          |                               |

| <u>Recipe ID</u>                                                                                                              | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3956                                                                                                                          | S2(SFAM,6020,200.8) | <a href="#">MP86788</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/18/2025 |
| <b>FROM</b> 0.25000ml of M6151 + 0.50000ml of M6162 + 49.00000ml of W3112 + 0.25000ml of MP86787 = Final Quantity: 100.000 ml |                     |                         |                  |                        |                    |                |                          |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>         | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|---------------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3957             | S1(SFAM,6020,200.8) | <a href="#">MP86789</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/18/2025 |

**FROM** 0.25000ml of M6151 + 0.50000ml of M6162 + 44.25000ml of W3112 + 5.00000ml of MP86788 = Final Quantity: 100.000 ml

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|-------------------------------|
| 3880             | M&B SPIKE-1 | <a href="#">MP86790</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | None             | Sarabjit Jaswal<br>08/18/2025 |

**FROM** 5.00000ml of M5658 + 5.00000ml of M5798 + 5.00000ml of M5800 + 5.00000ml of M5962 + 5.00000ml of M5981 + 5.00000ml of M6021 + 5.00000ml of M6023 + 5.00000ml of M6027 + 5.00000ml of M6028 + 5.00000ml of M6030 + 5.00000ml of M6079 + 5.00000ml of M6160 + 5.00000ml of M6176 + 32.50000ml of MP86739 = Final Quantity: 100.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 3881             | M&B SPIKE-2 | <a href="#">MP86791</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | None             | Sarabjit Jaswal      |
| 08/18/2025       |             |                         |                  |                        |                    |                |                  |                      |

**FROM** 10.00000ml of M5979 + 10.00000ml of M6178 + 12.50000ml of M6032 + 12.50000ml of M6140 + 12.50000ml of M6142 + 2.50000ml of M5799 + 2.50000ml of M6137 + 5.00000ml of M6159 + 32.50000ml of MP86739 = Final Quantity: 100.000 ml

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u> |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|----------------------|
| 3882             | M&B SPIKE-3 | <a href="#">MP86792</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal      |
| 08/18/2025       |             |                         |                  |                        |                    |                |                          |                      |

**FROM** 0.62500ml of M6026 + 12.50000ml of M5697 + 12.50000ml of M6128 + 12.50000ml of M6145 + 11.87500ml of MP86739 = Final Quantity: 50.000 ml



## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3900             | M&B SPIKE-4 | <a href="#">MP86793</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/18/2025 |

**FROM** 6.25000ml of M6086 + 6.25000ml of M6171 + 6.25000ml of M6172 + 6.25000ml of MP86739 = Final Quantity: 25.000 ml

| <u>Recipe ID</u> | <u>NAME</u> | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>         | <u>Supervised By</u>          |
|------------------|-------------|-------------------------|------------------|------------------------|--------------------|----------------|--------------------------|-------------------------------|
| 3961             | CCV         | <a href="#">MP86794</a> | 08/12/2025       | 09/02/2025             | Janvi Patel        | None           | METALS_PIPETTE_1 (ICP A) | Sarabjit Jaswal<br>08/18/2025 |

**FROM** 0.20000ml of M6026 + 0.50000ml of M5799 + 0.50000ml of M5981 + 0.50000ml of M6079 + 0.50000ml of M6137 + 0.50000ml of M6176 + 1.00000ml of M5815 + 1.00000ml of M5817 + 10.00000ml of M6162 + 12.45000ml of M6140 + 12.45000ml of M6142 + 2.00000ml of M6032 + 24.95000ml of M6086 + 24.95000ml of M6144 + 24.95000ml of M6171 + 25.00000ml of M6175 + 4.50000ml of M5697 + 4.50000ml of M6128 + 4.50000ml of M6145 + 4.95000ml of M6159 + 5.00000ml of M6151 + 5.50000ml of M5979 + 5.50000ml of M6178 + 824.10000ml of W3112 = Final Quantity: 1000.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                         | <u>NAME</u>                                   | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u>          |
|------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|-------------------------------|
| 67                                                                                       | SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION | <a href="#">MP86830</a> | 08/18/2025       | 02/18/2026             | Sagar Kanani       | None           | None             | Sarabjit Jaswal<br>08/18/2025 |
| <b>FROM</b> 2000.00000ml of W3112 + 240.00000gram of M5501 = Final Quantity: 2000.000 ml |                                               |                         |                  |                        |                    |                |                  |                               |

| <u>Recipe ID</u>                                                                                       | <u>NAME</u>                                | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 871                                                                                                    | MERCURY INTERMEDIATE B 250PPB WORKING STD. | <a href="#">MP86831</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 1.00000ml of M6162 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml |                                            |                         |                  |                        |                    |                |                        |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>     | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|-----------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1340             | Hg 0.00 PPB STD | <a href="#">MP86832</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

| <u>Recipe ID</u> | <u>NAME</u>    | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|----------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1341             | Hg 0.2 PPB STD | <a href="#">MP86833</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 247.50000ml of W3112 + 0.20000ml of MP86831 = Final Quantity: 250.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                          | <u>NAME</u>    | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|-----------------------------------------------------------------------------------------------------------|----------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1342                                                                                                      | Hg 2.5 PPB STD | <a href="#">MP86834</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 2.50000ml of M6162 + 245.00000ml of W3112 + 2.50000ml of MP86831 = Final Quantity: 250.000 ml |                |                         |                  |                        |                    |                |                        |                               |

| <u>Recipe ID</u>                                                                                          | <u>NAME</u>    | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|-----------------------------------------------------------------------------------------------------------|----------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1343                                                                                                      | Hg 5.0 PPB STD | <a href="#">MP86835</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 2.50000ml of M6162 + 242.50000ml of W3112 + 5.00000ml of MP86831 = Final Quantity: 250.000 ml |                |                         |                  |                        |                    |                |                        |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                          | <u>NAME</u>    | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|-----------------------------------------------------------------------------------------------------------|----------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1344                                                                                                      | Hg 7.5 PPB STD | <a href="#">MP86836</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 2.50000ml of M6162 + 240.00000ml of W3112 + 7.50000ml of MP86831 = Final Quantity: 250.000 ml |                |                         |                  |                        |                    |                |                        |                               |

| <u>Recipe ID</u>                                                                                           | <u>NAME</u>     | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1345                                                                                                       | Hg 10.0 PPB STD | <a href="#">MP86837</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 2.50000ml of M6162 + 237.50000ml of W3112 + 10.00000ml of MP86831 = Final Quantity: 250.000 ml |                 |                         |                  |                        |                    |                |                        |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>     | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|-----------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1346             | Hg ICV SOLUTION | <a href="#">MP86838</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 245.00000ml of W3112 = Final Quantity: 250.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|----------------------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1351             | ICB (Hg 0.00 PPB SOLUTION) | <a href="#">MP86839</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 247.50000ml of W3112 = Final Quantity: 250.000 ml

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                           | <u>NAME</u>               | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1358                                                                                                       | CCV (Hg 5.0 PPB SOLUTION) | <a href="#">MP86840</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 485.00000ml of W3112 + 5.00000ml of M6162 + 10.00000ml of MP86831 = Final Quantity: 500.000 ml |                           |                         |                  |                        |                    |                |                        |                               |

| <u>Recipe ID</u>                                                                   | <u>NAME</u>                | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>       | <u>Supervised By</u>          |
|------------------------------------------------------------------------------------|----------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------------|-------------------------------|
| 1352                                                                               | CCB (Hg 0.00 PPB SOLUTION) | <a href="#">MP86841</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HGA) | Sarabjit Jaswal<br>08/25/2025 |
| <b>FROM</b> 495.00000ml of W3112 + 5.00000ml of M6162 = Final Quantity: 500.000 ml |                            |                         |                  |                        |                    |                |                        |                               |

## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u> | <u>NAME</u>                   | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|-------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1349             | CRA/CRI (Hg 0.2 PPB SOLUTION) | <a href="#">MP86842</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 247.50000ml of W3112 + 0.20000ml of MP86831 = Final Quantity: 250.000 ml

| <u>Recipe ID</u> | <u>NAME</u>                   | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u>        | <u>Supervised By</u>          |
|------------------|-------------------------------|-------------------------|------------------|------------------------|--------------------|----------------|-------------------------|-------------------------------|
| 1350             | CHK STD (Hg 7.0 PPB SOLUTION) | <a href="#">MP86843</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | METALS_PIPETTE_5 (HG A) | Sarabjit Jaswal<br>08/25/2025 |

**FROM** 2.50000ml of M6162 + 240.50000ml of W3112 + 7.00000ml of MP86831 = Final Quantity: 250.000 ml



## Metals STANDARD PREPARATION LOG

| <u>Recipe ID</u>                                                                                            | <u>NAME</u>                | <u>NO.</u>              | <u>Prep Date</u> | <u>Expiration Date</u> | <u>Prepared By</u> | <u>ScaleID</u> | <u>PipetteID</u> | <u>Supervised By</u> |
|-------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 68                                                                                                          | STANNOUS CHLORIDE SOLUTION | <a href="#">MP86845</a> | 08/19/2025       | 08/20/2025             | Sagar Kanani       | None           | None             | Sarabjit Jaswal      |
| <b>FROM</b> 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6151 = Final Quantity: 500.000 ml |                            |                         |                  |                        |                    |                |                  |                      |

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## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName                       | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3238-05 / Potassium Persulfate (2.5kg) | 0000234156 | 08/06/2025      | 07/23/2019 / jaswal     | 07/25/2019 / manojkumar     | M4465          |

| Supplier         | ItemCode / ItemName                         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3227-05 / Potassium Permanganate (2.5kg) | 210800 | 03/31/2026      | 11/30/2022 / mohan      | 07/28/2021 / mohan          | M4916          |

| 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 B / ICSB (ICPMS) STOCK SOLUTION | CP-MS ICSB-0803 | 07/01/2026      | 07/02/2025 / jaswal     | 02/20/2020 / jaswal         | M5245          |

| Supplier           | ItemCode / ItemName                          | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|----------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | 6020CAL-1 / Calibration Standard Method 6020 | S2-MEB711244 | 10/20/2026      | 03/07/2025 / JANVI      | 04/01/2022 / jaswal         | M5305          |

| Supplier         | ItemCode / ItemName                                | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|----------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg) | 0000281938 | 07/06/2026      | 07/24/2023 / mohan      | 04/14/2023 / mohan          | M5501          |

## CHEMICAL RECEIPT LOG BOOK

| 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          |

| 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. | 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          |

## CHEMICAL RECEIPT LOG BOOK

| 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. | 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 # |
|------------------|--------------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| 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 # |
|--------------------------|------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 57034 / Se, 1000 PPM, 125 ml | 060624 | 06/06/2027      | 07/02/2024 / Jaswal     | 06/14/2024 / Jaswal         | M5962          |

| Supplier           | ItemCode / ItemName                | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|------------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | CGT11-1 / TITANIUM 125mL 1000ug/mL | T2-TI719972 | 08/05/2026      | 08/06/2025 / Janvi      | 02/22/2024 / Jaswal         | M5979          |

| Supplier                 | ItemCode / ItemName         | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-----------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 57092 / U, 1000 PPM, 125 ml | 060724 | 06/07/2027      | 07/29/2024 / Jaswal     | 06/11/2024 / Jaswal         | M5981          |

## 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 / TI, 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. | 57082 / Pb, 1000 PPM, 125 ml | 061224 | 11/09/2026      | 08/05/2024 / Jaswal     | 08/05/2024 / Jaswal         | M6025          |

| Supplier                 | ItemCode / ItemName           | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|-------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 57182 / Pb, 10000 PPM, 125 ml | 110923 | 11/09/2026      | 12/05/2024 / janvi      | 08/05/2024 / Jaswal         | M6026          |

| Supplier                 | ItemCode / ItemName          | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 57028 / Ni, 1000 PPM, 125 ml | 062024 | 06/20/2027      | 06/04/2025 / Janvi      | 08/05/2024 / Jaswal         | M6027          |

| 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     | 08/05/2024 / Jaswal         | M6028          |

## CHEMICAL RECEIPT LOG BOOK

| 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. | 57056 / Ba, 1000 PPM, 125 ml | 010924 | 01/09/2027      | 01/14/2025 / Jaswal     | 08/05/2024 / Jaswal         | M6032          |

| Supplier         | ItemCode / ItemName                                     | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|---------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L) | 23D2462010 | 03/20/2028      | 08/16/2024 / mohan      | 08/16/2024 / mohan          | M6041          |

| Supplier           | ItemCode / ItemName                         | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|---------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | IV-STOCK-12 / ICP-MS TUNING SOLUTION, 125mL | U2-MEB734294 | 06/21/2028      | 08/21/2024 / Jaswal     | 08/19/2024 / Jaswal         | M6055          |

| Supplier                 | ItemCode / ItemName          | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 57040 / Zr, 1000 PPM, 125 ml | 071423 | 07/14/2026      | 01/15/2025 / Jaswal     | 09/30/2024 / Jaswal         | M6079          |

| Supplier                 | ItemCode / ItemName                | Lot #  | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------------|------------------------------------|--------|-----------------|-------------------------|-----------------------------|----------------|
| Absolute Standards, Inc. | 58120 / Calcium, 500 ml, 10000 PPM | 082324 | 08/23/2027      | 03/06/2025 / JANVI      | 10/14/2024 / jaswal         | M6086          |

## CHEMICAL RECEIPT LOG BOOK

| 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 | 101124 | 10/11/2027      | 01/13/2025 / kareem     | 01/13/2025 / kareem         | M6128          |

| Supplier           | ItemCode / ItemName               | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|-----------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | CGSI1-1 / SILICON 125mL 1000ug/mL | V2-SI744713 | 07/10/2029      | 01/14/2025 / Jaswal     | 10/03/2024 / Jaswal         | M6137          |

| 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 | 011025 | 01/10/2028      | 06/25/2025 / Janvi      | 01/13/2025 / Jaswal         | M6140          |

| 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 | 103024 | 10/30/2027      | 05/06/2025 / JANVI      | 01/13/2025 / Jaswal         | M6142          |

| 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 | 072424 | 07/24/2027      | 01/23/2025 / kareem     | 01/13/2025 / Jaswal         | M6144          |

| 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 | 121724 | 12/17/2027      | 02/04/2025 / jaswal     | 01/13/2025 / Jaswal         | M6145          |

## CHEMICAL RECEIPT LOG BOOK

| 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 | 071724 | 07/17/2027      | 01/31/2025 / kareem     | 10/18/2024 / kareem         | M6146          |

| 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) | 22G2862015 | 02/17/2026      | 02/18/2025 / Sagar      | 01/15/2025 / Sagar          | M6151          |

| Supplier           | ItemCode / ItemName                      | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|------------------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | CGSR10 / Strontium (SR), 125mL 10,000ppm | V2-SR754329 | 02/28/2026      | 02/28/2025 / JANVI      | 01/07/2025 / JANVI          | M6153          |

| 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 | 09/09/2025      | 03/10/2025 / Eman       | 02/02/2025 / Sagar          | M6158          |

| 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 | 011325 | 03/18/2026      | 03/18/2025 / kareem     | 02/09/2025 / kareem         | M6159          |

| 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 | 071724 | 07/17/2027      | 03/24/2025 / kareem     | 10/18/2024 / kareem         | M6160          |



## 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) | 24H0162012 | 11/27/2025      | 05/27/2025 / Sagar      | 04/27/2025 / Sagar          | M6162          |

| Supplier           | ItemCode / ItemName                                   | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|-------------------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | QCP-CICV-1-125ML / EPA CLP ICP Verification Standard1 | V2-MEB744107 | 06/08/2026      | 06/09/2025 / jaswal     | 06/06/2025 / jaswal         | M6163          |

| Supplier           | ItemCode / ItemName                                   | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|-------------------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | QCP-CICV-2-125ML / EPA CLP ICP Verification Standard2 | U2-MEB733713 | 06/08/2026      | 06/09/2025 / jaswal     | 06/09/2025 / jaswal         | M6164          |

| Supplier           | ItemCode / ItemName                                   | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|-------------------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | QCP-CICV-3-125ML / EPA CLP ICP Verification Standard3 | V2-MEB749572 | 06/08/2026      | 06/09/2025 / jaswal     | 06/09/2025 / jaswal         | M6165          |

| 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 | 011525 | 01/15/2028      | 07/15/2025 / jaswal     | 02/13/2025 / Janvi          | M6171          |

| Supplier           | ItemCode / ItemName                  | Lot #       | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|--------------------------------------|-------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | CGNA10-5 / Sodium, 500 ml, 10000 PPM | V2-NA740547 | 07/29/2026      | 07/29/2025 / Janvi      | 01/25/2025 / Janvi          | M6172          |

## CHEMICAL RECEIPT LOG BOOK

| Supplier           | ItemCode / ItemName                          | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|--------------------|----------------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| Inorganic Ventures | 6020CAL-1 / Calibration Standard Method 6020 | V2-MEB742014 | 07/17/2026      | 07/17/2025 / Janvi      | 01/27/2025 / Janvi          | M6175          |

| 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 | 092724 | 09/27/2027      | 08/06/2025 / Janvi      | 08/06/2025 / Janvi          | M6176          |

| 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 | 080528 | 08/05/2028      | 08/06/2025 / Janvi      | 08/06/2025 / Janvi          | M6178          |

| Supplier | ItemCode / ItemName                | Lot #        | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|----------|------------------------------------|--------------|-----------------|-------------------------|-----------------------------|----------------|
| EPA      | PART A / ICSA ( ICPMS ) STOCK SOLN | MS ICSA-0803 | 07/01/2026      | 07/02/2025 / jaswal     | 07/14/2022 / Janvi          | M6185          |

| 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          |

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.



**Certified Reference Material CRM**

M6032

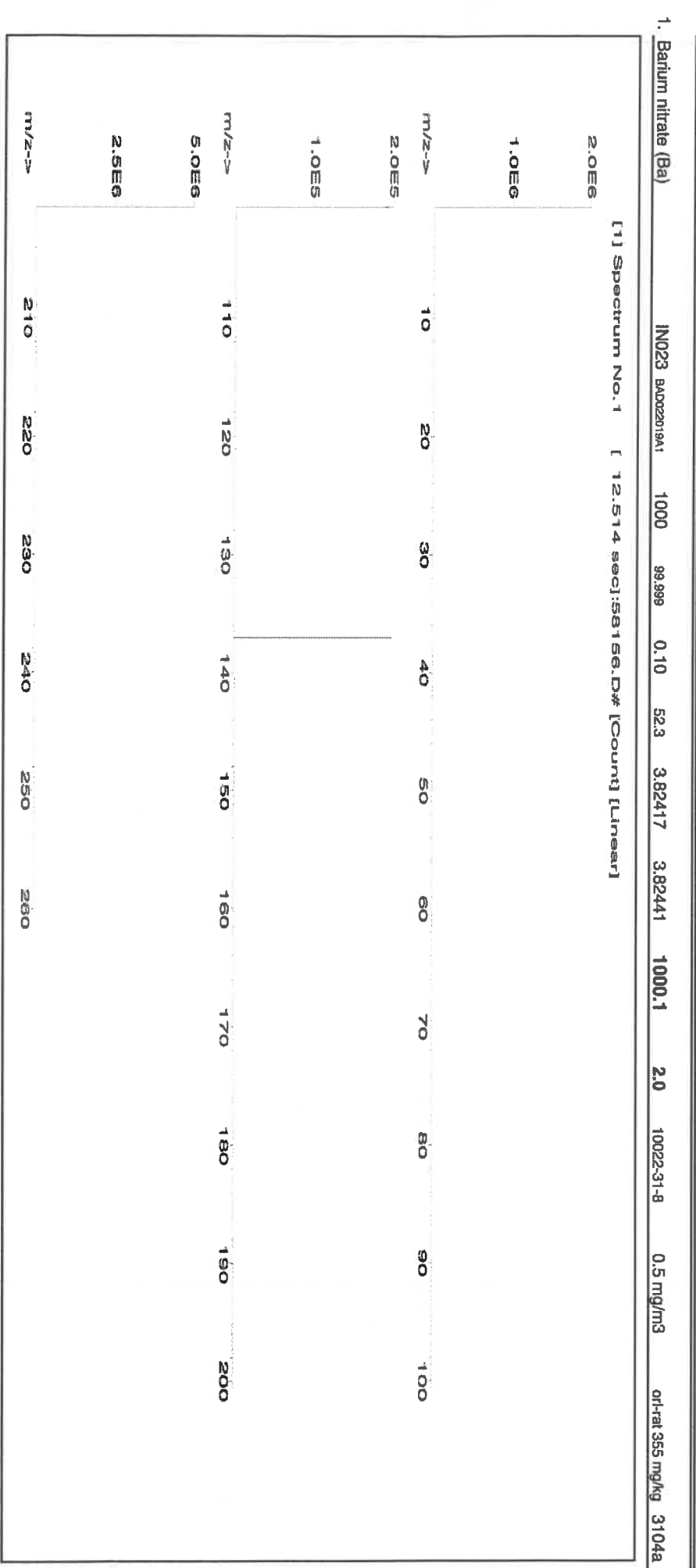


**CERTIFIED WEIGHT REPORT:**

|                                                |                    |                 |                            |
|------------------------------------------------|--------------------|-----------------|----------------------------|
| <b>Part Number:</b>                            | <b>57056</b>       | <b>Lot #</b>    |                            |
| <b>Lot Number:</b>                             | <b>010924</b>      | <b>Solvent:</b> | <b>Nitric Acid</b>         |
| <b>Description:</b>                            | <b>Barium (Ba)</b> |                 |                            |
| <b>Expiration Date:</b>                        | 010927             | <b>2%</b>       | <b>40.0 (mL)</b>           |
| <b>Recommended Storage:</b>                    | Ambient (20 °C)    |                 | <b>Nitric Acid</b>         |
| <b>Nominal Concentration (µg/mL):</b>          | 1000               |                 |                            |
| <b>NIST Test Number:</b>                       | 6UTB               | <b>5E-05</b>    | <b>Balance Uncertainty</b> |
| <b>Weight shown below was diluted to (mL):</b> | 2000.02            | <b>0.058</b>    | <b>Flask Uncertainty</b>   |

|                       |                          |               |
|-----------------------|--------------------------|---------------|
| <b>Formulated By:</b> | <b>Giovanni Esposito</b> | <b>010924</b> |
| <b>Reviewed By:</b>   | <b>Pedro L. Renteria</b> | <b>010924</b> |

| SDS Information        |            |                       |            |                 |           |                   |                   |                      |                                  |
|------------------------|------------|-----------------------|------------|-----------------|-----------|-------------------|-------------------|----------------------|----------------------------------|
| Compound               | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) |
| 1. Barium nitrate (Ba) | IN023      | BA0022019A1           | 1000       | 99.999          | 0.10      | 52.3              | 3.82417           | 3.82441              | 1000.1                           |





**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:**

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 certified (+/-) 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).



**Certified Reference Material CRM**



Rev'd 2/10/14/2021 M6085 / M6086 / M6087

**CERTIFIED WEIGHT REPORT:**

**Part Number:** 58120  
**Lot Number:** 082324  
**Description:** Calcium (Ca)

**Solvent:** 24002546 Nitric Acid

**Lot #**

**2%** 80.0 Nitric Acid (mL)

**Expiration Date:** 082327

**Recommended Storage:** Ambient (20 °C)

**Nominal Concentration (µg/mL):** 10000

**NIST Test Number:** 6UTB

**Weight shown below was diluted to (mL):** 4000.1 0.15 Balance Uncertainty Flask Uncertainty

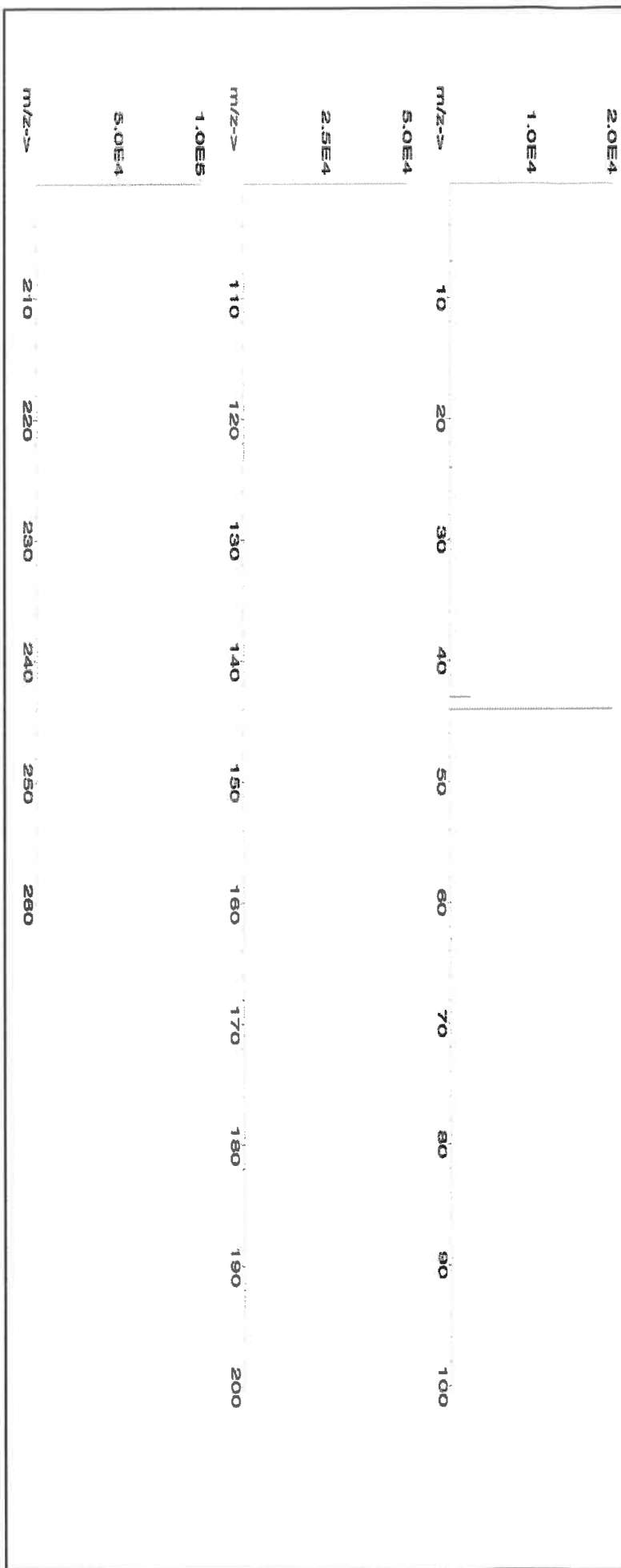
|                          |                   |
|--------------------------|-------------------|
| <i>Giovanni Esposito</i> |                   |
| Formulated By:           | Giovanni Esposito |
| Reviewed By:             | Pedro L. Rentas   |
|                          | 082324            |

**SDS Information**

| 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) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|-----|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|----------|-----|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

1. Calcium carbonate (Ca) IN014 CAD03202383 10000 99.999 0.10 39.9 100.2537 100.2656 10001.2 20.0 471-34-1 5 mg/m3 or-rat >2000mg/kg 3109a

[1] Spectrum No. 1 [12.514 sec]: 58120.D\* [Count] [Linear]







**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 | Pt | <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 | Ba | <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 | 30    | 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 | Sa | <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 certified (+/-) 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).



M6028



**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57048  
**Lot Number:** 070124  
**Description:** Cadmium (Cd)

**Solvent:** 24002546 Nitric Acid

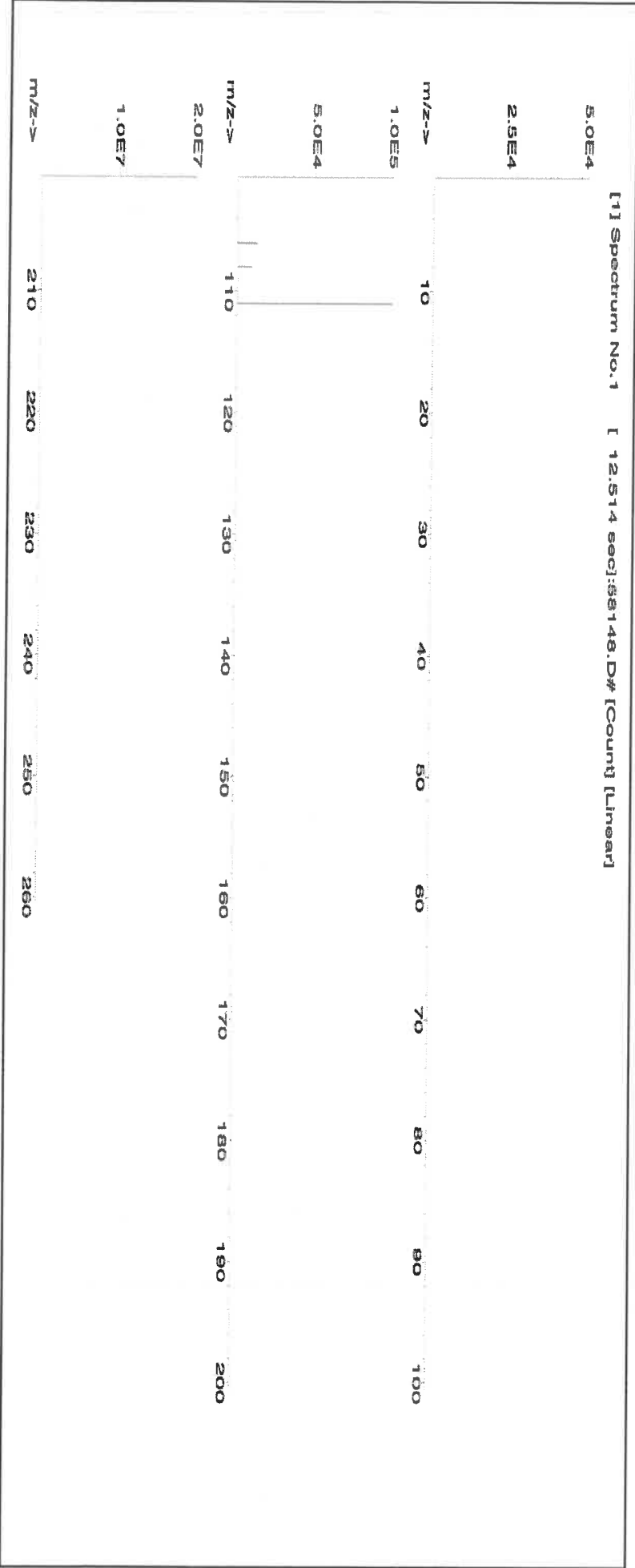
**Expiration Date:** 070127  
**Recommended Storage:** Ambient (20 °C)  
**Nominal Concentration (µg/mL):** 1000  
**NIST Test Number:** 6UTB

**2%** 40.0 (mL) Nitric Acid

**Weight shown below was diluted to (mL):** 2000.07 0.100 Balance Uncertainty Flask Uncertainty

|                        |                 |
|------------------------|-----------------|
| <i>Aleah O'Brady</i>   |                 |
| Formulated By:         | Aleah O'Brady   |
| <i>Pedro L. Rentas</i> |                 |
| Reviewed By:           | Pedro L. Rentas |
| 070124                 |                 |

| Compound                             | Lot   |            |                       |            | Expanded        |           |                   |                   | SDS Information      |                                        |
|--------------------------------------|-------|------------|-----------------------|------------|-----------------|-----------|-------------------|-------------------|----------------------|----------------------------------------|
|                                      | RW#   | Number     | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | (Solvent Safety Info. On Attached pg.) |
| 1. Cadmium nitrate tetrahydrate (Cd) | IN024 | CDM09221A1 | 1000                  | 99.999     | 0.10            | 36.5      | 5.4797            | 5.4804            | 1000.1               | 2.0                                    |
|                                      |       |            |                       |            |                 |           |                   |                   |                      | 10022-68-1                             |
|                                      |       |            |                       |            |                 |           |                   |                   |                      | 0.01 mg/m3                             |
|                                      |       |            |                       |            |                 |           |                   |                   |                      | or 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 | <0.2  | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <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 | Ba | <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 | Cd | <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 | Pr | <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 certified (+/-) 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).



Instructions for QATS Reference Material: *ICP-MS ICS*

**QATS LABORATORY INORGANIC REFERENCE MATERIAL  
INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (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 an 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-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

**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**

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. 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 the ICP-MS ICS 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-0803, Interferents:** Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this solution by ICP-MS.

**ICSB-0803, Analytes, mixed with ICSA-0803, 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 1% v/v HNO<sub>3</sub>. Analyze this ICSAB solution by ICP-MS.

**(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS 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-MS<br>ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803 |      |                  |                          |                          |                             |                          |                          |
|-------------------------------------------------------------------------------------------------------------------|------|------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|
| Element                                                                                                           | CRQL | Part A<br>(µg/L) | Lower<br>Limit<br>(µg/L) | Upper<br>Limit<br>(µg/L) | Part A<br>+Part B<br>(µg/L) | Lower<br>Limit<br>(µg/L) | Upper<br>Limit<br>(µg/L) |
| Al                                                                                                                | 20   | [100000]         |                          |                          | [100000]                    |                          |                          |
| Sb                                                                                                                | 2.0  | (1.5)            | -2.5                     | 5.5                      | (22.0)                      | 18.0                     | 26.0                     |
| As                                                                                                                | 1.0  | (0.10)           | -1.9                     | 2.1                      | 19.0                        | 16.2                     | 21.9                     |
| Ba                                                                                                                | 10   | (1.2)            | -18.8                    | 21.2                     | (22.0)                      | 2.0                      | 42.0                     |
| Be                                                                                                                | 1.0  | (0.0)            | -2.0                     | 2.0                      | 19.0                        | 16.2                     | 21.9                     |
| Cd                                                                                                                | 1.0  | (0.70)           | -1.3                     | 2.7                      | 20.0                        | 17.0                     | 23.0                     |
| Ca                                                                                                                | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| C                                                                                                                 |      | [200000]         |                          |                          | [200000]                    |                          |                          |
| Cl                                                                                                                |      | [1000000]        |                          |                          | [1000000]                   |                          |                          |
| Cr                                                                                                                | 2.0  | (21.0)           | 17.0                     | 25.0                     | 40.0                        | 34.0                     | 46.0                     |
| Co                                                                                                                | 1.0  | (1.0)            | -1.0                     | 3.0                      | 20.0                        | 17.0                     | 23.0                     |
| Cu                                                                                                                | 2.0  | (8.0)            | 4.0                      | 12.0                     | (25.0)                      | 21.0                     | 29.0                     |
| Fe                                                                                                                | 200  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Pb                                                                                                                | 1.0  | (4.0)            | 2.0                      | 6.0                      | 25.0                        | 21.3                     | 28.8                     |
| Mg                                                                                                                | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Mn                                                                                                                | 1.0  | (7.0)            | 5.0                      | 9.0                      | 27.0                        | 23.0                     | 31.1                     |
| Mo                                                                                                                |      | [2000]           |                          |                          | [2000]                      |                          |                          |
| Ni                                                                                                                | 1.0  | (6.0)            | 4.0                      | 8.0                      | 24.0                        | 20.4                     | 27.6                     |
| P                                                                                                                 |      | [100000]         |                          |                          | [100000]                    |                          |                          |
| K                                                                                                                 | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Se                                                                                                                | 5.0  | (0.30)           | -9.7                     | 10.0                     | (19.0)                      | 9.0                      | 29.0                     |
| Ag                                                                                                                | 1.0  | (0.0)            | -2.0                     | 2.0                      | 18.0                        | 15.3                     | 20.7                     |
| Na                                                                                                                | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| S                                                                                                                 |      | [100000]         |                          |                          | [100000]                    |                          |                          |
| Tl                                                                                                                | 1.0  | (0.0)            | -2.0                     | 2.0                      | 21.0                        | 17.9                     | 24.2                     |
| Ti                                                                                                                |      | [2000]           |                          |                          | [2000]                      |                          |                          |
| V                                                                                                                 | 5.0  | (0.50)           | -9.5                     | 10.5                     | (19.0)                      | 9.0                      | 29.0                     |
| Zn                                                                                                                | 5.0  | (11.0)           | 1.0                      | 21.0                     | (29.0)                      | 19.0                     | 39.0                     |

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value  $\pm$  2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value  $\pm$  15 percent of the listed certified value.

ICSA:  
M5244

ICSB:  
M5245



**Certified Reference Material CRM**



**CERTIFIED WEIGHT REPORT:**

Part Number: 57182  
Lot Number: 110923  
Description: Lead (Pb)  
Solvent: 24002546 Nitric Acid  
Lot #: M6025

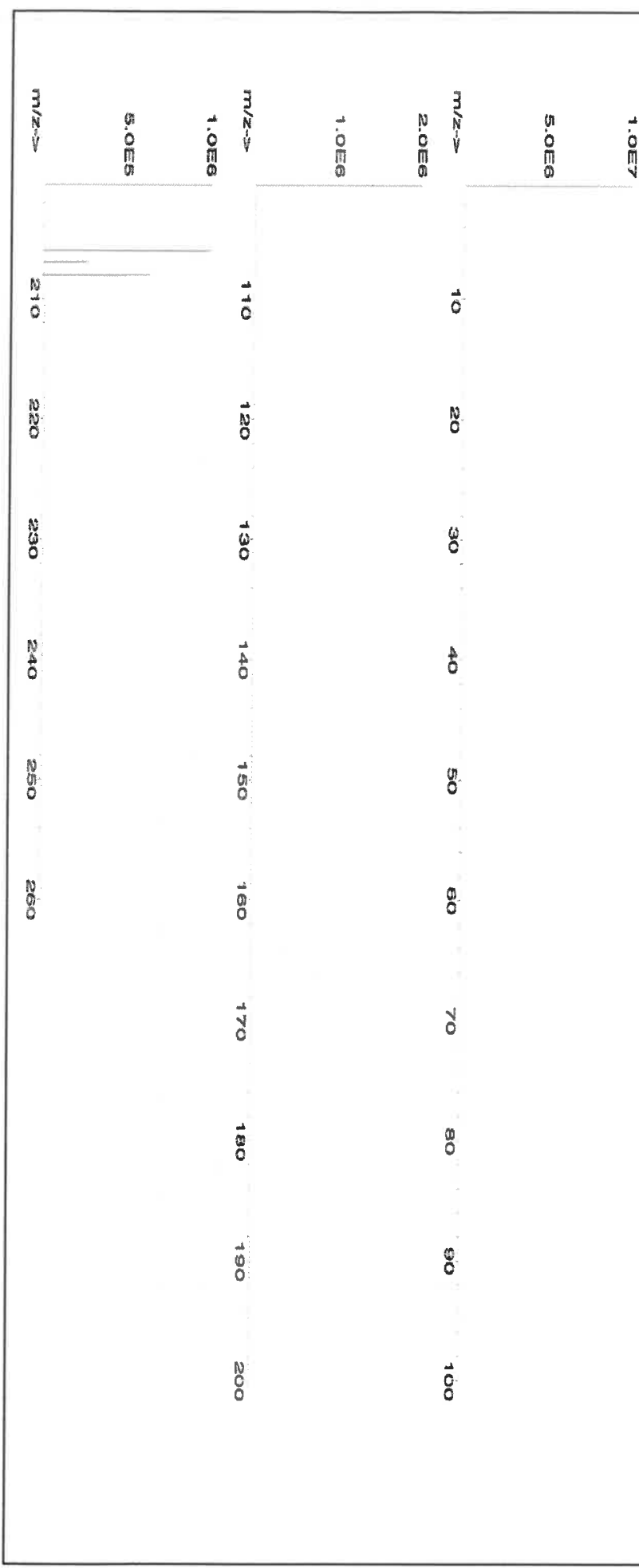
Expiration Date: 110926  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration (µg/mL): 10000  
NIST Test Number: 6UTB  
Weight shown below was diluted to (mL): 2000.02  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

|                |                 |
|----------------|-----------------|
|                |                 |
| Formulated By: | Lawrence Barry  |
|                |                 |
| Reviewed By:   | Pedro L. Rentas |
| 110923         |                 |

| Compound | SDS Information |            |                       |            |                        |           |                   |                   |                      |                                  |
|----------|-----------------|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|
|          | 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) |

1. Lead(II) nitrate (Pb) IN029 PED122016A1 10000 99.999 0.10 62.5 32.0006 32.0040 10001.1 20.0 10099-74-8 0.05 mg/m3 Inverse rat 83 mg/kg 3128

[1] Spectrum No.1 [ 17.284 sec]:58182.D# [Count] [Linear]





**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )**

|    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <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 | Bu | <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 |

**Physical Characterization:**

(T)= Target analyte

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 certified (+/-) 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).



MC026



**CERTIFIED WEIGHT REPORT:**

Part Number: **57182**  
Lot Number: **110923**  
Description: **Lead (Pb)**

Lot #  
Solvent: **24002546 Nitric Acid**

Expiration Date: **110926**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **10000**  
NIST Test Number: **6UTB**

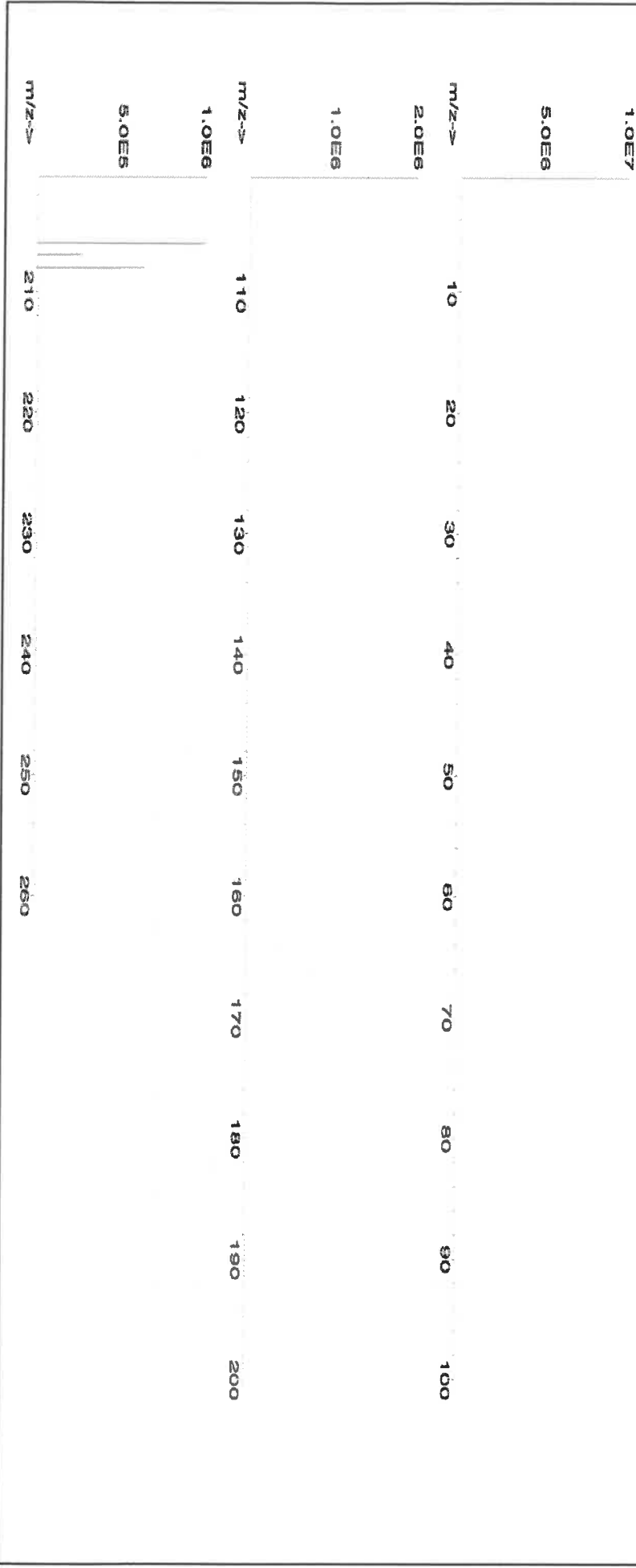
2% **40.0 (mL)** **Nitric Acid**

Weight shown below was diluted to (mL): **2000.02** **0.058** **Flask Uncertainty**

|                |                 |
|----------------|-----------------|
|                |                 |
| Formulated By: | Lawrence Barry  |
|                |                 |
| Reviewed By:   | Pedro L. Rentas |

| SDS Information          |        |               |        |             |       |            |            |               |                    |
|--------------------------|--------|---------------|--------|-------------|-------|------------|------------|---------------|--------------------|
| Compound                 | Lot    | Nominal       | Purity | Uncertainty | Assay | Target     | Actual     | Actual        | Expanded           |
|                          | Number | Conc. (µg/mL) | (%)    | Purity (%)  | (%)   | Weight (g) | Weight (g) | Conc. (µg/mL) | +/- (µg/mL)        |
| 1. Lead(II) nitrate (Pb) | IN029  | PED12016A1    | 10000  | 99.999      | 0.10  | 62.5       | 32.0006    | 32.0040       | 10001.1            |
|                          |        |               |        |             |       |            |            |               | 20.0               |
|                          |        |               |        |             |       |            |            |               | 10099-74-8         |
|                          |        |               |        |             |       |            |            |               | 0.05 mg/m3         |
|                          |        |               |        |             |       |            |            |               | intrinsic 83 mg/kg |
|                          |        |               |        |             |       |            |            |               | 3128               |

[1] Spectrum No.1 [ 17.284 sec]:58182.D# [Count] [Linear]







**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )**

|    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <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 | Bu | <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 |

**Physical Characterization:**

(T)= Target analyte

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 certified (+/-) 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).

M4913-16

MS

## 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 – 0120632

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    | P279                           | Quality Test / Release Date | 01/12/2021 |
| Lot Number        | 210306                         |                             |            |
| Description       | POTASSIUM PERMANGANATE, A.C.S. |                             |            |
| Country of Origin | United States                  | Suggested Retest Date       | Jan/2026   |

| N/A                 |           |                |                                      |
|---------------------|-----------|----------------|--------------------------------------|
| Result Name         | Units     | Specifications | Test Value                           |
| APPEARANCE          |           | REPORT         | Dark purple to purple green crystals |
| ASSAY               | %         | >= 99          | 99.3                                 |
| CHLORIDE & CHLORATE | %         | <= 0.005       | <0.005                               |
| IDENTIFICATION      | PASS/FAIL | = PASS TEST    | pass test                            |
| INSOLUBLE MATTER    | %         | <= 0.2         | <0.2                                 |
| MERCURY (Hg)        | ppm       | <= 0.05        | <0.004                               |
| SULFATE (SO4)       | %         | <= 0.02        | <0.02                                |

*Julian Burton*

Julian Burton - Quality Control Manager – 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.



300 Technology Drive  
Christiansburg, VA 24073 USA  
inorganicventures.com

P: 800-669-6799/540-585-3030  
F: 540-585-3012  
info@inorganicventures.com

MS062  
MS063  
MB

## 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).



## 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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

$X_i$  = 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.  
 $w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum ((w_i)^2 (u_{char i}^2))]^{1/2}$  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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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](http://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<sub>3</sub>. 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<sub>3</sub> / LDPE container, stable in 10% HNO<sub>3</sub> packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO<sub>3</sub> packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO<sub>3</sub> / LDPE container.

**Hg Containing Samples (Preparation and Solution)** - Metal (soluble in HNO<sub>3</sub>); Oxide (Soluble in HNO<sub>3</sub>); 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

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va, 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; [inorganicventures.com](http://inorganicventures.com); [info@inorganicventures.com](mailto:info@inorganicventures.com)

## 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





Refine your results. Redefine your industry.

# Certificate of Analysis

300 Technology Drive  
Christiansburg, VA 24073 USA  
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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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: 6020CAL-1  
Lot Number: S2-MEB711244  
Matrix: 5% (v/v) HNO<sub>3</sub>  
tr. HF  
Value / Analyte(s): 20 µg/mL ea:  
Silver, Aluminum,  
Arsenic, Barium,  
Beryllium, Calcium,  
Cadmium, Cobalt,  
Chromium, Copper,  
Iron, Potassium,  
Magnesium, Manganese,  
Sodium, Nickel,  
Lead, Antimony,  
Selenium, Thallium,  
Vanadium, Zinc

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE       | CERTIFIED VALUE    | ANALYTE       | CERTIFIED VALUE    |
|---------------|--------------------|---------------|--------------------|
| Aluminum, Al  | 20.01 ± 0.08 µg/mL | Antimony, Sb  | 20.01 ± 0.12 µg/mL |
| Arsenic, As   | 20.01 ± 0.18 µg/mL | Barium, Ba    | 20.01 ± 0.11 µg/mL |
| Beryllium, Be | 20.01 ± 0.14 µg/mL | Cadmium, Cd   | 20.01 ± 0.11 µg/mL |
| Calcium, Ca   | 20.01 ± 0.10 µg/mL | Chromium, Cr  | 20.01 ± 0.16 µg/mL |
| Cobalt, Co    | 20.01 ± 0.11 µg/mL | Copper, Cu    | 20.01 ± 0.10 µg/mL |
| Iron, Fe      | 20.01 ± 0.09 µg/mL | Lead, Pb      | 20.01 ± 0.11 µg/mL |
| Magnesium, Mg | 19.99 ± 0.10 µg/mL | Manganese, Mn | 20.01 ± 0.10 µg/mL |
| Nickel, Ni    | 20.01 ± 0.11 µg/mL | Potassium, K  | 20.01 ± 0.10 µg/mL |
| Selenium, Se  | 20.02 ± 0.14 µg/mL | Silver, Ag    | 20.02 ± 0.09 µg/mL |
| Sodium, Na    | 20.01 ± 0.10 µg/mL | Thallium, Tl  | 20.01 ± 0.13 µg/mL |
| Vanadium, V   | 20.01 ± 0.11 µg/mL | Zinc, Zn      | 20.01 ± 0.11 µg/mL |

**Density:** 1.026 g/mL (measured at 20 ± 4 °C)

**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          |
| As      | ICP Assay   | 3103a     | 100818       |
| Ba      | ICP Assay   | 3104a     | 140909       |
| Ba      | Gravimetric |           | See Sec. 4.2 |
| Be      | ICP Assay   | 3105a     | 090514       |
| Ca      | ICP Assay   | 3109a     | 130213       |
| Ca      | EDTA        | 928       | 928          |
| Cd      | ICP Assay   | 3108      | 130116       |
| Cd      | EDTA        | 928       | 928          |
| Co      | ICP Assay   | 3113      | 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          |
| Fe      | Calculated  |           | See Sec. 4.2 |
| 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          |
| Pb      | ICP Assay   | 3128      | 101026       |
| Pb      | EDTA        | 928       | 928          |
| Se      | ICP Assay   | 3149      | 100901       |
| Se      | Calculated  |           | See Sec. 4.2 |
| Tl      | ICP Assay   | 3158      | 151215       |
| Tl      | Calculated  |           | See Sec. 4.2 |
| V       | ICP Assay   | 3165      | 160906       |
| V       | EDTA        | 928       | 928          |
| Zn      | ICP Assay   | 3168a     | 120629       |
| Zn      | EDTA        | 928       | 928          |

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

#### Characterization of CRM/RM by Two or More Methods

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

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

$X_i$  = mean of Assay Method  $i$  with standard uncertainty  $u_{\text{char } i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2 (u_{\text{char } i}^2)]^{1/2}$  where  $u_{\text{char } i}$  are the errors from each characterization method

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = transport stability standard uncertainty

#### Characterization of CRM/RM by One Method

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

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

$X_a$  = mean of Assay Method A with

$u_{\text{char } a}$  = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char } a}$  = the errors from characterization

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = 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](http://www.inorganicventures.com/TCT)

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

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

## 8.0 HAZARDOUS INFORMATION

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

## 9.0 HOMOGENEITY

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

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

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

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

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

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

October 20, 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

- **October 20, 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





Sodium Chloride, Crystal  
BAKER ANALYZED® A.C.S. Reagent



M5497 - M5508  
And on 4/14/23  
063

Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

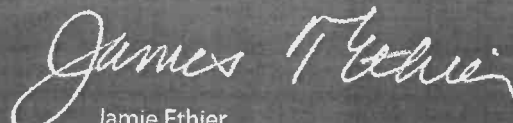
Retest Date: 2026-06-07

Revision No.: 2

## Certificate of Analysis

| Test                                       | Specification | Result      |
|--------------------------------------------|---------------|-------------|
| Assay (NaCl) (by Ag titrn)                 | ≥ 99.0 %      | 100.0 %     |
| pH of 5% Solution at 25°C                  | 5.0 - 9.0     | 6.3         |
| Insoluble Matter                           | ≤ 0.005 %     | 0.003 %     |
| Iodide (I)                                 | ≤ 0.002 %     | < 0.002 %   |
| Bromide (Br)                               | ≤ 0.01 %      | < 0.01 %    |
| Chlorate and Nitrate (as NO <sub>3</sub> ) | ≤ 0.003 %     | < 0.001 %   |
| ACS - Phosphate (PO <sub>4</sub> )         | ≤ 5 ppm       | < 5 ppm     |
| Sulfate (SO <sub>4</sub> )                 | ≤ 0.004 %     | < 0.004 %   |
| Barium (Ba)                                | Passes Test   | Passes Test |
| ACS - Heavy Metals (as Pb)                 | ≤ 5 ppm       | < 5 ppm     |
| Iron (Fe)                                  | ≤ 2 ppm       | < 1 ppm     |
| Calcium (Ca)                               | ≤ 0.002 %     | < 0.001 %   |
| Magnesium (Mg)                             | ≤ 0.001 %     | < 0.001 %   |
| Potassium (K)                              | ≤ 0.005 %     | 0.001 %     |

For Laboratory, Research, or Manufacturing Use  
Meets Reagent Specifications for testing USP/NF monographs  
Country of Origin: USA  
Packaging Site: Paris 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



**CERTIFIED WEIGHT REPORT:**

**Part Number:** 58024  
**Lot Number:** 060523  
**Description:** Chromium (Cr)

**Lot #** 2110221 **Solvent:** Nitric Acid

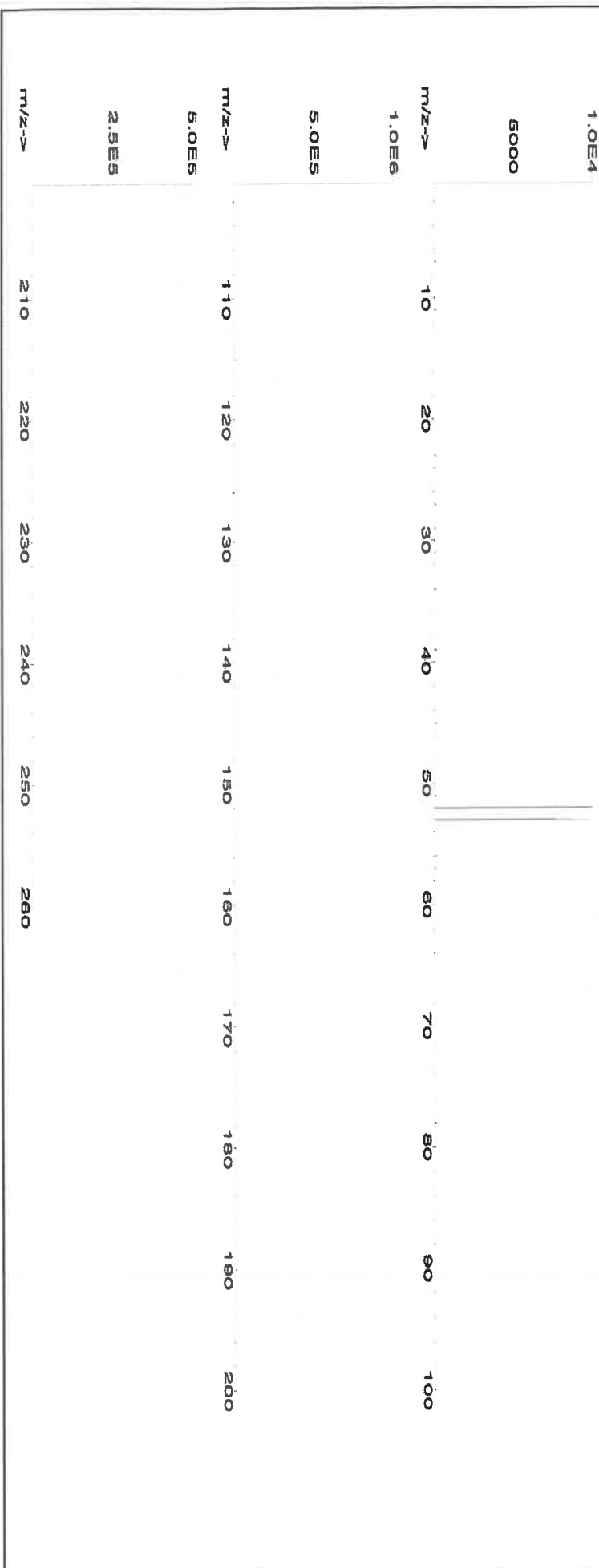
|                |                 |
|----------------|-----------------|
|                |                 |
| Formulated By: | Lawrence Barry  |
|                | 060523          |
|                |                 |
| Reviewed By:   | Pedro L. Ruelas |
|                | 060523          |

**Expiration Date:** 060526  
**Recommended Storage:** Ambient (20 °C)  
**Nominal Concentration (µg/mL):** 1000  
**NIST Test Number:** 6UTB  
**Volume shown below was diluted to (mL):** 2000.02 0.058 Balance Uncertainty  
Flask Uncertainty

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | 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 or rat 3250 mg/kg 3112a

[1] Spectrum No.1 [31.393 sec]:57024.D# [Count] [Linear]





**Certified Reference Material CRM**



ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://Absolutestandards.com

**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:**

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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

**Part Number:** 58029  
**Lot Number:** 102523  
**Description:** Copper (Cu)

**Lot #** 24002546  
**Solvent:** Nitric Acid

**Expiration Date:** 102526

2.0% 40.0 (mL) Nitric Acid

**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

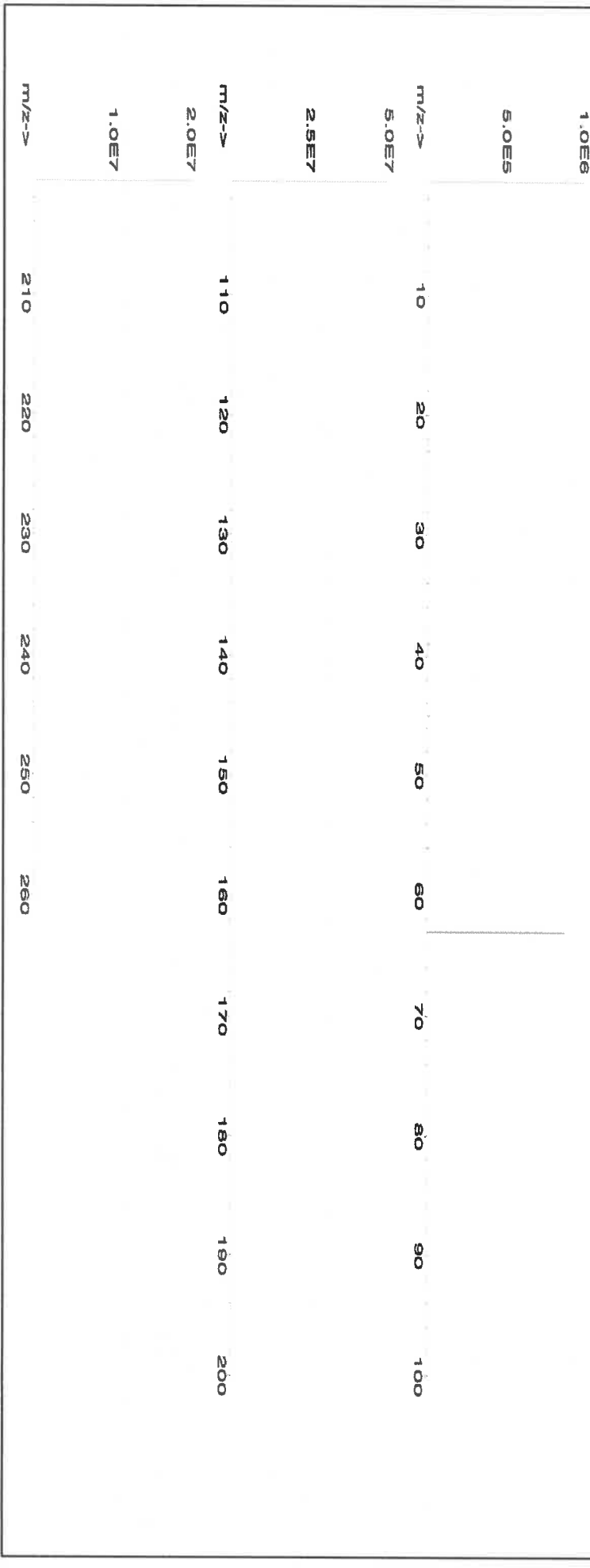
|                |  |                 |        |
|----------------|--|-----------------|--------|
| Formulated By: |  | Benson Chan     | 102523 |
| Reviewed By:   |  | Pedro L. Rentas | 102523 |

**SDS Information**

| 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) | 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 or-rat 794 mg/kg 3114

[1] Spectrum No.1 [ 33.422 sec]:58029.D# [Count] [Linear]





### Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

### Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )

|    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <0.02 | Se | <0.2  | Tb | <0.02 | W  | <0.02 |
| Si | <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 | T  | <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:**

*John P. Jones*

- \* 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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57004  
**Lot Number:** 102523  
**Description:** Beryllium (Be)

**Lot #** 24002546  
**Solvent:** Nitric Acid

**Expiration Date:**

102526

2.0%

40.0 (mL)

Nitric Acid

**Recommended Storage:**

Ambient (20 °C)

**Nominal Concentration (µg/mL):**

1000

**NIST Test Number:**

6UTB

Volume shown below was diluted to (mL): 2000.02

5E-05 Balance Uncertainty

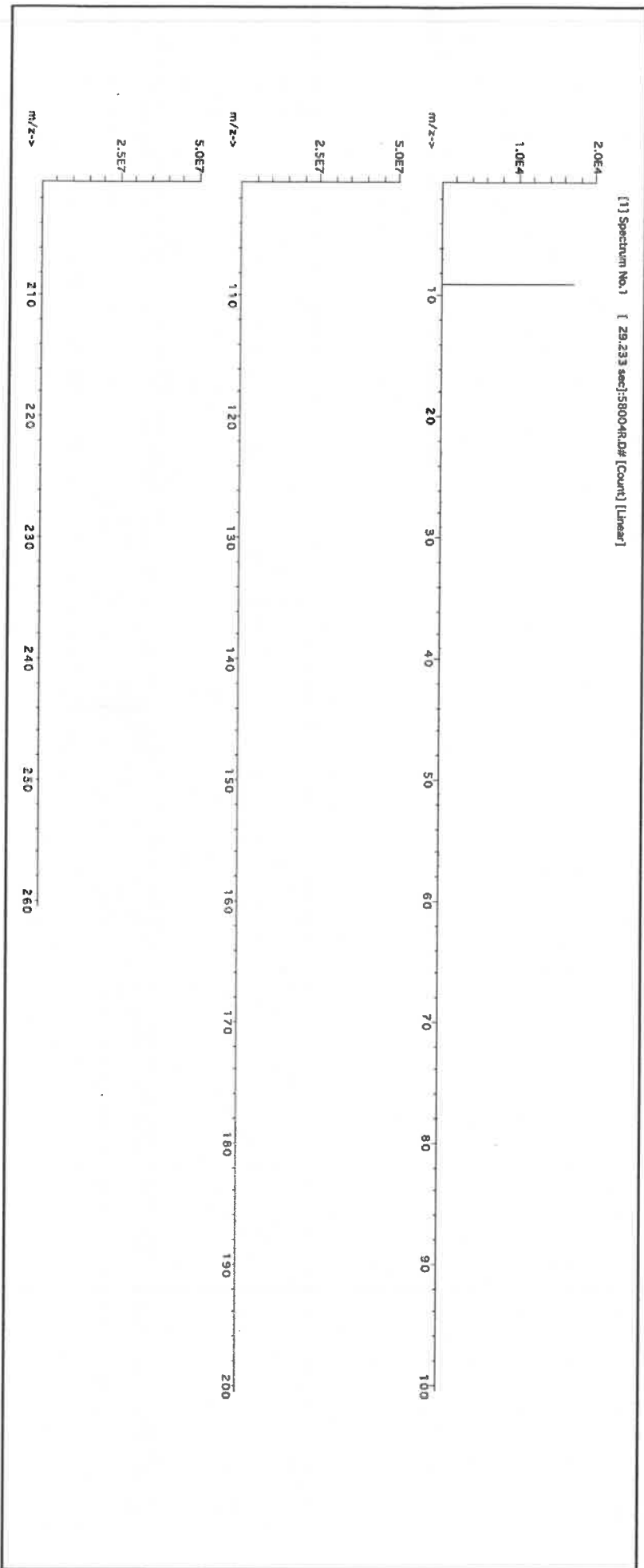
0.058 Flask Uncertainty

|                |                 |
|----------------|-----------------|
|                |                 |
| Formulated By: | Benson Chan     |
|                | 102523          |
|                |                 |
| Reviewed By:   | Pedro L. Rentas |
|                | 102523          |

**SDS Information**

| Compound | Part Number | Lot | Dilution Factor | Initial Vol. (mL) | Uncertainty Pipette (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | 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 | 0.2µg/m3 | intrinsc-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 | Pt | <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 | Tc | <0.02 | U  | <0.02 |
| As | <0.02 | Ce | <0.02 | Eu | <0.02 | In | <0.02 | Mg | <0.01 | Os | <0.02 | Rh | <0.02 | Ag | <0.02 | Ti | <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 | <0.02 | 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 | Ta | <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 | Tl | <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 certified (+/-) 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).



**Certified Reference Material CRM**

**CERTIFIED WEIGHT REPORT:**

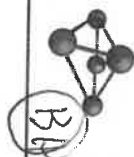
Part Number: 57050  
Lot Number: 071123  
Description: Tin (Sn)

Solvents: 21110221 Nitric Acid  
22D0562008 Hydrochloric acid

Lot #

R-02509124

M599



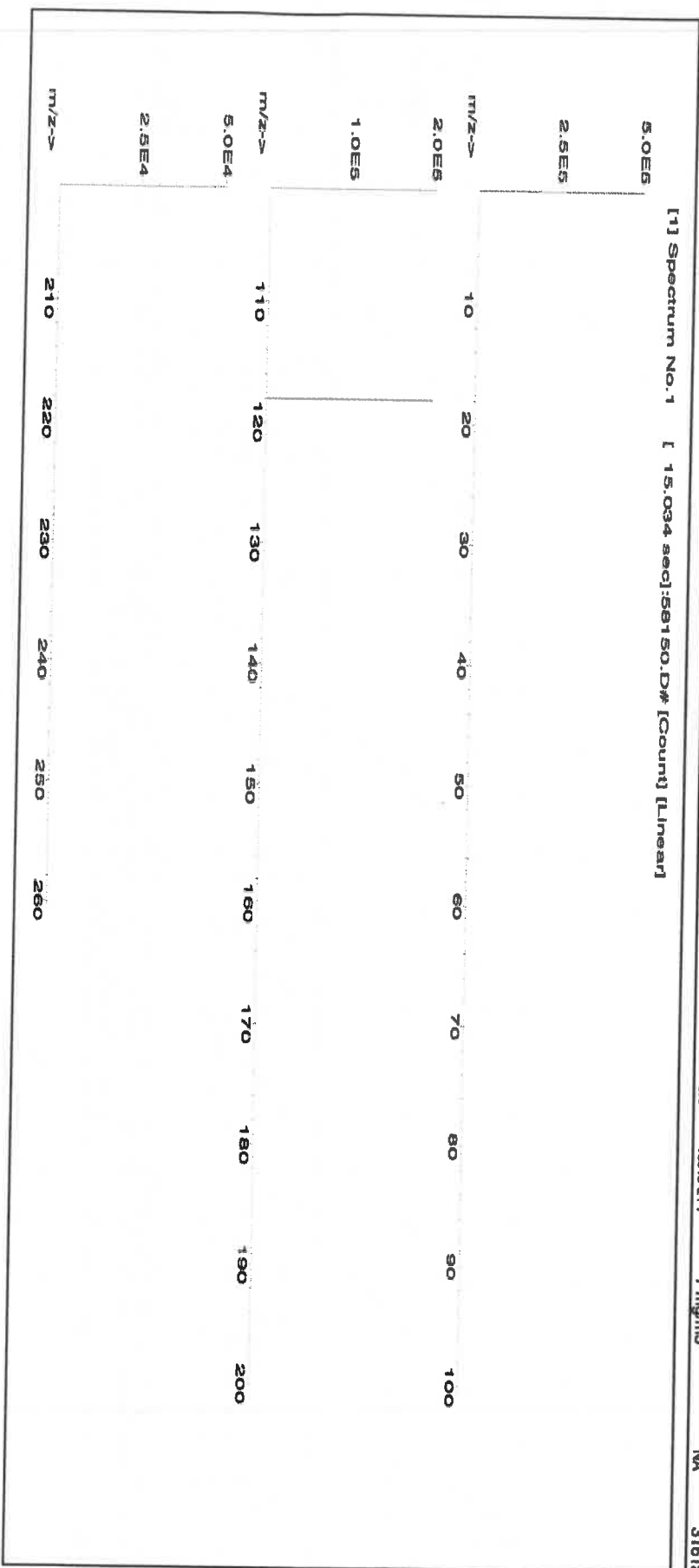
Expiration Date: 071126  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration (µg/mL): 1000  
NIST Test Number: 6UTB  
Weight shown below was diluted to (mL): 499.93  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

|                               |  |
|-------------------------------|--|
| Formulated By: Benson Chan    |  |
| 071123                        |  |
| Reviewed By: Pedro L. Rientas |  |
| 071123                        |  |

| Compound |        | Lot           |     | Nominal    | Purity | Uncertainty | Assay      | Target        | Actual      | Actual | Expanded       | SDS Information |     |      |
|----------|--------|---------------|-----|------------|--------|-------------|------------|---------------|-------------|--------|----------------|-----------------|-----|------|
| RM#      | Number | Conc. (µg/mL) | (%) | Purity (%) | (%)    | Weight (g)  | Weight (g) | Conc. (µg/mL) | +/- (µg/mL) | CAS#   | OSHA PEL (TWA) | LD50            | SRM | NIST |

1. Ammonium hexafluoroantimonate(V) (Sn) INO10 SMD042023A1 1000 99.999 0.10 44.2 1.13107 1.13286 1001.6 2.0 16919-24-7 7 mg/m3 NA 3161a

[1] Spectrum No. 1 [ 15.034 sec]:56150.D# [Count] [Linear]







**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 | Ta | <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.
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- \* Standards are certified (+/-) 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).



R: 02/09/24 115800 (54)

CERTIFIED WEIGHT REPORT:

Part Number: 57027  
Lot Number: 091923  
Description: Cobalt (Co)

Expiration Date: 091926  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration (µg/mL): 1000  
NIST Test Number: 6UTB  
Volume shown below was diluted to (mL): 2000.02

Lot # 24002546  
Solvent: Nitric Acid

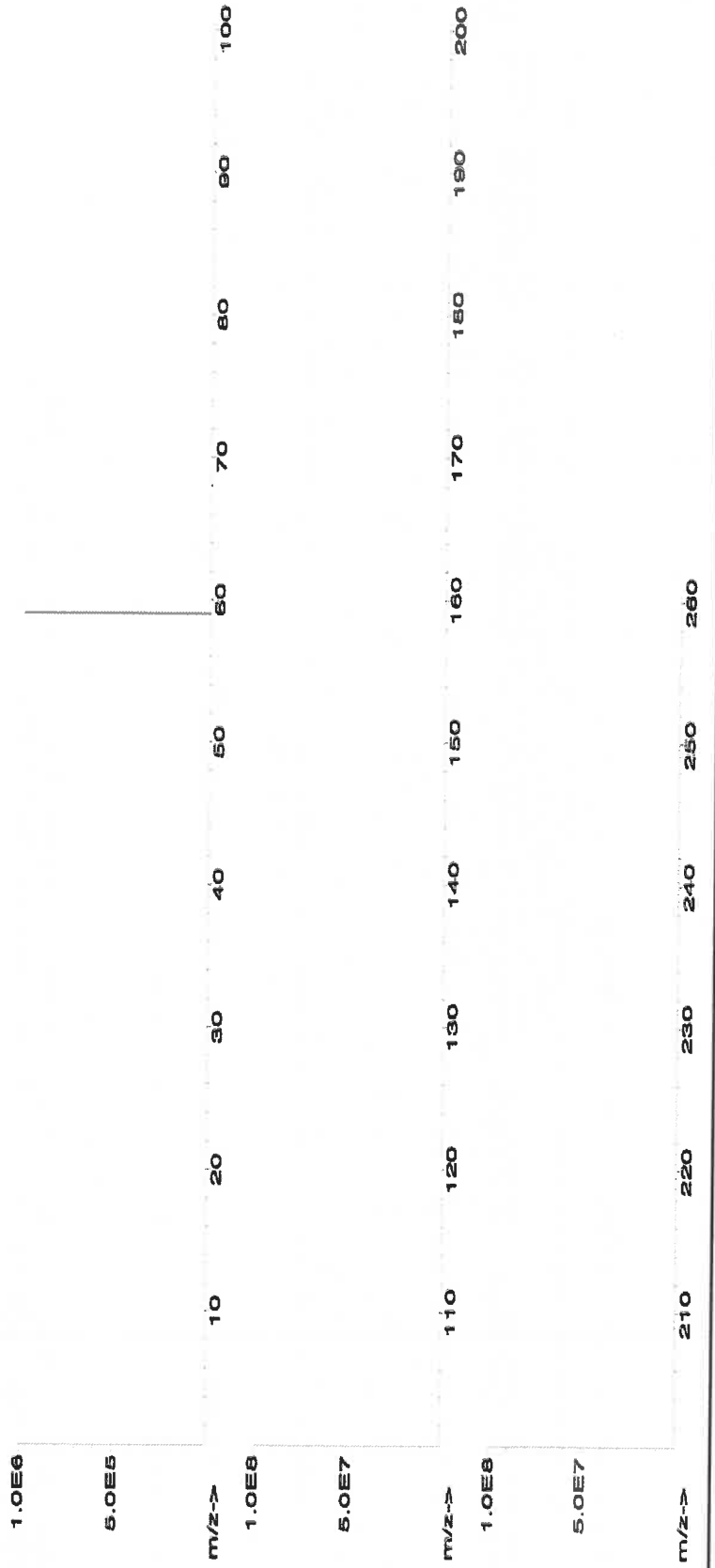
Formulated By: Lawrence Barry 091923  
Reviewed By: Pedro L. Rentas 091923

SDS Information

Expanded Uncertainty +/- (µg/mL)  
(Solvent Safety Info. On Attached pg.)  
NIST SRM  
CAS# OSHA PEL (TWA) LD50

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

[1] Spectrum No.1 [ 34.243 sec]:58027.D# [Count] [Linear]





**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 | <0.02 | Os | <0.01 | 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 | <0.2  | Na | <0.02 | 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     | 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).
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- \* 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).



**Certified Reference Material CRM**

AR: 02/09/24

M5801

BA



**CERTIFIED WEIGHT REPORT:**

Part Number: **57033**  
Lot Number: **111323**  
Description: **Arsenic (As)**

Lot # **24002546**  
Solvent: **Nitric Acid**

Expiration Date:

111326

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6LUTB**

Volume shown below was diluted to (mL): **4000.0**

5E-05 Balance Uncertainty

0.06 Flask Uncertainty

2.0%

80.0 (mL)

Nitric Acid

Formulated By: *Lawrence Barry*

Lawrence Barry

111323

Reviewed By: *Pedro L. Rendas*

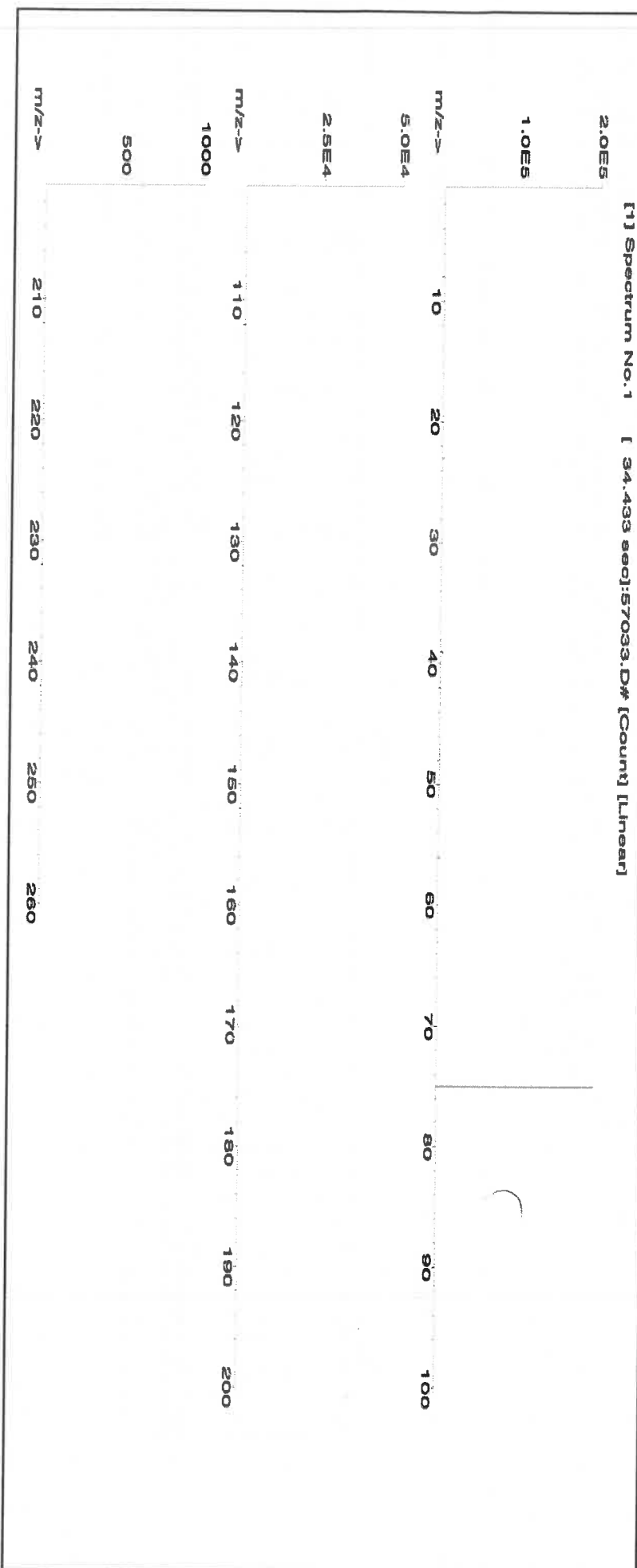
Pedro L. Rendas

111323

**SDS Information**

| 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) | 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      | or-rat 500 mg/kg | 3103a    |

[1] Spectrum No. 1 [ 34.433 sec]:57033.D# [Count] [Linear]





**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 | Tc | <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 | Ti | <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 |
| Bc | <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 | Sa | <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 | Tl | <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.
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**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57115  
**Lot Number:** 041723  
**Description:** Phosphorous (P)

**Solvent:** 21110221 Nitric Acid

**Lot #**

**Expiration Date:** 041726  
**Recommended Storage:** Ambient (20 °C)  
**Nominal Concentration (µg/mL):** 10000  
**NIST Test Number:** 6UTB

**2% 40.0 (mL) Nitric Acid**

**Weight shown below was diluted to (mL):** 2000.02 0.056 Balance Uncertainty  
Flask Uncertainty

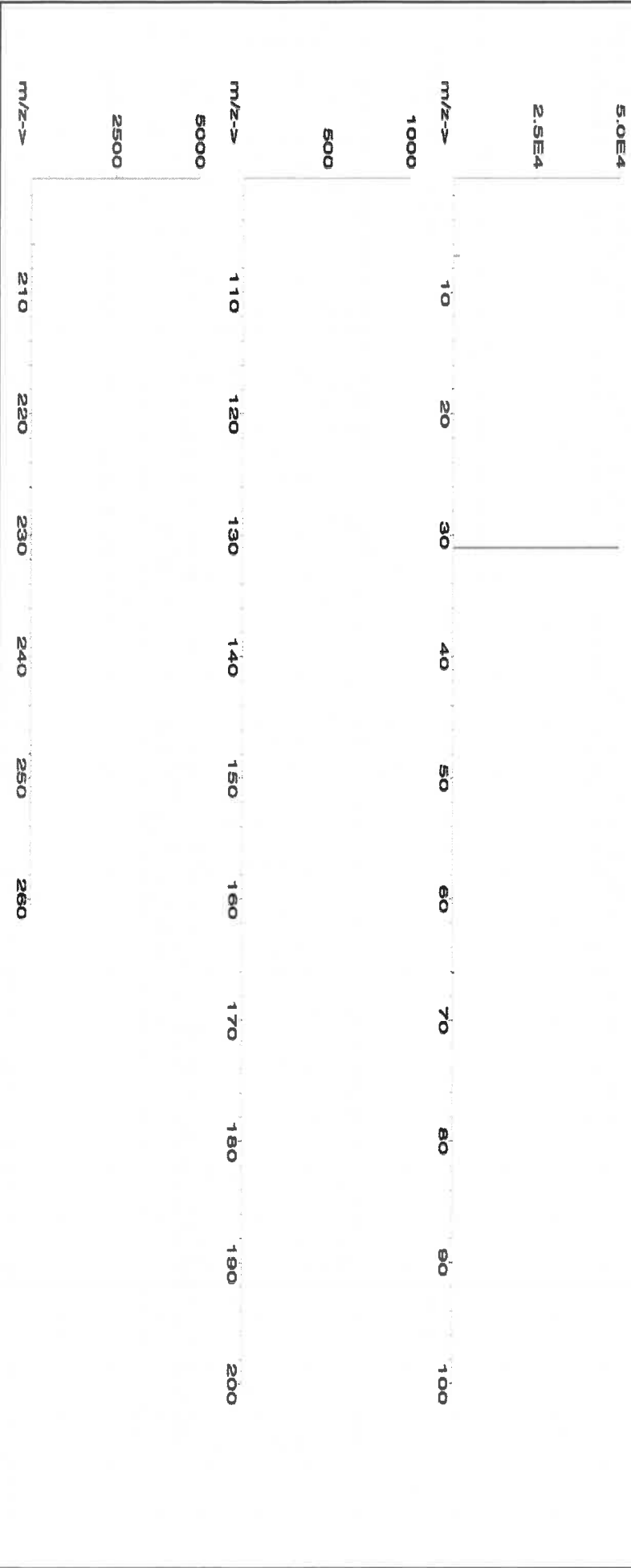
|                                      |               |
|--------------------------------------|---------------|
|                                      |               |
| <b>Formulated By:</b> Lawrence Barry | <b>041723</b> |
|                                      |               |
| <b>Reviewed By:</b> Pedro L. Rentas  | <b>041723</b> |

**Compound**

| RM# | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|-----|------------|-----------------------|------------|-----------------------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|-----|------------|-----------------------|------------|-----------------------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

1. Ammonium dihydrogen phosphate (P) IN008 PVR2019A1 10000 99.999 0.10 27.5 72.7287 72.7289 10000.0 20.0 7722-76-1 5 mg/m3 or-hal->2000mg/kg 3186

[1] Spectrum No.1 [ 12.074 sec]:58115.D# [Count] [Linear]





**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 | Pt | <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:**

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.
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**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57116  
**Lot Number:** 071123  
**Description:** Sulfur (S)

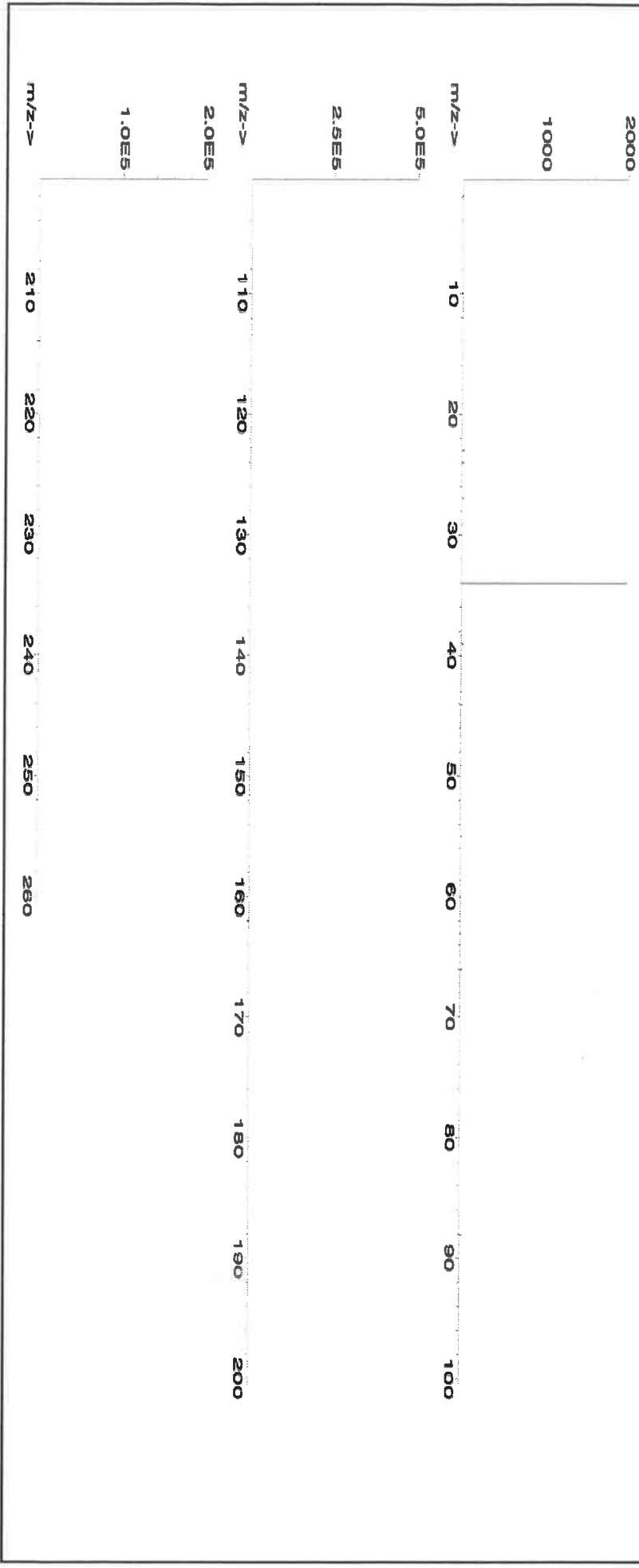
**Solvent:** 071123  
**ASTM Type 1 Water**

|                       |                 |
|-----------------------|-----------------|
|                       |                 |
| <b>Formulated By:</b> | Lawrence Barry  |
|                       |                 |
| <b>Reviewed By:</b>   | Pedro L. Rentas |
| 071123                |                 |

**Expiration Date:** 071126  
**Recommended Storage:** Ambient (20 °C)  
**Nominal Concentration (µg/mL):** 10000  
**NIST Test Number:** 6UTB  
**Weight shown below was diluted to (mL):** 1999.48  
**5E-05 Balance Uncertainty**  
**0.058 Flask Uncertainty**

| SDS Information      |        |               |        |             |       |            |            |               |                |
|----------------------|--------|---------------|--------|-------------|-------|------------|------------|---------------|----------------|
| Compound             | Lot    | Nominal       | Purity | Uncertainty | Assay | Target     | Actual     | Actual        | Expanded       |
|                      | Number | Conc. (µg/mL) | (%)    | Purity (%)  | (%)   | Weight (g) | Weight (g) | Conc. (µg/mL) | +/- (µg/mL)    |
| Ammonium sulfate (S) | IN117  | SLBR725V      | 10000  | 99.9        | 0.10  | 24.3       | 82.4675    | 82.4692       | 10000.1        |
|                      |        |               |        |             |       |            | 20.0       | 7763-20-2     | NA             |
|                      |        |               |        |             |       |            |            |               | oral 4250mg/kg |
|                      |        |               |        |             |       |            |            |               | 3181           |

[1] Spectrum No. 1 [ 24.004 sec]:58116.D# [Count] [Linear]







**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 | Pt | <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  | Tm | <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 | Sn | <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     | Ti | <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 |    |       | Zr | <0.02 |

**Physical Characterization:**

(T)= Target analyte

Homogeneity: No heterogeneity was observed in the preparation of this standard.

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www.absolutestandards.com



## Certified Reference Material CRM

ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
<https://AbsoluteStandards.com>

### CERTIFIED WEIGHT REPORT:

Part Number:

57034

Lot Number:

060624

Description:

Selenium (Se)

Lot #

24002546

Solvent:

Nitric Acid

Expiration Date:

060627

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

1000

NIST Test Number:

6UTB

Volume shown below was diluted to (mL):

2000.07

SE-05 Balance Uncertainty

0.100 Flask Uncertainty

2.0%

40.0 (mL)

Nitric Acid

Formulated By: Benson Chan 060624

Reviewed By:

Pedro L. Renterias

060624

### SDS Information

#### Compound

Part Number

Lot Number

Dilution Factor

Initial Vol. (mL)

Pipette (mL)

Uncertainty Conc. (µg/mL)

Nominal Conc. (µg/mL)

Initial Conc. (µg/mL)

Final Conc. (µg/mL)

Expanded Uncertainty +/- (µg/mL)

(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

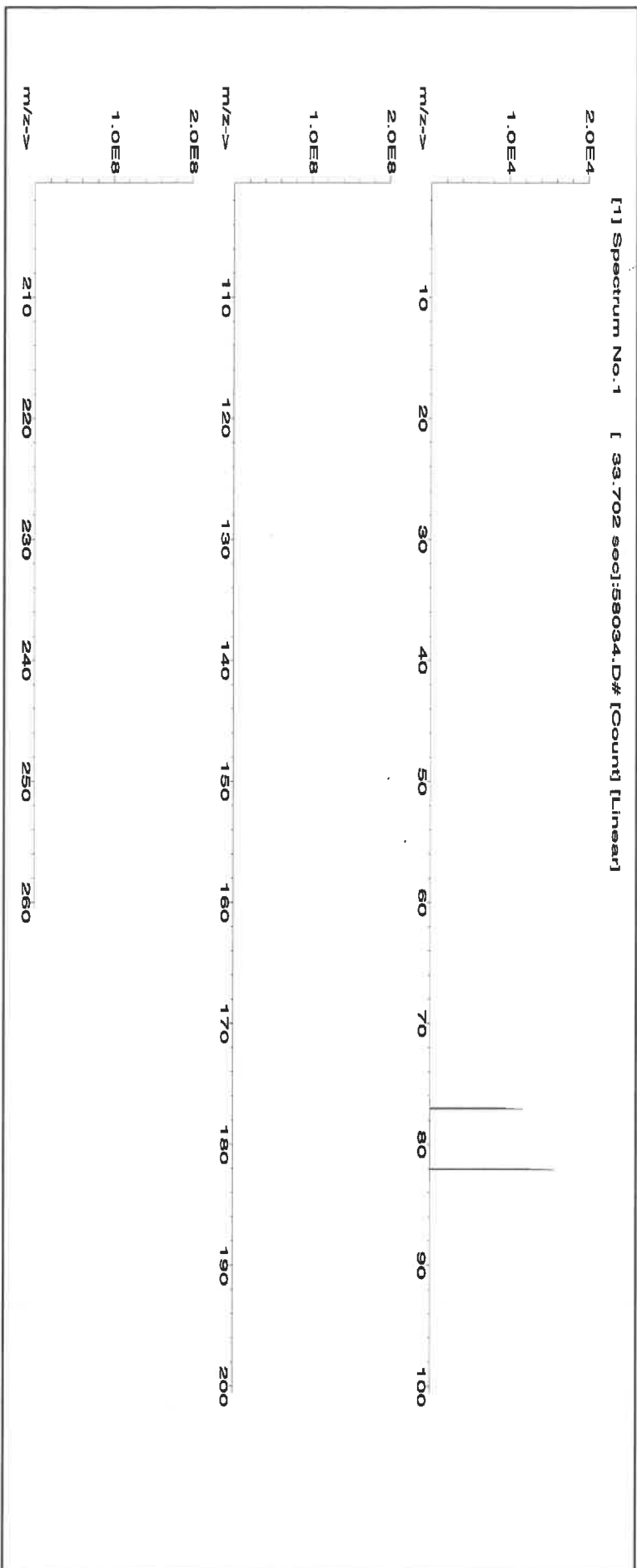
7782-49-2

0.2 mg/m3

or-tral 6700 mg/kg

3149

[1] Spectrum No.1 [33.702 sec]:58034.D# [Count] [Linear]





**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 | Pt | <0.02 | Se | T     | Tb | 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 | 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 | 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 | 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 | 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 | 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 | 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.
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## Certificate of Analysis



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inorganicventures.com

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F: 540-585-3012  
info@inorganicventures.com



**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).

## 1.0 ACCREDITATION / REGISTRATION

## 2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution

Catalog Number: CGT1

Lot Number: T2-T1719972

Matrix: 2% (v/v) HNO<sub>3</sub>

Value / Analyte(s): tr. HF

Starting Material: 1 000 µg/mL ea.

Starting Material: 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 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:

$X_{CRM/RM} = (x_p / u_{p,rel})$

$x_p$  = mean of Assay Method A with

$u_{p,rel}$  = the standard uncertainty of characterization Method A

$k$  = coverage factor = 2

$u_{CRM/RM} = [(2/(n-1)) \sum (u_{p,rel}^2)]^{1/2}$  where  $u_{p,rel}$  are the errors from each characterization method

$u_{p,rel}$  =  $[(2/(n-1)) \sum (u_{p,rel}^2)]^{1/2}$

$u_{p,rel}$  =  $[(2/(n-1)) \sum (u_{p,rel}^2)]^{1/2}$

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$u_{p,rel}$  =  $[(2/(n-1)) \sum (u_{p,rel}^2)]^{1/2}$

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$u_{p,rel}$  =  $[(2/(n-1)) \sum (u_{p,rel}^2)]^{1/2}$

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 UHPA-filtered Clean Room. An UHPA-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 |
| M | 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 | < | 0.00096  |   |    |   |          |
| O | B  | < | 0.008929 | M | Ge | < | 0.002146 | M | Os | < | 0.000269 | O | Sr | < | 0.00096  |   |    |   |          |
| 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  | < | 0.006976 | 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 |   |    |   |          |

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

- 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](http://www.inorganicventures.com/TCT)

**Atomic Weight; Valence:** Soluble in concentrated HCl, HF, H<sub>3</sub>PO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub> and HNO<sub>3</sub>. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F<sup>-</sup> away (i.e. Do not mix with Alkaline or Rare Earths or high levels of transition elements forming the hydrated oxide in all dilute acids except HF. 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)<sub>6</sub>-2 for months in 1% HNO<sub>3</sub> / LDPE container. 1-10,000 ppm single element solutions as the Ti(F)<sub>6</sub>-2 chemically stable for years in 2-5% HNO<sub>3</sub> / trace HF in an LDPE container.

**Ti Containing Samples (Preparation and Solution) - Metal (Soluble in H<sub>2</sub>O / HF caution - powder reacts violently):** Oxide - low temperature history anatase or rutile (Dissolved by heating in 1:1:1 H<sub>2</sub>O / HF / H<sub>2</sub>SO<sub>4</sub>); K<sub>2</sub>SiO<sub>3</sub> - no KF if silica not present); Organic Matrices (Dry ash at 450°C in P10 and dissolve by heating with 1:1:1 H<sub>2</sub>O / HF / H<sub>2</sub>SO<sub>4</sub> or fuse ash with pyrosulfate if oxide is as plastic pigment and likely in brookite crystaline form).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

| Technique/Line     | Estimated D.L.         | 14 ppt |
|--------------------|------------------------|--------|
| ICP-MS 48 amu      | N/A                    |        |
| ICP-OES 323.452 nm | 0.0054 / 0.00092 µg/mL | 1      |
| ICP-OES 334.941 nm | 0.0038 / 0.00028 µg/mL | 1      |
| ICP-OES 336.121 nm | 0.0053 / 0.00034 µg/mL | 1      |

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

W, Mo, Co  
Nb, Ta, Cr, U  
Ce, Ar, Ni  
Ru]]  
(where X = Zr, Mo,  
48Ca, [96X=2  
14N17N2, 36Ar12C,  
14N16O18O,  
32S16O, 32S14N,  
N/A

- 8.0 **HAZARDOUS INFORMATION**
- 9.0 **HOMOGENEITY**
- 10.0 **QUALITY STANDARD DOCUMENTATION**

- 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.

10.1 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"

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY  
Inorganic Ventures, 300 Technology Drive, Chesapeake, VA 24073, USA; Telephone: 800.868.6786; 540.565.3030; Fax: 540.565.3012; [info@inorganicventures.com](mailto:info@inorganicventures.com)  
- Reference Material Producer - Accredited / A2LA Certificate Number 883.02  
June 17, 2022

11.1 Certification Issue Date  
- 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

*Paul Gaines*

*80978*





MS981

R: 6/11/24



CERTIFIED WEIGHT REPORT:

Part Number:  
Lot Number:  
Description:

57092  
060724  
Uranium (U)

Expiration Date:  
Recommended Storage:  
Nominal Concentration (µg/mL):  
NIST Test Number:

060727  
Ambient (20 °C)  
1000  
6UTB

Volume shown below was diluted to (mL): 2000.07

5E-05 Balance Uncertainty  
0.100 Flask Uncertainty

Lot # Solvent:  
24002546 Nitric Acid

2.0% Nitric Acid  
40.0 (mL)

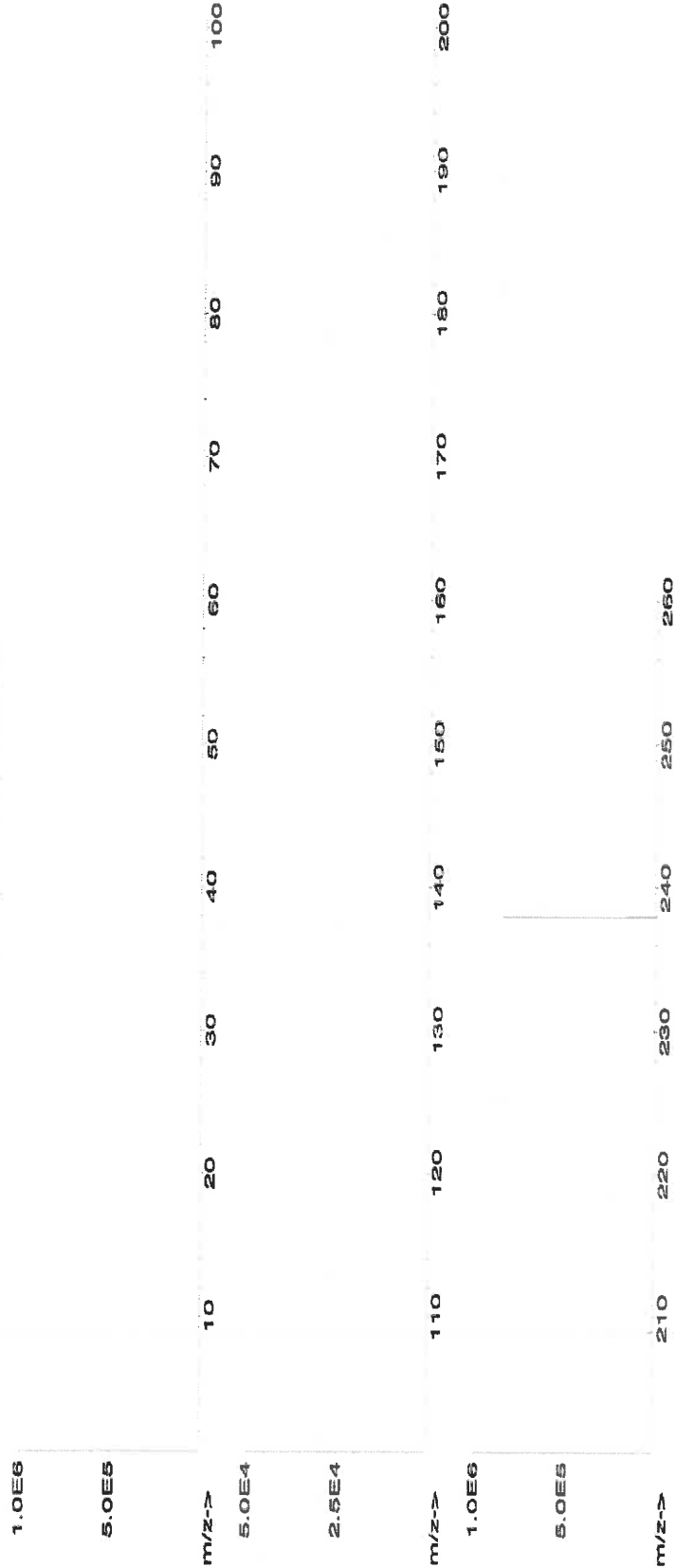
|                          |                   |
|--------------------------|-------------------|
| <i>Giovanni Esposito</i> |                   |
| Formulated By:           | Giovanni Esposito |
| <i>Pedro L. Rentas</i>   |                   |
| Reviewed By:             | Pedro L. Rentas   |

SDS Information

| 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) | (Solvent Safety Info. On Attached pg.) |                |      |
|----------|-------------|------------|-----------------|-------------------|--------------------------|-----------------------|-----------------------|---------------------|----------------------------------|----------------------------------------|----------------|------|
|          |             |            |                 |                   |                          |                       |                       |                     |                                  | CAS#                                   | OSHA PEL (TWA) | LD50 |

|                                   |       |        |        |       |       |      |         |        |     |            |            |                    |      |
|-----------------------------------|-------|--------|--------|-------|-------|------|---------|--------|-----|------------|------------|--------------------|------|
| 1. Uranyl nitrate hexahydrate (U) | 58192 | 041524 | 0.1000 | 200.0 | 0.084 | 1000 | 10001.5 | 1000.0 | 2.2 | 13620-83-7 | 0.05 mg/m3 | orl-rat 1040 mg/kg | 3164 |
|-----------------------------------|-------|--------|--------|-------|-------|------|---------|--------|-----|------------|------------|--------------------|------|

[1] Spectrum No.1 [ 23.254 sec]:57092.D# [Count] [Linear]







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 | Pt | <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 | <0.02 | Os | <0.01 | 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 | <0.2  | Fe | <0.02 | Hg | <0.2  | P  | <0.2  | 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 | <0.2  | 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:

*[Signature]*

- \* 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 certified (+/-) 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).

*[Handwritten signature]*

Sulfuric Acid  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis  
Low Selenium

avantor™



M 6041-4b  
MS

Material No.: 9673-33  
Batch No.: 23D2462010  
Manufactured Date: 2023-03-22  
Retest Date: 2028-03-20  
Revision No.: 0

## Certificate of Analysis

| Test                                                         | Specification | Result      |
|--------------------------------------------------------------|---------------|-------------|
| ACS – Assay (H <sub>2</sub> SO <sub>4</sub> )                | 95.0 – 98.0 % | 96.1 %      |
| Appearance                                                   | Passes Test   | Passes Test |
| ACS – Color (APHA)                                           | ≤ 10          | 5           |
| ACS – Residue after Ignition                                 | ≤ 3 ppm       | < 1 ppm     |
| ACS – Substances Reducing Permanganate (as SO <sub>2</sub> ) | ≤ 2 ppm       | < 2 ppm     |
| Ammonium (NH <sub>4</sub> )                                  | ≤ 1 ppm       | 1 ppm       |
| Chloride (Cl)                                                | ≤ 0.1 ppm     | < 0.1 ppm   |
| Nitrate (NO <sub>3</sub> )                                   | ≤ 0.2 ppm     | < 0.1 ppm   |
| Phosphate (PO <sub>4</sub> )                                 | ≤ 0.5 ppm     | < 0.1 ppm   |
| Trace Impurities – Aluminum (Al)                             | ≤ 30.0 ppb    | < 5.0 ppb   |
| Arsenic and Antimony (as As)                                 | ≤ 4.0 ppb     | < 2.0 ppb   |
| Trace Impurities – Boron (B)                                 | ≤ 10.0 ppb    | 8.5 ppb     |
| Trace Impurities – Cadmium (Cd)                              | ≤ 2.0 ppb     | < 0.3 ppb   |
| Trace Impurities – Chromium (Cr)                             | ≤ 6.0 ppb     | < 0.4 ppb   |
| Trace Impurities – Cobalt (Co)                               | ≤ 0.5 ppb     | < 0.3 ppb   |
| Trace Impurities – Copper (Cu)                               | ≤ 1.0 ppb     | < 0.1 ppb   |
| Trace Impurities – Gold (Au)                                 | ≤ 10.0 ppb    | 0.5 ppb     |
| Heavy Metals (as Pb)                                         | ≤ 500.0 ppb   | < 100.0 ppb |
| Trace Impurities – Iron (Fe)                                 | ≤ 50.0 ppb    | 1.3 ppb     |
| Trace Impurities – Lead (Pb)                                 | ≤ 0.5 ppb     | < 0.5 ppb   |
| Trace Impurities – Magnesium (Mg)                            | ≤ 7.0 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 – Nickel (Ni)                               | ≤ 2.0 ppb     | 0.3 ppb     |
| Trace Impurities – Potassium (K)                             | ≤ 500.0 ppb   | < 2.0 ppb   |
| Trace Impurities – Selenium (Se)                             | ≤ 50.0 ppb    | < 0.1 ppb   |
| Trace Impurities – Silicon (Si)                              | ≤ 100.0 ppb   | 31.5 ppb    |
| Trace Impurities – Silver (Ag)                               | ≤ 1.0 ppb     | < 0.3 ppb   |

>>> Continued on page 2 >>>

Sulfuric Acid  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis  
Low Selenium

 **avantor™**

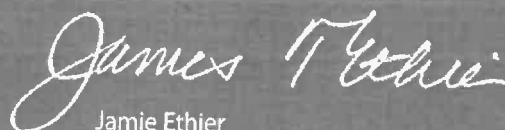


Material No.: 9673-33  
Batch No.: 23D2462010

| Test                              | Specification | Result    |
|-----------------------------------|---------------|-----------|
| Trace Impurities – Sodium (Na)    | ≤ 500.0 ppb   | 5.4 ppb   |
| Trace Impurities – Strontium (Sr) | ≤ 5.0 ppb     | < 0.2 ppb |
| Trace Impurities – Tin (Sn)       | ≤ 5.0 ppb     | < 0.8 ppb |
| Trace Impurities – Zinc (Zn)      | ≤ 5.0 ppb     | 0.4 ppb   |

For Laboratory, Research, or Manufacturing Use

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier  
Vice President Global Quality

*8/19/24, M6055*

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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: IV-STOCK-12  
Lot Number: U2-MEB734294  
Matrix: 5% (v/v) HNO<sub>3</sub>  
Value / Analyte(s): 10 µg/mL ea:  
Barium, Beryllium,  
Bismuth, Cerium,  
Cobalt, Indium,  
Lithium, Nickel,  
Lead, Uranium

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE     | CERTIFIED VALUE    | ANALYTE       | CERTIFIED VALUE    |
|-------------|--------------------|---------------|--------------------|
| Barium, Ba  | 10.01 ± 0.04 µg/mL | Beryllium, Be | 10.01 ± 0.05 µg/mL |
| Bismuth, Bi | 10.01 ± 0.06 µg/mL | Cerium, Ce    | 10.01 ± 0.04 µg/mL |
| Cobalt, Co  | 10.01 ± 0.05 µg/mL | Indium, In    | 10.01 ± 0.04 µg/mL |
| Lead, Pb    | 10.00 ± 0.04 µg/mL | Lithium, Li   | 10.01 ± 0.04 µg/mL |
| Nickel, Ni  | 10.01 ± 0.04 µg/mL | Uranium, U    | 10.01 ± 0.05 µg/mL |

Density: 1.025 g/mL (measured at 20 ± 4 °C)

Assay Information:

| ANALYTE | METHOD      | NIST SRM#         | SRM LOT#     |
|---------|-------------|-------------------|--------------|
| Ba      | ICP Assay   | 3104a             | 140909       |
| Ba      | Calculated  |                   | See Sec. 4.2 |
| Ba      | Gravimetric |                   | See Sec. 4.2 |
| Be      | ICP Assay   | 3105a             | 090514       |
| Be      | Calculated  |                   | See Sec. 4.2 |
| Bi      | ICP Assay   | 3106              | 180815       |
| Ce      | ICP Assay   | 3110              | 160830       |
| Ce      | EDTA        | 928               | 928          |
| Ce      | Calculated  |                   | See Sec. 4.2 |
| Co      | ICP Assay   | 3113              | 190630       |
| Co      | EDTA        | 928               | 928          |
| Co      | Calculated  |                   | See Sec. 4.2 |
| In      | ICP Assay   | 3124a             | 110516       |
| In      | EDTA        | 928               | 928          |
| In      | Calculated  |                   | See Sec. 4.2 |
| Li      | ICP Assay   | 3129a             | 100714       |
| Li      | Calculated  |                   | See Sec. 4.2 |
| Li      | Gravimetric |                   | See Sec. 4.2 |
| Ni      | ICP Assay   | 3136              | 120619       |
| Ni      | EDTA        | 928               | 928          |
| Ni      | Calculated  |                   | See Sec. 4.2 |
| Pb      | ICP Assay   | 3128              | 101026       |
| Pb      | EDTA        | 928               | 928          |
| Pb      | Calculated  |                   | See Sec. 4.2 |
| U       | ICP Assay   | traceable to 3164 | R2-U689597   |
| U       | 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,  $X_{\text{CRM/RM}}$ , where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

$X_i$  = mean of Assay Method  $i$  with standard uncertainty  $u_{\text{char } i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i})^2 / (\sum (1/(u_{\text{char } i})^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char}} = [\sum ((w_i)^2 (u_{\text{char } i})^2)]^{1/2}$  where  $u_{\text{char } i}$  are the errors from each characterization method

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

$u_{\text{ts}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = transport stability standard uncertainty

#### Certified Abundance:

##### IV's Certified Abundance

| Isotope      | Atom %      |
|--------------|-------------|
| Uranium 238U | 99.8 ± 0.1  |
| Uranium 235U | 0.19 ± 0.05 |

#### Characterization of CRM/RM by One Method

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

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

$X_a$  = mean of Assay Method A with

$u_{\text{char } a}$  = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char } a}$  = the errors from characterization

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

$u_{\text{ts}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = 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](http://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

June 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

- June 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





**Certified Reference Material CRM**



**CERTIFIED WEIGHT REPORT:**

Part Number: **57040**  
Lot Number: **071423**  
Description: **Zirconium (Zr)**

Lot # **21110221**  
Solvent: **Nitric Acid**

Expiration Date: **071426**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test Number: **6UTB**  
Volume shown below was diluted to (mL): **2000.02**

2.0%  
40.0 (mL)  
Nitric Acid

|                |  |                   |        |
|----------------|--|-------------------|--------|
| Formulated By: |  | Benson Chan       | 071423 |
| Reviewed By:   |  | Pedro L. Renteria | 071423 |

| 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 |         | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|-------------|------------|-----------------|-------------------|--------------------------|-----------------------|-----------------------|---------------------|----------------------|---------|------|----------------|------|----------|
|          |             |            |                 |                   |                          |                       |                       |                     | +/-                  | (µg/mL) |      |                |      |          |

1. **Zirconium chloride octahydrate (Zr)** 58140 070621 0.1000 200.0 0.084 1000 10000.3 1000.0 2.2 13520-82-8 NA NA NA

[1] Spectrum No. 1 [41.163 sec]: 57040.DW [Count] [Linear]

|     |       |     |     |     |     |     |     |     |     |     |     |
|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| m/z | 1.0E6 | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |
|     |       |     |     |     |     |     |     |     |     |     |     |
| m/z | 1.0E8 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|     |       |     |     |     |     |     |     |     |     |     |     |
| m/z | 5.0E7 | 210 | 220 | 230 | 240 | 250 | 260 |     |     |     |     |
|     |       |     |     |     |     |     |     |     |     |     |     |





### Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

### Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )

[illegible]

**(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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

Part Number: **58025**  
Lot Number: **101124**  
Description: **Manganese (Mn)**

*R-71113128*

Lot #: **24002546**  
Solvent: **Nitric Acid**

Expiration Date: **101127**

Recommended Storage: **Ambient (20 °C)**

Nominal Concentration (µg/mL): **1000**

NIST Test Number: **6UTB**

Weight shown below was diluted to (mL): **4000.2**

**0.10** Flask Uncertainty

2% **80.0** Nitric Acid (mL)

|                          |                          |
|--------------------------|--------------------------|
| <i>Giovanni Esposito</i> |                          |
| Formulated By:           | Giovanni Esposito        |
| Reviewed By:             | <i>Pedro L. Renteria</i> |
|                          | 101124                   |

**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) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|-----|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|-----|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

1. Manganese(II) nitrate hydrate (Mn) IN031 MMN02020A1 1000 99.999 0.10 20.8 19.2322 19.2344 **1000.1** **2.0** 15710-66-4 5 mg/m3 or-rel >300mg/kg 3132

[1] Spectrum No.1 [ 34.243 sec]:57025.D# [Count] [Linear]

|       |     |     |     |     |     |     |     |     |     |     |  |  |  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
| 5.0E6 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 2.5E6 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| m/z-> | 10  | 20  | 30  | 40  | 50  | 60  | 70  | 80  | 90  | 100 |  |  |  |
| 1.0E6 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 5.0E7 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| m/z-> | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |  |  |  |
| 1.0E6 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 5.0E7 |     |     |     |     |     |     |     |     |     |     |  |  |  |
| m/z-> | 210 | 220 | 230 | 240 | 250 | 260 |     |     |     |     |  |  |  |



**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 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 certified (+/-) 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).

# Certificate of Analysis

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 F: 540-585-3012  
 info@inorganicventures.com

M6137  
 R-71013124

## 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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution  
 Catalog Number: CGSI1  
 Lot Number: V2-SI744713  
 Matrix: tr. HNO<sub>3</sub>  
 tr. HF  
 Value / Analyte(s): 1 000 µg/mL ea:  
 Silicon  
 Starting Material: Silica  
 Starting Material Lot#: 1771  
 Starting Material Purity: 99.9981%

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 6 µg/mL  
 Density: 1.003 g/mL (measured at 20 ± 4 °C)

### Assay Information:

|                        |                                                                                      |
|------------------------|--------------------------------------------------------------------------------------|
| <b>Assay Method #1</b> | <b>999 ± 5 µg/mL</b><br>ICP Assay NIST SRM Traceable to 3150 Lot Number: S2-SI702546 |
| <b>Assay Method #2</b> | <b>1000 ± 7 µg/mL</b><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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

$X_i$  = 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:

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char i}^2)]^{1/2}$  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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = 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 | < | 0.000310 | M | Eu | < | 0.000310 | O | Na |   | 0.001656 | M | Se | < | 0.022000 | M | Zn | < | 0.002500 |
| M | Al |   | 0.010787 | M | Fe | < | 0.027000 | M | Nb | < | 0.001300 | s | Si | < |          | O | Zr | < | 0.001900 |
| M | As | < | 0.001900 | M | Ga | < | 0.001300 | M | Nd | < | 0.000310 | M | Sm | < | 0.000310 |   |    |   |          |
| M | Au | < | 0.000910 | M | Gd | < | 0.000310 | M | Ni | < | 0.005500 | M | Sn |   | 0.000096 |   |    |   |          |
| M | B  |   | 0.016180 | M | Ge | < | 0.001900 | M | Os | < | 0.000610 | O | Sr |   | 0.000092 |   |    |   |          |
| M | Ba |   | 0.000096 | M | Hf |   | 0.000423 | i | P  | < |          | M | Ta |   | 0.002542 |   |    |   |          |
| O | Be | < | 0.000570 | M | Hg | < | 0.000610 | M | Pb | < | 0.000310 | M | Tb | < | 0.000310 |   |    |   |          |
| M | Bi | < | 0.000310 | M | Ho | < | 0.000610 | M | Pd | < | 0.000610 | M | Te | < | 0.000910 |   |    |   |          |
| O | Ca |   | 0.011557 | M | In | < | 0.000310 | M | Pr | < | 0.000310 | M | Th | < | 0.001900 |   |    |   |          |
| M | Cd | < | 0.000310 | M | Ir | < | 0.000310 | M | Pt | < | 0.000310 | M | Ti |   | 0.001078 |   |    |   |          |
| M | Ce | < | 0.000610 | O | K  |   | 0.000577 | M | Rb | < | 0.009100 | M | Tl | < | 0.000310 |   |    |   |          |
| M | Co | < | 0.001600 | M | La | < | 0.000310 | M | Re | < | 0.000310 | M | Tm | < | 0.000310 |   |    |   |          |
| M | Cr | < | 0.010000 | O | Li | < | 0.000460 | M | Rh | < | 0.000310 | M | U  | < | 0.000310 |   |    |   |          |
| M | Cs | < | 0.000310 | M | Lu | < | 0.000310 | M | Ru | < | 0.000310 | O | V  | < | 0.001300 |   |    |   |          |
| M | Cu | < | 0.002500 | O | Mg |   | 0.001348 | O | S  | < | 0.570000 | M | W  | < | 0.001900 |   |    |   |          |
| M | Dy | < | 0.000310 | M | Mn | < | 0.002500 | M | Sb | < | 0.000310 | M | Y  | < | 0.000310 |   |    |   |          |
| M | Er | < | 0.000310 | M | Mo | < | 0.000310 | O | Sc | < | 0.000590 | M | Yb | < | 0.000310 |   |    |   |          |

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](http://www.inorganicventures.com/TCT)

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution** - 28.09 +4 6 Si(OH)x(F)y2-

**Chemical Compatibility** -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. 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 silicic acid (silicic acid is soluble up to &sim;100 ppm in water) in all dilute acids except HF.

**Stability** - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.

**Si Containing Samples (Preparation and Solution)** -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphous (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O ); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si- O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.

**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 28 amu      | 4000 - 8000 ppt   | N/A   | N2, 12C16O                                  |
| ICP-OES 212.412 nm | 0.02/0.01 µg/mL   | 1     | Hf, Os, Mo, Ta                              |
| ICP-OES 251.611 nm | 0.012/0.003 µg/mL | 1     | Ta, U, Zn, Th                               |
| ICP-OES 288.158 nm | 0.03/0.004 µg/mL  | 1     | Ta, Ce, Cr, Cd, Th                          |

**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

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

July 10, 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

- July 10, 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





**CERTIFIED WEIGHT REPORT:**

Part Number: **58126** Lot # **R-1113125**  
Lot Number: **011025** Solvent: **24012496 Nitric Acid**  
Description: **Iron (Fe)** **M6140** 2% 40.0 (mL) Nitric Acid

**Expiration Date:**

01/10/28

**Recommended Storage:**

Ambient (20 °C)

**Nominal Concentration (µg/mL):**

10000

**NIST Test Number:**

6U7B

Weight shown below was diluted to (mL): 2000.07

5E-05 Balance Uncertainty  
0.100 Flask Uncertainty

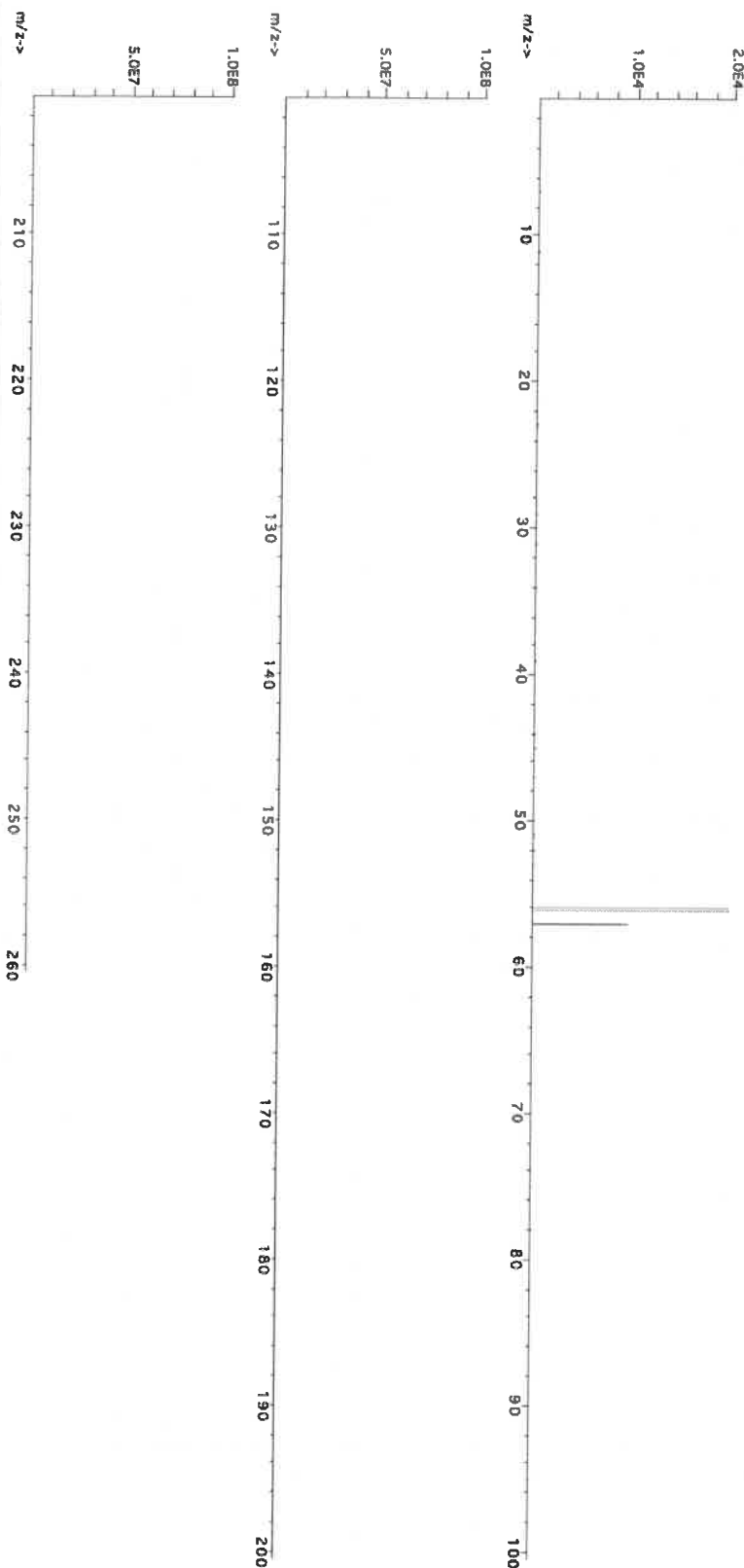
|                |                   |        |
|----------------|-------------------|--------|
| Formulated By: | Benson Chan       | 011025 |
| Reviewed By:   | Pedro L. Renteria | 011025 |

**Compound**

| Lot    | Nominal       | Purity | Uncertainty | Assay | Target     | Actual     | Actual        | Expanded  | SDS Information                        | NIST |
|--------|---------------|--------|-------------|-------|------------|------------|---------------|-----------|----------------------------------------|------|
| Number | Conc. (µg/mL) | (%)    | Purity (%)  | (%)   | Weight (g) | Weight (g) | Conc. (µg/mL) | ± (µg/mL) | (Solvent Safety Info. On Attached pg.) | SFM  |

1. Iron(III) nitrate nonahydrate (Fe) IN028 FED082023A1 10000 99.999 0.10 13.0 153.8534 ##### 10000.2 20.0 7782-61-8 1 mg/m<sup>3</sup> or-rel 3250mg/kg 3126A

[1] Spectrum No.1 [ 30.763 sec]58126.D# [Count] [Linear]







### Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):

### Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )

|    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <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 | Ru | <0.02 | Na | <0.2  | Th | <0.02 | Yb | <0.02 |
| Be | <0.01 | Cr | <0.02 | Ga | <0.02 | Fe | T     | Hg | <0.2  | P  | <0.02 | Sr | <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:**

Har P. D.

- \* 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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

**Part Number:**  
**Lot Number:**  
**Description:**

**57119**  
**103024**  
**Potassium (K)**

**R-21113125**

**Solvent:** 24002546 Nitric Acid  
**Lot #**

|                          |                   |
|--------------------------|-------------------|
| <i>Giovanni Esposito</i> |                   |
| Formulated By:           | Giovanni Esposito |
| Reviewed By:             | Pedro L. Renteria |
|                          | 103024            |

**Expiration Date:**  
**Recommended Storage:**  
**Nominal Concentration (µg/mL):**

**103027**  
**Ambient (20 °C)**  
**10000**

**M6141**  
**M6142**  
**M6143**

**2%**  
**80.0**  
**(mL)**  
**Nitric Acid**

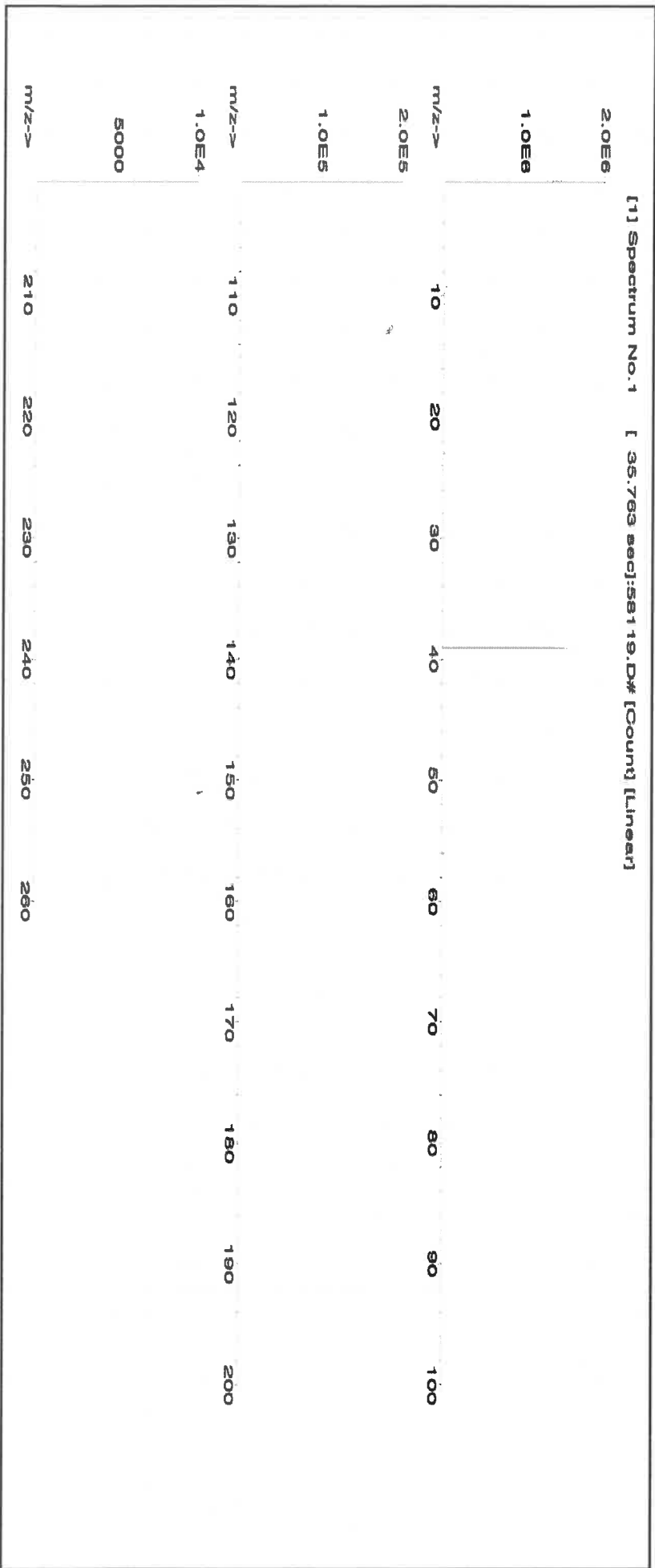
**Weight shown below was diluted to (mL):**

**4000.1**  
**0.15**  
**Flask Uncertainty**

| Compound | SDS Information |                          |               |                           |              |                      |                      |                         |  |  |  |  |  |  | Expanded<br>Uncertainty<br>+/- (µg/mL) | CAS# | (Solvent Safety Info. On Attached pg.) | NIST |
|----------|-----------------|--------------------------|---------------|---------------------------|--------------|----------------------|----------------------|-------------------------|--|--|--|--|--|--|----------------------------------------|------|----------------------------------------|------|
|          | Lot<br>Number   | Nominal<br>Conc. (µg/mL) | Purity<br>(%) | Uncertainty<br>Purity (%) | Assay<br>(%) | Target<br>Weight (g) | Actual<br>Weight (g) | Actual<br>Conc. (µg/mL) |  |  |  |  |  |  |                                        |      |                                        |      |
|          | RM#             |                          |               |                           |              |                      |                      |                         |  |  |  |  |  |  |                                        |      |                                        |      |

1. Potassium nitrate (K) IN034 KD062022A1 10000 99.999 0.10 37.7 106.1040 ##### 10001.1 20.0 7757-79-1 5 mg/m3 orl-rat 3750 mg/kg 3141a

[1] Spectrum No. 1 [ 35.763 sec]:58119.D# [Count] [Linear]





**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 | Pt | <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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

**Part Number:** 58111 **Lot #** R-1113125  
**Lot Number:** 072424 **Solvent:** Nitric Acid  
**Description:** Sodium (Na)

**Expiration Date:** 072427 **2%** **80.0** **Nitric Acid**  
**Recommended Storage:** Ambient (20 °C) (mL)

**Nominal Concentration (µg/mL):** 10000

**NIST Test Number:** 6UTB **5E-05** **Balance Uncertainty**

**Weight shown below was diluted to (mL):** 4000.2 **0.10** **Flask Uncertainty**

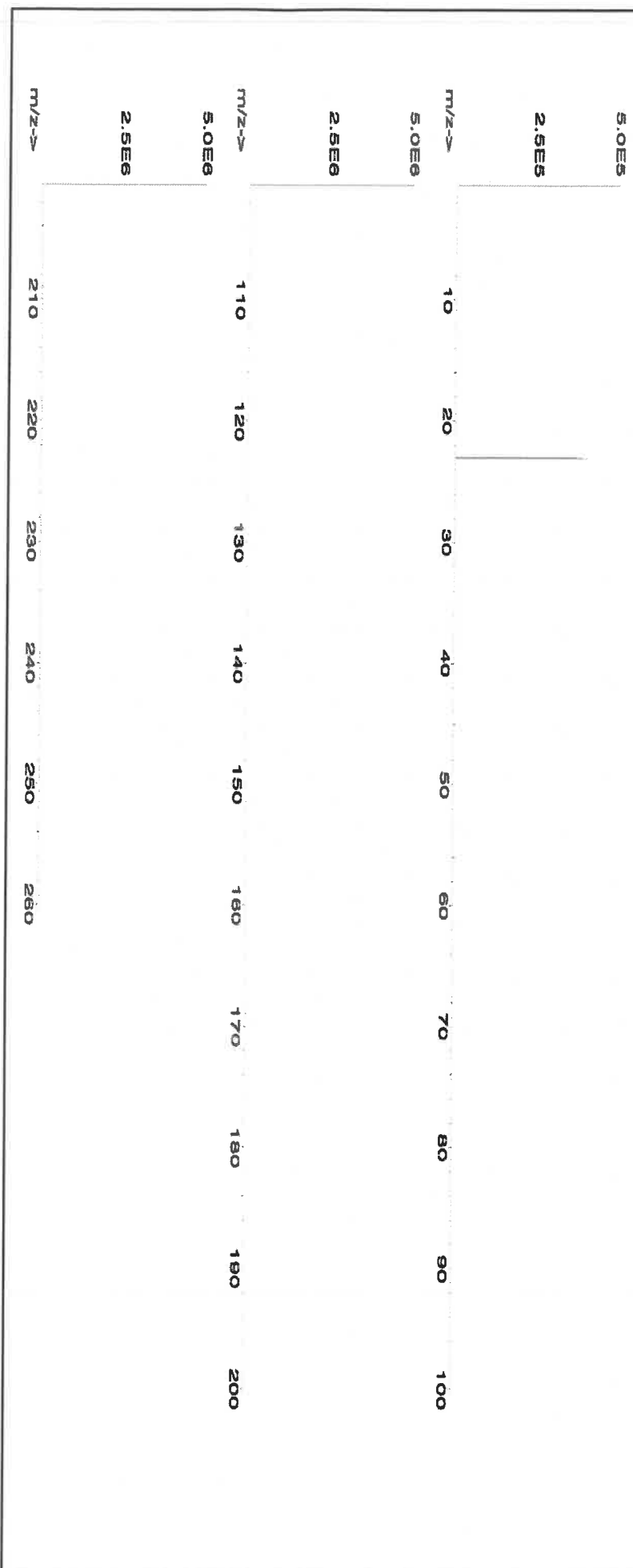
|                |                   |        |
|----------------|-------------------|--------|
| Formulated By: | Benson Chan       | 072424 |
| Reviewed By:   | Pedro L. Renteria | 072424 |

**SDS Information**

| Compound | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|----------|------------|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

1. Sodium nitrate (Na) IN036 NAV01201511 10000 99.999 0.10 26.9 148.7096 ##### 10000.0 20.0 7631-99-4 5 mg/m3 orl-rat 3430 mg/kg 3152a

[1] Spectrum No. 1 [ 8.935 sec]:58111.D# [Count] [Linear]





**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 | Pt | <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.
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- \* Standards are certified (+/-) 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).





**CERTIFIED WEIGHT REPORT:**

Part Number: **58030** Lot #  
Lot Number: **121724** *R → 11/13/25* Solvent: **24012496 Nitric Acid**  
Description: **Zinc (Zn)**

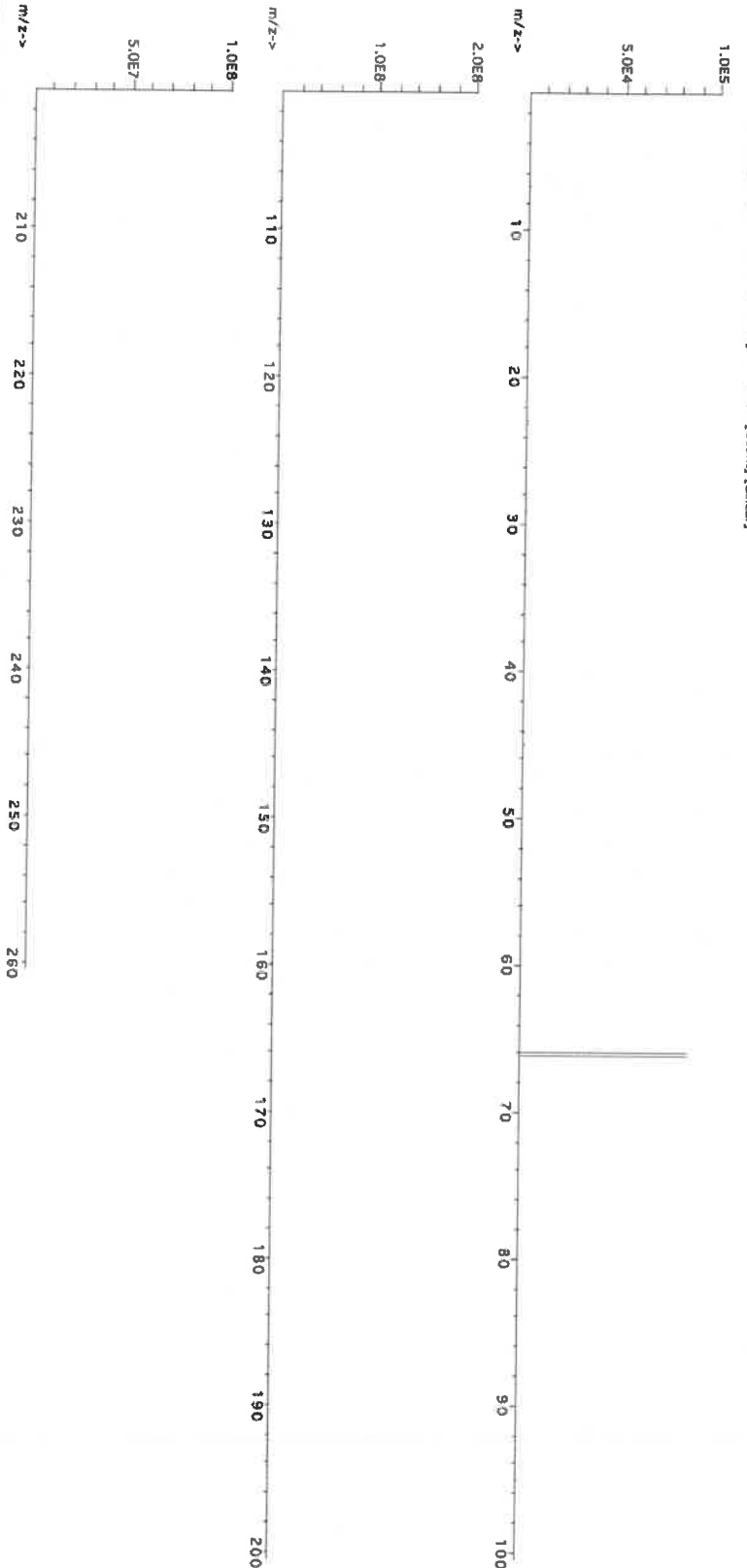
Expiration Date: **121727** *M6145* 2% 40.0 Nitric Acid  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test Number: **6UTB** 5E-05 Balance Uncertainty  
Weight shown below was diluted to (mL): **2000.1** 0.10 Flask Uncertainty

|                      |                         |
|----------------------|-------------------------|
| <i>Aleah O Brady</i> |                         |
| Formulated By:       | Aleah O'Brady           |
| Reviewed By:         | <i>Pedro L. Rentias</i> |
|                      | Pedro L. Rentias        |
|                      | 121724                  |

| Compound | Lot    | Nominal       | Purity     | Uncertainty | Assay | Target | (Solvent Safety Info. On Attached pg.) |             | NIST |
|----------|--------|---------------|------------|-------------|-------|--------|----------------------------------------|-------------|------|
|          |        |               |            |             |       |        | Actual                                 | Uncertainty |      |
| RM#      | Number | Conc. (µg/mL) | Purity (%) |             |       |        | Actual                                 |             |      |

1. Zinc nitrate hexahydrate (Zn) IN016 ZNE032021A1 1000 99.999 0.10 24.3 8.2308 8.2311 1000.0 2.0 10196-18-6 1 mg/m3 or-rat 1190mg/kg 3168

[1] Spectrum No.1 [ 31.103 sec; 58130.D# [Count] [Lines]





**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 | Pt | <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 | Bu | <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.
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- \* 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).

Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis

avantor™



M6151

R → 11/15/25

Material No.: 9530-33  
Batch No.: 22G2862015  
Manufactured Date: 2022-06-15  
Retest Date: 2027-06-14  
Revision No.: 0

## Certificate of Analysis

| Test                                      | Specification | Result      |
|-------------------------------------------|---------------|-------------|
| ACS – Assay (as HCl) (by acid–base titrn) | 36.5 – 38.0 % | 37.9 %      |
| ACS – Color (APHA)                        | ≤ 10          | 5           |
| ACS – Residue after Ignition              | ≤ 3 ppm       | < 1 ppm     |
| ACS – Specific Gravity at 60°/60°F        | 1.185 – 1.192 | 1.191       |
| ACS – Bromide (Br)                        | ≤ 0.005 %     | < 0.005 %   |
| ACS – Extractable Organic Substances      | ≤ 5 ppm       | < 1 ppm     |
| ACS – Free Chlorine (as Cl <sub>2</sub> ) | ≤ 0.5 ppm     | < 0.5 ppm   |
| Phosphate (PO <sub>4</sub> )              | ≤ 0.05 ppm    | < 0.03 ppm  |
| Sulfate (SO <sub>4</sub> )                | ≤ 0.5 ppm     | < 0.3 ppm   |
| Sulfite (SO <sub>3</sub> )                | ≤ 0.8 ppm     | 0.3 ppm     |
| Ammonium (NH <sub>4</sub> )               | ≤ 3 ppm       | < 1 ppm     |
| Trace Impurities – Arsenic (As)           | ≤ 0.010 ppm   | < 0.003 ppm |
| Trace Impurities – Aluminum (Al)          | ≤ 10.0 ppb    | 1.3 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    | 163.0 ppb   |
| Trace Impurities – Chromium (Cr)          | ≤ 1.0 ppb     | 0.7 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     | 0.6 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



Material No.: 9530-33  
 Batch No.: 22G2862015

| 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    | 2.9 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     | 0.8 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   | < 10.0 ppb |
| Trace Impurities – Silver (Ag)                         | ≤ 1.0 ppb     | 0.5 ppb    |
| Trace Impurities – Sodium (Na)                         | ≤ 100.0 ppb   | 2.3 ppb    |
| Trace Impurities – Strontium (Sr)                      | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Tantalum (Ta)                       | ≤ 1.0 ppb     | 1.6 ppb    |
| Trace Impurities – Thallium (Tl)                       | ≤ 5.0 ppb     | < 2.0 ppb  |
| Trace Impurities – Tin (Sn)                            | ≤ 5.0 ppb     | 4.0 ppb    |
| Trace Impurities – Titanium (Ti)                       | ≤ 1.0 ppb     | 1.5 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     | 0.3 ppb    |

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA–ANALYZED® Reagent  
For Trace Metal Analysis

 **avantor**™

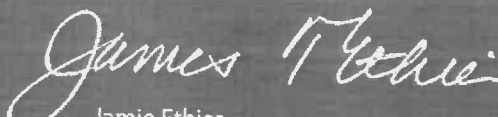


Material No.: 9530-33  
Batch No.: 22G2862015

| 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

  
Jamie Ethier  
Vice President Global Quality

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M6153

## 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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution  
Catalog Number: CGSR10  
Lot Number: V2-SR745329  
Matrix: 2% (v/v) HNO<sub>3</sub>  
Value / Analyte(s): 10 000 µg/mL ea:  
Strontium  
Starting Material: Strontium Carbonate  
Starting Material Lot#: 2647  
Starting Material Purity: 99.9960%

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10081 ± 39 µg/mL  
Density: 1.030 g/mL (measured at 20 ± 4 °C)

### Assay Information:

**Assay Method #1**      **10059 ± 50 µg/mL**  
ICP Assay NIST SRM Traceable to 3153a Lot Number: K2-SR650985

**Assay Method #2**      **10087 ± 26 µg/mL**  
EDTA NIST SRM 928 Lot Number: 928

- 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:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

$X_i$  = 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:

$$w_i = (1/u_{char\ i}^2) / (\sum (1/u_{char\ i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{char} = [\sum (w_i)^2 (u_{char\ i}^2)]^{1/2}$  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

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k (u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = 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 | < | 0.000960 | M | Eu | < | 0.000480 | O | Na |   | 0.002964 | M | Se | < | 0.042000 | M | Zn |  | 0.004560 |
| M | Al |   | 0.003420 | O | Fe |   | 0.013225 | M | Nb | < | 0.000480 | O | Si |   | 0.012997 | M | Zr |  | 0.001847 |
| M | As | < | 0.007200 | M | Ga | < | 0.002900 | M | Nd | < | 0.000480 | M | Sm | < | 0.000480 |   |    |  |          |
| M | Au | < | 0.003900 | M | Gd | < | 0.000480 | O | Ni |   | 0.001482 | M | Sn | < | 0.000480 |   |    |  |          |
| O | B  | < | 0.003200 | M | Ge | < | 0.004800 | M | Os | < | 0.001500 | s | Sr | < |          |   |    |  |          |
| M | Ba |   | 0.638494 | M | Hf | < | 0.000480 | O | P  | < | 0.017000 | M | Ta | < | 0.000480 |   |    |  |          |
| O | Be | < | 0.000450 | M | Hg | < | 0.000960 | M | Pb |   | 0.010717 | M | Tb | < | 0.000480 |   |    |  |          |
| M | Bi | < | 0.002000 | M | Ho | < | 0.000480 | M | Pd | < | 0.002000 | M | Te | < | 0.016000 |   |    |  |          |
| O | Ca |   | 0.025083 | M | In | < | 0.008600 | M | Pr |   | 0.000547 | M | Th | < | 0.000480 |   |    |  |          |
| M | Cd | < | 0.000960 | M | Ir | < | 0.000480 | M | Pt | < | 0.000480 | M | Ti |   | 0.004560 |   |    |  |          |
| M | Ce |   | 0.000661 | O | K  |   | 0.025083 | M | Rb | < | 0.003400 | M | Tl | < | 0.000480 |   |    |  |          |
| M | Co |   | 0.001527 | M | La | < | 0.000480 | M | Re | < | 0.000480 | M | Tm |   | 0.004332 |   |    |  |          |
| O | Cr | < | 0.004700 | O | Li | < | 0.005600 | O | Rh | < | 0.013000 | M | U  | < | 0.000480 |   |    |  |          |
| M | Cs | < | 0.000480 | M | Lu | < | 0.000480 | M | Ru | < | 0.000960 | M | V  | < | 0.000960 |   |    |  |          |
| O | Cu | < | 0.003800 | O | Mg |   | 0.001048 | O | S  | < | 0.045000 | M | W  | < | 0.002400 |   |    |  |          |
| M | Dy | < | 0.000960 | O | Mn |   | 0.000319 | M | Sb | < | 0.009600 | O | Y  | < | 0.001200 |   |    |  |          |
| M | Er | < | 0.000480 | M | Mo | < | 0.002900 | M | Sc | < | 0.001500 | M | Yb | < | 0.000480 |   |    |  |          |

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). <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](http://www.inorganicventures.com/TCT)

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution** - 87.62 +2 6 Sr(H<sub>2</sub>O)<sub>6</sub>+2

**Chemical Compatibility** - Soluble in HCl, and HNO<sub>3</sub>. Avoid H<sub>2</sub>SO<sub>4</sub>, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate and tungstate in neutral aqueous media.

**Stability** - 2-100 ppb levels stable for months in 1% HNO<sub>3</sub> / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1 - 3.5% HNO<sub>3</sub> / LDPE container.

**Sr Containing Samples (Preparation and Solution)** -Metal (Best dissolved in diluted HNO<sub>3</sub>); Ores (Carbonate fusion in PtO followed by HCl dissolution); Organic Matrices (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 88 amu      | 1200 ppt               | N/A   | 72Ge16O, 176Yb+2,<br>176Lu+2, 176Hf+2       |
| ICP-OES 407.771 nm | 0.0004 / 0.00006 µg/mL | 1     | U, Ce                                       |
| ICP-OES 421.552 nm | 0.0008 / 0.00004 µg/mL | 1     | Rb                                          |
| ICP-OES 460.733 nm | 0.07 / 0.003 µg/mL     | 1     | Ce                                          |

## 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

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

August 26, 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

- August 26, 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



Nitric Acid 69%  
CMOS

avantor™



R- 0210212025

m - 6158

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 <sub>3</sub> )         | 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 <sub>4</sub> )      | ≤ 0.10 ppm    | < 0.03 ppm  |
| Sulfate (SO <sub>4</sub> )        | ≤ 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

avantors<sup>TM</sup>



Material No.: 9606-03  
Batch No.: 24D1062002

| Test                                | Specification | Result     |
|-------------------------------------|---------------|------------|
| Trace Impurities - Niobium (Nb)     | ≤ 50.0 ppb    | < 1.0 ppb  |
| Trace Impurities - Potassium (K)    | ≤ 50 ppb      | 16 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   | 10 par/ml  |
| Particle Count - 1.0 µm and greater | ≤ 10 par/ml   | 3 par/ml   |

>>> Continued on page 3 >>>





Nitric Acid 69%  
CMOS



m-6162

Material No.: 9606-03  
Batch No.: 24H0162012  
Manufactured Date: 2024-06-28  
Retest Date: 2029-06-27  
Revision No.: 0

R. Date :- 04/27/2025

## Certificate of Analysis

| Test                              | Specification | Result      |
|-----------------------------------|---------------|-------------|
| Assay (HNO <sub>3</sub> )         | 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 <sub>4</sub> )      | ≤ 0.10 ppm    | < 0.03 ppm  |
| Sulfate (SO <sub>4</sub> )        | ≤ 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    | < 1.0 ppb   |
| Trace Impurities – Boron (B)      | ≤ 10.0 ppb    | 0.1 ppb     |
| Trace Impurities – Cadmium (Cd)   | ≤ 50 ppb      | < 1 ppb     |
| Trace Impurities – Calcium (Ca)   | ≤ 50.0 ppb    | 0.3 ppb     |
| Trace Impurities – Chromium (Cr)  | ≤ 30.0 ppb    | 0.1 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      | < 1 ppb     |
| Trace Impurities – Gold (Au)      | ≤ 20 ppb      | < 1 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    | < 1.0 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    | < 1.0 ppb   |

>>> Continued on page 2 >>>

Nitric Acid 69%  
CMOS

avantor™



Material No.: 9606-03  
Batch No.: 24H0162012

| Test                                | Specification | Result    |
|-------------------------------------|---------------|-----------|
| Trace Impurities – Niobium (Nb)     | ≤ 50.0 ppb    | < 1.0 ppb |
| Trace Impurities – Potassium (K)    | ≤ 50 ppb      | < 1 ppb   |
| Trace Impurities – Silicon (Si)     | ≤ 50 ppb      | 1 ppb     |
| Trace Impurities – Silver (Ag)      | ≤ 20.0 ppb    | < 1.0 ppb |
| Trace Impurities – Sodium (Na)      | ≤ 150.0 ppb   | < 1.0 ppb |
| Trace Impurities – Strontium (Sr)   | ≤ 30.0 ppb    | < 1.0 ppb |
| Trace Impurities – Tantalum (Ta)    | ≤ 10.0 ppb    | < 1.0 ppb |
| Trace Impurities – Thallium (Tl)    | ≤ 10.0 ppb    | < 1.0 ppb |
| Trace Impurities – Tin (Sn)         | ≤ 20.0 ppb    | < 1.0 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   | 13 par/ml |
| Particle Count – 1.0 µm and greater | ≤ 10 par/ml   | 5 par/ml  |

>>> Continued on page 3 >>>



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## 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).



## 2.0 PRODUCT DESCRIPTION

|                     |                                     |            |  |
|---------------------|-------------------------------------|------------|--|
| Product Code:       | Multi Analyte Custom Grade Solution |            |  |
| Catalog Number:     | QCP-CICV-1                          |            |  |
| Lot Number:         | V2-MEB744107                        |            |  |
| Matrix:             | 7% (v/v) HNO <sub>3</sub>           |            |  |
| Value / Analyte(s): | 2 500 µg/mL ea:                     |            |  |
|                     | Calcium,                            | Potassium, |  |
|                     | Magnesium,                          | Sodium,    |  |
|                     | 1 000 µg/mL ea:                     |            |  |
|                     | Aluminum,                           | Barium,    |  |
|                     | 500 µg/mL ea:                       |            |  |
|                     | Iron,                               |            |  |
|                     | 250 µg/mL ea:                       |            |  |
|                     | Nickel,                             | Vanadium,  |  |
|                     | Zinc,                               | Cobalt,    |  |
|                     | Manganese,                          |            |  |
|                     | 125 µg/mL ea:                       |            |  |
|                     | Silver,                             | Copper,    |  |
|                     | 100 µg/mL ea:                       |            |  |
|                     | Chromium,                           |            |  |
|                     | 25 µg/mL ea:                        |            |  |
|                     | Beryllium                           |            |  |

**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   |
|---------------|--------------------|---------------|-------------------|
| Aluminum, Al  | 1 000 ± 4 µg/mL    | Barium, Ba    | 1 000 ± 6 µg/mL   |
| Beryllium, Be | 24.98 ± 0.12 µg/mL | Calcium, Ca   | 2 500 ± 8 µg/mL   |
| Chromium, Cr  | 99.9 ± 0.6 µg/mL   | Cobalt, Co    | 250.2 ± 1.2 µg/mL |
| Copper, Cu    | 125.0 ± 0.5 µg/mL  | Iron, Fe      | 500.0 ± 2.2 µg/mL |
| Magnesium, Mg | 2 500 ± 11 µg/mL   | Manganese, Mn | 249.9 ± 1.1 µg/mL |
| Nickel, Ni    | 250.0 ± 1.2 µg/mL  | Potassium, K  | 2 500 ± 11 µg/mL  |
| Silver, Ag    | 125.0 ± 0.6 µg/mL  | Sodium, Na    | 2 500 ± 11 µg/mL  |
| Vanadium, V   | 250.0 ± 1.1 µg/mL  | Zinc, Zn      | 249.9 ± 1.1 µg/mL |

**Density:** 1.081 g/mL (measured at 20 ± 4 °C)

**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       |
| Cu      | ICP Assay   | 3114      | 120618       |
| 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     | 200413       |
| Na      | Gravimetric |           | See Sec. 4.2 |
| Ni      | ICP Assay   | 3136      | 120619       |
| Ni      | EDTA        | 928       | 928          |
| V       | ICP Assay   | 3165      | 160906       |
| V       | EDTA        | 928       | 928          |
| Zn      | ICP Assay   | 3168a     | 120629       |
| Zn      | EDTA        | 928       | 928          |

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

#### Characterization of CRM/RM by Two or More Methods

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

$$X_{\text{CRM/RM}} = \sum(w_i)(X_i)$$

$X_i$  = mean of Assay Method  $i$  with standard uncertainty  $u_{\text{char } i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum(1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char}} = [\sum(w_i)^2(u_{\text{char } i}^2)]^{1/2}$  where  $u_{\text{char } i}$  are the errors from each characterization method

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = transport stability standard uncertainty

#### Characterization of CRM/RM by One Method

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

$$X_{\text{CRM/RM}} = (X_a)(u_{\text{char } a})$$

$X_a$  = mean of Assay Method A with

$u_{\text{char } a}$  = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k(u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char } a}$  = the errors from characterization

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = 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), <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](http://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

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

May 22, 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

- **May 22, 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:

Justin Dirico  
Stock Processing Supervisor



#### Certificate Approved By:

Jodie Wall  
Stock VSM Coordinator



#### Certifying Officer:

Paul Gaines  
Chairman / Senior Technical Director



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Christiansburg, VA 24073 USA  
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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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: QCP-CICV-2  
Lot Number: U2-MEB733713  
Matrix: 3% (w/v) Tartaric acid  
1% (v/v) HNO<sub>3</sub>  
Value / Analyte(s): 500 µg/mL ea:  
Antimony

**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 |
|--------------|-------------------|---------|-----------------|
| Antimony, Sb | 500.0 ± 2.8 µg/mL |         |                 |

**Density:** 1.017 g/mL (measured at 20 ± 4 °C)

### Assay Information:

| ANALYTE | METHOD    | NIST SRM# | SRM LOT# |
|---------|-----------|-----------|----------|
| Sb      | ICP Assay | 3102a     | 140911   |

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:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

$X_i$  = 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:

$$w_i = (1/u_{char i}^2) / (\sum(1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char i}^2)]^{1/2}$  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

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k(u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

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)

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). <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](https://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

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

June 01, 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

- June 01, 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



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## 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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: QCP-CICV-3  
Lot Number: V2-MEB749572  
Matrix: 7% (v/v) HNO<sub>3</sub>  
Value / Analyte(s):  
500 µg/mL ea:  
Arsenic, Lead,  
Selenium, Thallium,  
250 µg/mL ea:  
Cadmium

**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   |
|--------------|-------------------|--------------|-------------------|
| Arsenic, As  | 500.0 ± 3.1 µg/mL | Cadmium, Cd  | 250.1 ± 1.1 µg/mL |
| Lead, Pb     | 500.0 ± 2.3 µg/mL | Selenium, Se | 500.0 ± 3.2 µg/mL |
| Thallium, Tl | 500.0 ± 3.0 µg/mL |              |                   |

**Density:** 1.040 g/mL (measured at 20 ± 4 °C)

### 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,  $X_{\text{CRM/RM}}$ , where two or more methods of characterization are used is the weighted mean of the results:

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

$X_i$  = mean of Assay Method  $i$  with standard uncertainty  $u_{\text{char } i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i})^2]^{1/2}$  where  $u_{\text{char } i}$  are the errors from each characterization method

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = transport stability standard uncertainty

#### Characterization of CRM/RM by One Method

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

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

$X_a$  = mean of Assay Method A with

$u_{\text{char } a}$  = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (\pm) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char } a}$  = the errors from characterization

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

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$u_{\text{ts}}$  = 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

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### 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), <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](http://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

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## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

January 02, 2025

- 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 02, 2030**

- 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:

Justin Dirico  
Stock Processing Supervisor



#### Certificate Approved By:

Jodie Wall  
Stock VSM Coordinator



#### Certifying Officer:

Paul Gaines  
Chairman / Senior Technical Director







**Certified Reference Material CRM**



ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://AbsoluteStandards.com

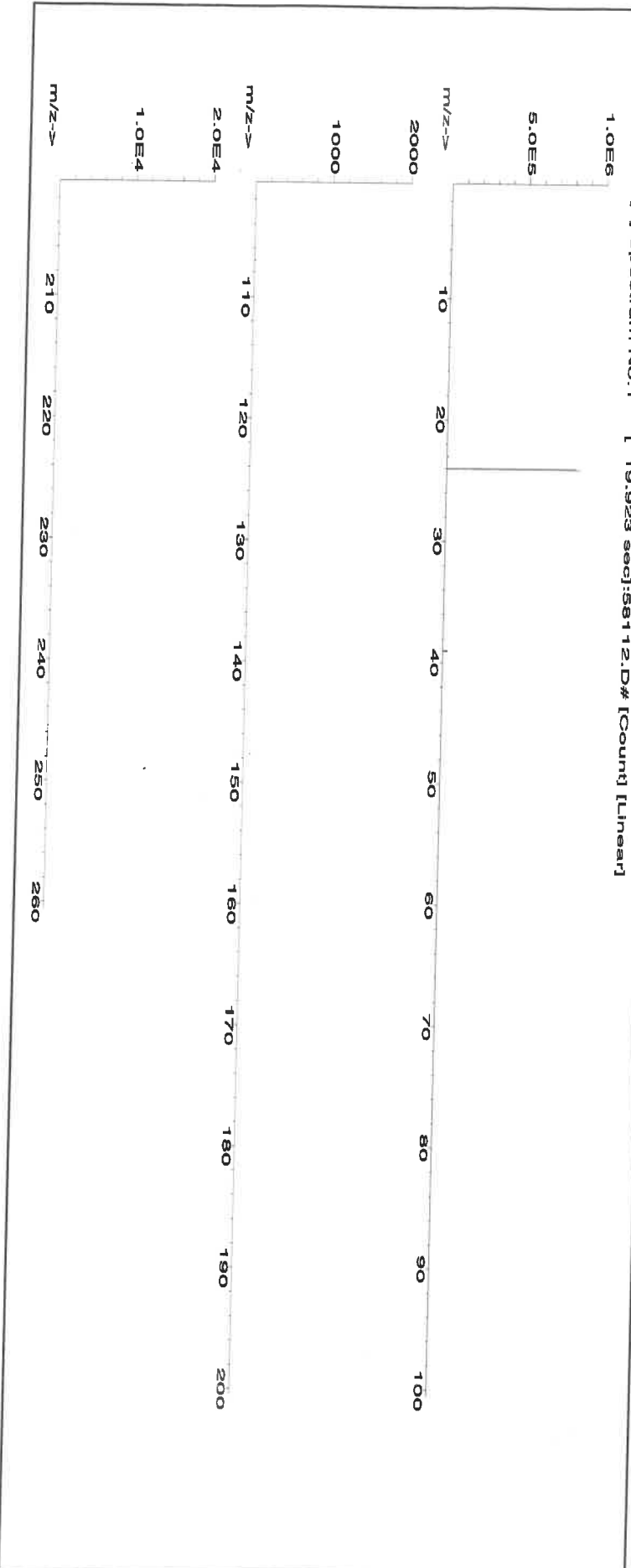
**CERTIFIED WEIGHT REPORT:**

**Part Number:** 58112 **Lot #** M 6171  
**Lot Number:** 011525 **Solvent:** 24012496 Nitric Acid  
**Description:** Magnesium (Mg)  
**Expiration Date:** 011528 **2%**  
**Recommended Storage:** Ambient (20 °C) **40.0** Nitric Acid  
**Nominal Concentration (µg/mL):** 10000 **(mL)**  
**NIST Test Number:** 6U7B **5E-05** Balance Uncertainty  
**Weight shown below was diluted to (mL):** 2000.07 **0.100** Flask Uncertainty

|                |                 |        |
|----------------|-----------------|--------|
| Formulated By: | Benson Chan     | 011525 |
| Reviewed By:   | Pedro L. Rentas | 011525 |

**Compound**

1. Magnesium nitrate hexahydrate (Mg) IN030 MGD05023A1 10000 99.999 0.10 8.51 234.9183 234.9195 10000.1 20.0 13446-18-9 NA off-ret 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 | Ku | <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 certified (+/-) 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).

## 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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Custom Grade Solution  
Catalog Number: CGNA10  
Lot Number: V2-NA740547  
Matrix: 2% (v/v) HNO<sub>3</sub>  
Value / Analyte(s): 10 000 µg/mL ea:  
Sodium  
Starting Material: Sodium Carbonate  
Starting Material Lot#: 2453 and 2606  
Starting Material Purity: 99.9976%

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10018 ± 30 µg/mL  
Density: 1.033 g/mL (measured at 20 ± 4 °C)

### Assay Information:

|                        |                                                                          |
|------------------------|--------------------------------------------------------------------------|
| <b>Assay Method #1</b> | <b>10026 ± 18 µg/mL</b><br>Gravimetric NIST SRM Lot Number: See Sec. 4.2 |
| <b>Assay Method #2</b> | <b>9986 ± 66 µg/mL</b><br>ICP Assay NIST SRM 3152a Lot Number: 200413    |
| <b>Assay Method #3</b> | <b>10002 ± 31 µg/mL</b><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:

$$X_{CRM/RM} = \sum(w_i)(X_i)$$

$X_i$  = 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:

$$w_i = (1/u_{char\ i})^2 / (\sum(1/(u_{char\ i})^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k(u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{char} = [\sum(w_i)^2(u_{char\ i})^2]^{1/2}$  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

$$CRM/RM \text{ Expanded Uncertainty } (z) = U_{CRM/RM} = k(u_{char\ a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

$k$  = 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 errors 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 < 0.000860 | M Eu < 0.000860 | s Na < 0.034000 | O Se < 0.000387 |
| O Al < 0.003121 | O Fe < 0.001622 | M Nb < 0.000860 | O Si < 0.044943 |
| M As < 0.001800 | M Ga < 0.000860 | M Nd < 0.000860 | M Sm < 0.000860 |
| M Au < 0.005700 | M Gd < 0.000860 | O Ni < 0.000980 | M Sn < 0.000860 |
| O B < 0.025000  | M Ge < 0.003500 | M Os < 0.029000 | M Sr < 0.000436 |
| M Ba < 0.004494 | M Hf < 0.000860 | O P < 0.005742  | M Ta < 0.000086 |
| O Be < 0.000160 | M Hg < 0.002900 | M Pb < 0.002600 | M Tb < 0.000860 |
| M Bi < 0.000860 | M Ho < 0.000860 | M Pd < 0.004300 | M Te < 0.004300 |
| O Ca < 0.112358 | M In < 0.000860 | M Pr < 0.000860 | M Th < 0.003500 |
| O Cd < 0.000730 | M Ir < 0.000940 | M Pt < 0.000860 | O Ti < 0.000399 |
| M Ce < 0.000860 | O K < 0.349560  | M Rb < 0.000436 | M Tl < 0.000860 |
| M Co < 0.000860 | M La < 0.000860 | M Re < 0.000860 | M Tm < 0.000860 |
| O Cr < 0.002000 | O Li < 0.000224 | M Rh < 0.000860 | M U < 0.000860  |
| M Cs < 0.000287 | M Lu < 0.000860 | M Ru < 0.000940 | O V < 0.001500  |
| O Cu < 0.004100 | M Mg < 0.097377 | O S < 0.018726  | M W < 0.007700  |
| M Dy < 0.000860 | M Mn < 0.007700 | M Sb < 0.000860 | M Y < 0.000860  |
| M Er < 0.000860 | O Mo < 0.002800 | O Sc < 0.000610 | M Yb < 0.000860 |

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). <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](http://www.inorganicventures.com/TCT)

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution** - 22.99 +1 (6) Na+(aq) largely ionic in nature

**Chemical Compatibility** -Soluble in HCl, HNO<sub>3</sub>, H<sub>2</sub>SO<sub>4</sub> and HF aqueous matrices. Stable with all metals and inorganic anions.

**Stability** - 2-100 ppb levels stable for months in 1% HNO<sub>3</sub> / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO<sub>3</sub> / LDPE container.

**Na Containing Samples (Preparation and Solution)** - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

**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 23 amu      | 310 ppt              | n/a   | 46Ti+2, 46Ca+2                                         |
| ICP-OES 330.237 nm | 2.0 / 0.09 µg/mL     | 1     | Pd, Zn                                                 |
| ICP-OES 588.995 nm | 0.03 / 0.006 µg/mL   | 1     | 2nd order radiation from R.E.s on some optical designs |
| ICP-OES 589.595 nm | 0.07 / 0.00009 µg/mL | 1     | 2nd order radiation from R.E.s on some optical designs |

## 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; [info@inorganicventures.com](mailto:info@inorganicventures.com);

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

February 23, 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 23, 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



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M6175

## 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).



## 2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Custom Grade Solution  
Catalog Number: 6020CAL-1  
Lot Number: V2-MEB742014  
Matrix: 5% (v/v) HNO<sub>3</sub>  
tr. HF  
Value / Analyte(s): 20 µg/mL ea:  
Silver, Aluminum,  
Arsenic, Barium,  
Beryllium, Calcium,  
Cadmium, Cobalt,  
Chromium, Copper,  
Iron, Potassium,  
Magnesium, Manganese,  
Sodium, Nickel,  
Lead, Antimony,  
Selenium, Thallium,  
Vanadium, Zinc

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

| ANALYTE       | CERTIFIED VALUE    | ANALYTE       | CERTIFIED VALUE    |
|---------------|--------------------|---------------|--------------------|
| Aluminum, Al  | 20.02 ± 0.08 µg/mL | Antimony, Sb  | 20.03 ± 0.11 µg/mL |
| Arsenic, As   | 20.03 ± 0.16 µg/mL | Barium, Ba    | 20.02 ± 0.11 µg/mL |
| Beryllium, Be | 20.02 ± 0.15 µg/mL | Cadmium, Cd   | 20.02 ± 0.11 µg/mL |
| Calcium, Ca   | 20.03 ± 0.09 µg/mL | Chromium, Cr  | 20.03 ± 0.13 µg/mL |
| Cobalt, Co    | 20.03 ± 0.12 µg/mL | Copper, Cu    | 20.03 ± 0.10 µg/mL |
| Iron, Fe      | 20.04 ± 0.09 µg/mL | Lead, Pb      | 20.03 ± 0.11 µg/mL |
| Magnesium, Mg | 20.03 ± 0.10 µg/mL | Manganese, Mn | 20.03 ± 0.11 µg/mL |
| Nickel, Ni    | 20.03 ± 0.11 µg/mL | Potassium, K  | 20.03 ± 0.10 µg/mL |
| Selenium, Se  | 20.03 ± 0.13 µg/mL | Silver, Ag    | 20.03 ± 0.09 µg/mL |
| Sodium, Na    | 20.03 ± 0.10 µg/mL | Thallium, Tl  | 20.03 ± 0.10 µg/mL |
| Vanadium, V   | 20.03 ± 0.11 µg/mL | Zinc, Zn      | 20.03 ± 0.11 µg/mL |



**Density:** 1.027 g/mL (measured at 20 ± 4 °C)

**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          |
| As      | ICP Assay   | 3103a     | 100818       |
| As      | Calculated  |           | See Sec. 4.2 |
| Ba      | ICP Assay   | 3104a     | 140909       |
| Ba      | Gravimetric |           | See Sec. 4.2 |
| Be      | ICP Assay   | 3105a     | 090514       |
| Ca      | ICP Assay   | 3109a     | 130213       |
| Ca      | EDTA        | 928       | 928          |
| Cd      | ICP Assay   | 3108      | 130116       |
| Cd      | EDTA        | 928       | 928          |
| Co      | ICP Assay   | 3113      | 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          |
| 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          |
| Pb      | ICP Assay   | 3128      | 101026       |
| Pb      | EDTA        | 928       | 928          |
| Sb      | ICP Assay   | 3102a     | 140911       |
| Se      | ICP Assay   | 3149      | 100901       |
| Tl      | ICP Assay   | 3158      | 151215       |
| V       | ICP Assay   | 3165      | 160906       |
| V       | EDTA        | 928       | 928          |
| Zn      | ICP Assay   | 3168a     | 120629       |
| Zn      | EDTA        | 928       | 928          |

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



#### Characterization of CRM/RM by Two or More Methods

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

$$X_{\text{CRM/RM}} = \sum (w_i) (X_i)$$

$X_i$  = mean of Assay Method  $i$  with standard uncertainty  $u_{\text{char } i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance:

$$w_i = (1/u_{\text{char } i}^2) / (\sum (1/u_{\text{char } i}^2))$$

$$\text{CRM/RM Expanded Uncertainty } (k) = U_{\text{CRM/RM}} = k (u_{\text{char}}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char}} = [\sum (w_i)^2 (u_{\text{char } i}^2)]^{1/2}$ , where  $u_{\text{char } i}$  are the errors from each characterization method

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = transport stability standard uncertainty

#### Characterization of CRM/RM by One Method

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

$$X_{\text{CRM/RM}} = (X_a) (u_{\text{char } a})$$

$X_a$  = mean of Assay Method A with

$u_{\text{char } a}$  = the standard uncertainty of characterization Method A

$$\text{CRM/RM Expanded Uncertainty } (k) = U_{\text{CRM/RM}} = k (u_{\text{char } a}^2 + u_{\text{bb}}^2 + u_{\text{Its}}^2 + u_{\text{ts}}^2)^{1/2}$$

$k$  = coverage factor = 2

$u_{\text{char } a}$  = the errors from characterization

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

$u_{\text{Its}}$  = long term stability standard uncertainty (storage)

$u_{\text{ts}}$  = 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). <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](http://www.inorganicventures.com/TCT)

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

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

**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](http://inorganicventures.com); [info@inorganicventures.com](mailto:info@inorganicventures.com)

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

March 11, 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

- **March 11, 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





**CERTIFIED WEIGHT REPORT:**

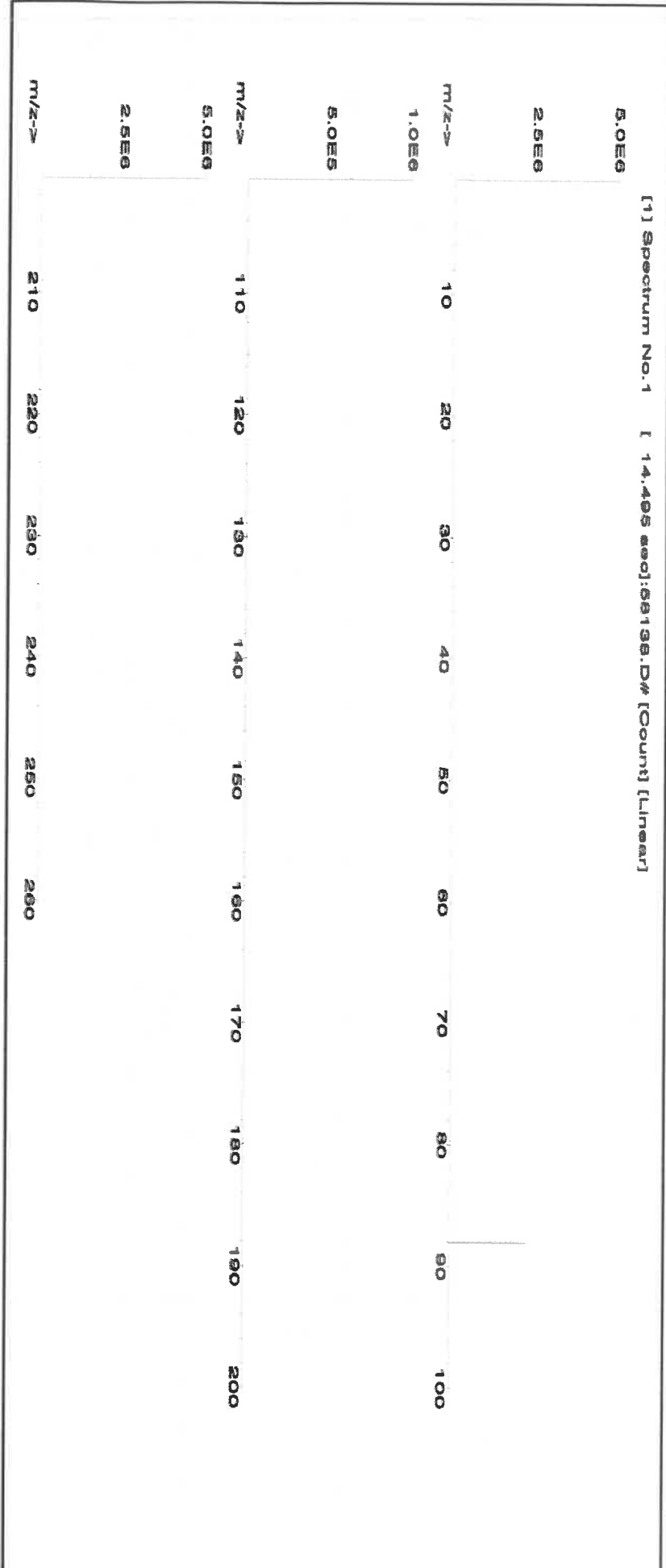
**Part Number:** 57038 **Lot #** 24002546 **Solvent:** Nitric Acid  
**Lot Number:** 092724  
**Description:** Strontium (Sr)  
**Expiration Date:** 092727 **2%** **40.0** **Nitric Acid**  
**Recommended Storage:** Ambient (20 °C) **(mL)**  
**Nominal Concentration (µg/mL):** 1000  
**NIST Test Number:** 8UTB **5E-05** **Balance Uncertainty**  
**Weight shown below was diluted to (mL):** 2000.07 **0.100** **Flask Uncertainty**

**Formulated By:** Benson Chan 092724  
**Reviewed By:** Pedro L. Rentas 092724

**SDS Information**

| Compound | Lot | Nominal | Purity        | Uncertainty | Assay      | Target     | Actual     | Actual        | Uncertainty | (Solvent Safety Info. On Attached pg.) | NIST |
|----------|-----|---------|---------------|-------------|------------|------------|------------|---------------|-------------|----------------------------------------|------|
|          | RM# | Number  | Conc. (µg/mL) | (%)         | Purity (%) | Weight (g) | Weight (g) | Conc. (µg/mL) | +/- (µg/mL) |                                        |      |

1. **Strontium nitrate (Sr)** IN017 SR2022018A1 **1000** **99.997** **0.10** **41.2** **4.85470** **4.85481** **1000.0** **2.0** **10042-76-9** **NA** **or-rel >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 | Pt | <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 | Tc | <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 | Ti | <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 | Tl | <0.02 | Zr | <0.02 |

(T) = Target analyte

### Physical Characterization:

**Homogeneity:** No heterogeneity was observed in the preparation of this standard.

**Certified by:**

Har. P. D.

- \* 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 certified (+/-) 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).



**CERTIFIED WEIGHT REPORT:**

Part Number:  
Lot Number:  
Description:

**57082**  
**031525**  
**Lead (Pb)**

Lot #

Nitric Acid

Expiration Date:

031528

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 0.10 Flask Uncertainty

2%

40.0 (mL)

Nitric Acid

Formulated By:

Giovanni Esposito

031525

Reviewed By:

Pedro L. Renterias

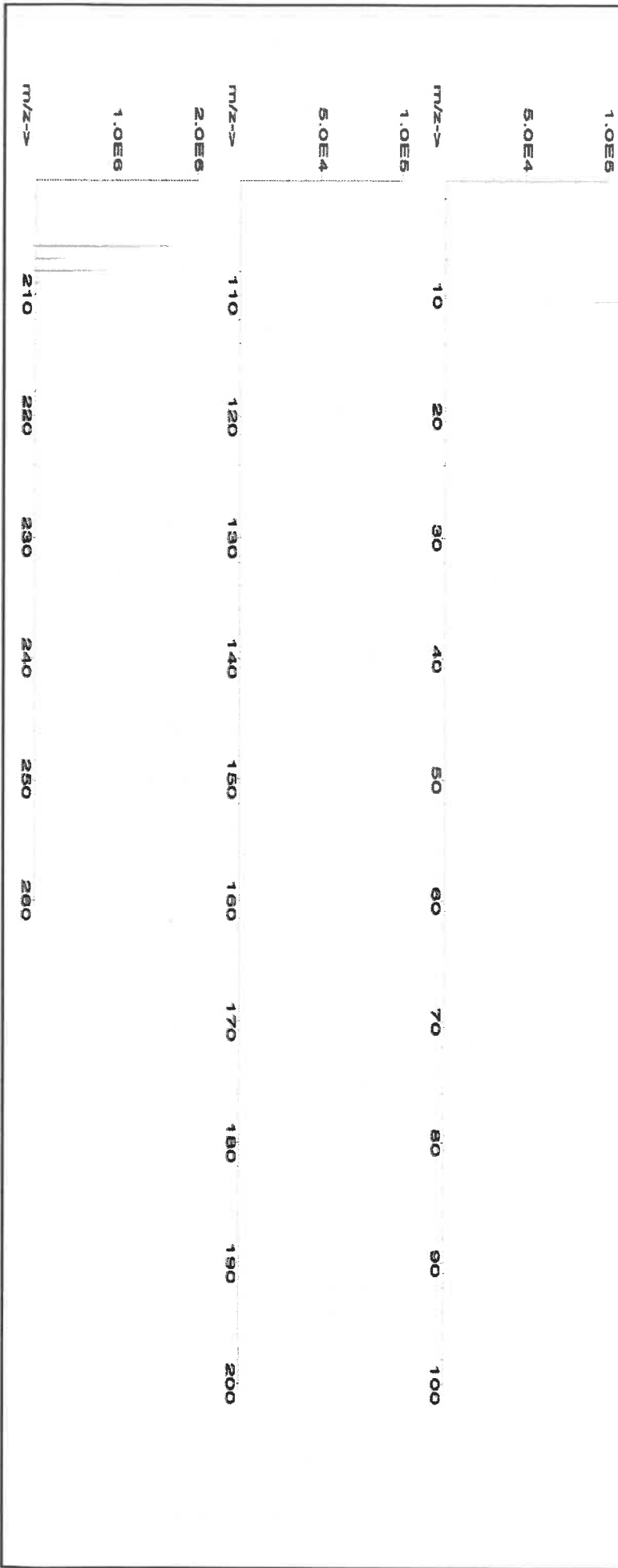
031525

**SDS Information**

| Compound | Lot | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty Purity (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|-----|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|----------|-----|-----------------------|------------|------------------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

|                          |                   |      |        |      |      |         |         |        |     |            |            |                      |      |
|--------------------------|-------------------|------|--------|------|------|---------|---------|--------|-----|------------|------------|----------------------|------|
| 1. Lead(II) nitrate (Pb) | IN028 PBD122016A1 | 1000 | 99.999 | 0.10 | 62.5 | 3.20015 | 3.20067 | 1000.2 | 2.0 | 10089-74-8 | 0.05 mg/m3 | Intrins-ral 93 mg/kg | 3128 |
|--------------------------|-------------------|------|--------|------|------|---------|---------|--------|-----|------------|------------|----------------------|------|

[1] Spectrum No. 1 [ 14.144 sec]:58082.D# [Count] [Linear]







**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 | Pt | <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 | Tc | <0.02 | U  | <0.02 |
| As | <0.2  | Ce | <0.02 | Bu | <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  | Se | <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 certified (+/-) 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).



QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY  
"An ISO 9001:2015 Certified Program"

Instructions for QATS Reference Material: *ICP-MS ICS*

QATS LABORATORY INORGANIC REFERENCE MATERIAL  
INTERFERENCE CHECK SAMPLE SET FOR ICP-MS (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.



(A) **SAMPLE DESCRIPTION**

Enclosed is a set of one (1) or more bottles of an 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-0803" and for the ICSAB mixture use "ICSA-0803+ICSB-0803".**

**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 the Contracting Officer, Ross Miller at [miller.ross@epa.gov](mailto:miller.ross@epa.gov). If directed by Ross Miller, 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**

This interference check sample set is to be used to verify elemental isobaric correction factors of inductively coupled plasma-mass spectrometers (ICP-MS). This reference material set consists of two (2) concentrated solutions. The ICSA solution contains several interferent elements and species; for a complete listing refer to the CLP SOW. 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 the ICP-MS ICS 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-0803, Interferents:** Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO<sub>3</sub>. Analyze this solution by ICP-MS.

**ICSB-0803, Analytes, mixed with ICSA-0803, 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 1% v/v HNO<sub>3</sub>. Analyze this ICSAB solution by ICP-MS.

(D) "CERTIFIED VALUE" CONCENTRATIONS OF QATS ICP-MS 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-MS  
ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

| Element | CRQL | Part A<br>(µg/L) | Lower<br>Limit<br>(µg/L) | Upper<br>Limit<br>(µg/L) | Part A<br>+Part B<br>(µg/L) | Lower<br>Limit<br>(µg/L) | Upper<br>Limit<br>(µg/L) |
|---------|------|------------------|--------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|
| Al      | 20.0 | [100000]         |                          |                          | [100000]                    |                          |                          |
| Sb      | 2.0  | (1.5)            | -2.5                     | 5.5                      | (22.0)                      | 18.0                     | 26.0                     |
| As      | 1.0  | (0.1)            | -1.9                     | 2.1                      | 19.0                        | 16.2                     | 21.9                     |
| Ba      | 10.0 | (1.2)            | -18.8                    | 21.2                     | (22.0)                      | 2.0                      | 42.0                     |
| Be      | 1.0  | (0)              | -2.0                     | 2.0                      | 19.0                        | 16.2                     | 21.9                     |
| Cd      | 1.0  | (0.7)            | -1.3                     | 2.7                      | 20.0                        | 17.0                     | 23.0                     |
| Ca      | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| C       |      | [200000]         |                          |                          | [200000]                    |                          |                          |
| Cl      |      | [1000000]        |                          |                          | [1000000]                   |                          |                          |
| Cr      | 2.0  | (21.0)           | 17.0                     | 25.0                     | 40.0                        | 34.0                     | 46.0                     |
| Co      | 1.0  | (1.0)            | -1.0                     | 3.0                      | 20.0                        | 17.0                     | 23.0                     |
| Cu      | 2.0  | (8.0)            | 4.0                      | 12.0                     | (25.0)                      | 21.0                     | 29.0                     |
| Fe      | 200  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Pb      | 1.0  | (4.0)            | 2.0                      | 6.0                      | 25.0                        | 21.3                     | 28.8                     |
| Mg      | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Mn      | 1.0  | (7.0)            | 5.0                      | 9.0                      | 27.0                        | 23.0                     | 31.1                     |
| Mo      |      | [2000]           |                          |                          | [2000]                      |                          |                          |
| Ni      | 1.0  | (6.0)            | 4.0                      | 8.0                      | 24.0                        | 20.4                     | 27.6                     |
| P       |      | [100000]         |                          |                          | [100000]                    |                          |                          |
| K       | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| Se      | 5.0  | (0.3)            | -9.7                     | 10.3                     | (19.0)                      | 9.0                      | 29.0                     |
| Ag      | 1.0  | (0)              | -2.0                     | 2.0                      | 18.0                        | 15.3                     | 20.7                     |
| Na      | 500  | [100000]         |                          |                          | [100000]                    |                          |                          |
| S       |      | [100000]         |                          |                          | [100000]                    |                          |                          |
| Tl      | 1.0  | (0)              | -2.0                     | 2.0                      | 21.0                        | 17.9                     | 24.2                     |
| Ti      |      | [2000]           |                          |                          | [2000]                      |                          |                          |
| V       | 5.0  | (0.5)            | -9.5                     | 10.5                     | (19.0)                      | 9.0                      | 29.0                     |
| Zn      | 5.0  | (11.0)           | 1.0                      | 21.0                     | (29.0)                      | 19.0                     | 39.0                     |

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.

The acceptance ranges for all analytes in parentheses in the above table were determined using the listed certified value  $\pm$  2 times the associated CLP SOW CRQL. The acceptance ranges for all other analytes were determined using the certified value  $\pm$  15 percent of the listed certified value.



**Certified Reference Material CRM**

M6027



ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT:**

Part Number: **57028**  
Lot Number: **062024**  
Description: **Nickel (NI)**

Lot # **24002546**  
Solvent: **Nitric Acid**

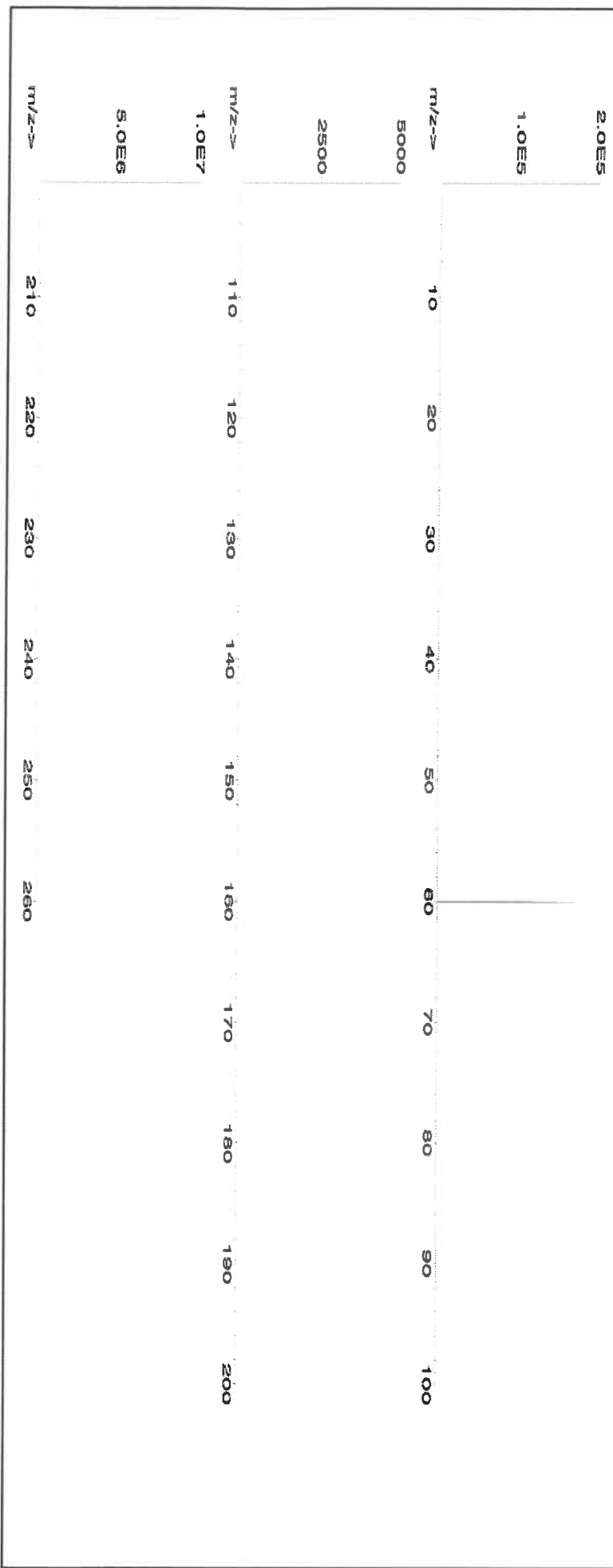
|                |                 |
|----------------|-----------------|
|                |                 |
| Formulated By: | Benson Chan     |
| 062024         |                 |
|                |                 |
| Reviewed By:   | Pedro L. Rentes |
| 062024         |                 |

Expiration Date: **062027**  
Recommended Storage: **Ambient (20 °C)**  
Nominal Concentration (µg/mL): **1000**  
NIST Test Number: **6UTB**  
Volume shown below was diluted to (mL): **2000.07**  
**5E-05** Balance Uncertainty  
**0.100** Flask Uncertainty

| Compound | Part Number | Lot Number | Dilution Factor | Initial Vol. (mL) | Uncertainty Pippet (mL) | Nominal Conc. (µg/mL) | Initial Conc. (µg/mL) | Final Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | 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

[1] Spectrum No.1 [ 9.136 sec]:58028.D# [Count] [Linear]





**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 | 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:**

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 certified (+/-) 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).



Certified Reference Material CRM

M6030



ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://Absolutestandards.com

CERTIFIED WEIGHT REPORT:

Part Number: 57047  
Lot Number: 122823  
Description: Silver (Ag)

Lot #  
Solvent: 24002546 Nitric Acid

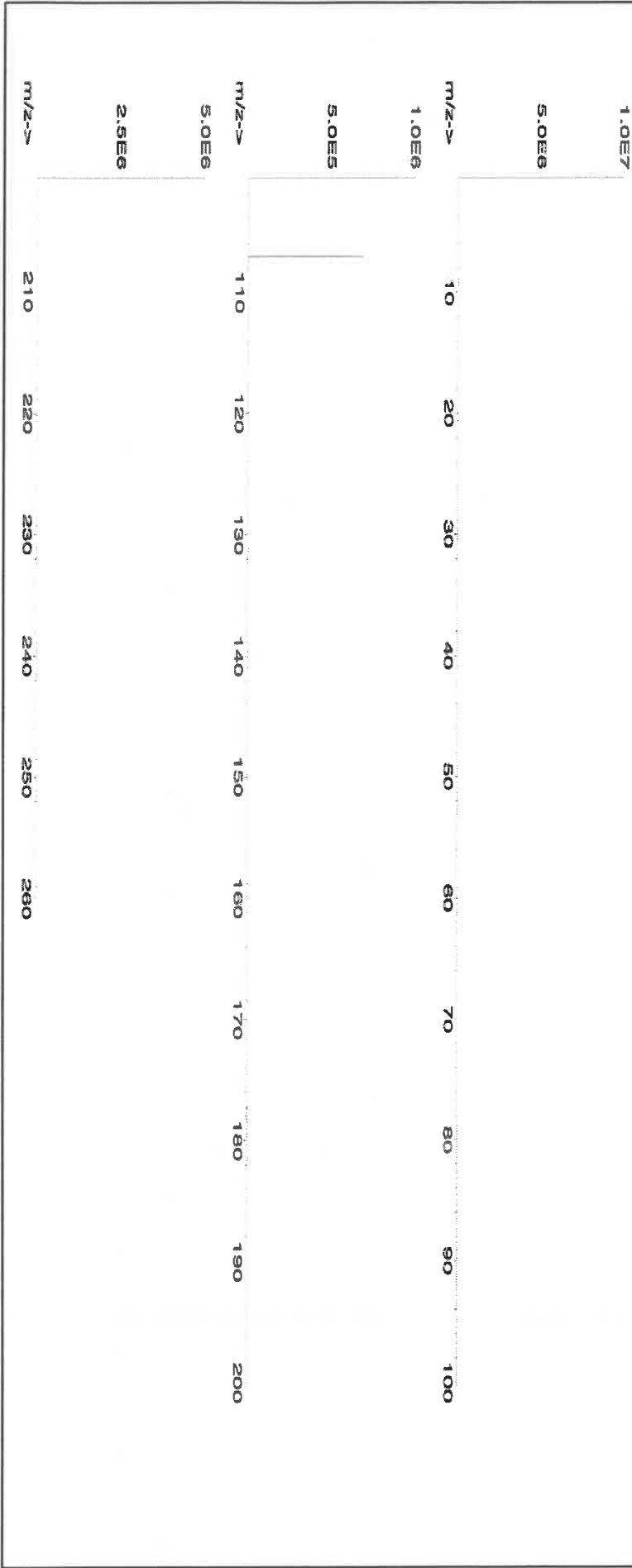
|                              |  |
|------------------------------|--|
| Formulated By: Benson Chan   |  |
| Reviewed By: Pedro L. Rentas |  |

Expiration Date: 122826  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration (µg/mL): 1000  
NIST Test Number: 6UTB  
Weight shown below was diluted to (mL): 4000.30  
5E-05 Balance Uncertainty  
0.058 Flask Uncertainty

| Compound |        | Lot           |     | Nominal    | Purity | Uncertainty | Assay      | Target        | Actual      | Actual | Expanded       | SDS Information                        |      | NIST |
|----------|--------|---------------|-----|------------|--------|-------------|------------|---------------|-------------|--------|----------------|----------------------------------------|------|------|
| RM#      | Number | Conc. (µg/mL) | (%) | Purity (%) | (%)    | Weight (g)  | Weight (g) | Conc. (µg/mL) | +/- (µg/mL) | CAS#   | OSHA PEL (TWA) | (Solvent Safety Info. On Attached pg.) | LD50 | SRM  |

1. Silver nitrate (Ag) IN035 J0612AGA1 1000.0 99.9996 0.10 63.7 6.27992 6.27998 1000.0 2.0 7761-88-8 10 µg/m3 NA 3151

[1] Spectrum No. 1 [ 14.044 sec]:58147.D# [Count] [Linear]





**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 | Pt | <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 |

**Physical Characterization:**

(T)= Target analyte

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 meghom deionized water, calibrated Class A glassware and the highest purity raw materials are used in the preparation of all standards.
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- \* Standards are certified (+/-) 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).





*R: 10/18/24*  
**Certified Reference Material CRM**



**CERTIFIED WEIGHT REPORT:**

Part Number:

**57051**

Lot #

24002546

Solvent:

Nitric Acid

Lot Number:

**071724**

Description:

**Antimony (Sb)**

Expiration Date:

071727

Recommended Storage:

Ambient (20 °C)

Nominal Concentration (µg/mL):

**1000**

NIST Test Number:

6UJB

Volume shown below was diluted to (mL):

2000.26

Balance Uncertainty

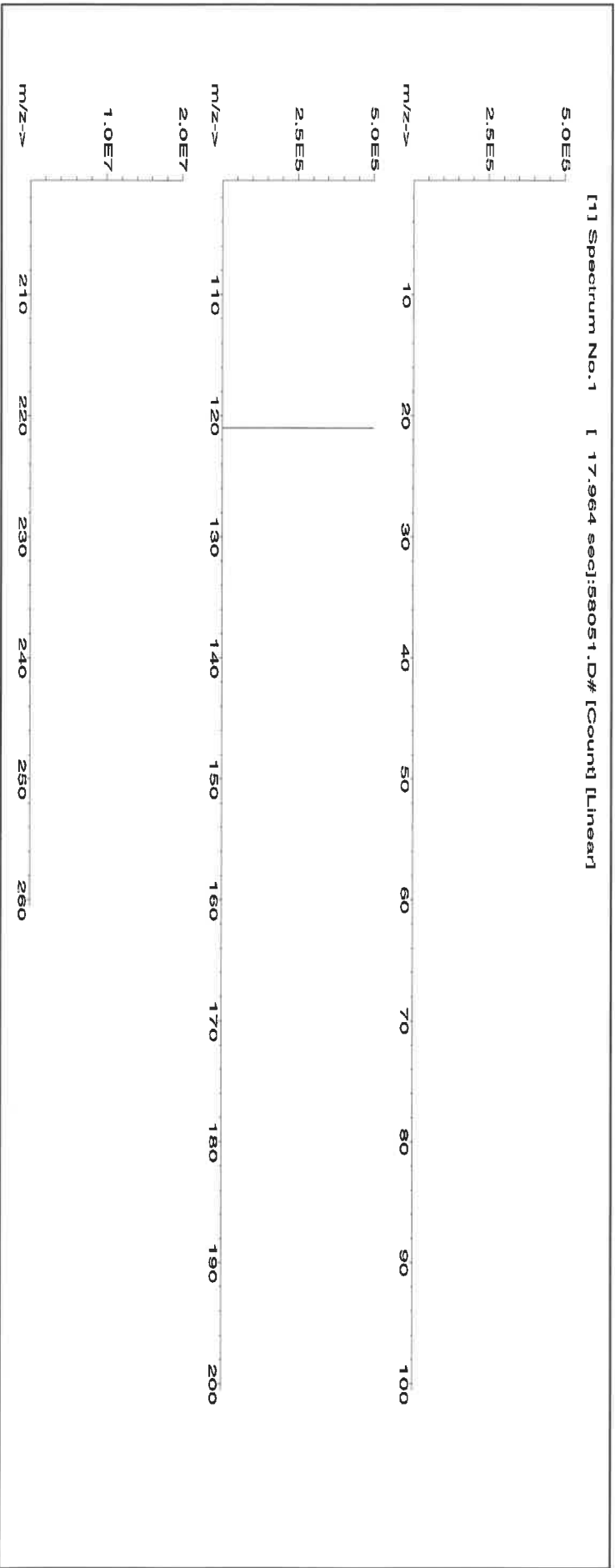
0.058

F flask Uncertainty

|                |                   |        |
|----------------|-------------------|--------|
| Formulated By: | Giovanni Esposito | 071724 |
| Reviewed By:   | Pedro L. Rentas   | 071724 |

| 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) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|-------------|------------|-----------------|-------------------|--------------------------|-----------------------|-----------------------|---------------------|----------------------------------|------|----------------|------|----------|
|----------|-------------|------------|-----------------|-------------------|--------------------------|-----------------------|-----------------------|---------------------|----------------------------------|------|----------------|------|----------|

|                  |       |        |        |       |       |      |         |        |     |           |           |                    |       |
|------------------|-------|--------|--------|-------|-------|------|---------|--------|-----|-----------|-----------|--------------------|-------|
| 1. Antimony (Sb) | 58151 | 060324 | 0.1000 | 200.0 | 0.084 | 1000 | 10001.4 | 1000.0 | 2.2 | 7440-36-0 | 0.5 mg/m3 | orl-rat 7000 mg/kg | 3102a |
|------------------|-------|--------|--------|-------|-------|------|---------|--------|-----|-----------|-----------|--------------------|-------|





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**Certified Reference Material CRM**

M6023



ANAB ISO 17034 Accredited  
AR-1539 Certificate Number  
https://AbsoluteStandards.com

**CERTIFIED WEIGHT REPORT:**

**Part Number:** 57081  
**Lot Number:** 062724  
**Description:** Thallium (TI)

**Solvent:** 24002546 Nitric Acid

**Lot #**

**Expiration Date:**

062727

**2%** 40.0 Nitric Acid (mL)

**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

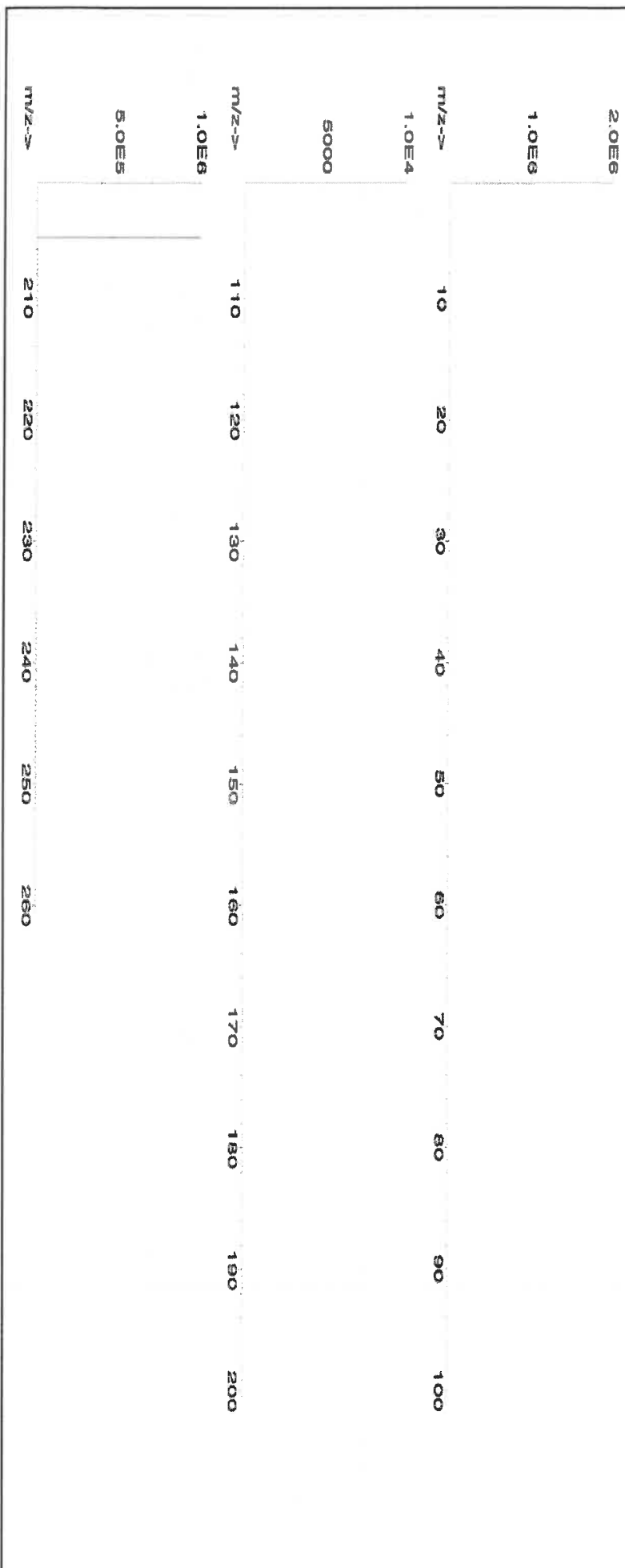
|                      |                        |
|----------------------|------------------------|
| <i>Aleah O'Brady</i> |                        |
| Formulated By:       | Aleah O'Brady          |
|                      | 062724                 |
| Reviewed By:         | <i>Pedro L. Rendas</i> |
|                      | Pedro L. Rendas        |
|                      | 062724                 |

**SDS Information**

| Compound | Lot Number | Nominal Conc. (µg/mL) | Purity (%) | Uncertainty (%) | Assay (%) | Target Weight (g) | Actual Weight (g) | Actual Conc. (µg/mL) | Expanded Uncertainty +/- (µg/mL) | CAS# | OSHA PEL (TWA) | LD50 | NIST SRM |
|----------|------------|-----------------------|------------|-----------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|
|----------|------------|-----------------------|------------|-----------------|-----------|-------------------|-------------------|----------------------|----------------------------------|------|----------------|------|----------|

1. Thallium nitrate (TI) IN037 BCCF4399 1000 99.999 0.10 77.0 2.5975 2.5977 1000.1 2.0 10102-45-1 0.1 mg/m3 or-mus 15mg/kg 3158

[1] Spectrum No.1 [ 14.044 sec]:57081.D# [Count] [Linear]





**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 | Pt | <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  | Tm | <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 | Sn | <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 | Ti | <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 |    |       | 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 certified (+/-) 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).



Certified Reference Material CRM

M6021



CERTIFIED WEIGHT REPORT:

Part Number: 57023  
Lot Number: 062424  
Description: Vanadium (V)

Lot # 24002546  
Solvent: Nitric Acid

|                |                 |
|----------------|-----------------|
| Aleah O'Brady  |                 |
| Formulated By: | Aleah O'Brady   |
| Reviewed By:   | Pedro L. Rantas |
|                | 062424          |

Expiration Date: 062427  
Recommended Storage: Ambient (20 °C)  
Nominal Concentration (µg/mL): 1000  
NIST Test Number: 6UTB

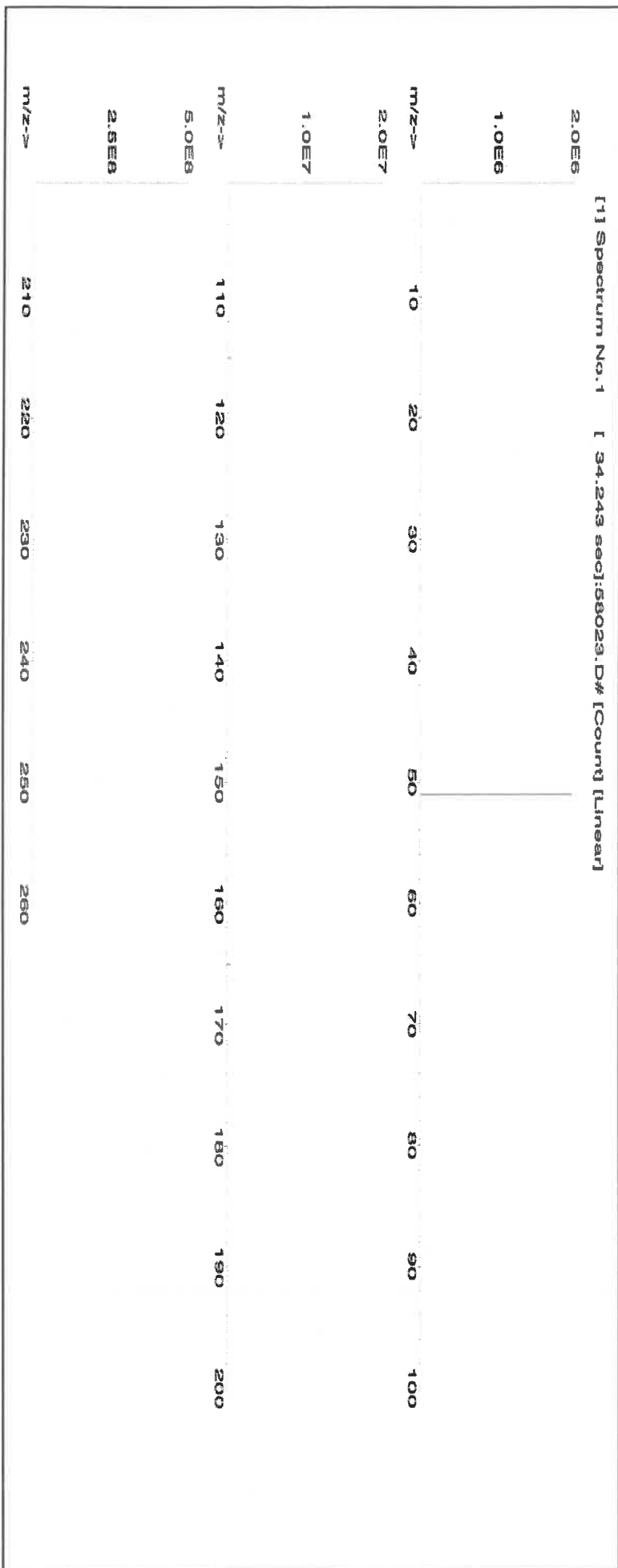
2.0% 40.0 (mL) Nitric Acid

Volume shown below was diluted to (mL): 2000.3

5E-05 Balance Uncertainty  
0.06 Flask Uncertainty

| Compound                     |  | Part   |  | Lot    |  | Dilution |  | Initial   |  | Uncertainty  |  | Nominal       |  | Initial       |  | Final         |  | Expanded    |  | SDS Information |  | NIST             |  |
|------------------------------|--|--------|--|--------|--|----------|--|-----------|--|--------------|--|---------------|--|---------------|--|---------------|--|-------------|--|-----------------|--|------------------|--|
|                              |  | Number |  | Number |  | Factor   |  | Vol. (mL) |  | Pipette (mL) |  | Conc. (µg/mL) |  | Conc. (µg/mL) |  | Conc. (µg/mL) |  | +/- (µg/mL) |  | CAS#            |  | LD50             |  |
| 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       |  |
|                              |  |        |  |        |  |          |  |           |  |              |  |               |  |               |  |               |  |             |  |                 |  | or-rat 58.1mg/kg |  |
|                              |  |        |  |        |  |          |  |           |  |              |  |               |  |               |  |               |  |             |  |                 |  | 3165             |  |

[1] Spectrum No.1 [ 34.243 sec]:58023.D# [Count] [Linear]





**Instrumental Analysis by Inductively Coupled Plasma Mass Spectrometry (ICP-MS):**

**Trace Metals Verification by ICP-MS ( $\mu\text{g/mL}$ )**

|    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |    |       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Al | <0.02 | Cd | <0.02 | Dy | <0.02 | Hf | <0.02 | Li | <0.02 | Ni | <0.02 | Pt | <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 | Ru | <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 | Sr | <0.02 | S  | <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 | Ta | <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 |    | <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).
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# SHIPPING DOCUMENTS

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Q 2879

## Chemtech

Phone: (908) 789-8900

Fax: (908) 789-8922

284 Sheffield Street, Mountainside, NJ 07092

Company Name: Nobis Group

Address: 55 Technology Dr Suite 101, Lowell, MA 01851

Phone: 978-703-6014

Project Name: Raymark

Project Location: Stratford, CT

Project Number: 95700

Project Manager: Adam Roy

Con-Test Quote Name/Number

Invoice Recipient:

Sampled By: A. Brittingham

http://www.contestlabs.com

## CHAIN OF CUSTODY RECORD

39 Spruce Street  
East Longmeadow, MA 01028

Doc # 381 Rev 4\_01/08/2020

Page 1 of 1

| Requested Turnaround Time                                                                                                                                                                                                                                                                                                                                                                                                                             |                                |                                                                                                                                       |                  |           |             | Dissolved Metals Samples                    |       |       |         |          |        | ANALYSIS REQUESTED                     |          |      |            |            |      |                        |         |                        |  |  |  | Preservation Code                                                      |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------|-------------|---------------------------------------------|-------|-------|---------|----------|--------|----------------------------------------|----------|------|------------|------------|------|------------------------|---------|------------------------|--|--|--|------------------------------------------------------------------------|--|
| Rush-Approval Required                                                                                                                                                                                                                                                                                                                                                                                                                                |                                |                                                                                                                                       |                  |           |             | Orthophosphate Samples                      |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | Total Number Of:                                                       |  |
| Data Delivery                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                                                                       |                  |           |             | PCB ONLY                                    |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | Glassware in the fridge? Y / N                                         |  |
| Format: PDF <input checked="" type="checkbox"/> EXCEL <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                             |                                |                                                                                                                                       |                  |           |             | SOXHLET <input checked="" type="checkbox"/> |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | Glassware in freezer? Y / N                                            |  |
| Other: CLP Like Data Pkg Required: <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                        |                                |                                                                                                                                       |                  |           |             | NON SOXHLET <input type="checkbox"/>        |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | Prepackaged Cooler? Y / N                                              |  |
| Email To: arroy@nobis-group.com                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | *Contest is not responsible for missing samples from prepacked coolers |  |
| Fax To #:                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | 1 Matrix Codes:                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | GW = Ground Water                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | WW = Waste Water                                                       |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | DW = Drinking Water                                                    |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | A = Air                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | S = Soil                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | SL = Sludge                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | SOL = Solid                                                            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | O = Other (please define)                                              |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | 2 Preservation Codes:                                                  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | 1 = Iced                                                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | H = HCL                                                                |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | M = Methanol                                                           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | N = Nitric Acid                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | S = Sulfuric Acid                                                      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | B = Sodium Bisulfate                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | X = Sodium Hydroxide                                                   |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | T = Sodium Thiosulfate                                                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  | O = Other (please define)                                              |  |
| Con-Test Work Order#                                                                                                                                                                                                                                                                                                                                                                                                                                  | Client Sample ID / Description | Beginning Date/Time                                                                                                                   | Ending Date/Time | COMP/GRAB | Matrix Code | Conc Code                                   | VIALS | GLASS | PLASTIC | BACTERIA | ENCORE | RCP VOCs                               | % Solids | PAHs | Herbicides | Pesticides | PCBs | Metals ICP + Hg - 6010 | Cyanide | SPLP RCP Metals - 6020 |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP03-081425    | 8/14/25                                                                                                                               | 11:30            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP04-081425    | 8/14/25                                                                                                                               | 11:35            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP05-081425    | 8/14/25                                                                                                                               | 11:40            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP06-081425    | 8/14/25                                                                                                                               | 11:45            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP07-081425    | 8/14/25                                                                                                                               | 11:50            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP08-081425    | 8/14/25                                                                                                                               | 11:55            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP09-081425    | 8/14/25                                                                                                                               | 12:00            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP10-081425    | 8/14/25                                                                                                                               | 12:05            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OU4-TS-Grillo-TSCP11-081425    | 8/14/25                                                                                                                               | 12:10            | G         | SO          |                                             | 3     | 2     | 1       |          |        | X                                      | X        | X    | X          | X          | X    | X                      | X       | X                      |  |  |  |                                                                        |  |
| Relinquished by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                          | Date/Time:                     | Client Comments:                                                                                                                      |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Received by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                              | Date/Time:                     | 3-2                                                                                                                                   |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Relinquished by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                          | Date/Time:                     | Detection Limit Requirements                                                                                                          |                  |           |             |                                             |       |       |         |          |        | Special Requirements                   |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Received by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                              | Date/Time:                     | MA                                                                                                                                    |                  |           |             |                                             |       |       |         |          |        | MA MCP Required                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Relinquished by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                          | Date/Time:                     | CT                                                                                                                                    |                  |           |             |                                             |       |       |         |          |        | MCP Certification Form Required        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Received by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                              | Date/Time:                     |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        | CT RCP Required                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Relinquished by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                          | Date/Time:                     |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        | RCP Certification Form Required        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Received by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                              | Date/Time:                     |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        | MA State DW Required                   |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Relinquished by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                          | Date/Time:                     | Other:                                                                                                                                |                  |           |             |                                             |       |       |         |          |        | PWSID #                                |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Received by: (signature)                                                                                                                                                                                                                                                                                                                                                                                                                              | Date/Time:                     | Project Entity                                                                                                                        |                  |           |             |                                             |       |       |         |          |        | Other                                  |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                | Government <input type="checkbox"/> Municipality <input type="checkbox"/> MWRA <input type="checkbox"/> WRTA <input type="checkbox"/> |                  |           |             |                                             |       |       |         |          |        | <input type="checkbox"/> Chromatogram  |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                | Federal <input type="checkbox"/> 21 J <input type="checkbox"/> School <input type="checkbox"/>                                        |                  |           |             |                                             |       |       |         |          |        | <input type="checkbox"/> AIHA-LAP, LLC |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                | City <input type="checkbox"/> Brownfield <input type="checkbox"/> MBTA <input type="checkbox"/>                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Lab Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |
| Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine what analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable. |                                |                                                                                                                                       |                  |           |             |                                             |       |       |         |          |        |                                        |          |      |            |            |      |                        |         |                        |  |  |  |                                                                        |  |

### 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                | TX-C25-00189     |
|                      |                  |
| Virginia             | 460312           |

## LOGIN REPORT/SAMPLE TRANSFER

|                                   |        |                                                |                              |
|-----------------------------------|--------|------------------------------------------------|------------------------------|
| <b>Order ID :</b> Q2879           | NOBI03 | <b>Order Date :</b> 8/15/2025 9:15:00 AM       | <b>Project Mgr :</b>         |
| <b>Client Name :</b> Nobis Group  |        | <b>Project Name :</b> Raymark Superfund Site   | <b>Report Type :</b> Level 4 |
| <b>Client Contact :</b> Adam Roy  |        | <b>Receive DateTime :</b> 8/15/2025 9:09:00 AM | <b>EDD Type :</b> EQUIS      |
| <b>Invoice Name :</b> Nobis Group |        | <b>Purchase Order :</b>                        | <b>Hard Copy Date :</b>      |
| <b>Invoice Contact :</b> Adam Roy |        |                                                | <b>Date Signoff :</b>        |

| LAB ID   | CLIENT ID                   | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD | FAX DATE    | DUE DATES |
|----------|-----------------------------|--------|-------------|-------------|--------------|------------|--------|-------------|-----------|
| Q2879-01 | OU4-TS-GRILLO-TSCP03-081425 | Solid  | 08/14/2025  | 11:30       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-03 | OU4-TS-GRILLO-TSCP04-081425 | Solid  | 08/14/2025  | 11:35       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-05 | OU4-TS-GRILLO-TSCP05-081425 | Solid  | 08/14/2025  | 11:40       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-07 | OU4-TS-GRILLO-TSCP06-081425 | Solid  | 08/14/2025  | 11:45       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-09 | OU4-TS-GRILLO-TSCP07-081425 | Solid  | 08/14/2025  | 11:50       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-11 | OU4-TS-GRILLO-TSCP08-081425 | Solid  | 08/14/2025  | 11:55       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-13 | OU4-TS-GRILLO-TSCP09-081425 | Solid  | 08/14/2025  | 12:00       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-15 | OU4-TS-GRILLO-TSCP10-081425 | Solid  | 08/14/2025  | 12:05       |              |            |        |             |           |

## LOGIN REPORT/SAMPLE TRANSFER

|                                   |        |                                                |                              |
|-----------------------------------|--------|------------------------------------------------|------------------------------|
| <b>Order ID :</b> Q2879           | NOBI03 | <b>Order Date :</b> 8/15/2025 9:15:00 AM       | <b>Project Mgr :</b>         |
| <b>Client Name :</b> Nobis Group  |        | <b>Project Name :</b> Raymark Superfund Site   | <b>Report Type :</b> Level 4 |
| <b>Client Contact :</b> Adam Roy  |        | <b>Receive DateTime :</b> 8/15/2025 9:09:00 AM | <b>EDD Type :</b> EQUIS      |
| <b>Invoice Name :</b> Nobis Group |        | <b>Purchase Order :</b>                        | <b>Hard Copy Date :</b>      |
| <b>Invoice Contact :</b> Adam Roy |        |                                                | <b>Date Signoff :</b>        |

| LAB ID   | CLIENT ID                   | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST         | TEST GROUP | METHOD | FAX DATE    | DUE DATES |
|----------|-----------------------------|--------|-------------|-------------|--------------|------------|--------|-------------|-----------|
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |
| Q2879-17 | OU4-TS-GRILLO-TSCP11-081425 | Solid  | 08/14/2025  | 12:10       |              |            |        |             |           |
|          |                             |        |             |             | VOCMS Group3 |            | 8260D  | 5 Bus. Days |           |

Relinquished By :

Date / Time : 8/15/25 1230

Received By :

Date / Time :

Storage Area : VOA Refridgerator Room