



December 15, 2021

Jared Bean
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

RE: AMI-310

Work Order No.: 21D0200
Order Name: Hermosa Project

Dear Jared Bean,

Turner Laboratories, Inc. received 1 sample(s) on 04/07/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Kevin Brim
Project Manager

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

Order: Hermosa Project

Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date/Time |
|----------------------|-------------------------|---------------|-----------------------------|
| 21D0200-01 | MW-9-20210407 | Ground Water | 04/07/2021 0855 |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

Case Narrative

- E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
- E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
- M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
- M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
- Q9 Insufficient sample received to meet method QC requirements.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

- ND Not Detected at or above the PQL
- PQL Practical Quantitation Limit
- DF Dilution Factor
-

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Lab Sample ID: 21D0200-01

Client Sample ID: MW-9-20210407
Collection Date/Time: 04/07/2021 0855
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|

Hardness-Calculation

| | | | | | | | | | | | |
|--|--|--|--|--|------|---|------------|-----|------------|-----|----|
| Hardness, Calcium/Magnesium (As 110 CaCO3) | | | | | mg/L | 1 | 04/08/2021 | 113 | 04/13/2021 | 132 | MH |
|--|--|--|--|--|------|---|------------|-----|------------|-----|----|

ICP Dissolved Metals-E 200.7 (4.4)

| | | | | | | | | | | | |
|-----------|-------|--------|------|----|------|---|------------|-----|------------|-----|----|
| Boron | 0.17 | | 0.10 | | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Calcium | 30 | | 4.0 | | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Iron | 0.088 | 0.0031 | 0.30 | E4 | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Magnesium | 1.0 | 0.10 | 3.0 | E4 | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Potassium | 0.97 | 0.14 | 5.0 | E4 | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Silica | 19 | | 0.20 | | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |
| Sodium | 70 | | 5.0 | | mg/L | 1 | 04/07/2021 | 170 | 04/15/2021 | 112 | MH |

ICP/MS Dissolved Metals-E 200.8 (5.4)

| | | | | | | | | | | | |
|-----------|---------|----------|---------|----|------|---|------------|-----|------------|-----|----|
| Aluminum | ND | 0.066 | 0.20 | E8 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Antimony | ND | 0.00020 | 0.0025 | E8 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Arsenic | 0.0076 | | 0.00050 | | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Barium | 0.017 | | 0.0025 | | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Beryllium | ND | 0.000066 | 0.0013 | E8 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Cadmium | ND | 0.000050 | 0.00025 | E8 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Chromium | 0.00017 | 0.000023 | 0.00050 | E4 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Cobalt | ND | | 0.00025 | | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Copper | 0.00022 | 0.00015 | 0.00050 | E4 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Lead | ND | 0.00029 | 0.0025 | E8 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Manganese | 0.12 | | 0.00025 | | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Nickel | 0.00017 | 0.000015 | 0.00050 | E4 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Selenium | ND | 0.00025 | 0.0025 | E8 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Silver | 0.00007 | 0.000021 | 0.00050 | E4 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |
| Thallium | ND | 0.00012 | 0.0025 | E8 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Uranium | 0.0018 | 0.000074 | 0.0025 | E4 | mg/L | 5 | 04/09/2021 | 123 | 04/15/2021 | 114 | CR |
| Zinc | ND | 0.0023 | 0.040 | E8 | mg/L | 1 | 04/09/2021 | 123 | 04/15/2021 | 113 | CR |

CVAA Dissolved Mercury-E 245.1

| | | | | | | | | | | | |
|---------|---------|--|--------|--|------|---|------------|-----|------------|-----|----|
| Mercury | 0.00010 | | 0.0010 | | mg/L | 1 | 04/14/2021 | 100 | 04/14/2021 | 163 | LB |
|---------|---------|--|--------|--|------|---|------------|-----|------------|-----|----|

ICP Total Metals-E200.7 (4.4)

Turner Laboratories, Inc.

Date: 12/15/2021

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Lab Sample ID: 21D0200-01

Client Sample ID: MW-9-20210407
 Collection Date/Time: 04/07/2021 0855
 Matrix: Ground Water
 Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|-----------|--------|------|------|------|-------|----|------------|-----------------|---------|
| Boron | 0.16 | | 0.10 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Calcium | 37 | | 4.0 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Iron | 4.4 | | 0.30 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Magnesium | 3.9 | | 3.0 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Potassium | 3.3 | 0.14 | 5.0 | E4 | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Silica | 41 | | 0.20 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |
| Sodium | 78 | | 5.0 | | mg/L | 1 | 04/08/2021 | 1130 04/13/2021 | 132 MH |

ICP/MS Total Metals-E200.8 (5.4)

| | | | | | | | | | |
|-----------|---------|----------|----------|----|------|----|------------|-----------------|--------|
| Aluminum | 6.1 | | 0.80 | | mg/L | 20 | 04/12/2021 | 1250 04/14/2021 | 124 CR |
| Antimony | 0.00046 | 0.000039 | 0.00050 | E4 | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Arsenic | 0.014 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Barium | 0.098 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Beryllium | 0.00043 | 0.00026 | 0.0050 | E4 | mg/L | 20 | 04/12/2021 | 1250 04/14/2021 | 124 CR |
| Cadmium | 0.00025 | 0.000050 | 0.00025 | E4 | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Chromium | 0.0068 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Cobalt | 0.00195 | | 0.000250 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Copper | 0.016 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Lead | 0.098 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Manganese | 0.17 | | 0.00025 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Nickel | 0.0049 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Selenium | 0.00085 | 0.00025 | 0.0025 | E4 | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Silver | 0.00011 | 0.000021 | 0.00050 | E4 | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Thallium | 0.00034 | 0.000023 | 0.00050 | E4 | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Uranium | 0.0044 | | 0.00050 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |
| Zinc | 0.091 | | 0.040 | | mg/L | 1 | 04/12/2021 | 1250 04/13/2021 | 134 CR |

CVAA Total Mercury-E245.1

| | | | | | | | | | |
|---------|---------|--|--------|--|------|---|------------|-----------------|--------|
| Mercury | 0.00054 | | 0.0010 | | mg/L | 1 | 04/14/2021 | 1000 04/14/2021 | 155 LB |
|---------|---------|--|--------|--|------|---|------------|-----------------|--------|

Anions by Ion Chromatography-E300.0 (2.1)

| | | | | | | | | | |
|--------------------------|-----|-------|------|----|------|----|------------|-----------------|--------|
| Chloride | 4.3 | | 1.0 | | mg/L | 1 | 04/07/2021 | 1200 04/07/2021 | 213 JG |
| Fluoride | ND | 0.29 | 0.50 | E8 | mg/L | 1 | 04/07/2021 | 1200 04/07/2021 | 213 JG |
| Nitrogen, Nitrate (As N) | ND | 0.20 | 0.50 | E8 | mg/L | 1 | 04/07/2021 | 1200 04/07/2021 | 213 JG |
| Nitrogen, Nitrite (As N) | ND | 0.027 | 0.10 | E8 | mg/L | 1 | 04/07/2021 | 1200 04/07/2021 | 213 JG |
| Sulfate | 170 | | 50 | | mg/L | 10 | 04/07/2021 | 1200 04/07/2021 | 215 JG |

Calculation-Ion Balance

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Lab Sample ID: 21D0200-01

Client Sample ID: MW-9-20210407
Collection Date/Time: 04/07/2021 0855
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|--|--------|-------|------|------|-------|----|----------------|----------------|---------|
| Anion | 5.51 | | | | meq/L | 1 | 04/16/2021 151 | 04/16/2021 151 | KB |
| Cation | 4.66 | | | | meq/L | 1 | 04/16/2021 151 | 04/16/2021 151 | KB |
| Cation/Anion, % Difference | 8.36 | | | | meq/L | 1 | 04/16/2021 151 | 04/16/2021 151 | KB |
| Alkalinity-SM2320B | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO ₃) | 66 | | 2.0 | | mg/L | 1 | 04/09/2021 080 | 04/09/2021 165 | CWB |
| Alkalinity, Carbonate (As CaCO ₃) | ND | | 2.0 | | mg/L | 1 | 04/09/2021 080 | 04/09/2021 165 | CWB |
| Alkalinity, Hydroxide (As CaCO ₃) | ND | | 2.0 | | mg/L | 1 | 04/09/2021 080 | 04/09/2021 165 | CWB |
| Alkalinity, Total (As CaCO ₃) | 66 | | 2.0 | | mg/L | 1 | 04/09/2021 080 | 04/09/2021 165 | CWB |
| Total Dissolved Solids (Residue, Filterable)-SM2540 C | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 360 | | 20 | | mg/L | 1 | 04/08/2021 170 | 04/11/2021 160 | CWB |
| Total Suspended Solids (Residue, Non-Filterable)-SM2540 D | | | | | | | | | |
| Total Suspended Solids | 100 | | 10 | | mg/L | 1 | 04/12/2021 105 | 04/12/2021 161 | CWB |
| Cyanide-SM4500-CN BE | | | | | | | | | |
| Cyanide | ND | 0.067 | 0.10 | E8 | mg/L | 1 | 04/08/2021 083 | 04/09/2021 115 | JG |
| Ammonia as N-SM4500-NH3 B,C | | | | | | | | | |
| Nitrogen, Ammonia (As N) | ND | 0.045 | 0.50 | E8 | mg/L | 1 | 04/09/2021 103 | 04/09/2021 165 | JG |
| Silica-SM4500-SiO2 C | | | | | | | | | |
| Silica | 20 | | 10 | | mg/L | 5 | 04/16/2021 132 | 04/16/2021 141 | CWB |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | Limit | RPD | RPD Limit | Qual |
|--|--------|-----------------|-------|-------------|---------------|-----------|--------|-----|-----------|------|
| Batch 2104096 - E 200.7 (4.4) | | | | | | | | | | |
| Blank (2104096-BLK1) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | ND | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | ND | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |
| LCS (2104096-BS1) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Boron | 0.95 | 0.10 | mg/L | 1.000 | | 95 | 85-115 | | | |
| Calcium | 10 | 4.0 | mg/L | 10.00 | | 100 | 85-115 | | | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | | 107 | 85-115 | | | |
| Magnesium | 9.8 | 3.0 | mg/L | 10.00 | | 98 | 85-115 | | | |
| Potassium | 10 | 5.0 | mg/L | 10.00 | | 101 | 85-115 | | | |
| Sodium | 11 | 5.0 | mg/L | 10.00 | | 106 | 85-115 | | | |
| LCS (2104096-BS2) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Silica | 9.5 | 0.20 | mg/L | 10.00 | | 95 | 85-115 | | | |
| LCS Dup (2104096-BSD1) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Boron | 0.94 | 0.10 | mg/L | 1.000 | | 94 | 85-115 | 1 | 20 | |
| Calcium | 9.6 | 4.0 | mg/L | 10.00 | | 96 | 85-115 | 4 | 20 | |
| Iron | 1.0 | 0.30 | mg/L | 1.000 | | 104 | 85-115 | 3 | 20 | |
| Magnesium | 9.5 | 3.0 | mg/L | 10.00 | | 95 | 85-115 | 3 | 20 | |
| Potassium | 9.7 | 5.0 | mg/L | 10.00 | | 97 | 85-115 | 4 | 20 | |
| Sodium | 11 | 5.0 | mg/L | 10.00 | | 110 | 85-115 | 4 | 20 | |
| LCS Dup (2104096-BSD2) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Silica | 9.6 | 0.20 | mg/L | 10.00 | | 96 | 85-115 | 1 | 20 | |
| Matrix Spike (2104096-MS1) | | | | | | | | | | |
| Source: 21D0046-27 Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Boron | 1.0 | | mg/L | 1.000 | 0.032 | 98 | 70-130 | | | |
| Calcium | 94 | | mg/L | 10.00 | 94 | 5 | 70-130 | | | M3 |
| Iron | 8.8 | | mg/L | 1.000 | 8.7 | 17 | 70-130 | | | M3 |
| Magnesium | 84 | | mg/L | 10.00 | 83 | 15 | 70-130 | | | M3 |
| Potassium | 15 | | mg/L | 10.00 | 4.9 | 99 | 70-130 | | | |
| Sodium | 26 | | mg/L | 10.00 | 17 | 90 | 70-130 | | | |
| Matrix Spike (2104096-MS2) | | | | | | | | | | |
| Source: 21D0046-31 Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Boron | 1.0 | | mg/L | 1.000 | 0.021 | 100 | 70-130 | | | |
| Calcium | 98 | | mg/L | 10.00 | 91 | 68 | 70-130 | | | M3 |
| Iron | 3.7 | | mg/L | 1.000 | 2.8 | 92 | 70-130 | | | |
| Magnesium | 65 | | mg/L | 10.00 | 57 | 79 | 70-130 | | | |
| Potassium | 13 | | mg/L | 10.00 | 2.8 | 106 | 70-130 | | | |
| Sodium | 25 | | mg/L | 10.00 | 14 | 107 | 70-130 | | | |
| Matrix Spike (2104096-MS3) | | | | | | | | | | |
| Source: 21D0046-27 Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Silica | 41 | | mg/L | 10.00 | 32 | 86 | 70-130 | | | |
| Batch 2104129 - E 200.8 (5.4) | | | | | | | | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--------------------------------------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|------|
| Batch 2104129 - E 200.8 (5.4) | | | | | | | | | | |
| Blank (2104129-BLK1) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | ND | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | ND | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.00025 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | ND | 0.00025 | mg/L | | | | | | | |
| Nickel | ND | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | ND | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |
| LCS (2104129-BS1) | | | | | | | | | | |
| Prepared & Analyzed: 04/15/2021 | | | | | | | | | | |
| Aluminum | 0.093 | 0.040 | mg/L | 0.1000 | | 93 | 85-115 | | | |
| Antimony | 0.044 | 0.00050 | mg/L | 0.05000 | | 88 | 85-115 | | | |
| Arsenic | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Barium | 0.046 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Beryllium | 0.046 | 0.00025 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Cadmium | 0.046 | 0.00025 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Chromium | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | | | |
| Cobalt | 0.045 | 0.00025 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Copper | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Lead | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Manganese | 0.045 | 0.00025 | mg/L | 0.05000 | | 90 | 85-115 | | | |
| Nickel | 0.046 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Selenium | 0.046 | 0.0025 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Silver | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | | | |
| Thallium | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | | | |
| Uranium | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Zinc | 0.094 | 0.040 | mg/L | 0.1000 | | 94 | 85-115 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | Limit | RPD | RPD Limit | Qual |
|--------------------------------------|--------|-----------------|-------|---|---------------|---------------------------------|--------|-----|-----------|------|
| Batch 2104129 - E 200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2104129-BSD1) | | | | Prepared & Analyzed: 04/15/2021 | | | | | | |
| Aluminum | 0.090 | 0.040 | mg/L | 0.1000 | | 90 | 85-115 | 3 | 20 | |
| Antimony | 0.043 | 0.00050 | mg/L | 0.05000 | | 85 | 85-115 | 3 | 20 | |
| Arsenic | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 2 | 20 | |
| Barium | 0.045 | 0.00050 | mg/L | 0.05000 | | 89 | 85-115 | 2 | 20 | |
| Beryllium | 0.045 | 0.00025 | mg/L | 0.05000 | | 89 | 85-115 | 4 | 20 | |
| Cadmium | 0.045 | 0.00025 | mg/L | 0.05000 | | 91 | 85-115 | 2 | 20 | |
| Chromium | 0.045 | 0.00050 | mg/L | 0.05000 | | 89 | 85-115 | 0.8 | 20 | |
| Cobalt | 0.045 | 0.00025 | mg/L | 0.05000 | | 90 | 85-115 | 1 | 20 | |
| Copper | 0.045 | 0.00050 | mg/L | 0.05000 | | 89 | 85-115 | 1 | 20 | |
| Lead | 0.044 | 0.00050 | mg/L | 0.05000 | | 88 | 85-115 | 3 | 20 | |
| Manganese | 0.044 | 0.00025 | mg/L | 0.05000 | | 89 | 85-115 | 2 | 20 | |
| Nickel | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | 0.7 | 20 | |
| Selenium | 0.045 | 0.0025 | mg/L | 0.05000 | | 91 | 85-115 | 1 | 20 | |
| Silver | 0.044 | 0.00050 | mg/L | 0.05000 | | 87 | 85-115 | 3 | 20 | |
| Thallium | 0.045 | 0.00050 | mg/L | 0.05000 | | 89 | 85-115 | 1 | 20 | |
| Uranium | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 1 | 20 | |
| Zinc | 0.093 | 0.040 | mg/L | 0.1000 | | 93 | 85-115 | 1 | 20 | |
| Matrix Spike (2104129-MS1) | | | | Source: 21D0200-01 | | Prepared & Analyzed: 04/15/2021 | | | | |
| Aluminum | 0.095 | 0.20 | mg/L | 0.1000 | ND | 95 | 70-130 | | | |
| Antimony | 0.047 | 0.0025 | mg/L | 0.05000 | ND | 93 | 70-130 | | | |
| Arsenic | 0.060 | 0.00050 | mg/L | 0.05000 | 0.0076 | 105 | 70-130 | | | |
| Barium | 0.064 | 0.0025 | mg/L | 0.05000 | 0.017 | 95 | 70-130 | | | |
| Beryllium | 0.044 | 0.0013 | mg/L | 0.05000 | ND | 89 | 70-130 | | | |
| Cadmium | 0.050 | 0.00025 | mg/L | 0.05000 | ND | 101 | 70-130 | | | |
| Chromium | 0.047 | 0.00050 | mg/L | 0.05000 | 0.00017 | 95 | 70-130 | | | |
| Cobalt | 0.047 | 0.00025 | mg/L | 0.05000 | 0.00011 | 94 | 70-130 | | | |
| Copper | 0.042 | 0.00050 | mg/L | 0.05000 | 0.00022 | 84 | 70-130 | | | |
| Lead | 0.057 | 0.0025 | mg/L | 0.05000 | ND | 113 | 70-130 | | | |
| Manganese | 0.16 | 0.00025 | mg/L | 0.05000 | 0.12 | 90 | 70-130 | | | |
| Nickel | 0.047 | 0.00050 | mg/L | 0.05000 | 0.00017 | 93 | 70-130 | | | |
| Selenium | 0.051 | 0.0025 | mg/L | 0.05000 | ND | 102 | 70-130 | | | |
| Silver | 0.040 | 0.00050 | mg/L | 0.05000 | 0.000071 | 80 | 70-130 | | | |
| Thallium | 0.056 | 0.0025 | mg/L | 0.05000 | ND | 112 | 70-130 | | | |
| Uranium | 0.057 | 0.0025 | mg/L | 0.05000 | 0.0018 | 110 | 70-130 | | | |
| Zinc | 0.099 | 0.040 | mg/L | 0.1000 | ND | 99 | 70-130 | | | |
| Batch 2104132 - E200.7 (4.4) | | | | | | | | | | |
| Blank (2104132-BLK1) | | | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | ND | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | ND | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | Limit | RPD | RPD Limit | Qual |
|-------------------------------------|--------|-----------------|-------|---|---------------|---|--------|-----|-----------|------|
| Batch 2104132 - E200.7 (4.4) | | | | | | | | | | |
| LCS (2104132-BS1) | | | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | | | |
| Boron | 0.96 | 0.10 | mg/L | 1.000 | | 96 | 85-115 | | | |
| Calcium | 9.1 | 4.0 | mg/L | 10.00 | | 91 | 85-115 | | | |
| Iron | 0.94 | 0.30 | mg/L | 1.000 | | 94 | 85-115 | | | |
| Magnesium | 9.2 | 3.0 | mg/L | 10.00 | | 92 | 85-115 | | | |
| Potassium | 9.0 | 5.0 | mg/L | 10.00 | | 90 | 85-115 | | | |
| Sodium | 10 | 5.0 | mg/L | 10.00 | | 101 | 85-115 | | | |
| LCS (2104132-BS2) | | | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | | | |
| Silica | 8.7 | 0.20 | mg/L | 10.00 | | 87 | 85-115 | | | |
| LCS Dup (2104132-BSD1) | | | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | | | |
| Boron | 0.96 | 0.10 | mg/L | 1.000 | | 96 | 85-115 | 0.7 | 20 | |
| Calcium | 9.4 | 4.0 | mg/L | 10.00 | | 94 | 85-115 | 3 | 20 | |
| Iron | 0.94 | 0.30 | mg/L | 1.000 | | 94 | 85-115 | 0.6 | 20 | |
| Magnesium | 9.3 | 3.0 | mg/L | 10.00 | | 93 | 85-115 | 1 | 20 | |
| Potassium | 9.2 | 5.0 | mg/L | 10.00 | | 92 | 85-115 | 2 | 20 | |
| Sodium | 9.1 | 5.0 | mg/L | 10.00 | | 91 | 85-115 | 11 | 20 | |
| LCS Dup (2104132-BSD2) | | | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | | | |
| Silica | 8.6 | 0.20 | mg/L | 10.00 | | 86 | 85-115 | 1 | 20 | |
| Matrix Spike (2104132-MS1) | | | | Source: 21D0009-02 | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | |
| Boron | 1.2 | 0.10 | mg/L | 1.000 | 0.27 | 91 | 70-130 | | | |
| Calcium | 210 | 4.0 | mg/L | 10.00 | 210 | 58 | 70-130 | | | M3 |
| Iron | 1.5 | 0.30 | mg/L | 1.000 | 0.59 | 94 | 70-130 | | | |
| Magnesium | 51 | 3.0 | mg/L | 10.00 | 41 | 99 | 70-130 | | | |
| Potassium | 36 | 5.0 | mg/L | 10.00 | 26 | 104 | 70-130 | | | |
| Sodium | 180 | 5.0 | mg/L | 10.00 | 170 | 102 | 70-130 | | | |
| Matrix Spike (2104132-MS2) | | | | Source: 21D0010-01 | | Prepared: 04/08/2021 Analyzed: 04/16/2021 | | | | |
| Boron | 0.94 | 0.10 | mg/L | 1.000 | 0.033 | 91 | 70-130 | | | |
| Calcium | 14 | 4.0 | mg/L | 10.00 | 3.8 | 98 | 70-130 | | | |
| Iron | 1.0 | 0.30 | mg/L | 1.000 | 0.019 | 98 | 70-130 | | | |
| Potassium | 9.7 | 5.0 | mg/L | 10.00 | ND | 97 | 70-130 | | | |
| Matrix Spike (2104132-MS3) | | | | Source: 21D0009-02 | | Prepared: 04/08/2021 Analyzed: 04/13/2021 | | | | |
| Silica | 86 | 0.20 | mg/L | 10.00 | 76 | 108 | 70-130 | | | |
| Batch 2104161 - E200.8 (5.4) | | | | | | | | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|----------|-----------------|-------|---|---------------|------|-------------|-----|-----------|------|
| Batch 2104161 - E200.8 (5.4) | | | | | | | | | | |
| Blank (2104161-BLK1) | | | | | | | | | | |
| | | | | Prepared: 04/12/2021 Analyzed: 04/13/2021 | | | | | | |
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | 0.000046 | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | 0.000046 | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.000250 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | 0.000087 | 0.00025 | mg/L | | | | | | | |
| Nickel | 0.00039 | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | ND | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |
| LCS (2104161-BS1) | | | | | | | | | | |
| | | | | Prepared: 04/12/2021 Analyzed: 04/13/2021 | | | | | | |
| Aluminum | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | | | |
| Antimony | 0.050 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Arsenic | 0.051 | 0.00050 | mg/L | 0.05000 | | 102 | 85-115 | | | |
| Barium | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Beryllium | 0.051 | 0.00025 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Cadmium | 0.050 | 0.00025 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Chromium | 0.050 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Cobalt | 0.0500 | 0.000250 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Copper | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Lead | 0.049 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | | | |
| Manganese | 0.050 | 0.00025 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Nickel | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Selenium | 0.054 | 0.0025 | mg/L | 0.05000 | | 109 | 85-115 | | | |
| Silver | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Thallium | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | | | |
| Uranium | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | | | |
| Zinc | 0.11 | 0.040 | mg/L | 0.1000 | | 108 | 85-115 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|-----------------|-------|---|---------------|---|-------------|---------|-----------|------|
| Batch 2104161 - E200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2104161-BSD1) | | | | Prepared: 04/12/2021 Analyzed: 04/13/2021 | | | | | | |
| Aluminum | 0.11 | 0.040 | mg/L | 0.1000 | | 107 | 85-115 | 3 | 20 | |
| Antimony | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | 1 | 20 | |
| Arsenic | 0.052 | 0.00050 | mg/L | 0.05000 | | 103 | 85-115 | 0.8 | 20 | |
| Barium | 0.050 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | 0.9 | 20 | |
| Beryllium | 0.051 | 0.00025 | mg/L | 0.05000 | | 102 | 85-115 | 0.5 | 20 | |
| Cadmium | 0.051 | 0.00025 | mg/L | 0.05000 | | 102 | 85-115 | 1 | 20 | |
| Chromium | 0.051 | 0.00050 | mg/L | 0.05000 | | 102 | 85-115 | 3 | 20 | |
| Cobalt | 0.0500 | 0.000250 | mg/L | 0.05000 | | 100 | 85-115 | 0.00008 | 20 | |
| Copper | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 0.1 | 20 | |
| Lead | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 0.5 | 20 | |
| Manganese | 0.051 | 0.00025 | mg/L | 0.05000 | | 102 | 85-115 | 2 | 20 | |
| Nickel | 0.050 | 0.00050 | mg/L | 0.05000 | | 100 | 85-115 | 0.1 | 20 | |
| Selenium | 0.054 | 0.0025 | mg/L | 0.05000 | | 108 | 85-115 | 1 | 20 | |
| Silver | 0.050 | 0.00050 | mg/L | 0.05000 | | 100 | 85-115 | 1 | 20 | |
| Thallium | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 2 | 20 | |
| Uranium | 0.048 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | 1 | 20 | |
| Zinc | 0.11 | 0.040 | mg/L | 0.1000 | | 111 | 85-115 | 3 | 20 | |
| Matrix Spike (2104161-MS1) | | | | Source: 21D0184-01 | | Prepared: 04/12/2021 Analyzed: 04/13/2021 | | | | |
| Aluminum | 11 | 0.80 | mg/L | 0.1000 | 11 | 211 | 70-130 | | | M3 |
| Antimony | 0.052 | 0.00050 | mg/L | 0.05000 | 0.00021 | 104 | 70-130 | | | |
| Arsenic | 0.058 | 0.00050 | mg/L | 0.05000 | 0.0090 | 97 | 70-130 | | | |
| Barium | 0.073 | 0.00050 | mg/L | 0.05000 | 0.022 | 101 | 70-130 | | | |
| Beryllium | 0.045 | 0.0050 | mg/L | 0.05000 | ND | 89 | 70-130 | | | |
| Cadmium | 0.047 | 0.00025 | mg/L | 0.05000 | ND | 94 | 70-130 | | | |
| Chromium | 0.074 | 0.00050 | mg/L | 0.05000 | 0.028 | 91 | 70-130 | | | |
| Cobalt | 0.0464 | 0.000250 | mg/L | 0.05000 | 0.000303 | 92 | 70-130 | | | |
| Copper | 0.063 | 0.00050 | mg/L | 0.05000 | 0.022 | 83 | 70-130 | | | |
| Lead | 0.049 | 0.00050 | mg/L | 0.05000 | 0.00072 | 96 | 70-130 | | | |
| Manganese | 0.059 | 0.00025 | mg/L | 0.05000 | 0.013 | 92 | 70-130 | | | |
| Nickel | 0.046 | 0.00050 | mg/L | 0.05000 | 0.0020 | 88 | 70-130 | | | |
| Selenium | 0.048 | 0.0025 | mg/L | 0.05000 | 0.0045 | 87 | 70-130 | | | |
| Silver | 0.042 | 0.00050 | mg/L | 0.05000 | ND | 83 | 70-130 | | | |
| Thallium | 0.048 | 0.00050 | mg/L | 0.05000 | 0.00087 | 94 | 70-130 | | | |
| Uranium | 0.058 | 0.00050 | mg/L | 0.05000 | 0.0053 | 106 | 70-130 | | | |
| Zinc | 0.10 | 0.040 | mg/L | 0.1000 | 0.019 | 85 | 70-130 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|---------|---------------------------|-------|-------------|---------------------------------|------|----------------------|-----|-----------|------|
| Batch 2104161 - E200.8 (5.4) | | | | | | | | | | |
| Matrix Spike (2104161-MS2) | | Source: 21D0256-01 | | | Prepared: 04/12/2021 | | Analyzed: 04/13/2021 | | | |
| Aluminum | ND | 0.80 | mg/L | 0.1000 | ND | | 70-130 | | | M2 |
| Antimony | 0.050 | 0.00050 | mg/L | 0.05000 | 0.00085 | 99 | 70-130 | | | |
| Arsenic | 0.055 | 0.00050 | mg/L | 0.05000 | 0.0043 | 101 | 70-130 | | | |
| Barium | 0.067 | 0.00050 | mg/L | 0.05000 | 0.016 | 102 | 70-130 | | | |
| Beryllium | 0.046 | 0.0050 | mg/L | 0.05000 | ND | 93 | 70-130 | | | |
| Cadmium | 0.047 | 0.00025 | mg/L | 0.05000 | ND | 94 | 70-130 | | | |
| Chromium | 0.048 | 0.00050 | mg/L | 0.05000 | 0.00025 | 95 | 70-130 | | | |
| Cobalt | 0.0466 | 0.000250 | mg/L | 0.05000 | 0.000306 | 93 | 70-130 | | | |
| Copper | 0.046 | 0.00050 | mg/L | 0.05000 | 0.0030 | 86 | 70-130 | | | |
| Lead | 0.048 | 0.00050 | mg/L | 0.05000 | 0.00043 | 96 | 70-130 | | | |
| Manganese | 0.075 | 0.00025 | mg/L | 0.05000 | 0.027 | 96 | 70-130 | | | |
| Nickel | 0.045 | 0.00050 | mg/L | 0.05000 | 0.0012 | 88 | 70-130 | | | |
| Selenium | 0.051 | 0.0025 | mg/L | 0.05000 | 0.00084 | 100 | 70-130 | | | |
| Silver | 0.043 | 0.00050 | mg/L | 0.05000 | 0.000047 | 85 | 70-130 | | | |
| Thallium | 0.048 | 0.00050 | mg/L | 0.05000 | 0.00073 | 94 | 70-130 | | | |
| Uranium | 0.061 | 0.00050 | mg/L | 0.05000 | 0.0072 | 107 | 70-130 | | | |
| Zinc | 0.11 | 0.040 | mg/L | 0.1000 | 0.025 | 88 | 70-130 | | | |
| Batch 2104174 - E 245.1 | | | | | | | | | | |
| Blank (2104174-BLK1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.00013 | 0.0010 | mg/L | | | | | | | |
| LCS (2104174-BS1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0055 | 0.0010 | mg/L | 0.005000 | | 109 | 85-115 | | | |
| LCS Dup (2104174-BSD1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0055 | 0.0010 | mg/L | 0.005000 | | 110 | 85-115 | 0.9 | 20 | |
| Matrix Spike (2104174-MS1) | | Source: 21D0342-01 | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0054 | 0.0010 | mg/L | 0.005000 | 0.00012 | 105 | 70-130 | | | |
| Matrix Spike Dup (2104174-MSD1) | | Source: 21D0342-01 | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0054 | 0.0010 | mg/L | 0.005000 | 0.00012 | 105 | 70-130 | 0.2 | 20 | |
| Batch 2104175 - E245.1 | | | | | | | | | | |
| Blank (2104175-BLK1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | ND | 0.0010 | mg/L | | | | | | | |
| LCS (2104175-BS1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0055 | 0.0010 | mg/L | 0.005000 | | 109 | 85-115 | | | |
| LCS Dup (2104175-BSD1) | | | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0055 | 0.0010 | mg/L | 0.005000 | | 110 | 85-115 | 0.4 | 20 | |
| Matrix Spike (2104175-MS1) | | Source: 21D0307-01 | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0053 | 0.0010 | mg/L | 0.005000 | ND | 107 | 70-130 | | | |
| Matrix Spike Dup (2104175-MSD1) | | Source: 21D0307-01 | | | Prepared & Analyzed: 04/14/2021 | | | | | |
| Mercury | 0.0054 | 0.0010 | mg/L | 0.005000 | ND | 108 | 70-130 | 1 | 20 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|---|--------|-----------------|-------|-------------|---------------|------|-------------|------|-----------|------|
| Batch 2104100 - SM2540 C | | | | | | | | | | |
| Duplicate (2104100-DUP1) Source: 21D0106-01 Prepared: 04/08/2021 Analyzed: 04/12/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 8100 | 20 | mg/L | | 8200 | | | 2 | 5 | |
| Duplicate (2104100-DUP2) Source: 21D0106-03 Prepared: 04/08/2021 Analyzed: 04/11/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 18000 | 20 | mg/L | | 18000 | | | 0.09 | 5 | |
| Duplicate (2104100-DUP3) Source: 21D0215-01 Prepared: 04/08/2021 Analyzed: 04/12/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 8100 | 20 | mg/L | | 8100 | | | 0.2 | 5 | |
| Batch 2104117 - SM4500-CN BE | | | | | | | | | | |
| Blank (2104117-BLK1) Prepared: 04/08/2021 Analyzed: 04/09/2021 | | | | | | | | | | |
| Cyanide | ND | 0.10 | mg/L | | | | | | | |
| LCS (2104117-BS1) Prepared: 04/08/2021 Analyzed: 04/09/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | | 96 | 85-115 | | | |
| LCS Dup (2104117-BSD1) Prepared: 04/08/2021 Analyzed: 04/09/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | | 93 | 85-115 | 3 | 15 | |
| Matrix Spike (2104117-MS1) Source: 21D0035-07 Prepared: 04/08/2021 Analyzed: 04/09/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | ND | 95 | 80-120 | | | |
| Matrix Spike Dup (2104117-MSD1) Source: 21D0035-07 Prepared: 04/08/2021 Analyzed: 04/09/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | ND | 94 | 80-120 | 1 | 15 | |
| Batch 2104142 - SM2320B | | | | | | | | | | |
| Blank (2104142-BLK1) Prepared & Analyzed: 04/09/2021 | | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Carbonate (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Hydroxide (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Total (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| LCS (2104142-BS1) Prepared & Analyzed: 04/09/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 240 | 2.0 | mg/L | 250.0 | | 97 | 90-110 | | | |
| LCS Dup (2104142-BSD1) Prepared & Analyzed: 04/09/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 240 | 2.0 | mg/L | 250.0 | | 98 | 90-110 | 0.8 | 10 | |
| Matrix Spike (2104142-MS1) Source: 21D0115-01 Prepared & Analyzed: 04/09/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 370 | 2.0 | mg/L | 250.0 | 130 | 96 | 70-130 | | | |
| Matrix Spike Dup (2104142-MSD1) Source: 21D0115-01 Prepared & Analyzed: 04/09/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 370 | 2.0 | mg/L | 250.0 | 130 | 96 | 70-130 | 0 | 10 | |
| Batch 2104144 - SM2540 D | | | | | | | | | | |
| Duplicate (2104144-DUP1) Source: 21D0149-02 Prepared & Analyzed: 04/12/2021 | | | | | | | | | | |
| Total Suspended Solids | ND | 10 | mg/L | | ND | | | 5 | Q9 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21D0200
 Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|-------------|---------------------------------|------|-------------|-----|-----------|------|
| Batch 2104144 - SM2540 D | | | | | | | | | | |
| Duplicate (2104144-DUP2) | | Source: 21D0175-02 | | | Prepared & Analyzed: 04/12/2021 | | | | | |
| Total Suspended Solids | ND | 10 | mg/L | | ND | | | 5 | | Q9 |
| Batch 2104145 - SM4500-NH3 B,C | | | | | | | | | | |
| Blank (2104145-BLK1) | | | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | ND | 0.50 | mg/L | | | | | | | |
| LCS (2104145-BS1) | | | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 96 | 90-110 | | | |
| LCS Dup (2104145-BSD1) | | | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 97 | 90-110 | 0.5 | | 10 |
| Matrix Spike (2104145-MS1) | | Source: 21D0005-01 | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 5.6 | 0.50 | mg/L | 5.000 | 0.76 | 96 | 75-120 | | | |
| Matrix Spike (2104145-MS2) | | Source: 21D0008-01 | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 5.6 | 0.50 | mg/L | 5.000 | 0.99 | 92 | 75-120 | | | |
| Matrix Spike Dup (2104145-MSD1) | | Source: 21D0005-01 | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 5.6 | 0.50 | mg/L | 5.000 | 0.76 | 96 | 75-120 | 0.4 | | 20 |
| Matrix Spike Dup (2104145-MSD2) | | Source: 21D0008-01 | | | Prepared & Analyzed: 04/09/2021 | | | | | |
| Nitrogen, Ammonia (As N) | 5.6 | 0.50 | mg/L | 5.000 | 0.99 | 92 | 75-120 | 0.4 | | 20 |
| Batch 2104210 - SM4500-SiO2 C | | | | | | | | | | |
| Blank (2104210-BLK1) | | | | | Prepared & Analyzed: 04/16/2021 | | | | | |
| Silica | ND | 2.0 | mg/L | | | | | | | |
| LCS (2104210-BS1) | | | | | Prepared & Analyzed: 04/16/2021 | | | | | |
| Silica | 8.2 | 2.0 | mg/L | 8.000 | | 102 | 90-110 | | | |
| LCS Dup (2104210-BSD1) | | | | | Prepared & Analyzed: 04/16/2021 | | | | | |
| Silica | 8.3 | 2.0 | mg/L | 8.000 | | 104 | 90-110 | 2 | | 20 |
| Matrix Spike (2104210-MS1) | | Source: 21D0200-01 | | | Prepared & Analyzed: 04/16/2021 | | | | | |
| Silica | 63 | 10 | mg/L | 40.00 | 20 | 109 | 85-115 | | | |
| Matrix Spike Dup (2104210-MSD1) | | Source: 21D0200-01 | | | Prepared & Analyzed: 04/16/2021 | | | | | |
| Silica | 63 | 10 | mg/L | 40.00 | 20 | 108 | 85-115 | 0.7 | | 20 |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21D0200
Date Received: 04/07/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|-----------------|-------|---------------------------------|---------------|---|-------------|------|-----------|------|
| Batch 2104093 - E300.0 (2.1) | | | | | | | | | | |
| Blank (2104093-BLK1) | | | | Prepared & Analyzed: 04/07/2021 | | | | | | |
| Chloride | ND | 1.0 | mg/L | | | | | | | |
| Fluoride | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrate (As N) | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrite (As N) | ND | 0.10 | mg/L | | | | | | | |
| Sulfate | ND | 5.0 | mg/L | | | | | | | |
| LCS (2104093-BS1) | | | | Prepared & Analyzed: 04/07/2021 | | | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 93 | 90-110 | | | |
| Fluoride | 1.9 | 0.50 | mg/L | 2.000 | | 97 | 90-110 | | | |
| Nitrogen, Nitrate (As N) | 4.9 | 0.50 | mg/L | 5.000 | | 98 | 90-110 | | | |
| Nitrogen, Nitrite (As N) | 2.3 | 0.10 | mg/L | 2.500 | | 92 | 90-110 | | | |
| Sulfate | 12 | 5.0 | mg/L | 12.50 | | 97 | 90-110 | | | |
| LCS Dup (2104093-BSD1) | | | | Prepared & Analyzed: 04/07/2021 | | | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 93 | 90-110 | 0.1 | 10 | |
| Fluoride | 1.9 | 0.50 | mg/L | 2.000 | | 97 | 90-110 | 0.03 | 10 | |
| Nitrogen, Nitrate (As N) | 4.9 | 0.50 | mg/L | 5.000 | | 98 | 90-110 | 0.1 | 10 | |
| Nitrogen, Nitrite (As N) | 2.3 | 0.10 | mg/L | 2.500 | | 92 | 90-110 | 0.06 | 10 | |
| Sulfate | 12 | 5.0 | mg/L | 12.50 | | 96 | 90-110 | 0.2 | 10 | |
| Matrix Spike (2104093-MS1) | | | | Source: 21D0185-01 | | Prepared: 04/07/2021 Analyzed: 04/10/2021 | | | | |
| Chloride | 270 | 20 | mg/L | 250.0 | 36 | 93 | 80-120 | | | |
| Fluoride | 38 | 10 | mg/L | 40.00 | ND | 95 | 80-120 | | | |
| Nitrogen, Nitrate (As N) | 100 | 10 | mg/L | 100.0 | ND | 103 | 80-120 | | | |
| Nitrogen, Nitrite (As N) | 47 | 2.0 | mg/L | 50.00 | ND | 93 | 80-120 | | | |
| Sulfate | 270 | 100 | mg/L | 250.0 | ND | 106 | 80-120 | | | |
| Matrix Spike Dup (2104093-MSD1) | | | | Source: 21D0185-01 | | Prepared: 04/07/2021 Analyzed: 04/10/2021 | | | | |
| Chloride | 270 | 20 | mg/L | 250.0 | 36 | 94 | 80-120 | 0.5 | 10 | |
| Fluoride | 39 | 10 | mg/L | 40.00 | ND | 96 | 80-120 | 1 | 10 | |
| Nitrogen, Nitrate (As N) | 100 | 10 | mg/L | 100.0 | ND | 103 | 80-120 | 0.6 | 10 | |
| Nitrogen, Nitrite (As N) | 47 | 2.0 | mg/L | 50.00 | ND | 94 | 80-120 | 0.5 | 10 | |
| Sulfate | 270 | 100 | mg/L | 250.0 | ND | 107 | 80-120 | 0.4 | 10 | |

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT LEVEL IV

Work Order No.

21D0200-01

2104096-MS1

210132-MS1

Dissolved & Total ICP Metals

EPA 200.7

Analysis Date – April 13 & 15, 2021

| <u>Section</u> | | <u>Page</u> |
|---------------------------------------|--------------|-------------|
| Prep batch | | 19 |
| Sequence log | (04/13/2021) | 23 |
| Analytical data | (04/13/2021) | 25 |
| Sequence log | (04/15/2021) | 55 |
| Analytical data | (04/15/2021) | 57 |
| Standard log entries and traceability | | 80 |

Date Prepared: 04/15/2021 10:00:00AM

Prep Batch: 2104096

Prep Code: E200.2 D ICP

Technician: MH

| Sample ID | Sample and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|---------------------------------------|-------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|-----------------------------|
| 2104096-BLK Blank | | Drinking Water | | 10 | / | / | 10 | |
| 2104096-BS1 LCS | | Drinking Water | | 10 | 2100525/100 | 2100508/100 | 10 | |
| 2104096-BS2 LCS | | Drinking Water | | 10 | 2100713/100 | / | 10 | |
| 2104096-BSD LCS Dup | | Drinking Water | | 10 | 2100525/100 | 2100508/100 | 10 | |
| 2104096-BSD LCS Dup | | Drinking Water | | 10 | 2100713/100 | / | 10 | |
| 2104096-MRL MRL Check | | Drinking Water | | 10 | 2001459/100 | 2101204/200 | 10 | |
| 2104096-MS1 Matrix Spike [21D0046-27] | | Drinking Water | | 2 | 2100525/100 | 2100508/100 | | [Spk] 50mL->50mL; 2mL->10mL |
| 2104096-MS2 Matrix Spike [21D0046-31] | | Drinking Water | | 2 | 2100525/100 | 2100508/100 | | [Spk] 50mL->50mL; 2mL->10mL |
| 2104096-MS3 Matrix Spike [21D0046-27] | | Drinking Water | | 2 | 2100713/100 | / | | [Spk] 50mL->50mL; 2mL->10mL |
| 21D0046-26 IR 1 5337 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-27 IR 1 5338 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-28 IR 1 5406 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-29 IR 1 5473 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-30 IR 1 5474 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-31 IR 1 7774 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-32 IR 1 7757 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-33 IR 1 7758 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-34 IR 1 7855 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-35 IR 1 7854 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0046-36 IR 1 7853A | | Non-Potable Water | | 50 | | | 50 | |
| 21D0047-03 PLS J | | Non-Potable Water | | 50 | | | 50 | |
| 21D0047-04 E2B | | Non-Potable Water | | 50 | | | 50 | |
| 21D0047-06 BE | | Non-Potable Water | | 50 | | | 50 | |
| 21D0047-07 Burro Pit | | Non-Potable Water | | 50 | | | 50 | |
| 21D0200-01 MW-9-20210407 | | Drinking Water | | 50 | | | 50 | |

Lab or field filtered through 0.45 um and acidified with HNO3

Date Prepared: 04/07/2021 5:00:00PM

Prep Batch: 2104096 Prep Code: E 200.2 D ICP

Technician: LB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (mL) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (mL) | Comments |
|-----------|-------------------------|--------|----|---------------------|-------------------|-------------------|----------------|----------|
| 2003408 | Nitric Acid Trace Metal | | | | | | | |

Spike 1:
 2001459 ICP PQL Check
 3188568 ICP Spike A
 2100713 Silica Standard Solution 1000ppm
 2101204 Silica PQL check

Number: Surrogate Name

Date Prepared: 04/08/2021 11:30:00AM

Prep Batch: 2104132 Prep Code: E 200.2 ICP Technician: LB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (mL) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (mL) | Comments |
|--------------|---------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|-------------------------------|
| 2104132-BLK | Blank | Non-Potable Water | | 50 | / | / | 50 | |
| 2104132-BS1 | LCS | Non-Potable Water | | 50 | 2100525/500 | 2100508/500 | 50 | |
| 2104132-BS2 | LCS | Non-Potable Water | | 50 | 2100713/500 | / | 50 | |
| 2104132-BS3 | LCS | Non-Potable Water | | 50 | 2002062/500 | / | 50 | |
| 2104132-BSD | LCS Dup | Non-Potable Water | | 50 | 2100525/500 | 2100508/500 | 50 | |
| 2104132-BSD | LCS Dup | Non-Potable Water | | 50 | 2100713/500 | / | 50 | |
| 2104132-BSD | LCS Dup | Non-Potable Water | | 50 | 2002062/500 | / | 50 | |
| 2104132-MRL | MRL Check | Non-Potable Water | | 50 | 2001459/500 | / | 50 | |
| 2104132-MS1 | Matrix Spike [21D0009-02] | Non-Potable Water | | 50 | 2100525/500 | 2100508/500 | 50 | |
| 2104132-MS2 | Matrix Spike [21D0010-01] | Non-Potable Water | | 50 | 2100525/500 | 2100508/500 | 50 | |
| 2104132-MSS3 | Matrix Spike [21D0009-02] | Non-Potable Water | | 50 | 2100713/500 | / | 50 | |
| 2104132-MS4 | Matrix Spike [21D0009-02] | Non-Potable Water | | 50 | 2002062/500 | / | 50 | |
| 21C0651-03 | Loc 6 Lift Station Comp | Non-Potable Water | | 50 | | | 50 | |
| 21C0684-21 | WP PE 1041 | Non-Potable Water | | 50 | | | 50 | |
| 21C0735-01 | Exit of Silver Recovery | Non-Potable Water | | 50 | | | 50 | |
| 21C0748-01 | H21099-1 | Non-Potable Water | | 50 | | | 50 | |
| 21D0007-01 | Location 8 Composite | Non-Potable Water | | 50 | | | 50 | |
| 21D0007-03 | Location 9 Composite | Non-Potable Water | | 50 | | | 50 | |
| 21D0009-02 | Influent | Non-Potable Water | | 50 | | | 50 | Added for BatchQC in: 2104132 |
| 21D0010-01 | Composite | Non-Potable Water | | 50 | | | 50 | Added for BatchQC in: 2104132 |
| 21D0012-01 | Composite | Non-Potable Water | | 50 | | | 50 | No MDL reporting, Haz flag |
| 21D0022-02 | CP700 CS 04121 Comp | Non-Potable Water | | 50 | | | 50 | Flag no MDL reporting |
| 21D0038-19 | WB-04.5 | Non-Potable Water | | 50 | | | 50 | |
| 21D0115-01 | Discharge | Non-Potable Water | | 50 | | | 50 | |
| 21D0146-01 | Well | Drinking Water | | 50 | | | 50 | |
| 21D0176-01 | Composite | Non-Potable Water | | 50 | | | 50 | |
| 21D0177-01 | 040721-M | Non-Potable Water | | 50 | | | 50 | |
| 21D0178-01 | FDB | Non-Potable Water | | 50 | | | 50 | |
| 21D0181-01 | | Non-Potable Water | | 50 | | | 50 | |
| 21D0184-01 | Comp | Non-Potable Water | | 50 | | | 50 | Custom Alert Level |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 50 | | | 50 | |

Analysis: B by ICP, Total

Date Prepared: 04/08/2021 11:30:00AM

Prep Batch: 2104132 Prep Code: E 200.2 ICP Technician: LB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (mL) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (mL) | Comments |
|----------------------|----------------------|----------------|----|---------------------|-------------------|-------------------|----------------|----------|
| 21D0215-03 | Concentrate | Drinking Water | | 50 | | | 50 | |
| Digested at 95 deg C | | | | | | | | |

| Number | Reagent Name |
|---------|--|
| 2101359 | 1:1 Nitric for Metals 200.7 Digestions |
| 2101360 | 1:1 HCl for 200.7 Digestions |

| Spike ID | Spike Name |
|----------|-----------------------------------|
| 2001459 | ICP PQL Check |
| 2009988 | ICP Spike Solution C - Additional |
| 2100525 | ICP Spike A |
| 2100713 | Silica Standard Solution 1000ppm |

| Number | Surrogate Name |
|--------|----------------|
| | |

MRLCHECK1 = 2104064 MRL1 (2001459 & 2101264). MRLCHECK2 =
2104103 MRL2 (2001459). Spikes = 2100525 & 2100504 in 2100713
2104103 / 2104132 were digested per 200.2. 2104064
is total

Handwritten signature
4/13/2021

| Seq. | Loc. |
|------|------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 1 |
| 6 | 2 |
| 7 | 3 |
| 8 | 4 |
| 9 | 5 |
| 10 | 6 |
| 11 | 7 |
| 12 | 8 |
| 13 | 14 |
| 14 | 15 |
| 15 | 16 |
| 16 | 17 |
| 17 | 18 |
| 18 | 19 |
| 19 | 20 |
| 20 | 21 |
| 21 | 60 |
| 22 | 22 |
| 23 | 23 |
| 24 | 1 |
| 25 | 5 |
| 26 | 6 |
| 27 | 7 |
| 28 | 8 |
| 29 | 24 |
| 30 | 25 |
| 31 | 26 |
| 32 | 27 |
| 33 | 28 |
| 34 | 29 |
| 35 | 30 |
| 36 | 31 |
| 37 | 32 |
| 38 | 33 |
| 39 | 1 |
| 40 | 5 |
| 41 | 6 |
| 42 | 7 |
| 43 | 8 |
| 44 | 34 |
| 45 | 35 |
| 46 | 60 |
| 47 | 36 |
| 48 | 37 |
| 49 | 38 |
| 50 | 39 |
| 51 | 1 |
| 52 | 5 |
| 53 | 6 |
| 54 | 7 |
| 55 | 8 |
| 56 | 40 |

Sample ID

Calib Blank 1
Calib Std 1 2101375
Calib Std 2 2101333 MM
Calib Std 3 2101338 4/13/21

ICB
IPC-1 2101375
IPC-2 2101333
IPC-3 2101338
ICV-1 2101352
ICV-2 2101383
ICV-3 2101384
ICV-4 2101376

MRL CHECK 1
MRL CHECK 2
2104103-BLK1
2104103-BS1
2104103-BSD1
21C0684-17
21D0106-03@20
21D0106-03@2
RINSE
21C0646-01
2104103-MS1
CCB
CCV-1 2101352
CCV-2 2101383
CCV-3 2101384
CCV-4 2101376
2104064-BLK1
2104064-BS1
2104064-BSD1
21C0683-06
21C0724-01@5
2104064-MS1@5
21D0106-01@10
21D0106-02
21D0215-01@10
21D0215-02
CCB
CCV-1
CCV-2
CCV-3
CCV-4
21D0106-01@2
21D0215-01@2
RINSE
21C0720-01
21C0733-01@5
21D0148-01
21D0019-01
CCB
CCV-1
CCV-2
CCV-3
CCV-4
2104132-MRL1

Set 1: Al, Cd, Ba, Pb, Cu, Cr Repeats
CCB, CCVS pass

Set 2: 2104064-BS1/D/MS1 pass
CCB, CCVS pass

Set 3: CCB, CCVS pass

Set 4: 2104132-BS1/D/BS2/MS3
pass
MS1 - Ca M3
CCB, CCVS pass

Set 5: Cu ↑, none in set

MM 4/13/21

Set 1

Set 2

Set 3

Analytical Sequence

Method : Master 200.7

| Seq. | Loc. | Sample ID |
|------|------|---------------|
| 57 | 41 | 2104132-BLK1 |
| 58 | 42 | 2104132-BS1 |
| 59 | 43 | 2104132-BSD1 |
| 60 | 44 | 2104132-BS2 |
| 61 | 45 | 2104132-BSD2 |
| 62 | 46 | 21C0684-21 |
| 63 | 47 | 21D0009-02 |
| 64 | 48 | 2104132-MS1 |
| 65 | 49 | 2104132-MS3 |
| 66 | 50 | 21C0651-03 |
| 67 | 51 | 21C0748-01 |
| 68 | 52 | 21D0022-02 |
| 69 | 53 | 21D0038-19@10 |
| 70 | 54 | 21D0146-01 |
| 71 | 55 | 21D0178-01 |
| 72 | 56 | 21D0215-03@50 |
| 73 | 1 | CCB |
| 74 | 5 | CCV-1 |
| 75 | 6 | CCV-2 |
| 76 | 7 | CCV-3 |
| 77 | 8 | CCV-4 |
| 78 | 57 | 21D0215-03 |
| 79 | 58 | 21C0735-01 |
| 80 | 59 | 21D0200-01 |
| 81 | 1 | CCB |
| 82 | 5 | CCV-1 |
| 83 | 6 | CCV-2 |
| 84 | 7 | CCV-3 |
| 85 | 8 | CCV-4 |
| 86 | 60 | RINSE |

set 4

W

per 5

=====
Analysis Begun

Start Time: 4/13/2021 8:05:30 AM Plasma On Time: 4/13/2021 6:12:27 AM
 Logged In Analyst: Optima7300DV Technique: ICP Continuous
 Spectrometer Model: Optima 7300 DV, S/N 077C9102801 Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210413_1.sif
 Batch ID:
 Results Data Set: 210413_1
 Results Library: C:\pe\Optima7300DV\Results\Results.mdb

m
 4/13/21

Sequence No.: 1 Autosampler Location: 1
 Sample ID: Calib Blank 1 Date Collected: 4/13/2021 8:05:30 AM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 258.0 kPa | 0.75 L/min |

Mean Data: Calib Blank 1

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. Units |
|-------------|--------------------------|----------|---------|-------------|
| Y 371.029 | 3166170.3 | 35290.46 | 1.11% | 1.00 mg/L |
| Sc 361.383 | 5250974.6 | 58300.93 | 1.11% | 1.00 mg/L |
| Ag 328.068+ | -1664.8 | 96.44 | 5.79% | [0.00] mg/L |
| Al 308.215+ | 7970.7 | 106.19 | 1.33% | [0.00] mg/L |
| As 188.979+ | -23.5 | 11.67 | 49.76% | [0.00] mg/L |
| B 249.772+ | 767.7 | 57.55 | 7.50% | [0.00] mg/L |
| Ba 233.527+ | -268.0 | 25.82 | 9.63% | [0.00] mg/L |
| Be 313.107+ | -12788.7 | 158.87 | 1.24% | [0.00] mg/L |
| Ca 317.933+ | 3371.0 | 55.59 | 1.65% | [0.00] mg/L |
| Cd 214.440+ | 188.2 | 21.93 | 11.66% | [0.00] mg/L |
| Co 228.616+ | 155.5 | 9.57 | 6.15% | [0.00] mg/L |
| Cr 267.716+ | 219.6 | 26.96 | 12.28% | [0.00] mg/L |
| Cu 324.752+ | 8351.7 | 140.10 | 1.68% | [0.00] mg/L |
| Fe 238.204+ | 634.9 | 22.56 | 3.55% | [0.00] mg/L |
| K 766.490+ | 859.7 | 109.79 | 12.77% | [0.00] mg/L |
| Mg 279.077+ | 189.0 | 8.30 | 4.39% | [0.00] mg/L |
| Mn 257.610+ | 192.1 | 15.71 | 8.18% | [0.00] mg/L |
| Mo 202.031+ | 169.7 | 23.30 | 13.73% | [0.00] mg/L |
| Na 330.237+ | 47.5 | 28.36 | 59.74% | [0.00] mg/L |
| Ni 232.003+ | -1889.1 | 54.47 | 2.88% | [0.00] mg/L |
| Pb 220.353+ | -86.2 | 9.72 | 11.28% | [0.00] mg/L |
| Sb 206.836+ | 117.1 | 5.31 | 4.53% | [0.00] mg/L |
| Se 196.026+ | -2.1 | 8.19 | 387.90% | [0.00] mg/L |
| Tl 190.801+ | -142.7 | 10.19 | 7.14% | [0.00] mg/L |
| V 292.402+ | 1138.6 | 136.87 | 12.02% | [0.00] mg/L |
| Zn 213.857+ | 2059.1 | 19.28 | 0.94% | [0.00] mg/L |
| P 178.221+ | 60.1 | 6.08 | 10.12% | [0.00] mg/L |
| Si 251.611+ | 1854.6 | 29.77 | 1.61% | [0.00] mg/L |

Sequence No.: 2 Autosampler Location: 2
 Sample ID: Calib Std 1 Date Collected: 4/13/2021 8:09:32 AM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Std 1

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 259.0 kPa | 0.75 L/min |

Mean Data: Calib Std 1

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. | Units | Calib |
|-------------|--------------------------|----------|-------|----------|-------|-------|
| Y 371.029 | 3080132.2 | 23803.75 | 0.77% | 0.973 | mg/L | |
| Sc 361.383 | 5284508.7 | 57334.28 | 1.08% | 1.01 | mg/L | |
| Al 308.215† | 303544.3 | 5341.53 | 1.76% | [10.0] | mg/L | |
| Ba 233.527† | 221635.6 | 3641.95 | 1.64% | [1.0] | mg/L | |
| Be 313.107† | 5709922.9 | 7415.45 | 0.13% | [0.5000] | mg/L | |
| Cd 214.440† | 919558.5 | 15092.01 | 1.64% | [1.50] | mg/L | |
| Co 228.616† | 111015.2 | 923.85 | 0.83% | [1.0] | mg/L | |
| Cr 267.716† | 265715.3 | 4104.67 | 1.54% | [1.0] | mg/L | |
| Cu 324.752† | 447196.1 | 7960.32 | 1.78% | [1.0] | mg/L | |
| Mn 257.610† | 1038306.7 | 17301.83 | 1.67% | [1.00] | mg/L | |
| Ni 232.003† | 62879.7 | 536.40 | 0.85% | [1.0] | mg/L | |
| Pb 220.353† | 180833.8 | 2910.74 | 1.61% | [5.0] | mg/L | |
| Se 196.026† | 5978.1 | 58.45 | 0.98% | [2.0] | mg/L | |
| V 292.402† | 565920.5 | 8979.69 | 1.59% | [1.0] | mg/L | |
| Zn 213.857† | 472323.0 | 7835.95 | 1.66% | [1.5] | mg/L | |
| Si 251.611† | 267499.7 | 4377.49 | 1.64% | [5.00] | mg/L | |

W
4/13/21

Sequence No.: 3
 Sample ID: Calib Std 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 4/13/2021 8:12:54 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: Calib Std 2

Analyte Back Pressure Flow
 All 259.0 kPa 0.75 L/min

Mean Data: Calib Std 2

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. | Units | Calib |
|-------------|--------------------------|----------|-------|--------|-------|-------|
| Y 371.029 | 3085148.5 | 9259.86 | 0.30% | 0.974 | mg/L | |
| Sc 361.383 | 5231009.2 | 15063.65 | 0.29% | 0.996 | mg/L | |
| As 188.979† | 30541.8 | 236.02 | 0.77% | [5.0] | mg/L | |
| Ca 317.933† | 534810.7 | 12700.81 | 2.37% | [12.5] | mg/L | |
| Fe 238.204† | 785310.6 | 15730.11 | 2.00% | [20.0] | mg/L | |
| K 766.490† | 63574.0 | 1269.67 | 2.00% | [12.5] | mg/L | |
| Mg 279.077† | 73677.1 | 1530.18 | 2.08% | [12.5] | mg/L | |
| Mo 202.031† | 65523.9 | 611.36 | 0.93% | [1.00] | mg/L | |
| Na 330.237† | 767.6 | 24.12 | 3.14% | [12.5] | mg/L | |
| P 178.221† | 33802.9 | 365.02 | 1.08% | [10.0] | mg/L | |

Sequence No.: 4
 Sample ID: Calib Std 3
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 4/13/2021 8:16:19 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: Calib Std 3

Analyte Back Pressure Flow
 All 259.0 kPa 0.75 L/min

Mean Data: Calib Std 3

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. | Units | Calib |
|-------------|--------------------------|----------|-------|---------|-------|-------|
| Y 371.029 | 3202714.2 | 46246.73 | 1.44% | 1.01 | mg/L | |
| Sc 361.383 | 5355093.2 | 79569.49 | 1.49% | 1.02 | mg/L | |
| Ag 328.068† | 195519.2 | 3681.80 | 1.88% | [0.5] | mg/L | |
| B 249.772† | 237954.2 | 5198.41 | 2.18% | [1.0] | mg/L | |
| Be 313.107† | 280652.5 | 325.01 | 0.12% | [0.025] | mg/L | |
| Sb 206.836† | 20678.4 | 425.71 | 2.06% | [2.0] | mg/L | |
| Tl 190.801† | 15913.8 | 270.97 | 1.70% | [2.0] | mg/L | |

Calibration Summary

| Analyte | Stds. | Equation | Intercept | Slope | Curvature | Corr. Coef. | Reslope |
|------------|-------|---------------|-----------|----------|-----------|-------------|---------|
| Ag 328.068 | 1 | Lin, Calc Int | 0.0 | 391000 | 0.00000 | 1.000000 ✓ | |
| Al 308.215 | 1 | Lin, Calc Int | 0.0 | 30350 | 0.00000 | 1.000000 | |
| As 188.979 | 1 | Lin, Calc Int | 0.0 | 6108 | 0.00000 | 1.000000 | |
| B 249.772 | 1 | Lin, Calc Int | 0.0 | 238000 | 0.00000 | 1.000000 | |
| Ba 233.527 | 1 | Lin, Calc Int | 0.0 | 221600 | 0.00000 | 1.000000 | |
| Be 313.107 | 2 | Lin, Calc Int | -2415.5 | 11420000 | 0.00000 | 1.000000 | |
| Ca 317.933 | 1 | Lin, Calc Int | 0.0 | 42780 | 0.00000 | 1.000000 | |
| Cd 214.440 | 1 | Lin, Calc Int | -0.0 | 613000 | 0.00000 | 1.000000 | |
| Co 228.616 | 1 | Lin, Calc Int | 0.0 | 111000 | 0.00000 | 1.000000 | |
| Cr 267.716 | 1 | Lin, Calc Int | 0.0 | 265700 | 0.00000 | 1.000000 | |
| Cu 324.752 | 1 | Lin, Calc Int | 0.0 | 447200 | 0.00000 | 1.000000 | |
| Fe 238.204 | 1 | Lin, Calc Int | 0.0 | 39270 | 0.00000 | 1.000000 | |
| K 766.490 | 1 | Lin, Calc Int | 0.0 | 5086 | 0.00000 | 1.000000 | |
| Mg 279.077 | 1 | Lin, Calc Int | 0.0 | 5894 | 0.00000 | 1.000000 | |
| Mn 257.610 | 1 | Lin, Calc Int | 0.0 | 1038000 | 0.00000 | 1.000000 | |
| Mo 202.031 | 1 | Lin, Calc Int | 0.0 | 65520 | 0.00000 | 1.000000 | |
| Na 330.237 | 1 | Lin, Calc Int | 0.0 | 61.41 | 0.00000 | 1.000000 | |
| Ni 232.003 | 1 | Lin, Calc Int | 0.0 | 62880 | 0.00000 | 1.000000 | |
| Pb 220.353 | 1 | Lin, Calc Int | 0.0 | 36170 | 0.00000 | 1.000000 | |
| Sb 206.836 | 1 | Lin, Calc Int | 0.0 | 10340 | 0.00000 | 1.000000 | |
| Se 196.026 | 1 | Lin, Calc Int | 0.0 | 2989 | 0.00000 | 1.000000 | |
| Tl 190.801 | 1 | Lin, Calc Int | 0.0 | 7957 | 0.00000 | 1.000000 | |
| V 292.402 | 1 | Lin, Calc Int | 0.0 | 565900 | 0.00000 | 1.000000 | |
| Zn 213.857 | 1 | Lin, Calc Int | 0.0 | 314900 | 0.00000 | 1.000000 | |
| P 178.221 | 1 | Lin, Calc Int | 0.0 | 3380 | 0.00000 | 1.000000 | |
| Si 251.611 | 1 | Lin, Calc Int | 0.0 | 53500 | 0.00000 | 1.000000 | |

Sequence No.: 5

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 4/13/2021 8:19:37 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Handwritten signature and date: 4/13/21

Nebulizer Parameters: ICB

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 259.0 kPa | 0.75 L/min |

Mean Data: ICB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 3194702.5 | 1.01 mg/L | | 0.009 | | | 0.86% |
| Sc 361.383 | 5306971.3 | 1.01 mg/L | | 0.010 | | | 1.02% |
| Ag 328.068† | 356.9 | 0.00091 mg/L | | 0.000465 | 0.00091 mg/L | 0.000465 | 50.91% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 308.215† | -449.9 | -0.0148 mg/L | | 0.00384 | -0.0148 mg/L | 0.00384 | 25.89% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | | |
| As 188.979† | -14.1 | -0.0023 mg/L | | 0.00180 | -0.0023 mg/L | 0.00180 | 78.20% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.772† | 1651.4 | 0.0069 mg/L | | 0.00035 | 0.0069 mg/L | 0.00035 | 5.01% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 35.2 | 0.0002 mg/L | | 0.00010 | 0.0002 mg/L | 0.00010 | 60.00% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | 416.0 | 0.00025 mg/L | | 0.000016 | 0.00025 mg/L | 0.000016 | 6.52% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933† | -8.6 | -0.0002 mg/L | | 0.00248 | -0.0002 mg/L | 0.00248 | >999.9% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | | |
| Cd 214.440† | 52.8 | 0.00009 mg/L | | 0.000018 | 0.00009 mg/L | 0.000018 | 21.22% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | | |
| Co 228.616† | 6.2 | 0.0001 mg/L | | 0.00012 | 0.0001 mg/L | 0.00012 | 222.83% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | -24.4 | -0.0001 mg/L | | 0.00005 | -0.0001 mg/L | 0.00005 | 58.38% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | -134.6 | -0.0003 mg/L | | 0.00035 | -0.0003 mg/L | 0.00035 | 117.24% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204† | -207.1 | -0.0053 mg/L | | 0.00047 | -0.0053 mg/L | 0.00047 | 8.87% |
| QC value within limits for Fe 238.204 Recovery = Not calculated | | | | | | | |
| K 766.490† | -3.2 | -0.0008 mg/L | | 0.02099 | -0.0008 mg/L | 0.02099 | >999.9% |

| | | | | | | | | |
|----|----------|---|--------|--------------|---------|--------------|---------|---------|
| Mg | 279.077† | QC value within limits for K 766.490 Recovery = Not calculated | -5.2 | -0.0009 mg/L | 0.00337 | -0.0009 mg/L | 0.00337 | 378.10% |
| Mn | 257.610† | QC value within limits for Mg 279.077 Recovery = Not calculated | 13.2 | 0.0000 mg/L | 0.00003 | 0.0000 mg/L | 0.00003 | 202.42% |
| Mo | 202.031† | QC value within limits for Mn 257.610 Recovery = Not calculated | -105.6 | -0.0016 mg/L | 0.00034 | -0.0016 mg/L | 0.00034 | 20.89% |
| Na | 330.237† | QC value within limits for Mo 202.031 Recovery = Not calculated | 16.1 | 0.2616 mg/L | 0.44753 | 0.2616 mg/L | 0.44753 | 171.05% |
| Ni | 232.003† | QC value within limits for Na 330.237 Recovery = Not calculated | -9.5 | -0.0001 mg/L | 0.00071 | -0.0001 mg/L | 0.00071 | 513.66% |
| Pb | 220.353† | QC value within limits for Ni 232.003 Recovery = Not calculated | -39.7 | -0.0011 mg/L | 0.00058 | -0.0011 mg/L | 0.00058 | 52.38% |
| Sb | 206.836† | QC value within limits for Pb 220.353 Recovery = Not calculated | 55.1 | 0.0053 mg/L | 0.00136 | 0.0053 mg/L | 0.00136 | 25.64% |
| Se | 196.026† | QC value within limits for Sb 206.836 Recovery = Not calculated | 4.1 | 0.0014 mg/L | 0.00257 | 0.0014 mg/L | 0.00257 | 189.60% |
| Tl | 190.801† | QC value within limits for Se 196.026 Recovery = Not calculated | 18.5 | 0.0023 mg/L | 0.00073 | 0.0023 mg/L | 0.00073 | 31.44% |
| V | 292.402† | QC value within limits for Tl 190.801 Recovery = Not calculated | 37.1 | 0.0001 mg/L | 0.00015 | 0.0001 mg/L | 0.00015 | 222.94% |
| Zn | 213.857† | QC value within limits for V 292.402 Recovery = Not calculated | 14.3 | 0.0000 mg/L | 0.00007 | 0.0000 mg/L | 0.00007 | 148.86% |
| P | 178.221† | QC value within limits for Zn 213.857 Recovery = Not calculated | -2.5 | -0.001 mg/L | 0.0034 | -0.001 mg/L | 0.0034 | 453.36% |
| Si | 251.611† | QC value within limits for P 178.221 Recovery = Not calculated | 2.2 | 0.000 mg/L | 0.0008 | 0.000 mg/L | 0.0008 | >999.9% |

QC value within limits for Si 251.611 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: IPC-1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 4/13/2021 8:23:41 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: IPC-1

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 260.0 kPa | 0.75 L/min |

Handwritten signature and date: 4/13/21

Mean Data: IPC-1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------|--------|----------|--------------------|----------|--------|
| Y 371.029 | 3121561.6 | 0.986 mg/L | ✓ | 0.0039 | | | 0.39% |
| Sc 361.383 | 5312349.4 | 1.01 mg/L | | 0.011 | | | 1.09% |
| Ag 328.068† | -138.5 | 0.00075 mg/L | | 0.000287 | 0.00075 mg/L | 0.000287 | 38.09% |
| Al 308.215† | 311700.0 | 10.24 mg/L | | 0.132 | 10.24 mg/L | 0.132 | 1.29% |
| QC value within limits for Al 308.215 Recovery = 102.42% | | | | | | | |
| As 188.979† | -11.7 | -0.0022 mg/L | | 0.00069 | -0.0022 mg/L | 0.00069 | 31.60% |
| B 249.772† | 153.9 | 0.0007 mg/L | | 0.00016 | 0.0007 mg/L | 0.00016 | 21.59% |
| Ba 233.527† | 224639.4 | 1.016 mg/L | | 0.0117 | 1.016 mg/L | 0.0117 | 1.16% |
| QC value within limits for Ba 233.527 Recovery = 101.55% | | | | | | | |
| Be 313.107† | 5683956.9 | 0.49775 mg/L | | 0.000648 | 0.49775 mg/L | 0.000648 | 0.13% |
| QC value within limits for Be 313.107 Recovery = 99.55% | | | | | | | |
| Ca 317.933† | 2110805.0 | 49.35 mg/L | | 1.579 | 49.35 mg/L | 1.579 | 3.20% |
| Cd 214.440† | 915214.0 | 1.4932 mg/L | | 0.01739 | 1.4932 mg/L | 0.01739 | 1.16% |
| QC value within limits for Cd 214.440 Recovery = 99.55% | | | | | | | |
| Co 228.616† | 109641.4 | 0.9872 mg/L | | 0.01123 | 0.9872 mg/L | 0.01123 | 1.14% |
| QC value within limits for Co 228.616 Recovery = 98.72% | | | | | | | |
| Cr 267.716† | 270384.7 | 1.018 mg/L | | 0.0107 | 1.018 mg/L | 0.0107 | 1.05% |
| QC value within limits for Cr 267.716 Recovery = 101.83% | | | | | | | |
| Cu 324.752† | 453336.5 | 1.014 mg/L | | 0.0133 | 1.014 mg/L | 0.0133 | 1.31% |
| QC value within limits for Cu 324.752 Recovery = 101.43% | | | | | | | |
| Fe 238.204† | -722.6 | -0.0102 mg/L | | 0.00061 | -0.0102 mg/L | 0.00061 | 5.95% |
| K 766.490† | 101705.1 | 19.99 mg/L | | 0.626 | 19.99 mg/L | 0.626 | 3.13% |
| Mg 279.077† | -41.6 | -0.0061 mg/L | | 0.00345 | -0.0061 mg/L | 0.00345 | 56.51% |
| Mn 257.610† | 1039319.0 | 1.001 mg/L | | 0.0134 | 1.001 mg/L | 0.0134 | 1.34% |
| QC value within limits for Mn 257.610 Recovery = 100.10% | | | | | | | |
| Mo 202.031† | -108.3 | -0.0021 mg/L | | 0.00032 | -0.0021 mg/L | 0.00032 | 15.01% |
| Na 330.237† | 1145.4 | 17.31 mg/L | | 1.072 | 17.31 mg/L | 1.072 | 6.19% |

| | | | | | | |
|--|----------|-------------|---------|-------------|---------|--------|
| Ni 232.003† | 62209.7 | 0.9573 mg/L | 0.01088 | 0.9573 mg/L | 0.01088 | 1.14% |
| QC value within limits for Ni 232.003 Recovery = 95.73% | | | | | | |
| Pb 220.353† | 182233.4 | 5.037 mg/L | 0.0663 | 5.037 mg/L | 0.0663 | 1.32% |
| QC value within limits for Pb 220.353 Recovery = 100.75% | | | | | | |
| Sb 206.836† | 188.7 | 0.0081 mg/L | 0.00088 | 0.0081 mg/L | 0.00088 | 10.89% |
| Se 196.026† | 5940.8 | 1.990 mg/L | 0.0284 | 1.990 mg/L | 0.0284 | 1.43% |
| QC value within limits for Se 196.026 Recovery = 99.49% | | | | | | |
| Tl 190.801† | 7.0 | 0.0037 mg/L | 0.00120 | 0.0037 mg/L | 0.00120 | 32.50% |
| V 292.402† | 571199.2 | 1.013 mg/L | 0.0128 | 1.013 mg/L | 0.0128 | 1.27% |
| QC value within limits for V 292.402 Recovery = 101.27% | | | | | | |
| Zn 213.857† | 473442.6 | 1.497 mg/L | 0.0188 | 1.497 mg/L | 0.0188 | 1.26% |
| QC value within limits for Zn 213.857 Recovery = 99.81% | | | | | | |
| P 178.221† | 20.4 | 0.008 mg/L | 0.0025 | 0.008 mg/L | 0.0025 | 33.20% |
| Si 251.611† | 271761.3 | 5.087 mg/L | 0.0627 | 5.087 mg/L | 0.0627 | 1.23% |
| QC value within limits for Si 251.611 Recovery = 101.74% | | | | | | |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 7

Autosampler Location: 3

Sample ID: IPC-2

Date Collected: 4/13/2021 8:27:33 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

W 4/13/21

Nebulizer Parameters: IPC-2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 260.0 kPa | 0.75 L/min |

Mean Data: IPC-2

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3067964.7 | 0.969 mg/L | 0.0140 | | | 1.44% |
| Sc 361.383 | 5218223.0 | 0.994 mg/L | 0.0154 | | | 1.55% |
| Ag 328.068† | -84.6 | 0.00104 mg/L | 0.000180 | 0.00104 mg/L | 0.000180 | 17.29% |
| Al 308.215† | 337.5 | -0.0075 mg/L | 0.00568 | -0.0075 mg/L | 0.00568 | 75.97% |
| As 188.979† | 30606.6 | 5.010 mg/L | 0.1213 | 5.010 mg/L | 0.1213 | 2.42% |
| QC value within limits for As 188.979 Recovery = 100.20% | | | | | | |
| B 249.772† | 20528.8 | 0.0460 mg/L | 0.00118 | 0.0460 mg/L | 0.00118 | 2.56% |
| Ba 233.527† | 303.6 | 0.0001 mg/L | 0.00016 | 0.0001 mg/L | 0.00016 | 168.87% |
| Be 313.107† | 1783.8 | 0.00035 mg/L | 0.000032 | 0.00035 mg/L | 0.000032 | 9.19% |
| Ca 317.933† | 537662.8 | 12.57 mg/L | 0.210 | 12.57 mg/L | 0.210 | 1.67% |
| QC value within limits for Ca 317.933 Recovery = 100.59% | | | | | | |
| Cd 214.440† | 591.9 | 0.00013 mg/L | 0.000086 | 0.00013 mg/L | 0.000086 | 65.12% |
| Co 228.616† | -24.8 | 0.0002 mg/L | 0.00008 | 0.0002 mg/L | 0.00008 | 48.43% |
| Cr 267.716† | 34.1 | 0.0001 mg/L | 0.00020 | 0.0001 mg/L | 0.00020 | 132.86% |
| Cu 324.752† | -940.9 | -0.0010 mg/L | 0.00026 | -0.0010 mg/L | 0.00026 | 25.29% |
| Fe 238.204† | 790838.3 | 20.14 mg/L | 0.348 | 20.14 mg/L | 0.348 | 1.73% |
| QC value within limits for Fe 238.204 Recovery = 100.71% | | | | | | |
| K 766.490† | 63833.0 | 12.53 mg/L | 0.240 | 12.53 mg/L | 0.240 | 1.91% |
| QC value within limits for K 766.490 Recovery = 100.24% | | | | | | |
| Mg 279.077† | 72547.8 | 12.31 mg/L | 0.186 | 12.31 mg/L | 0.186 | 1.51% |
| QC value within limits for Mg 279.077 Recovery = 98.46% | | | | | | |
| Mn 257.610† | 302.3 | -0.0001 mg/L | 0.00009 | -0.0001 mg/L | 0.00009 | 80.32% |
| Mo 202.031† | 66030.9 | 1.009 mg/L | 0.0232 | 1.009 mg/L | 0.0232 | 2.30% |
| QC value within limits for Mo 202.031 Recovery = 100.85% | | | | | | |
| Na 330.237† | 771.8 | 12.51 mg/L | 0.629 | 12.51 mg/L | 0.629 | 5.03% |
| QC value within limits for Na 330.237 Recovery = 100.07% | | | | | | |
| Ni 232.003† | 562.2 | 0.0062 mg/L | 0.00073 | 0.0062 mg/L | 0.00073 | 11.75% |
| Pb 220.353† | 13.2 | 0.0015 mg/L | 0.00056 | 0.0015 mg/L | 0.00056 | 37.37% |
| Sb 206.836† | -61.5 | -0.0044 mg/L | 0.00109 | -0.0044 mg/L | 0.00109 | 24.68% |
| Se 196.026† | -17.7 | -0.0003 mg/L | 0.00072 | -0.0003 mg/L | 0.00072 | 287.33% |
| Tl 190.801† | 2.8 | 0.0051 mg/L | 0.00126 | 0.0051 mg/L | 0.00126 | 24.90% |
| V 292.402† | 44.4 | -0.0006 mg/L | 0.00022 | -0.0006 mg/L | 0.00022 | 38.40% |
| Zn 213.857† | 419.0 | -0.0006 mg/L | 0.00012 | -0.0006 mg/L | 0.00012 | 20.83% |
| P 178.221† | 33536.8 | 9.925 mg/L | 0.1731 | 9.925 mg/L | 0.1731 | 1.74% |
| QC value within limits for P 178.221 Recovery = 99.25% | | | | | | |
| Si 251.611† | 6039.6 | 0.106 mg/L | 0.0017 | 0.106 mg/L | 0.0017 | 1.62% |

All analyte(s) passed QC.

User canceled analysis.

REBU

Analysis Begun

Start Time: 4/13/2021 8:29:54 AM
Logged In Analyst: Optima7300DV
Spectrometer Model: Optima 7300 DV, S/N.077C9102801

Plasma On Time: 4/13/2021 6:12:27 AM
Technique: ICP Continuous
Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210413_1.sif
Batch ID:
Results Data Set: 210413_1
Results Library: C:\pe\Optima7300DV\Results\Results.mdb

Sequence No.: 7
Sample ID: IPC-2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 4/13/2021 8:29:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Handwritten signature and date: M 4/13/21

Nebulizer Parameters: IPC-2
Analyte Back Pressure Flow
All 260.0 kPa 0.75 L/min

Mean Data: IPC-2

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include elements like Y, Sc, Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Tl, V, Zn, P, Si.

Sequence No.: 8
Sample ID: IPC-3
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 4
Date Collected: 4/13/2021 8:33:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: IPC-3

Analyte Back Pressure Flow
All 260.0 kPa 0.75 L/min

WV
4/13/21

Mean Data: IPC-3

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3212913.2 | 1.01 mg/L | 0.016 | | | 1.56% |
| Sc 361.383 | 5385441.3 | 1.03 mg/L | 0.016 | | | 1.61% |
| Ag 328.068† | 195012.9 | 0.49871 mg/L | 0.009518 | 0.49871 mg/L | 0.009518 | 1.91% |
| QC value within limits for Ag 328.068 Recovery = 99.74% | | | | | | |
| Al 308.215† | -355.0 | -0.0117 mg/L | 0.00280 | -0.0117 mg/L | 0.00280 | 23.88% |
| As 188.979† | 36.2 | 0.0059 mg/L | 0.00281 | 0.0059 mg/L | 0.00281 | 47.42% |
| B 249.772† | 239467.5 | 1.006 mg/L | 0.0221 | 1.006 mg/L | 0.0221 | 2.20% |
| QC value within limits for B 249.772 Recovery = 100.63% | | | | | | |
| Ba 233.527† | 57.4 | 0.0003 mg/L | 0.00008 | 0.0003 mg/L | 0.00008 | 29.26% |
| Be 313.107† | 278736.1 | 0.02461 mg/L | 0.000049 | 0.02461 mg/L | 0.000049 | 0.20% |
| Ca 317.933† | 466.9 | 0.0109 mg/L | 0.00147 | 0.0109 mg/L | 0.00147 | 13.42% |
| Cd 214.440† | -1019.3 | -0.00166 mg/L | 0.000042 | -0.00166 mg/L | 0.000042 | 2.54% |
| Co 228.616† | 12.2 | 0.0001 mg/L | 0.00009 | 0.0001 mg/L | 0.00009 | 81.75% |
| Cr 267.716† | 40.4 | 0.0002 mg/L | 0.00011 | 0.0002 mg/L | 0.00011 | 73.37% |
| Cu 324.752† | 331.8 | 0.0007 mg/L | 0.00019 | 0.0007 mg/L | 0.00019 | 25.01% |
| Fe 238.204† | 528.2 | 0.0135 mg/L | 0.00159 | 0.0135 mg/L | 0.00159 | 11.85% |
| K 766.490† | 225.6 | 0.0442 mg/L | 0.01603 | 0.0442 mg/L | 0.01603 | 36.29% |
| Mg 279.077† | 33.6 | 0.0057 mg/L | 0.00211 | 0.0057 mg/L | 0.00211 | 37.08% |
| Mn 257.610† | 179.8 | 0.0002 mg/L | 0.00002 | 0.0002 mg/L | 0.00002 | 10.55% |
| Mo 202.031† | 56.4 | 0.0009 mg/L | 0.00016 | 0.0009 mg/L | 0.00016 | 18.72% |
| Na 330.237† | 17.5 | 0.2829 mg/L | 0.36273 | 0.2829 mg/L | 0.36273 | 128.21% |
| Ni 232.003† | -450.7 | -0.0072 mg/L | 0.00129 | -0.0072 mg/L | 0.00129 | 17.94% |
| Pb 220.353† | 19.8 | 0.0005 mg/L | 0.00098 | 0.0005 mg/L | 0.00098 | 181.02% |
| Sb 206.836† | 20577.2 | 1.990 mg/L | 0.0421 | 1.990 mg/L | 0.0421 | 2.11% |
| QC value within limits for Sb 206.836 Recovery = 99.51% | | | | | | |
| Se 196.026† | 9.6 | 0.0032 mg/L | 0.00357 | 0.0032 mg/L | 0.00357 | 110.84% |
| Tl 190.801† | 15209.8 | 1.912 mg/L | 0.0530 | 1.912 mg/L | 0.0530 | 2.77% |
| QC value within limits for Tl 190.801 Recovery = 95.58% | | | | | | |
| V 292.402† | 1.1 | 0.0000 mg/L | 0.00014 | 0.0000 mg/L | 0.00014 | >999.9% |
| Zn 213.857† | 847.1 | 0.0027 mg/L | 0.00017 | 0.0027 mg/L | 0.00017 | 6.21% |
| P 178.221† | 20.9 | 0.006 mg/L | 0.0024 | 0.006 mg/L | 0.0024 | 38.46% |
| Si 251.611† | 18474.4 | 0.345 mg/L | 0.0081 | 0.345 mg/L | 0.0081 | 2.35% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 9

Sample ID: ICV-1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 4/13/2021 8:37:52 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICV-1

Analyte Back Pressure Flow
All 261.0 kPa 0.75 L/min

Mean Data: ICV-1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|--------|
| Y 371.029 | 3168164.2 | 1.00 mg/L | 0.009 | | | 0.87% |
| Sc 361.383 | 5340092.8 | 1.02 mg/L | 0.009 | | | 0.93% |
| Ag 328.068† | -1169.7 | -0.00090 mg/L | 0.000513 | -0.00090 mg/L | 0.000513 | 57.27% |
| Al 308.215† | 262.0 | -0.0218 mg/L | 0.00233 | -0.0218 mg/L | 0.00233 | 10.71% |
| As 188.979† | 6071.5 | 0.9938 mg/L | 0.01844 | 0.9938 mg/L | 0.01844 | 1.86% |
| QC value within limits for As 188.979 Recovery = 99.38% | | | | | | |
| B 249.772† | 4362.3 | 0.0181 mg/L | 0.00045 | 0.0181 mg/L | 0.00045 | 2.47% |
| Ba 233.527† | -484.1 | -0.0004 mg/L | 0.00013 | -0.0004 mg/L | 0.00013 | 34.48% |
| Be 313.107† | 11091044.5 | 0.97105 mg/L | 0.006969 | 0.97105 mg/L | 0.006969 | 0.72% |
| QC value within limits for Be 313.107 Recovery = 97.10% | | | | | | |
| Ca 317.933† | 43890.7 | 1.036 mg/L | 0.0285 | 1.036 mg/L | 0.0285 | 2.75% |
| Cd 214.440† | 606665.6 | 0.98987 mg/L | 0.001101 | 0.98987 mg/L | 0.001101 | 0.11% |

| | | | | | | | |
|----|----------|-----------|--------------|---------|--------------|---------|---------|
| Co | 228.616† | 113148.2 | 1.019 mg/L | 0.0265 | 1.019 mg/L | 0.0265 | 2.60% |
| Cr | 267.716† | 275478.9 | 1.037 mg/L | 0.0242 | 1.037 mg/L | 0.0242 | 2.34% |
| Cu | 324.752† | 425133.7 | 0.9511 mg/L | 0.00188 | 0.9511 mg/L | 0.00188 | 0.20% |
| Fe | 238.204† | 38730.7 | 0.9946 mg/L | 0.02676 | 0.9946 mg/L | 0.02676 | 2.69% |
| K | 766.490† | -40.7 | -0.0068 mg/L | 0.00413 | -0.0068 mg/L | 0.00413 | 60.58% |
| Mg | 279.077† | 5700.0 | 0.9740 mg/L | 0.03018 | 0.9740 mg/L | 0.03018 | 3.10% |
| Mn | 257.610† | 1055820.7 | 1.017 mg/L | 0.0021 | 1.017 mg/L | 0.0021 | 0.20% |
| Mo | 202.031† | 63789.9 | 0.9734 mg/L | 0.02707 | 0.9734 mg/L | 0.02707 | 2.78% |
| Na | 330.237† | -22.3 | -1.157 mg/L | 0.4788 | -1.157 mg/L | 0.4788 | 41.36% |
| Ni | 232.003† | 63490.1 | 0.9708 mg/L | 0.02265 | 0.9708 mg/L | 0.02265 | 2.33% |
| Pb | 220.353† | 36900.1 | 1.020 mg/L | 0.0251 | 1.020 mg/L | 0.0251 | 2.47% |
| Sb | 206.836† | 10925.5 | 1.050 mg/L | 0.0161 | 1.050 mg/L | 0.0161 | 1.54% |
| Se | 196.026† | 2869.3 | 0.9611 mg/L | 0.01091 | 0.9611 mg/L | 0.01091 | 1.14% |
| Tl | 190.801† | 7597.8 | 0.9560 mg/L | 0.01390 | 0.9560 mg/L | 0.01390 | 1.45% |
| V | 292.402† | 561852.4 | 0.9958 mg/L | 0.00041 | 0.9958 mg/L | 0.00041 | 0.04% |
| Zn | 213.857† | 313440.4 | 0.9886 mg/L | 0.02607 | 0.9886 mg/L | 0.02607 | 2.64% |
| P | 178.221† | -14.3 | 0.000 mg/L | 0.0006 | 0.000 mg/L | 0.0006 | 350.66% |
| Si | 251.611† | 12453.3 | 0.225 mg/L | 0.0775 | 0.225 mg/L | 0.0775 | 34.47% |

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICV-2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 4/13/2021 8:41:43 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICV-2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 261.0 kPa | 0.75 L/min |

Handwritten signature and date: 4/13/21

Mean Data: ICV-2

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. / Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|-------------------|--------------------|----------|---------|
| Y 371.029 | 3131388.9 | 0.989 mg/L | 0.0087 | | | 0.88% |
| Sc 361.383 | 5282973.4 | 1.01 mg/L | 0.009 | | | 0.92% |
| Ag 328.068† | 184474.7 | 0.47174 mg/L | 0.005345 | 0.47174 mg/L | 0.005345 | 1.13% |
| Al 308.215† | 29202.7 | 0.9602 mg/L | 0.01418 | 0.9602 mg/L | 0.01418 | 1.48% |
| As 188.979† | -2.7 | -0.0004 mg/L | 0.00170 | -0.0004 mg/L | 0.00170 | 462.87% |
| B 249.772† | 240722.9 | 1.012 mg/L | 0.0117 | 1.012 mg/L | 0.0117 | 1.16% |
| Ba 233.527† | 237906.1 | 1.073 mg/L | 0.0093 | 1.073 mg/L | 0.0093 | 0.86% |
| Be 313.107† | 6156.0 | 0.00075 mg/L | 0.000025 | 0.00075 mg/L | 0.000025 | 3.34% |
| Ca 317.933† | -183.6 | -0.0037 mg/L | 0.00096 | -0.0037 mg/L | 0.00096 | 25.88% |
| Cd 214.440† | 427.7 | 0.00072 mg/L | 0.000036 | 0.00072 mg/L | 0.000036 | 5.06% |
| Co 228.616† | -36.1 | 0.0008 mg/L | 0.00012 | 0.0008 mg/L | 0.00012 | 15.00% |
| Cr 267.716† | 168.3 | 0.0006 mg/L | 0.00010 | 0.0006 mg/L | 0.00010 | 15.47% |
| Cu 324.752† | 662.6 | 0.0014 mg/L | 0.00028 | 0.0014 mg/L | 0.00028 | 19.44% |
| Fe 238.204† | -234.9 | -0.0059 mg/L | 0.00020 | -0.0059 mg/L | 0.00020 | 3.34% |
| K 766.490† | 53115.7 | 10.44 mg/L | 0.132 | 10.44 mg/L | 0.132 | 1.26% |
| Mg 279.077† | -30.8 | -0.0052 mg/L | 0.00221 | -0.0052 mg/L | 0.00221 | 42.05% |
| Mn 257.610† | 712.3 | 0.0007 mg/L | 0.00003 | 0.0007 mg/L | 0.00003 | 4.99% |
| Mo 202.031† | 34.3 | 0.0005 mg/L | 0.00004 | 0.0005 mg/L | 0.00004 | 8.57% |

| Analyte | Conc. (mg/L) | Conc. (mg/L) | Conc. (mg/L) | Conc. (mg/L) | Conc. (mg/L) | Conc. (mg/L) | Conc. (mg/L) |
|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Na 330.237† | 77.2 | 1.249 | 0.2914 | 1.249 | 0.2914 | 23.32% | |
| Ni 232.003† | -397.3 | -0.0062 | 0.00026 | -0.0062 | 0.00026 | 4.17% | |
| Pb 220.353† | 5.6 | 0.0003 | 0.00126 | 0.0003 | 0.00126 | 452.97% | |
| Sb 206.836† | 137.4 | 0.0132 | 0.00069 | 0.0132 | 0.00069 | 5.24% | |
| Se 196.026† | 14.1 | 0.0048 | 0.00395 | 0.0048 | 0.00395 | 82.70% | |
| Tl 190.801† | 33.4 | 0.0045 | 0.00123 | 0.0045 | 0.00123 | 27.03% | |
| V 292.402† | 343.9 | 0.0006 | 0.00013 | 0.0006 | 0.00013 | 21.81% | |
| Zn 213.857† | 593.9 | 0.0021 | 0.00018 | 0.0021 | 0.00018 | 8.65% | |
| P 178.221† | 0.8 | 0.000 | 0.0016 | 0.000 | 0.0016 | >999.9% | |
| Si 251.611† | 123213.3 | 2.304 | 0.0232 | 2.304 | 0.0232 | 1.01% | |

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: ICV-3

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 4/13/2021 8:45:47 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICV-3

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 261.0 kPa | 0.75 L/min |

Mean Data: ICV-3

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|-------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 3164216.2 | 0.999 | mg/L | 0.0040 | | | 0.40% |
| Sc 361.383 | 5371082.6 | 1.02 | mg/L | 0.004 | | | 0.35% |
| Ag 328.068† | 631.4 | 0.00133 | mg/L | 0.000271 | 0.00133 | 0.000271 | 20.34% |
| Al 308.215† | -40.6 | -0.0195 | mg/L | 0.00245 | -0.0195 | 0.00245 | 12.55% |
| As 188.979† | 25.2 | 0.0017 | mg/L | 0.00089 | 0.0017 | 0.00089 | 51.49% |
| B 249.772† | 240529.8 | 1.010 | mg/L | 0.0177 | 1.010 | 0.0177 | 1.75% |
| Ba 233.527† | 194.8 | 0.0008 | mg/L | 0.00005 | 0.0008 | 0.00005 | 5.97% |
| Be 313.107† | 2650.1 | 0.00045 | mg/L | 0.000016 | 0.00045 | 0.000016 | 3.47% |
| Ca 317.933† | 427865.9 | 10.00 | mg/L | 0.331 | 10.00 | 0.331 | 3.31% |
| QC value within limits for Ca 317.933 Recovery = 100.01% | | | | | | | |
| Cd 214.440† | 61.0 | 0.00028 | mg/L | 0.000061 | 0.00028 | 0.000061 | 21.46% |
| Co 228.616† | -89.2 | 0.0002 | mg/L | 0.00009 | 0.0002 | 0.00009 | 49.68% |
| Cr 267.716† | 66.4 | 0.0002 | mg/L | 0.00014 | 0.0002 | 0.00014 | 83.67% |
| Cu 324.752† | 307.9 | -0.0001 | mg/L | 0.00032 | -0.0001 | 0.00032 | 245.04% |
| Fe 238.204† | -356.2 | -0.0089 | mg/L | 0.00015 | -0.0089 | 0.00015 | 1.64% |
| K 766.490† | 50658.5 | 9.951 | mg/L | 0.2726 | 9.951 | 0.2726 | 2.74% |
| QC value within limits for K 766.490 Recovery = 99.51% | | | | | | | |
| Mg 279.077† | 57470.0 | 9.754 | mg/L | 0.3334 | 9.754 | 0.3334 | 3.42% |
| QC value within limits for Mg 279.077 Recovery = 97.54% | | | | | | | |
| Mn 257.610† | 195.5 | 0.0001 | mg/L | 0.00002 | 0.0001 | 0.00002 | 13.60% |
| Mo 202.031† | 65651.0 | 1.002 | mg/L | 0.0159 | 1.002 | 0.0159 | 1.58% |
| Na 330.237† | 647.1 | 10.58 | mg/L | 0.495 | 10.58 | 0.495 | 4.68% |
| QC value within limits for Na 330.237 Recovery = 105.81% | | | | | | | |
| Ni 232.003† | 536.2 | 0.0037 | mg/L | 0.00095 | 0.0037 | 0.00095 | 25.89% |
| Pb 220.353† | -115.3 | -0.0014 | mg/L | 0.00038 | -0.0014 | 0.00038 | 26.60% |
| Sb 206.836† | -61.5 | -0.0032 | mg/L | 0.00144 | -0.0032 | 0.00144 | 44.30% |
| Se 196.026† | -3.0 | -0.0006 | mg/L | 0.00460 | -0.0006 | 0.00460 | 811.61% |
| Tl 190.801† | 11.5 | 0.0023 | mg/L | 0.00043 | 0.0023 | 0.00043 | 18.81% |
| V 292.402† | 66.7 | -0.0003 | mg/L | 0.00016 | -0.0003 | 0.00016 | 51.22% |
| Zn 213.857† | -393.0 | -0.0008 | mg/L | 0.00004 | -0.0008 | 0.00004 | 5.15% |
| P 178.221† | 16984.1 | 5.027 | mg/L | 0.0760 | 5.027 | 0.0760 | 1.51% |
| QC value within limits for P 178.221 Recovery = 100.54% | | | | | | | |
| Si 251.611† | 11763.5 | 0.206 | mg/L | 0.0051 | 0.206 | 0.0051 | 2.50% |

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: ICV-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 4/13/2021 8:49:52 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICV-4

Analyte Back Pressure Flow
All 262.0 kPa 0.75 L/min

Mean Data: ICV-4

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Calib. Units, Std.Dev., Conc., Sample Units, Std.Dev., RSD. Lists various elements like Y, Sc, Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Tl, V, Zn, P, Si with their respective values.

QC value within limits for Si 251.611 Recovery = 98.64%
All analyte(s) passed QC.

Sequence No.: 13
Sample ID: MRL CHECK 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 4/13/2021 8:53:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Handwritten signature and date: 4/13/21

Nebulizer Parameters: MRL CHECK 1

Analyte Back Pressure Flow
All 262.0 kPa 0.75 L/min

Handwritten note: 2104064 MRL1

Mean Data: MRL CHECK 1

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Calib. Units, Std.Dev., Conc., Sample Units, Std.Dev., RSD. Lists various elements like Y, Sc, Ag, Al, As, B, Ba, Be, Ca, Cd with their respective values and recovery percentages.

| | | | | | | |
|-------------|----------|--------------|---------|--------------|---------|---------|
| Pb 220.353† | -132.0 | 0.0007 mg/L | 0.00063 | 0.0007 mg/L | 0.00063 | 92.96% |
| Sb 206.836† | -25.3 | -0.0049 mg/L | 0.00072 | -0.0049 mg/L | 0.00072 | 14.49% |
| Se 196.026† | -16.6 | -0.0025 mg/L | 0.00361 | -0.0025 mg/L | 0.00361 | 144.29% |
| Tl 190.801† | 27.7 | 0.0094 mg/L | 0.00058 | 0.0094 mg/L | 0.00058 | 6.20% |
| V 292.402† | 842.6 | 0.0014 mg/L | 0.00005 | 0.0014 mg/L | 0.00005 | 3.44% |
| Zn 213.857† | 3283.9 | 0.0125 mg/L | 0.00028 | 0.0125 mg/L | 0.00028 | 2.20% |
| P 178.221† | 34.6 | 0.009 mg/L | 0.0044 | 0.009 mg/L | 0.0044 | 47.53% |
| Si 251.611† | 280953.2 | 5.254 mg/L | 0.0457 | 5.254 mg/L | 0.0457 | 0.87% |

Sequence No.: 50
 Sample ID: 21D0019-01
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 39
 Date Collected: 4/13/2021 11:24:02 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

W-413/M

Nebulizer Parameters: 21D0019-01

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 271.0 kPa | 0.75 L/min |

Mean Data: 21D0019-01

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD% |
|-------------|--------------------------|---------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 3094899.3 | 0.977 mg/L | ✓ | 0.0218 | | | 2.23% |
| Sc 361.383 | 5334777.9 | 1.02 mg/L | | 0.024 | | | 2.37% |
| Ag 328.068† | 3837.8 | 0.00684 mg/L | | 0.000263 | 0.00684 mg/L | 0.000263 | 3.85% |
| Al 308.215† | -419.7 | -0.0465 mg/L | | 0.00705 | -0.0465 mg/L | 0.00705 | 15.19% |
| As 188.979† | 46.0 | 0.0053 mg/L | | 0.00159 | 0.0053 mg/L | 0.00159 | 30.00% |
| B 249.772† | 40458.9 | 0.1654 mg/L | | 0.00536 | 0.1654 mg/L | 0.00536 | 3.24% |
| Ba 233.527† | 12729.8 | 0.0574 mg/L | | 0.00135 | 0.0574 mg/L | 0.00135 | 2.36% |
| Be 313.107† | -331.8 | 0.00025 mg/L | ✓ | 0.000019 | 0.00025 mg/L | 0.000019 | 7.47% |
| Ca 317.933† | 6202697.3 | 145.0 mg/L | | 2.73 | 145.0 mg/L | 2.73 | 1.89% |
| Cd 214.440† | -30.0 | -0.00014 mg/L | | 0.000052 | -0.00014 mg/L | 0.000052 | 36.49% |
| Co 228.616† | 124.6 | 0.0012 mg/L | | 0.00012 | 0.0012 mg/L | 0.00012 | 10.38% |
| Cr 267.716† | 227.5 | 0.0006 mg/L | | 0.00008 | 0.0006 mg/L | 0.00008 | 13.24% |
| Cu 324.752† | 7652.1 | 0.0157 mg/L | | 0.00290 | 0.0157 mg/L | 0.00290 | 18.52% |
| Fe 238.204† | 2280.5 | 0.0584 mg/L | | 0.00335 | 0.0584 mg/L | 0.00335 | 5.74% |
| K 766.490† | 18373.8 | 3.532 mg/L | | 0.0766 | 3.532 mg/L | 0.0766 | 2.17% |
| Mg 279.077† | 125017.5 | 21.20 mg/L | ✓ | 0.464 | 21.20 mg/L | 0.464 | 2.19% |
| Mn 257.610† | 1898.0 | 0.0017 mg/L | | 0.00006 | 0.0017 mg/L | 0.00006 | 3.67% |
| Mo 202.031† | 44.3 | 0.0003 mg/L | | 0.00020 | 0.0003 mg/L | 0.00020 | 59.40% |
| Na 330.237† | 6568.1 | 106.8 mg/L | ✓ | 3.40 | 106.8 mg/L | 3.40 | 3.19% |
| Ni 232.003† | 64.8 | 0.0034 mg/L | | 0.00030 | 0.0034 mg/L | 0.00030 | 8.96% |
| Pb 220.353† | -174.4 | -0.0023 mg/L | | 0.00065 | -0.0023 mg/L | 0.00065 | 27.80% |
| Sb 206.836† | -27.0 | -0.0036 mg/L | | 0.00055 | -0.0036 mg/L | 0.00055 | 15.42% |
| Se 196.026† | -19.9 | -0.0046 mg/L | | 0.00276 | -0.0046 mg/L | 0.00276 | 59.89% |
| Tl 190.801† | 5.0 | 0.0029 mg/L | | 0.00130 | 0.0029 mg/L | 0.00130 | 45.53% |
| V 292.402† | 3389.1 | 0.0059 mg/L | | 0.00014 | 0.0059 mg/L | 0.00014 | 2.27% |
| Zn 213.857† | -203.0 | 0.0001 mg/L | | 0.00025 | 0.0001 mg/L | 0.00025 | 355.71% |
| P 178.221† | 177.2 | 0.052 mg/L | | 0.0047 | 0.052 mg/L | 0.0047 | 8.96% |
| Si 251.611† | 1860636.8 | 34.78 mg/L | | 0.153 | 34.78 mg/L | 0.153 | 0.44% |

Sequence No.: 51
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 4/13/2021 11:27:53 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 265.0 kPa | 0.75 L/min |

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD% |
|------------|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Y 371.029 | 3181009.6 | 1.00 mg/L | | 0.014 | | | 1.42% |
| Sc 361.383 | 5284609.7 | 1.01 mg/L | | 0.015 | | | 1.45% |

| | | | | | | |
|---|--------|--------------|----------|--------------|----------|---------|
| Ag 328.068† | 368.9 | 0.00094 mg/L | 0.000443 | 0.00094 mg/L | 0.000443 | 47.06% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 308.215† | -940.7 | -0.0310 mg/L | 0.00542 | -0.0310 mg/L | 0.00542 | 17.47% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | |
| As 188.979† | -20.8 | -0.0034 mg/L | 0.00019 | -0.0034 mg/L | 0.00019 | 5.64% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.772† | 738.0 | 0.0031 mg/L | 0.00013 | 0.0031 mg/L | 0.00013 | 4.25% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 41.3 | 0.0002 mg/L | 0.00005 | 0.0002 mg/L | 0.00005 | 27.93% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | -601.7 | 0.00016 mg/L | 0.000016 | 0.00016 mg/L | 0.000016 | 9.90% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933† | 3181.1 | 0.0744 mg/L | 0.00088 | 0.0744 mg/L | 0.00088 | 1.18% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | |
| Cd 214.440† | 43.4 | 0.00007 mg/L | 0.000050 | 0.00007 mg/L | 0.000050 | 71.57% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | |
| Co 228.616† | 42.0 | 0.0004 mg/L | 0.00022 | 0.0004 mg/L | 0.00022 | 57.92% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | -94.8 | -0.0004 mg/L | 0.00010 | -0.0004 mg/L | 0.00010 | 27.02% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | |
| Cu 324.752† | 2601.2 | 0.0058 mg/L | 0.00350 | 0.0058 mg/L | 0.00350 | 60.20% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | |
| Fe 238.204† | -451.8 | -0.0115 mg/L | 0.00008 | -0.0115 mg/L | 0.00008 | 0.71% |
| QC value within limits for Fe 238.204 Recovery = Not calculated | | | | | | |
| K 766.490† | 372.1 | 0.0728 mg/L | 0.00222 | 0.0728 mg/L | 0.00222 | 3.04% |
| QC value within limits for K 766.490 Recovery = Not calculated | | | | | | |
| Mg 279.077† | 56.0 | 0.0095 mg/L | 0.00377 | 0.0095 mg/L | 0.00377 | 39.77% |
| QC value within limits for Mg 279.077 Recovery = Not calculated | | | | | | |
| Mn 257.610† | 98.2 | 0.0001 mg/L | 0.00005 | 0.0001 mg/L | 0.00005 | 56.42% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | |
| Mo 202.031† | -188.5 | -0.0029 mg/L | 0.00028 | -0.0029 mg/L | 0.00028 | 9.87% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | |
| Na 330.237† | 34.5 | 0.5598 mg/L | 0.14503 | 0.5598 mg/L | 0.14503 | 25.91% |
| QC value within limits for Na 330.237 Recovery = Not calculated | | | | | | |
| Ni 232.003† | 30.9 | 0.0005 mg/L | 0.00072 | 0.0005 mg/L | 0.00072 | 137.36% |
| QC value within limits for Ni 232.003 Recovery = Not calculated | | | | | | |
| Pb 220.353† | -76.1 | -0.0021 mg/L | 0.00055 | -0.0021 mg/L | 0.00055 | 25.98% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | |
| Sb 206.836† | -16.5 | -0.0016 mg/L | 0.00068 | -0.0016 mg/L | 0.00068 | 42.63% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | |
| Se 196.026† | 3.0 | 0.0010 mg/L | 0.00614 | 0.0010 mg/L | 0.00614 | 617.65% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | |
| Tl 190.801† | 19.9 | 0.0025 mg/L | 0.00182 | 0.0025 mg/L | 0.00182 | 72.59% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | |
| V 292.402† | 51.4 | 0.0001 mg/L | 0.00017 | 0.0001 mg/L | 0.00017 | 189.71% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | |
| Zn 213.857† | 687.5 | 0.0022 mg/L | 0.00011 | 0.0022 mg/L | 0.00011 | 5.14% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | |
| P 178.221† | 11.4 | 0.003 mg/L | 0.0030 | 0.003 mg/L | 0.0030 | 89.87% |
| QC value within limits for P 178.221 Recovery = Not calculated | | | | | | |
| Si 251.611† | 1004.6 | 0.019 mg/L | 0.0016 | 0.019 mg/L | 0.0016 | 8.25% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | |

All analyte(s) passed QC.

Sequence No.: 52
 Sample ID: CCV-1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 4/13/2021 11:31:58 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

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 4/13/21

Nebulizer Parameters: CCV-1

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 264.0 kPa | 0.75 L/min |

Mean Data: CCV-1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|------------|--------------------------|-------------|-----------------|--------------------|----------|-------|
| Y 371.029 | 3126297.9 | 0.987 mg/L | 0.0180 | | | 1.83% |
| Sc 361.383 | 5254527.0 | 1.00 mg/L | 0.019 | | | 1.89% |

| | | | | | | |
|--|------------|---------------|----------|---------------|----------|---------|
| Ag 328.068† | -1384.8 | -0.00142 mg/L | 0.000224 | -0.00142 mg/L | 0.000224 | 15.76% |
| Al 308.215† | -21.4 | -0.0318 mg/L | 0.00832 | -0.0318 mg/L | 0.00832 | 26.19% |
| As 188.979† | 6373.1 | 1.043 mg/L | 0.0169 | 1.043 mg/L | 0.0169 | 1.62% |
| QC value within limits for As 188.979 Recovery = 104.32% | | | | | | |
| B 249.772† | 2378.7 | 0.0099 mg/L | 0.00033 | 0.0099 mg/L | 0.00033 | 3.30% |
| Ba 233.527† | -515.7 | -0.0005 mg/L | 0.00014 | -0.0005 mg/L | 0.00014 | 28.62% |
| Be 313.107† | 11300267.5 | 0.98936 mg/L | 0.015332 | 0.98936 mg/L | 0.015332 | 1.55% |
| QC value within limits for Be 313.107 Recovery = 98.94% | | | | | | |
| Ca 317.933† | 45519.6 | 1.074 mg/L | 0.0387 | 1.074 mg/L | 0.0387 | 3.61% |
| Cd 214.440† | 635606.7 | 1.0371 mg/L | 0.00145 | 1.0371 mg/L | 0.00145 | 0.14% |
| QC value within limits for Cd 214.440 Recovery = 103.71% | | | | | | |
| Co 228.616† | 117137.0 | 1.055 mg/L | 0.0223 | 1.055 mg/L | 0.0223 | 2.11% |
| QC value within limits for Co 228.616 Recovery = 105.49% | | | | | | |
| Cr 267.716† | 284353.1 | 1.071 mg/L | 0.0218 | 1.071 mg/L | 0.0218 | 2.03% |
| QC value within limits for Cr 267.716 Recovery = 107.09% | | | | | | |
| Cu 324.752† | 425757.7 | 0.9525 mg/L | 0.00313 | 0.9525 mg/L | 0.00313 | 0.33% |
| QC value within limits for Cu 324.752 Recovery = 95.25% | | | | | | |
| Fe 238.204† | 37959.3 | 0.9753 mg/L | 0.03299 | 0.9753 mg/L | 0.03299 | 3.38% |
| QC value within limits for Fe 238.204 Recovery = 97.53% | | | | | | |
| K 766.490† | 158.4 | 0.0325 mg/L | 0.02728 | 0.0325 mg/L | 0.02728 | 83.96% |
| Mg 279.077† | 5703.9 | 0.9749 mg/L | 0.03837 | 0.9749 mg/L | 0.03837 | 3.94% |
| Mn 257.610† | 1078392.5 | 1.039 mg/L | 0.0004 | 1.039 mg/L | 0.0004 | 0.04% |
| QC value within limits for Mn 257.610 Recovery = 103.86% | | | | | | |
| Mo 202.031† | 65842.7 | 1.005 mg/L | 0.0215 | 1.005 mg/L | 0.0215 | 2.14% |
| QC value within limits for Mo 202.031 Recovery = 100.47% | | | | | | |
| Na 330.237† | -33.1 | -1.368 mg/L | 0.4422 | -1.368 mg/L | 0.4422 | 32.31% |
| Ni 232.003† | 64952.2 | 0.9928 mg/L | 0.01982 | 0.9928 mg/L | 0.01982 | 2.00% |
| QC value within limits for Ni 232.003 Recovery = 99.28% | | | | | | |
| Pb 220.353† | 38603.6 | 1.067 mg/L | 0.0245 | 1.067 mg/L | 0.0245 | 2.29% |
| QC value within limits for Pb 220.353 Recovery = 106.67% | | | | | | |
| Sb 206.836† | 11058.8 | 1.063 mg/L | 0.0218 | 1.063 mg/L | 0.0218 | 2.05% |
| QC value within limits for Sb 206.836 Recovery = 106.25% | | | | | | |
| Se 196.026† | 3030.7 | 1.015 mg/L | 0.0170 | 1.015 mg/L | 0.0170 | 1.67% |
| QC value within limits for Se 196.026 Recovery = 101.52% | | | | | | |
| Tl 190.801† | 8078.9 | 1.016 mg/L | 0.0198 | 1.016 mg/L | 0.0198 | 1.95% |
| QC value within limits for Tl 190.801 Recovery = 101.64% | | | | | | |
| V 292.402† | 570276.2 | 1.011 mg/L | 0.0014 | 1.011 mg/L | 0.0014 | 0.14% |
| QC value within limits for V 292.402 Recovery = 101.08% | | | | | | |
| Zn 213.857† | 327117.3 | 1.032 mg/L | 0.0218 | 1.032 mg/L | 0.0218 | 2.11% |
| QC value within limits for Zn 213.857 Recovery = 103.19% | | | | | | |
| P 178.221† | -4.9 | 0.003 mg/L | 0.0031 | 0.003 mg/L | 0.0031 | 112.23% |
| Si 251.611† | 11589.9 | 0.208 mg/L | 0.0039 | 0.208 mg/L | 0.0039 | 1.87% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 53

Sample ID: CCV-2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 4/13/2021 11:35:48 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV-2

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 265.0 kPa | 0.75 L/min |

Mean Data: CCV-2

| Analyte | Mean Corrected | | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|----------------|--------------|----------|--------------|--------------------|----------|--------|
| | Intensity | Conc. Units | | | | | |
| Y 371.029 | 3201088.5 | 1.01 mg/L | 0.008 | | | | 0.76% |
| Sc 361.383 | 5391139.6 | 1.03 mg/L | 0.007 | | | | 0.71% |
| Ag 328.068† | 182586.9 | 0.46691 mg/L | 0.003899 | 0.46691 mg/L | 0.003899 | | 0.84% |
| QC value within limits for Ag 328.068 Recovery = 93.38% | | | | | | | |
| Al 308.215† | 28647.5 | 0.9419 mg/L | 0.01252 | 0.9419 mg/L | 0.01252 | | 1.33% |
| QC value within limits for Al 308.215 Recovery = 94.19% | | | | | | | |
| As 188.979† | -13.3 | -0.0021 mg/L | 0.00110 | -0.0021 mg/L | 0.00110 | | 52.32% |
| B 249.772† | 240864.6 | 1.012 mg/L | 0.0136 | 1.012 mg/L | 0.0136 | | 1.35% |
| QC value within limits for B 249.772 Recovery = 101.21% | | | | | | | |
| Ba 233.527† | 238908.1 | 1.078 mg/L | 0.0109 | 1.078 mg/L | 0.0109 | | 1.01% |
| QC value within limits for Ba 233.527 Recovery = 107.79% | | | | | | | |
| Be 313.107† | 2880.5 | 0.00047 mg/L | 0.000045 | 0.00047 mg/L | 0.000045 | | 9.75% |

| | | | | | | |
|-------------|----------|--------------|----------|--------------|----------|---------|
| Ca 317.933+ | 4561.0 | 0.1072 mg/L | 0.00362 | 0.1072 mg/L | 0.00362 | 3.38% |
| Cd 214.440+ | 245.6 | 0.00042 mg/L | 0.000037 | 0.00042 mg/L | 0.000037 | 8.85% |
| Co 228.616+ | -52.9 | 0.0007 mg/L | 0.00016 | 0.0007 mg/L | 0.00016 | 24.19% |
| Cr 267.716+ | 58.2 | 0.0002 mg/L | 0.00015 | 0.0002 mg/L | 0.00015 | 69.16% |
| Cu 324.752+ | 7182.6 | 0.0160 mg/L | 0.00127 | 0.0160 mg/L | 0.00127 | 7.94% |
| Fe 238.204+ | -333.3 | -0.0084 mg/L | 0.00012 | -0.0084 mg/L | 0.00012 | 1.45% |
| K 766.490+ | 51039.9 | 10.04 mg/L | 0.212 | 10.04 mg/L | 0.212 | 2.12% |
| Mg 279.077+ | 89.6 | 0.0152 mg/L | 0.00329 | 0.0152 mg/L | 0.00329 | 21.69% |
| Mn 257.610+ | 989.3 | 0.0010 mg/L | 0.00004 | 0.0010 mg/L | 0.00004 | 4.48% |
| Mo 202.031+ | 4.0 | 0.0000 mg/L | 0.00052 | 0.0000 mg/L | 0.00052 | >999.9% |
| Na 330.237+ | 80.5 | 1.303 mg/L | 0.2862 | 1.303 mg/L | 0.2862 | 21.97% |
| Ni 232.003+ | -510.0 | -0.0080 mg/L | 0.00025 | -0.0080 mg/L | 0.00025 | 3.09% |
| Pb 220.353+ | -42.5 | -0.0011 mg/L | 0.00030 | -0.0011 mg/L | 0.00030 | 28.05% |
| Sb 206.836+ | 53.5 | 0.0050 mg/L | 0.00111 | 0.0050 mg/L | 0.00111 | 21.98% |
| Se 196.026+ | 4.8 | 0.0017 mg/L | 0.00260 | 0.0017 mg/L | 0.00260 | 157.29% |
| Tl 190.801+ | 25.9 | 0.0036 mg/L | 0.00068 | 0.0036 mg/L | 0.00068 | 18.89% |
| V 292.402+ | 242.8 | 0.0004 mg/L | 0.00008 | 0.0004 mg/L | 0.00008 | 19.07% |
| Zn 213.857+ | 724.9 | 0.0025 mg/L | 0.00017 | 0.0025 mg/L | 0.00017 | 6.95% |
| P 178.221+ | -2.0 | -0.001 mg/L | 0.0008 | -0.001 mg/L | 0.0008 | 107.06% |
| Si 251.611+ | 124373.6 | 2.325 mg/L | 0.0213 | 2.325 mg/L | 0.0213 | 0.92% |

All analyte(s) passed QC.

Sequence No.: 54
Sample ID: CCV-3
Analyst:
Initial Sample Wt.:
Dilution:

Autosampler Location: 7
Date Collected: 4/13/2021 11:39:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV-3

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 265.0 kPa | 0.75 L/min |

Handwritten signature

Mean Data: CCV-3

| Analyte | Mean Corrected Intensity | Conc. | Calib. Units | Std.Dev. | Sample Conc. | Units | Std.Dev. | RSD |
|--|--------------------------|---------|--------------|----------|--------------|-------|----------|---------|
| Y 371.029 | 3178880.5 | 1.00 | mg/L | 0.010 | | | | 0.98% |
| Sc 361.383 | 5393614.7 | 1.03 | mg/L | 0.010 | | | | 1.00% |
| Ag 328.068+ | 665.3 | 0.00142 | mg/L | 0.000199 | 0.00142 | mg/L | 0.000199 | 14.08% |
| Al 308.215+ | -265.4 | -0.0273 | mg/L | 0.00582 | -0.0273 | mg/L | 0.00582 | 21.35% |
| As 188.979+ | 12.8 | -0.0004 | mg/L | 0.00099 | -0.0004 | mg/L | 0.00099 | 272.73% |
| B 249.772+ | 247581.0 | 1.040 | mg/L | 0.0135 | 1.040 | mg/L | 0.0135 | 1.30% |
| Ba 233.527+ | 168.7 | 0.0007 | mg/L | 0.00012 | 0.0007 | mg/L | 0.00012 | 17.17% |
| Be 313.107+ | 91.1 | 0.00023 | mg/L | 0.000013 | 0.00023 | mg/L | 0.000013 | 5.61% |
| Ca 317.933+ | 425262.1 | 9.940 | mg/L | 0.1712 | 9.940 | mg/L | 0.1712 | 1.72% |
| QC value within limits for Ca 317.933 Recovery = 99.40% | | | | | | | | |
| Cd 214.440+ | -49.5 | 0.00011 | mg/L | 0.000039 | 0.00011 | mg/L | 0.000039 | 36.03% |
| Co 228.616+ | -78.7 | 0.0003 | mg/L | 0.00012 | 0.0003 | mg/L | 0.00012 | 39.19% |
| Cr 267.716+ | 10.7 | 0.0000 | mg/L | 0.00012 | 0.0000 | mg/L | 0.00012 | 322.49% |
| Cu 324.752+ | 2560.4 | 0.0049 | mg/L | 0.00195 | 0.0049 | mg/L | 0.00195 | 39.83% |
| Fe 238.204+ | -437.4 | -0.0110 | mg/L | 0.00022 | -0.0110 | mg/L | 0.00022 | 2.01% |
| K 766.490+ | 50101.8 | 9.842 | mg/L | 0.1612 | 9.842 | mg/L | 0.1612 | 1.64% |
| QC value within limits for K 766.490 Recovery = 98.42% | | | | | | | | |
| Mg 279.077+ | 57641.9 | 9.784 | mg/L | 0.1756 | 9.784 | mg/L | 0.1756 | 1.79% |
| QC value within limits for Mg 279.077 Recovery = 97.84% | | | | | | | | |
| Mn 257.610+ | 130.3 | 0.0001 | mg/L | 0.00002 | 0.0001 | mg/L | 0.00002 | 20.45% |
| Mo 202.031+ | 67304.4 | 1.027 | mg/L | 0.0122 | 1.027 | mg/L | 0.0122 | 1.19% |
| Na 330.237+ | 640.5 | 10.48 | mg/L | 0.329 | 10.48 | mg/L | 0.329 | 3.14% |
| QC value within limits for Na 330.237 Recovery = 104.75% | | | | | | | | |
| Ni 232.003+ | 551.4 | 0.0038 | mg/L | 0.00102 | 0.0038 | mg/L | 0.00102 | 26.92% |
| Pb 220.353+ | -139.4 | -0.0021 | mg/L | 0.00023 | -0.0021 | mg/L | 0.00023 | 11.24% |
| Sb 206.836+ | -78.7 | -0.0048 | mg/L | 0.00188 | -0.0048 | mg/L | 0.00188 | 38.95% |
| Se 196.026+ | 2.8 | 0.0014 | mg/L | 0.00394 | 0.0014 | mg/L | 0.00394 | 287.22% |
| Tl 190.801+ | 15.0 | 0.0027 | mg/L | 0.00187 | 0.0027 | mg/L | 0.00187 | 69.16% |
| V 292.402+ | 84.0 | -0.0003 | mg/L | 0.00016 | -0.0003 | mg/L | 0.00016 | 54.42% |
| Zn 213.857+ | -422.1 | -0.0009 | mg/L | 0.00013 | -0.0009 | mg/L | 0.00013 | 15.19% |
| P 178.221+ | 18129.8 | 5.366 | mg/L | 0.0723 | 5.366 | mg/L | 0.0723 | 1.35% |
| QC value within limits for P 178.221 Recovery = 107.32% | | | | | | | | |
| Si 251.611+ | 12812.3 | 0.225 | mg/L | 0.0051 | 0.225 | mg/L | 0.0051 | 2.25% |

All analyte(s) passed QC.

Sequence No.: 55
 Sample ID: CCV-4
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 4/13/2021 11:43:58 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

MW 4/13/21

Nebulizer Parameters: CCV-4

Analyte Back Pressure Flow
 All 266.0 kPa 0.75 L/min

Mean Data: CCV-4

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 3346860.0 | 1.06 mg/L | 1.06 mg/L | 0.014 | | | 1.29% |
| Sc 361.383 | 5633492.3 | 1.07 mg/L | 1.07 mg/L | 0.015 | | | 1.40% |
| Ag 328.068† | 441.7 | 0.00113 mg/L | 0.00113 mg/L | 0.000286 | 0.00113 mg/L | 0.000286 | 25.29% |
| Al 308.215† | -1342.7 | -0.0446 mg/L | -0.0446 mg/L | 0.00334 | -0.0446 mg/L | 0.00334 | 7.49% |
| As 188.979† | -14.1 | -0.0023 mg/L | -0.0023 mg/L | 0.00113 | -0.0023 mg/L | 0.00113 | 49.61% |
| B 249.772† | 3511.2 | 0.0147 mg/L | 0.0147 mg/L | 0.00029 | 0.0147 mg/L | 0.00029 | 2.00% |
| Ba 233.527† | 75.6 | 0.0003 mg/L | 0.0003 mg/L | 0.00010 | 0.0003 mg/L | 0.00010 | 29.18% |
| Be 313.107† | 705.2 | 0.00027 mg/L | 0.00027 mg/L | 0.000036 | 0.00027 mg/L | 0.000036 | 13.16% |
| Ca 317.933† | 530.3 | 0.0125 mg/L | 0.0125 mg/L | 0.00166 | 0.0125 mg/L | 0.00166 | 13.31% |
| Cd 214.440† | 27.5 | 0.00004 mg/L | 0.00004 mg/L | 0.000020 | 0.00004 mg/L | 0.000020 | 45.91% |
| Co 228.616† | 19.7 | 0.0002 mg/L | 0.0002 mg/L | 0.00007 | 0.0002 mg/L | 0.00007 | 41.02% |
| Cr 267.716† | -62.4 | -0.0002 mg/L | -0.0002 mg/L | 0.00012 | -0.0002 mg/L | 0.00012 | 49.51% |
| Cu 324.752† | 865.7 | 0.0019 mg/L | 0.0019 mg/L | 0.00052 | 0.0019 mg/L | 0.00052 | 27.20% |
| Fe 238.204† | -322.2 | -0.0082 mg/L | -0.0082 mg/L | 0.00042 | -0.0082 mg/L | 0.00042 | 5.17% |
| K 766.490† | 156.6 | 0.0285 mg/L | 0.0285 mg/L | 0.01382 | 0.0285 mg/L | 0.01382 | 48.53% |
| Mg 279.077† | 9.2 | 0.0014 mg/L | 0.0014 mg/L | 0.00094 | 0.0014 mg/L | 0.00094 | 66.59% |
| Mn 257.610† | 105.3 | 0.0001 mg/L | 0.0001 mg/L | 0.00005 | 0.0001 mg/L | 0.00005 | 45.87% |
| Mo 202.031† | -24.1 | -0.0004 mg/L | -0.0004 mg/L | 0.00014 | -0.0004 mg/L | 0.00014 | 39.06% |
| Na 330.237† | 231.4 | 3.769 mg/L | 3.769 mg/L | 0.1699 | 3.769 mg/L | 0.1699 | 4.51% |
| Ni 232.003† | 135.8 | 0.0022 mg/L | 0.0022 mg/L | 0.00063 | 0.0022 mg/L | 0.00063 | 28.33% |
| Pb 220.353† | -67.1 | -0.0019 mg/L | -0.0019 mg/L | 0.00060 | -0.0019 mg/L | 0.00060 | 32.64% |
| Sb 206.836† | -20.1 | -0.0020 mg/L | -0.0020 mg/L | 0.00084 | -0.0020 mg/L | 0.00084 | 43.01% |
| Se 196.026† | -1.6 | -0.0006 mg/L | -0.0006 mg/L | 0.00200 | -0.0006 mg/L | 0.00200 | 347.67% |
| Tl 190.801† | 27.5 | 0.0035 mg/L | 0.0035 mg/L | 0.00124 | 0.0035 mg/L | 0.00124 | 35.78% |
| V 292.402† | 35.7 | 0.0001 mg/L | 0.0001 mg/L | 0.00007 | 0.0001 mg/L | 0.00007 | 113.97% |
| Zn 213.857† | -221.7 | -0.0007 mg/L | -0.0007 mg/L | 0.00014 | -0.0007 mg/L | 0.00014 | 19.34% |
| P 178.221† | 3.8 | 0.001 mg/L | 0.001 mg/L | 0.0016 | 0.001 mg/L | 0.0016 | 148.01% |
| Si 251.611† | 133418.0 | 2.494 mg/L | 2.494 mg/L | 0.0286 | 2.494 mg/L | 0.0286 | 1.15% |

QC value within limits for Si 251.611 Recovery = 99.75%
 All analyte(s) passed QC.

Sequence No.: 56
 Sample ID: 2104132-MRL1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 4/13/2021 11:48:03 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104132-MRL1

Analyte Back Pressure Flow
 All 266.0 kPa 0.75 L/min

2
MW 4/13/21

Mean Data: 2104132-MRL1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|--------------|----------|--------------------|----------|-------|
| Y 371.029 | 3354636.2 | 1.06 mg/L | 1.06 mg/L | 0.003 | | | 0.31% |
| Sc 361.383 | 5667311.6 | 1.08 mg/L | 1.08 mg/L | 0.004 | | | 0.38% |
| Ag 328.068† | 4155.2 | 0.01080 mg/L | 0.01080 mg/L | 0.000353 | 0.01080 mg/L | 0.000353 | 3.26% |
| Al 308.215† | 56792.6 | 1.867 mg/L | 1.867 mg/L | 0.0119 | 1.867 mg/L | 0.0119 | 0.64% |
| As 188.979† | 227.9 | 0.0373 mg/L | 0.0373 mg/L | 0.00165 | 0.0373 mg/L | 0.00165 | 4.43% |
| B 249.772† | 31977.1 | 0.1337 mg/L | 0.1337 mg/L | 0.00155 | 0.1337 mg/L | 0.00155 | 1.16% |
| Ba 233.527† | 11057.5 | 0.0501 mg/L | 0.0501 mg/L | 0.00032 | 0.0501 mg/L | 0.00032 | 0.64% |
| Be 313.107† | 22369.4 | 0.00217 mg/L | 0.00217 mg/L | 0.000012 | 0.00217 mg/L | 0.000012 | 0.56% |

| | | | | | | |
|-------------|----------|--------------|----------|--------------|----------|--------|
| Ca 317.933† | 164816.2 | 3.852 mg/L | 0.0709 | 3.852 mg/L | 0.0709 | 1.84% |
| Cd 214.440† | 1114.3 | 0.00184 mg/L | 0.000023 | 0.00184 mg/L | 0.000023 | 1.25% |
| Co 228.616† | 10941.8 | 0.0986 mg/L | 0.00066 | 0.0986 mg/L | 0.00066 | 0.67% |
| Cr 267.716† | 7763.6 | 0.0293 mg/L | 0.00019 | 0.0293 mg/L | 0.00019 | 0.65% |
| Cu 324.752† | 9415.6 | 0.0211 mg/L | 0.00231 | 0.0211 mg/L | 0.00231 | 10.96% |
| Fe 238.204† | 10706.1 | 0.2735 mg/L | 0.00475 | 0.2735 mg/L | 0.00475 | 1.74% |
| K 766.490† | 23743.3 | 4.664 mg/L | 0.0885 | 4.664 mg/L | 0.0885 | 1.90% |
| Mg 279.077† | 16669.8 | 2.828 mg/L | 0.0322 | 2.828 mg/L | 0.0322 | 1.14% |
| Mn 257.610† | 20655.6 | 0.0199 mg/L | 0.00011 | 0.0199 mg/L | 0.00011 | 0.58% |
| Mo 202.031† | 505.6 | 0.0077 mg/L | 0.00023 | 0.0077 mg/L | 0.00023 | 2.97% |
| Na 330.237† | 287.6 | 4.637 mg/L | 0.4256 | 4.637 mg/L | 0.4256 | 9.18% |
| Ni 232.003† | 3034.7 | 0.0476 mg/L | 0.00066 | 0.0476 mg/L | 0.00066 | 1.40% |
| Pb 220.353† | 1375.2 | 0.0383 mg/L | 0.00038 | 0.0383 mg/L | 0.00038 | 1.01% |
| Sb 206.836† | 1956.0 | 0.1889 mg/L | 0.00225 | 0.1889 mg/L | 0.00225 | 1.19% |
| Se 196.026† | 108.5 | 0.0366 mg/L | 0.00232 | 0.0366 mg/L | 0.00232 | 6.35% |
| Tl 190.801† | 330.0 | 0.0418 mg/L | 0.00056 | 0.0418 mg/L | 0.00056 | 1.33% |
| V 292.402† | 55152.1 | 0.0975 mg/L | 0.00050 | 0.0975 mg/L | 0.00050 | 0.51% |
| Zn 213.857† | 12802.7 | 0.0404 mg/L | 0.00035 | 0.0404 mg/L | 0.00035 | 0.87% |
| P 178.221† | 1732.1 | 0.512 mg/L | 0.0025 | 0.512 mg/L | 0.0025 | 0.48% |
| Si 251.611† | 1349.9 | 0.025 mg/L | 0.0005 | 0.025 mg/L | 0.0005 | 1.93% |

Sequence No.: 57
 Sample ID: 2104132-BLK1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 4/13/2021 11:51:49 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104132-BLK1

Analyte Back Pressure Flow
 All 264.0 kPa 0.75 L/min

Handwritten signature
 4/13/21

Mean Data: 2104132-BLK1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3356954.0 | 1.06 mg/L | 0.007 | | | 0.67% |
| Sc 361.383 | 5574948.0 | 1.06 mg/L | 0.007 | | | 0.67% |
| Ag 328.068† | 344.3 | 0.00088 mg/L | 0.000221 | 0.00088 mg/L | 0.000221 | 25.13% |
| Al 308.215† | -450.9 | -0.0149 mg/L | 0.00286 | -0.0149 mg/L | 0.00286 | 19.22% |
| As 188.979† | -17.7 | -0.0029 mg/L | 0.00118 | -0.0029 mg/L | 0.00118 | 40.76% |
| B 249.772† | 9114.2 | 0.0383 mg/L | 0.00082 | 0.0383 mg/L | 0.00082 | 2.15% |
| Ba 233.527† | 60.5 | 0.0003 mg/L | 0.00012 | 0.0003 mg/L | 0.00012 | 43.71% |
| Be 313.107† | 625.6 | 0.00027 mg/L | 0.000015 | 0.00027 mg/L | 0.000015 | 5.47% |
| Ca 317.933† | 738.5 | 0.0173 mg/L | 0.00111 | 0.0173 mg/L | 0.00111 | 6.44% |
| Cd 214.440† | 18.5 | 0.00003 mg/L | 0.000044 | 0.00003 mg/L | 0.000044 | 149.08% |
| Co 228.616† | 23.5 | 0.0002 mg/L | 0.00015 | 0.0002 mg/L | 0.00015 | 70.38% |
| Cr 267.716† | -53.1 | -0.0002 mg/L | 0.00012 | -0.0002 mg/L | 0.00012 | 57.71% |
| Cu 324.752† | 1284.6 | 0.0029 mg/L | 0.00119 | 0.0029 mg/L | 0.00119 | 41.49% |
| Fe 238.204† | -54.3 | -0.0014 mg/L | 0.00040 | -0.0014 mg/L | 0.00040 | 29.24% |
| K 766.490† | 118.3 | 0.0231 mg/L | 0.02754 | 0.0231 mg/L | 0.02754 | 119.27% |
| Mg 279.077† | 58.7 | 0.0099 mg/L | 0.00109 | 0.0099 mg/L | 0.00109 | 10.99% |
| Mn 257.610† | 338.8 | 0.0003 mg/L | 0.00002 | 0.0003 mg/L | 0.00002 | 6.12% |
| Mo 202.031† | -173.0 | -0.0026 mg/L | 0.00017 | -0.0026 mg/L | 0.00017 | 6.28% |
| Na 330.237† | 17.5 | 0.2842 mg/L | 0.32453 | 0.2842 mg/L | 0.32453 | 114.20% |
| Ni 232.003† | 153.2 | 0.0025 mg/L | 0.00037 | 0.0025 mg/L | 0.00037 | 15.20% |
| Pb 220.353† | -41.7 | -0.0012 mg/L | 0.00033 | -0.0012 mg/L | 0.00033 | 28.41% |
| Sb 206.836† | -13.8 | -0.0013 mg/L | 0.00051 | -0.0013 mg/L | 0.00051 | 38.15% |
| Se 196.026† | 7.0 | 0.0023 mg/L | 0.00254 | 0.0023 mg/L | 0.00254 | 108.25% |
| Tl 190.801† | 32.0 | 0.0040 mg/L | 0.00048 | 0.0040 mg/L | 0.00048 | 11.94% |
| V 292.402† | 33.3 | 0.0001 mg/L | 0.00027 | 0.0001 mg/L | 0.00027 | 453.12% |
| Zn 213.857† | 447.1 | 0.0014 mg/L | 0.00008 | 0.0014 mg/L | 0.00008 | 5.49% |
| P 178.221† | -2.3 | -0.001 mg/L | 0.0033 | -0.001 mg/L | 0.0033 | 480.94% |
| Si 251.611† | 490.8 | 0.009 mg/L | 0.0003 | 0.009 mg/L | 0.0003 | 3.25% |

Sequence No.: 58
 Sample ID: 2104132-BS1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 4/13/2021 11:55:55 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104132-BS1

Analyte Back Pressure Flow
 All 263.0 kPa 0.75 L/min

AW
 4/13/21

Mean Data: 2104132-BS1

| Analyte | Mean Corrected | | Calib. Units | Std.Dev. | Sample | | Std.Dev. | RSD |
|-------------|----------------|---------|--------------|----------|---------|-------|----------|-------|
| | Intensity | Conc. | | | Conc. | Units | | |
| Y 371.029 | 3311600.9 | 1.05 | mg/L | 0.007 | | | | 0.69% |
| Sc 361.383 | 5606392.9 | 1.07 | mg/L | 0.008 | | | | 0.71% |
| Ag 328.068† | 18529.6 | 0.04818 | mg/L | 0.000647 | 0.04818 | mg/L | 0.000647 | 1.34% |
| Al 308.215† | 58007.9 | 1.885 | mg/L | 0.0302 | 1.885 | mg/L | 0.0302 | 1.60% |
| As 188.979† | 11765.1 | 1.924 | mg/L | 0.0323 | 1.924 | mg/L | 0.0323 | 1.68% |
| B 249.772† | 229265.0 | 0.9622 | mg/L | 0.00199 | 0.9622 | mg/L | 0.00199 | 0.21% |
| Ba 233.527† | 438253.6 | 1.978 | mg/L | 0.0027 | 1.978 | mg/L | 0.0027 | 0.13% |
| Be 313.107† | 530285.0 | 0.04664 | mg/L | 0.000026 | 0.04664 | mg/L | 0.000026 | 0.06% |
| Ca 317.933† | 389672.8 | 9.114 | mg/L | 0.1608 | 9.114 | mg/L | 0.1608 | 1.76% |
| Cd 214.440† | 28783.1 | 0.04725 | mg/L | 0.000595 | 0.04725 | mg/L | 0.000595 | 1.26% |
| Co 228.616† | 52903.3 | 0.4789 | mg/L | 0.00720 | 0.4789 | mg/L | 0.00720 | 1.50% |
| Cr 267.716† | 52298.6 | 0.1971 | mg/L | 0.00228 | 0.1971 | mg/L | 0.00228 | 1.15% |
| Cu 324.752† | 101851.6 | 0.2275 | mg/L | 0.00294 | 0.2275 | mg/L | 0.00294 | 1.29% |
| Fe 238.204† | 36704.9 | 0.9389 | mg/L | 0.01341 | 0.9389 | mg/L | 0.01341 | 1.43% |
| K 766.490† | 45807.5 | 8.998 | mg/L | 0.1592 | 8.998 | mg/L | 0.1592 | 1.77% |
| Mg 279.077† | 54078.1 | 9.180 | mg/L | 0.1461 | 9.180 | mg/L | 0.1461 | 1.59% |
| Mn 257.610† | 508050.9 | 0.4892 | mg/L | 0.00044 | 0.4892 | mg/L | 0.00044 | 0.09% |
| Mo 202.031† | 62359.1 | 0.9516 | mg/L | 0.01346 | 0.9516 | mg/L | 0.01346 | 1.41% |
| Na 330.237† | 646.2 | 10.15 | mg/L | 0.879 | 10.15 | mg/L | 0.879 | 8.67% |
| Ni 232.003† | 28776.9 | 0.4473 | mg/L | 0.00547 | 0.4473 | mg/L | 0.00547 | 1.22% |
| Pb 220.353† | 17126.0 | 0.4744 | mg/L | 0.00575 | 0.4744 | mg/L | 0.00575 | 1.21% |
| Sb 206.836† | 4790.8 | 0.4644 | mg/L | 0.00841 | 0.4644 | mg/L | 0.00841 | 1.81% |
| Se 196.026† | 5604.3 | 1.876 | mg/L | 0.0170 | 1.876 | mg/L | 0.0170 | 0.90% |
| Tl 190.801† | 13931.2 | 1.753 | mg/L | 0.0375 | 1.753 | mg/L | 0.0375 | 2.14% |
| V 292.402† | 269584.0 | 0.4766 | mg/L | 0.00071 | 0.4766 | mg/L | 0.00071 | 0.15% |
| Zn 213.857† | 148892.5 | 0.4705 | mg/L | 0.00045 | 0.4705 | mg/L | 0.00045 | 0.10% |
| P 178.221† | 16911.0 | 5.006 | mg/L | 0.0937 | 5.006 | mg/L | 0.0937 | 1.87% |
| Si 251.611† | 49570.4 | 0.917 | mg/L | 0.0120 | 0.917 | mg/L | 0.0120 | 1.31% |

Matrix Recovery Check: 2104132-BS1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|------------|----------------|----------------|-----------|-------|--------------|
| Ca 317.933 | 10.02 | 9.114 | 0.161 | mg/L | 91.0 |
| Fe 238.204 | 0.9986 | 0.9389 | 0.013 | mg/L | 94.0 |
| K 766.490 | 10.02 | 8.998 | 0.159 | mg/L | 89.8 |
| Mg 279.077 | 10.01 | 9.180 | 0.146 | mg/L | 91.7 |
| Na 330.237 | 10.28 | 10.15 | 0.879 | mg/L | 98.6 |
| Ag 328.068 | 0.05088 | 0.04818 | 0.001 | mg/L | 94.6 |
| Al 308.215 | 1.985 | 1.885 | 0.030 | mg/L | 95.0 |
| As 188.979 | 1.997 | 1.924 | 0.032 | mg/L | 96.3 |
| B 249.772 | 1.038 | 0.9622 | 0.002 | mg/L | 92.4 |
| Ba 233.527 | 2.000 | 1.978 | 0.003 | mg/L | 98.9 |
| Be 313.107 | 0.05027 | 0.04664 | 0.000 | mg/L | 92.7 |
| Cd 214.440 | 0.05003 | 0.04725 | 0.001 | mg/L | 94.4 |
| Co 228.616 | 0.5002 | 0.4789 | 0.007 | mg/L | 95.7 |
| Cr 267.716 | 0.1998 | 0.1971 | 0.002 | mg/L | 98.7 |
| Cu 324.752 | 0.2529 | 0.2275 | 0.003 | mg/L | 89.8 |
| Mn 257.610 | 0.5003 | 0.4892 | 0.000 | mg/L | 97.8 |
| Mo 202.031 | 0.9974 | 0.9516 | 0.013 | mg/L | 95.4 |
| Ni 232.003 | 0.5025 | 0.4473 | 0.005 | mg/L | 89.0 |
| Pb 220.353 | 0.4988 | 0.4744 | 0.006 | mg/L | 95.1 |
| Sb 206.836 | 0.4987 | 0.4644 | 0.008 | mg/L | 93.2 |
| Se 196.026 | 2.002 | 1.876 | 0.017 | mg/L | 93.7 |
| Tl 190.801 | 2.004 | 1.753 | 0.037 | mg/L | 87.4 |
| V 292.402 | 0.5001 | 0.4766 | 0.001 | mg/L | 95.3 |
| Zn 213.857 | 0.5014 | 0.4705 | 0.000 | mg/L | 93.8 |
| P 178.221 | 4.999 | 5.006 | 0.094 | mg/L | 100.1 |

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2104132-BSD1

Analyte Back Pressure Flow
All 265.0 kPa 0.75 L/min

W 4/13/21

Mean Data: 2104132-BSD1

| Analyte | Mean Intensity | Mean Corrected Intensity | Conc. | Calib. Units | Std.Dev. | Conc. Units | Sample Std.Dev. | RSD |
|-------------|----------------|--------------------------|---------|--------------|----------|--------------|-----------------|-------|
| Y 371.029 | 3299996.6 | | 1.04 | mg/L | 0.002 | | | 0.19% |
| Sc 361.383 | 5592477.1 | | 1.07 | mg/L | 0.002 | | | 0.22% |
| Ag 328.068† | 18683.5 | | 0.04857 | mg/L | 0.000355 | 0.04857 mg/L | 0.000355 | 0.73% |
| Al 308.215† | 58112.8 | | 1.888 | mg/L | 0.0067 | 1.888 mg/L | 0.0067 | 0.36% |
| As 188.979† | 11960.0 | | 1.956 | mg/L | 0.0135 | 1.956 mg/L | 0.0135 | 0.69% |
| B 249.772† | 227637.2 | | 0.9553 | mg/L | 0.00052 | 0.9553 mg/L | 0.00052 | 0.05% |
| Ba 233.527† | 441907.6 | | 1.995 | mg/L | 0.0020 | 1.995 mg/L | 0.0020 | 0.10% |
| Be 313.107† | 534910.7 | | 0.04704 | mg/L | 0.00022 | 0.04704 mg/L | 0.00022 | 0.05% |
| Ca 317.933† | 403512.9 | | 9.438 | mg/L | 0.2741 | 9.438 mg/L | 0.2741 | 2.90% |
| Cd 214.440† | 29224.7 | | 0.04798 | mg/L | 0.000190 | 0.04798 mg/L | 0.000190 | 0.40% |
| Co 228.616† | 53775.0 | | 0.4868 | mg/L | 0.00119 | 0.4868 mg/L | 0.00119 | 0.24% |
| Cr 267.716† | 52840.8 | | 0.1991 | mg/L | 0.00070 | 0.1991 mg/L | 0.00070 | 0.35% |
| Cu 324.752† | 102728.8 | | 0.2295 | mg/L | 0.00089 | 0.2295 mg/L | 0.00089 | 0.39% |
| Fe 238.204† | 36911.0 | | 0.9442 | mg/L | 0.01022 | 0.9442 mg/L | 0.01022 | 1.08% |
| K 766.490† | 46922.2 | | 9.218 | mg/L | 0.2591 | 9.218 mg/L | 0.2591 | 2.81% |
| Mg 279.077† | 54742.0 | | 9.293 | mg/L | 0.1288 | 9.293 mg/L | 0.1288 | 1.39% |
| Mn 257.610† | 508822.5 | | 0.4899 | mg/L | 0.00039 | 0.4899 mg/L | 0.00039 | 0.08% |
| Mo 202.031† | 63275.4 | | 0.9655 | mg/L | 0.00544 | 0.9655 mg/L | 0.00544 | 0.56% |
| Na 330.237† | 583.8 | | 9.131 | mg/L | 0.5932 | 9.131 mg/L | 0.5932 | 6.50% |
| Ni 232.003† | 29038.1 | | 0.4514 | mg/L | 0.00254 | 0.4514 mg/L | 0.00254 | 0.56% |
| Pb 220.353† | 17426.4 | | 0.4827 | mg/L | 0.00237 | 0.4827 mg/L | 0.00237 | 0.49% |
| Sb 206.836† | 4775.8 | | 0.4630 | mg/L | 0.00439 | 0.4630 mg/L | 0.00439 | 0.95% |
| Se 196.026† | 5679.4 | | 1.901 | mg/L | 0.0149 | 1.901 mg/L | 0.0149 | 0.78% |
| Tl 190.801† | 14285.9 | | 1.797 | mg/L | 0.0079 | 1.797 mg/L | 0.0079 | 0.44% |
| V 292.402† | 271425.2 | | 0.4799 | mg/L | 0.00099 | 0.4799 mg/L | 0.00099 | 0.21% |
| Zn 213.857† | 148605.2 | | 0.4695 | mg/L | 0.00088 | 0.4695 mg/L | 0.00088 | 0.19% |
| P 178.221† | 17214.0 | | 5.096 | mg/L | 0.0470 | 5.096 mg/L | 0.0470 | 0.92% |
| Si 251.611† | 49252.0 | | 0.911 | mg/L | 0.0025 | 0.911 mg/L | 0.0025 | 0.27% |

Duplicate Check: 2104132-BSD1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|------------|----------------|----------------|-----------|-------|----------------|
| Ca 317.933 | 9.114 | 9.438 | 0.274 | mg/L | 3.5 |
| Fe 238.204 | 0.9389 | 0.9442 | 0.010 | mg/L | 0.6 |
| K 766.490 | 8.998 | 9.218 | 0.259 | mg/L | 2.4 |
| Mg 279.077 | 9.180 | 9.293 | 0.129 | mg/L | 1.2 |
| Na 330.237 | 10.15 | 9.131 | 0.593 | mg/L | 10.5 |
| Y 371.029 | | | 0.000 | mg/L | Not calculated |
| Sc 361.383 | | | 0.000 | mg/L | Not calculated |
| Ag 328.068 | 0.04818 | 0.04857 | 0.000 | mg/L | 0.8 |
| Al 308.215 | 1.885 | 1.888 | 0.007 | mg/L | 0.2 |
| As 188.979 | 1.924 | 1.956 | 0.014 | mg/L | 1.6 |
| B 249.772 | 0.9622 | 0.9553 | 0.001 | mg/L | 0.7 |
| Ba 233.527 | 1.978 | 1.995 | 0.002 | mg/L | 0.8 |
| Be 313.107 | 0.04664 | 0.04704 | 0.000 | mg/L | 0.9 |
| Cd 214.440 | 0.04725 | 0.04798 | 0.000 | mg/L | 1.5 |
| Co 228.616 | 0.4789 | 0.4868 | 0.001 | mg/L | 1.6 |
| Cr 267.716 | 0.1971 | 0.1991 | 0.001 | mg/L | 1.0 |
| Cu 324.752 | 0.2275 | 0.2295 | 0.001 | mg/L | 0.9 |
| Mn 257.610 | 0.4892 | 0.4899 | 0.000 | mg/L | 0.2 |
| Mo 202.031 | 0.9516 | 0.9655 | 0.005 | mg/L | 1.5 |
| Ni 232.003 | 0.4473 | 0.4514 | 0.003 | mg/L | 0.9 |
| Pb 220.353 | 0.4744 | 0.4827 | 0.002 | mg/L | 1.7 |
| Sb 206.836 | 0.4644 | 0.4630 | 0.004 | mg/L | 0.3 |
| Se 196.026 | 1.876 | 1.901 | 0.015 | mg/L | 1.3 |
| Tl 190.801 | 1.753 | 1.797 | 0.008 | mg/L | 2.5 |
| V 292.402 | 0.4766 | 0.4799 | 0.001 | mg/L | 0.7 |
| Zn 213.857 | 0.4705 | 0.4695 | 0.001 | mg/L | 0.2 |

| | | | | | |
|------------|-------|-------|-------|------|-----|
| P 178.221 | 5.006 | 5.096 | 0.047 | mg/L | 1.8 |
| Si 251.611 | 0.917 | 0.911 | 0.002 | mg/L | 0.7 |

Sequence No.: 60
 Sample ID: 2104132-BS2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 4/13/2021 12:02:50 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104132-BS2
 Analyte Back Pressure Flow
 All 266.0 kPa 0.75 L/min

Mean Data: 2104132-BS2

| Analyte | Mean Corrected | | Calib. Units | Std.Dev. | Sample | | RSD |
|-------------|----------------|---------|--------------|----------|---------|-------|---------|
| | Intensity | Conc. | | | Conc. | Units | |
| Y 371.029 | 3266810.0 | 1.03 | mg/L | 0.007 | | | 0.66% |
| Sc 361.383 | 5499781.3 | 1.05 | mg/L | 0.008 | | | 0.74% |
| Ag 328.068† | 303.3 | 0.00081 | mg/L | 0.000102 | 0.00081 | mg/L | 12.59% |
| Al 308.215† | -89.8 | -0.0041 | mg/L | 0.00410 | -0.0041 | mg/L | 99.85% |
| As 188.979† | -15.6 | -0.0025 | mg/L | 0.00140 | -0.0025 | mg/L | 56.81% |
| B 249.772† | 10916.4 | 0.0450 | mg/L | 0.00052 | 0.0450 | mg/L | 1.16% |
| Ba 233.527† | 276.8 | 0.0012 | mg/L | 0.00014 | 0.0012 | mg/L | 11.27% |
| Be 313.107† | 529.7 | 0.00026 | mg/L | 0.000018 | 0.00026 | mg/L | 6.84% |
| Ca 317.933† | 1835.7 | 0.0433 | mg/L | 0.00136 | 0.0433 | mg/L | 3.15% |
| Cd 214.440† | 21.6 | 0.00001 | mg/L | 0.000022 | 0.00001 | mg/L | 378.56% |
| Co 228.616† | 47.8 | 0.0004 | mg/L | 0.00018 | 0.0004 | mg/L | 41.31% |
| Cr 267.716† | 36.6 | 0.0001 | mg/L | 0.00013 | 0.0001 | mg/L | 92.19% |
| Cu 324.752† | 1989.5 | 0.0044 | mg/L | 0.00197 | 0.0044 | mg/L | 44.63% |
| Fe 238.204† | 16215.4 | 0.4130 | mg/L | 0.01201 | 0.4130 | mg/L | 2.91% |
| K 766.490† | 143.5 | 0.0215 | mg/L | 0.01279 | 0.0215 | mg/L | 59.53% |
| Mg 279.077† | 102.5 | 0.0169 | mg/L | 0.00445 | 0.0169 | mg/L | 26.34% |
| Mn 257.610† | 5933.1 | 0.0057 | mg/L | 0.00007 | 0.0057 | mg/L | 1.28% |
| Mo 202.031† | 10.5 | 0.0002 | mg/L | 0.00022 | 0.0002 | mg/L | 123.73% |
| Na 330.237† | 654.0 | 10.65 | mg/L | 0.983 | 10.65 | mg/L | 9.24% |
| Ni 232.003† | 162.7 | 0.0027 | mg/L | 0.00025 | 0.0027 | mg/L | 9.31% |
| Pb 220.353† | -15.5 | -0.0004 | mg/L | 0.00057 | -0.0004 | mg/L | 132.69% |
| Sb 206.836† | -12.3 | -0.0013 | mg/L | 0.00095 | -0.0013 | mg/L | 75.33% |
| Se 196.026† | 1.0 | 0.0004 | mg/L | 0.00322 | 0.0004 | mg/L | 850.21% |
| Tl 190.801† | 85.2 | 0.0108 | mg/L | 0.00076 | 0.0108 | mg/L | 6.99% |
| V 292.402† | 118.8 | 0.0002 | mg/L | 0.00014 | 0.0002 | mg/L | 67.37% |
| Zn 213.857† | 1152.2 | 0.0036 | mg/L | 0.00016 | 0.0036 | mg/L | 4.32% |
| P 178.221† | 9.2 | 0.003 | mg/L | 0.0024 | 0.003 | mg/L | 87.99% |
| Si 251.611† | 463219.1 | 8.659 | mg/L | 0.0814 | 8.659 | mg/L | 0.94% |

Matrix Recovery Check: 2104132-BS2

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|------------|----------------|----------------|-----------|-------|--------------|
| Si 251.611 | 10.01 | 8.659 | 0.081 | mg/L | 86.5 |

Sequence No.: 61
 Sample ID: 2104132-BSD2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 4/13/2021 12:06:32 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104132-BSD2
 Analyte Back Pressure Flow
 All 266.0 kPa 0.75 L/min

Mean Data: 2104132-BSD2

| Analyte | Mean Corrected | | Calib. Units | Std.Dev. | Sample | | RSD |
|------------|----------------|-------|--------------|----------|--------|-------|-------|
| | Intensity | Conc. | | | Conc. | Units | |
| Y 371.029 | 3299810.3 | 1.04 | mg/L | 0.004 | | | 0.34% |
| Sc 361.383 | 5570183.4 | 1.06 | mg/L | 0.005 | | | 0.47% |

| | | | | | | |
|-------------|----------|--------------|----------|--------------|----------|---------|
| Ag 328.068† | 485.2 | 0.00125 mg/L | 0.000444 | 0.00125 mg/L | 0.000444 | 35.60% |
| Al 308.215† | -550.0 | -0.0192 mg/L | 0.00277 | -0.0192 mg/L | 0.00277 | 14.40% |
| As 188.979† | -16.1 | -0.0026 mg/L | 0.00091 | -0.0026 mg/L | 0.00091 | 35.19% |
| B 249.772† | 4449.3 | 0.0186 mg/L | 0.00049 | 0.0186 mg/L | 0.00049 | 2.61% |
| Ba 233.527† | 115.8 | 0.0005 mg/L | 0.00011 | 0.0005 mg/L | 0.00011 | 21.17% |
| Be 313.107† | 238.7 | 0.00024 mg/L | 0.000010 | 0.00024 mg/L | 0.000010 | 4.24% |
| Ca 317.933† | 1040.8 | 0.0246 mg/L | 0.00049 | 0.0246 mg/L | 0.00049 | 1.98% |
| Cd 214.440† | 8.9 | 0.00001 mg/L | 0.000044 | 0.00001 mg/L | 0.000044 | 384.60% |
| Co 228.616† | 36.5 | 0.0003 mg/L | 0.00017 | 0.0003 mg/L | 0.00017 | 51.16% |
| Cr 267.716† | -34.6 | -0.0001 mg/L | 0.00009 | -0.0001 mg/L | 0.00009 | 64.85% |
| Cu 324.752† | 1079.0 | 0.0023 mg/L | 0.00017 | 0.0023 mg/L | 0.00017 | 7.07% |
| Fe 238.204† | 399.4 | 0.0102 mg/L | 0.00023 | 0.0102 mg/L | 0.00023 | 2.30% |
| K 766.490† | 21.0 | -0.0024 mg/L | 0.00926 | -0.0024 mg/L | 0.00926 | 389.28% |
| Mg 279.077† | 69.3 | 0.0113 mg/L | 0.00118 | 0.0113 mg/L | 0.00118 | 10.43% |
| Mn 257.610† | 2029.5 | 0.0020 mg/L | 0.00004 | 0.0020 mg/L | 0.00004 | 2.30% |
| Mo 202.031† | -115.4 | -0.0018 mg/L | 0.00029 | -0.0018 mg/L | 0.00029 | 16.62% |
| Na 330.237† | 648.2 | 10.55 mg/L | 0.511 | 10.55 mg/L | 0.511 | 4.84% |
| Ni 232.003† | 108.4 | 0.0018 mg/L | 0.00037 | 0.0018 mg/L | 0.00037 | 20.00% |
| Pb 220.353† | -37.8 | -0.0010 mg/L | 0.00013 | -0.0010 mg/L | 0.00013 | 12.85% |
| Sb 206.836† | -31.9 | -0.0031 mg/L | 0.00183 | -0.0031 mg/L | 0.00183 | 58.31% |
| Se 196.026† | -3.8 | -0.0013 mg/L | 0.00276 | -0.0013 mg/L | 0.00276 | 206.07% |
| Tl 190.801† | 51.5 | 0.0065 mg/L | 0.00176 | 0.0065 mg/L | 0.00176 | 27.00% |
| V 292.402† | 86.3 | 0.0002 mg/L | 0.00019 | 0.0002 mg/L | 0.00019 | 124.82% |
| Zn 213.857† | 921.6 | 0.0029 mg/L | 0.00005 | 0.0029 mg/L | 0.00005 | 1.80% |
| P 178.221† | 2.1 | 0.001 mg/L | 0.0027 | 0.001 mg/L | 0.0027 | 434.20% |
| Si 251.611† | 458265.6 | 8.566 mg/L | 0.0886 | 8.566 mg/L | 0.0886 | 1.03% |

Duplicate Check: 2104132-BSD2

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|------------|----------------|----------------|-----------|-------|----------------|
| Ca 317.933 | 0.0433 | 0.0246 | 0.000 | mg/L | 55.1 |
| Fe 238.204 | 0.4130 | 0.0102 | 0.000 | mg/L | 190.4 |
| K 766.490 | 0.0215 | -0.0024 | 0.009 | mg/L | 249.8 |
| Mg 279.077 | 0.0169 | 0.0113 | 0.001 | mg/L | 39.4 |
| Na 330.237 | 10.65 | 10.55 | 0.511 | mg/L | 0.9 |
| Y 371.029 | | | 0.000 | mg/L | Not calculated |
| Sc 361.383 | | | 0.000 | mg/L | Not calculated |
| Ag 328.068 | 0.00081 | 0.00125 | 0.000 | mg/L | 42.1 |
| Al 308.215 | -0.0041 | -0.0192 | 0.003 | mg/L | -129.6 |
| As 188.979 | -0.0025 | -0.0026 | 0.001 | mg/L | -4.5 |
| B 249.772 | 0.0450 | 0.0186 | 0.000 | mg/L | 83.0 |
| Ba 233.527 | 0.0012 | 0.0005 | 0.000 | mg/L | 80.9 |
| Be 313.107 | 0.00026 | 0.00024 | 0.000 | mg/L | 10.1 |
| Cd 214.440 | 0.00001 | 0.00001 | 0.000 | mg/L | 65.7 |
| Co 228.616 | 0.0004 | 0.0003 | 0.000 | mg/L | 26.3 |
| Cr 267.716 | 0.0001 | -0.0001 | 0.000 | mg/L | 8531.9 |
| Cu 324.752 | 0.0044 | 0.0023 | 0.000 | mg/L | 61.2 |
| Mn 257.610 | 0.0057 | 0.0020 | 0.000 | mg/L | 98.0 |
| Mo 202.031 | 0.0002 | -0.0018 | 0.000 | mg/L | -245.3 |
| Ni 232.003 | 0.0027 | 0.0018 | 0.000 | mg/L | 38.7 |
| Pb 220.353 | -0.0004 | -0.0010 | 0.000 | mg/L | -83.0 |
| Sb 206.836 | -0.0013 | -0.0031 | 0.002 | mg/L | -85.4 |
| Se 196.026 | 0.0004 | -0.0013 | 0.003 | mg/L | -357.9 |
| Tl 190.801 | 0.0108 | 0.0065 | 0.002 | mg/L | 49.6 |
| V 292.402 | 0.0002 | 0.0002 | 0.000 | mg/L | 30.0 |
| Zn 213.857 | 0.0036 | 0.0029 | 0.000 | mg/L | 21.2 |
| P 178.221 | 0.003 | 0.001 | 0.003 | mg/L | 126.0 |
| Si 251.611 | 8.659 | 8.566 | 0.089 | mg/L | 1.1 |

Handwritten signature and date: 4/13/21

Sequence No.: 62
 Sample ID: 21C0684-21
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 4/13/2021 12:10:38 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 21C0684-21
 Analyte Back Pressure Flow
 All 265.0 kPa 0.75 L/min

| | | | | | | |
|-------------|------------|--------------|---------|--------------|---------|---------|
| Cu 324.752† | 12786931.5 | 28.59 mg/L | 0.026 | 1430 mg/L | 1.3 | 0.09% |
| Fe 238.204† | 69635.7 | 1.775 mg/L | 0.0220 | 88.73 mg/L | 1.100 | 1.24% |
| K 766.490† | 20424.1 | 4.003 mg/L | 0.0341 | 200.1 mg/L | 1.70 | 0.85% |
| Mg 279.077† | 123930.8 | 21.03 mg/L | 0.224 | 1051 mg/L | 11.2 | 1.06% |
| Mn 257.610† | 867370.0 | 0.8353 mg/L | 0.01231 | 41.77 mg/L | 0.616 | 1.47% |
| Mo 202.031† | -158.9 | -0.0026 mg/L | 0.00050 | -0.1310 mg/L | 0.02496 | 19.06% |
| Na 330.237† | 995.4 | 15.85 mg/L | 0.481 | 792.4 mg/L | 24.07 | 3.04% |
| Ni 232.003† | 2153.2 | 0.0323 mg/L | 0.00113 | 1.615 mg/L | 0.0565 | 3.50% |
| Pb 220.353† | 303.0 | -0.0122 mg/L | 0.00136 | -0.6099 mg/L | 0.06803 | 11.15% |
| Sb 206.836† | -6.7 | -0.0020 mg/L | 0.00260 | -0.0976 mg/L | 0.12994 | 133.20% |
| Se 196.026† | 8.0 | 0.0047 mg/L | 0.00158 | 0.2365 mg/L | 0.07914 | 33.46% |
| Tl 190.801† | 6.2 | 0.0010 mg/L | 0.00174 | 0.0476 mg/L | 0.08677 | 182.36% |
| V 292.402† | 1391.7 | 0.0044 mg/L | 0.00025 | 0.2215 mg/L | 0.01229 | 5.55% |
| Zn 213.857† | 42051.9 | 0.0656 mg/L | 0.00147 | 3.280 mg/L | 0.0734 | 2.24% |
| P 178.221† | 182.0 | 0.051 mg/L | 0.0031 | 2.563 mg/L | 0.1562 | 6.09% |
| Si 251.611† | 373201.8 | 6.982 mg/L | 0.0634 | 349.1 mg/L | 3.17 | 0.91% |

Sequence No.: 73

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 4/13/2021 12:52:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCB

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 265.0 kPa | 0.75 L/min |

M 4/13/21

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------|----------|----------|--------------|----------|--------|
| Y 371.029 | 3219918.1 | 1.02 mg/L | 0.021 | 0.021 | | | 2.03% |
| Sc 361.383 | 5343716.7 | 1.02 mg/L | 0.021 | 0.021 | | | 2.05% |
| Ag 328.068† | 334.7 | 0.00086 mg/L | 0.000499 | 0.000499 | 0.00086 mg/L | 0.000499 | 58.00% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 308.215† | -796.7 | -0.0264 mg/L | 0.00255 | 0.00255 | -0.0264 mg/L | 0.00255 | 9.69% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | | |
| As 188.979† | -31.1 | -0.0051 mg/L | 0.00168 | 0.00168 | -0.0051 mg/L | 0.00168 | 33.14% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.772† | 710.2 | 0.0028 mg/L | 0.00012 | 0.00012 | 0.0028 mg/L | 0.00012 | 4.38% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 20.0 | 0.0001 mg/L | 0.00008 | 0.00008 | 0.0001 mg/L | 0.00008 | 94.34% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | -523.7 | 0.00017 mg/L | 0.000014 | 0.000014 | 0.00017 mg/L | 0.000014 | 8.58% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933† | 5278.5 | 0.1234 mg/L | 0.00489 | 0.00489 | 0.1234 mg/L | 0.00489 | 3.97% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | | |
| Cd 214.440† | 29.5 | 0.00004 mg/L | 0.000041 | 0.000041 | 0.00004 mg/L | 0.000041 | 97.40% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | | |
| Co 228.616† | 32.4 | 0.0003 mg/L | 0.00020 | 0.00020 | 0.0003 mg/L | 0.00020 | 70.51% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | -47.5 | -0.0002 mg/L | 0.00009 | 0.00009 | -0.0002 mg/L | 0.00009 | 48.27% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | 6314.8 | 0.0141 mg/L | 0.00024 | 0.00024 | 0.0141 mg/L | 0.00024 | 1.68% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204† | 3020.7 | 0.0769 mg/L | 0.00243 | 0.00243 | 0.0769 mg/L | 0.00243 | 3.16% |
| QC value within limits for Fe 238.204 Recovery = Not calculated | | | | | | | |
| K 766.490† | 1042.4 | 0.2044 mg/L | 0.01930 | 0.01930 | 0.2044 mg/L | 0.01930 | 9.44% |
| QC value within limits for K 766.490 Recovery = Not calculated | | | | | | | |
| Mg 279.077† | 111.8 | 0.0189 mg/L | 0.01002 | 0.01002 | 0.0189 mg/L | 0.01002 | 53.00% |
| QC value within limits for Mg 279.077 Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 2481.7 | 0.0024 mg/L | 0.00009 | 0.00009 | 0.0024 mg/L | 0.00009 | 3.61% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | -162.4 | -0.0025 mg/L | 0.00027 | 0.00027 | -0.0025 mg/L | 0.00027 | 10.80% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 330.237† | 57.0 | 0.9252 mg/L | 0.43962 | 0.43962 | 0.9252 mg/L | 0.43962 | 47.52% |
| QC value within limits for Na 330.237 Recovery = Not calculated | | | | | | | |
| Ni 232.003† | -116.1 | -0.0018 mg/L | 0.00091 | 0.00091 | -0.0018 mg/L | 0.00091 | 50.55% |
| QC value within limits for Ni 232.003 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | -92.4 | -0.0026 mg/L | 0.00046 | 0.00046 | -0.0026 mg/L | 0.00046 | 18.05% |

| | | | | | | | | |
|-------------|---------------------------------------|---------------------------|--------|--------------|---------|--------------|---------|---------|
| Sb 206.836† | QC value within limits for Pb 220.353 | Recovery = Not calculated | -5.9 | -0.0006 mg/L | 0.00062 | -0.0006 mg/L | 0.00062 | 105.48% |
| Se 196.026† | QC value within limits for Sb 206.836 | Recovery = Not calculated | 0.5 | 0.0002 mg/L | 0.00340 | 0.0002 mg/L | 0.00340 | >999.9% |
| Tl 190.801† | QC value within limits for Se 196.026 | Recovery = Not calculated | 10.7 | 0.0014 mg/L | 0.00095 | 0.0014 mg/L | 0.00095 | 69.78% |
| V 292.402† | QC value within limits for Tl 190.801 | Recovery = Not calculated | 192.2 | 0.0003 mg/L | 0.00013 | 0.0003 mg/L | 0.00013 | 37.41% |
| Zn 213.857† | QC value within limits for V 292.402 | Recovery = Not calculated | 674.8 | 0.0021 mg/L | 0.00019 | 0.0021 mg/L | 0.00019 | 8.86% |
| P 178.221† | QC value within limits for Zn 213.857 | Recovery = Not calculated | 8.6 | 0.003 mg/L | 0.0041 | 0.003 mg/L | 0.0041 | 161.34% |
| Si 251.611† | QC value within limits for P 178.221 | Recovery = Not calculated | 3648.7 | 0.068 mg/L | 0.0035 | 0.068 mg/L | 0.0035 | 5.06% |

QC value within limits for Si 251.611 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 74
 Sample ID: CCV-1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 4/13/2021 12:56:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV-1

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 264.0 kPa | 0.75 L/min |

Handwritten signature and date: 4/13/21

Mean Data: CCV-1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|---------------------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3196691.8 | 1.01 mg/L | 0.008 | | | 0.82% |
| Sc 361.383 | 5364115.4 | 1.02 mg/L | 0.008 | | | 0.77% |
| Ag 328.068† | -1318.1 | -0.00124 mg/L | 0.000064 | -0.00124 mg/L | 0.000064 | 5.15% |
| Al 308.215† | -30.5 | -0.0319 mg/L | 0.00348 | -0.0319 mg/L | 0.00348 | 10.90% |
| As 188.979† | 6158.5 | 1.008 mg/L | 0.0130 | 1.008 mg/L | 0.0130 | 1.29% |
| | QC value within limits for As 188.979 | Recovery = 100.80% | | | | |
| B 249.772† | 2451.0 | 0.0101 mg/L | 0.00024 | 0.0101 mg/L | 0.00024 | 2.42% |
| Ba 233.527† | -549.2 | -0.0006 mg/L | 0.00005 | -0.0006 mg/L | 0.00005 | 7.94% |
| Be 313.107† | 11193575.4 | 0.98002 mg/L | 0.007611 | 0.98002 mg/L | 0.007611 | 0.78% |
| | QC value within limits for Be 313.107 | Recovery = 98.00% | | | | |
| Ca 317.933† | 45215.0 | 1.067 mg/L | 0.0172 | 1.067 mg/L | 0.0172 | 1.61% |
| Cd 214.440† | 633978.0 | 1.0344 mg/L | 0.00136 | 1.0344 mg/L | 0.00136 | 0.13% |
| | QC value within limits for Cd 214.440 | Recovery = 103.44% | | | | |
| Co 228.616† | 115788.7 | 1.043 mg/L | 0.0074 | 1.043 mg/L | 0.0074 | 0.71% |
| | QC value within limits for Co 228.616 | Recovery = 104.28% | | | | |
| Cr 267.716† | 280182.3 | 1.055 mg/L | 0.0069 | 1.055 mg/L | 0.0069 | 0.65% |
| | QC value within limits for Cr 267.716 | Recovery = 105.52% | | | | |
| Cu 324.752† | 425844.9 | 0.9527 mg/L | 0.00081 | 0.9527 mg/L | 0.00081 | 0.09% |
| | QC value within limits for Cu 324.752 | Recovery = 95.27% | | | | |
| Fe 238.204† | 39308.5 | 1.010 mg/L | 0.0145 | 1.010 mg/L | 0.0145 | 1.43% |
| | QC value within limits for Fe 238.204 | Recovery = 100.95% | | | | |
| K 766.490† | 615.9 | 0.1220 mg/L | 0.01738 | 0.1220 mg/L | 0.01738 | 14.25% |
| Mg 279.077† | 5675.0 | 0.9699 mg/L | 0.01066 | 0.9699 mg/L | 0.01066 | 1.10% |
| Mn 257.610† | 1072845.4 | 1.033 mg/L | 0.0005 | 1.033 mg/L | 0.0005 | 0.04% |
| | QC value within limits for Mn 257.610 | Recovery = 103.32% | | | | |
| Mo 202.031† | 64613.8 | 0.9860 mg/L | 0.00631 | 0.9860 mg/L | 0.00631 | 0.64% |
| | QC value within limits for Mo 202.031 | Recovery = 98.60% | | | | |
| Na 330.237† | 11.6 | -0.6241 mg/L | 0.66327 | -0.6241 mg/L | 0.66327 | 106.28% |
| Ni 232.003† | 64046.2 | 0.9790 mg/L | 0.00822 | 0.9790 mg/L | 0.00822 | 0.84% |
| | QC value within limits for Ni 232.003 | Recovery = 97.90% | | | | |
| Pb 220.353† | 38099.8 | 1.053 mg/L | 0.0057 | 1.053 mg/L | 0.0057 | 0.54% |
| | QC value within limits for Pb 220.353 | Recovery = 105.27% | | | | |
| Sb 206.836† | 10750.0 | 1.033 mg/L | 0.0091 | 1.033 mg/L | 0.0091 | 0.88% |
| | QC value within limits for Sb 206.836 | Recovery = 103.28% | | | | |
| Se 196.026† | 2931.3 | 0.9819 mg/L | 0.01133 | 0.9819 mg/L | 0.01133 | 1.15% |
| | QC value within limits for Se 196.026 | Recovery = 98.19% | | | | |
| Tl 190.801† | 7798.5 | 0.9812 mg/L | 0.01182 | 0.9812 mg/L | 0.01182 | 1.20% |
| | QC value within limits for Tl 190.801 | Recovery = 98.12% | | | | |
| V 292.402† | 571636.7 | 1.013 mg/L | 0.0022 | 1.013 mg/L | 0.0022 | 0.22% |

QC value within limits for V 292.402 Recovery = 101.32%
 Zn 213.857† 320562.2 1.011 mg/L 0.0072 1.011 mg/L 0.0072 0.71%
 QC value within limits for Zn 213.857 Recovery = 101.12%
 P 178.221† -0.9 0.004 mg/L 0.0039 0.004 mg/L 0.0039 100.08%
 Si 251.611† 13705.8 0.248 mg/L 0.0060 0.248 mg/L 0.0060 2.41%
 All analyte(s) passed QC.

Sequence No.: 75 Autosampler Location: 6
 Sample ID: CCV-2 Date Collected: 4/13/2021 1:00:21 PM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: CCV-2
 Analyte Back Pressure Flow
 All 264.0 kPa 0.75 L/min

Handwritten signature and date: 4/13/21

Mean Data: CCV-2

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3253558.3 | 1.03 mg/L | 0.010 | | | 0.96% |
| Sc 361.383 | 5463847.4 | 1.04 mg/L | 0.009 | | | 0.89% |
| Ag 328.068† | 180032.4 | 0.46038 mg/L | 0.006001 | 0.46038 mg/L | 0.006001 | 1.30% |
| QC value within limits for Ag 328.068 Recovery = 92.08% | | | | | | |
| Al 308.215† | 27916.7 | 0.9179 mg/L | 0.01739 | 0.9179 mg/L | 0.01739 | 1.89% |
| QC value within limits for Al 308.215 Recovery = 91.79% | | | | | | |
| As 188.979† | -24.7 | -0.0040 mg/L | 0.00291 | -0.0040 mg/L | 0.00291 | 73.30% |
| B 249.772† | 236270.7 | 0.9928 mg/L | 0.01480 | 0.9928 mg/L | 0.01480 | 1.49% |
| QC value within limits for B 249.772 Recovery = 99.28% | | | | | | |
| Ba 233.527† | 235086.9 | 1.061 mg/L | 0.0138 | 1.061 mg/L | 0.0138 | 1.30% |
| QC value within limits for Ba 233.527 Recovery = 106.07% | | | | | | |
| Be 313.107† | 2393.8 | 0.00042 mg/L | 0.000010 | 0.00042 mg/L | 0.000010 | 2.31% |
| Ca 317.933† | 445.0 | 0.0110 mg/L | 0.00095 | 0.0110 mg/L | 0.00095 | 8.65% |
| Cd 214.440† | 199.4 | 0.00035 mg/L | 0.000025 | 0.00035 mg/L | 0.000025 | 7.25% |
| Co 228.616† | -58.3 | 0.0006 mg/L | 0.00022 | 0.0006 mg/L | 0.00022 | 36.82% |
| Cr 267.716† | 60.3 | 0.0002 mg/L | 0.00008 | 0.0002 mg/L | 0.00008 | 35.59% |
| Cu 324.752† | 1979.3 | 0.0044 mg/L | 0.00114 | 0.0044 mg/L | 0.00114 | 26.20% |
| Fe 238.204† | 186.8 | 0.0048 mg/L | 0.00015 | 0.0048 mg/L | 0.00015 | 3.08% |
| K 766.490† | 51043.9 | 10.04 mg/L | 0.115 | 10.04 mg/L | 0.115 | 1.15% |
| Mg 279.077† | -5.3 | -0.0009 mg/L | 0.00231 | -0.0009 mg/L | 0.00231 | 248.58% |
| Mn 257.610† | 820.9 | 0.0008 mg/L | 0.00009 | 0.0008 mg/L | 0.00009 | 10.98% |
| Mo 202.031† | 11.0 | 0.0001 mg/L | 0.00022 | 0.0001 mg/L | 0.00022 | 203.42% |
| Na 330.237† | 74.9 | 1.211 mg/L | 0.0930 | 1.211 mg/L | 0.0930 | 7.67% |
| Ni 232.003† | -539.4 | -0.0084 mg/L | 0.00092 | -0.0084 mg/L | 0.00092 | 10.90% |
| Pb 220.353† | -56.2 | -0.0014 mg/L | 0.00094 | -0.0014 mg/L | 0.00094 | 65.64% |
| Sb 206.836† | 28.5 | 0.0026 mg/L | 0.00153 | 0.0026 mg/L | 0.00153 | 58.16% |
| Se 196.026† | 10.8 | 0.0036 mg/L | 0.00194 | 0.0036 mg/L | 0.00194 | 53.06% |
| Tl 190.801† | 52.2 | 0.0069 mg/L | 0.00094 | 0.0069 mg/L | 0.00094 | 13.65% |
| V 292.402† | 165.0 | 0.0003 mg/L | 0.00013 | 0.0003 mg/L | 0.00013 | 46.81% |
| Zn 213.857† | 505.4 | 0.0018 mg/L | 0.00015 | 0.0018 mg/L | 0.00015 | 8.26% |
| P 178.221† | 5.3 | 0.001 mg/L | 0.0025 | 0.001 mg/L | 0.0025 | 175.94% |
| Si 251.611† | 123531.9 | 2.310 mg/L | 0.0333 | 2.310 mg/L | 0.0333 | 1.44% |

All analyte(s) passed QC.

Sequence No.: 76 Autosampler Location: 7
 Sample ID: CCV-3 Date Collected: 4/13/2021 1:04:26 PM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

Nebulizer Parameters: CCV-3
 Analyte Back Pressure Flow
 All 265.0 kPa 0.75 L/min

Mean Data: CCV-3

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|
|---------|--------------------------|--------------------|----------|--------------------|----------|-----|

| Analyte | Intensity | Conc. Units | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|--|-----------|--------------|----------|--------------|----------|---------|
| Y 371.029 | 3220200.9 | 1.02 mg/L | 0.005 | | | 0.47% |
| Sc 361.383 | 5443579.6 | 1.04 mg/L | 0.005 | | | 0.44% |
| Ag 328.068† | 658.9 | 0.00141 mg/L | 0.000386 | 0.00141 mg/L | 0.000386 | 27.45% |
| Al 308.215† | -265.1 | -0.0270 mg/L | 0.00404 | -0.0270 mg/L | 0.00404 | 14.97% |
| As 188.979† | 14.4 | -0.0001 mg/L | 0.00249 | -0.0001 mg/L | 0.00249 | >999.9% |
| B 249.772† | 244528.3 | 1.027 mg/L | 0.0130 | 1.027 mg/L | 0.0130 | 1.27% |
| Ba 233.527† | 148.7 | 0.0006 mg/L | 0.00005 | 0.0006 mg/L | 0.00005 | 8.59% |
| Be 313.107† | 1325.9 | 0.00034 mg/L | 0.000024 | 0.00034 mg/L | 0.000024 | 7.05% |
| Ca 317.933† | 417277.7 | 9.754 mg/L | 0.0737 | 9.754 mg/L | 0.0737 | 0.76% |
| QC value within limits for Ca 317.933 Recovery = 97.54% | | | | | | |
| Cd 214.440† | 4.2 | 0.00019 mg/L | 0.000030 | 0.00019 mg/L | 0.000030 | 15.60% |
| Co 228.616† | -84.8 | 0.0002 mg/L | 0.00012 | 0.0002 mg/L | 0.00012 | 50.83% |
| Cr 267.716† | 53.6 | 0.0001 mg/L | 0.00007 | 0.0001 mg/L | 0.00007 | 52.95% |
| Cu 324.752† | 2256.5 | 0.0042 mg/L | 0.00029 | 0.0042 mg/L | 0.00029 | 6.84% |
| Fe 238.204† | 753.9 | 0.0194 mg/L | 0.00070 | 0.0194 mg/L | 0.00070 | 3.63% |
| K 766.490† | 49586.6 | 9.741 mg/L | 0.0514 | 9.741 mg/L | 0.0514 | 0.53% |
| QC value within limits for K 766.490 Recovery = 97.41% | | | | | | |
| Mg 279.077† | 56492.9 | 9.589 mg/L | 0.0598 | 9.589 mg/L | 0.0598 | 0.62% |
| QC value within limits for Mg 279.077 Recovery = 95.89% | | | | | | |
| Mn 257.610† | 849.5 | 0.0008 mg/L | 0.00007 | 0.0008 mg/L | 0.00007 | 9.54% |
| Mo 202.031† | 66316.6 | 1.012 mg/L | 0.0088 | 1.012 mg/L | 0.0088 | 0.87% |
| Na 330.237† | 614.9 | 10.06 mg/L | 0.230 | 10.06 mg/L | 0.230 | 2.29% |
| QC value within limits for Na 330.237 Recovery = 100.58% | | | | | | |
| Ni 232.003† | 445.9 | 0.0022 mg/L | 0.00056 | 0.0022 mg/L | 0.00056 | 25.91% |
| Pb 220.353† | -150.7 | -0.0024 mg/L | 0.00100 | -0.0024 mg/L | 0.00100 | 41.19% |
| Sb 206.836† | -72.1 | -0.0042 mg/L | 0.00062 | -0.0042 mg/L | 0.00062 | 14.58% |
| Se 196.026† | -6.1 | -0.0016 mg/L | 0.00355 | -0.0016 mg/L | 0.00355 | 220.02% |
| Tl 190.801† | 12.0 | 0.0023 mg/L | 0.00063 | 0.0023 mg/L | 0.00063 | 27.11% |
| V 292.402† | 68.7 | -0.0003 mg/L | 0.00017 | -0.0003 mg/L | 0.00017 | 53.71% |
| Zn 213.857† | -307.4 | -0.0005 mg/L | 0.00018 | -0.0005 mg/L | 0.00018 | 35.10% |
| P 178.221† | 18101.1 | 5.358 mg/L | 0.0709 | 5.358 mg/L | 0.0709 | 1.32% |
| QC value within limits for P 178.221 Recovery = 107.15% | | | | | | |
| Si 251.611† | 14677.4 | 0.260 mg/L | 0.0022 | 0.260 mg/L | 0.0022 | 0.85% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 77
 Sample ID: CCV-4
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 4/13/2021 1:08:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV-4

Analyte All
 Back Pressure 265.0 kPa
 Flow 0.75 L/min

W. G. Smith
 4/13/21

Mean Data: CCV-4

| Analyte | Mean Corrected Intensity | Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 3348240.1 | 1.06 mg/L | 0.007 | | | 0.70% |
| Sc 361.383 | 5624091.6 | 1.07 mg/L | 0.008 | | | 0.73% |
| Ag 328.068† | 305.1 | 0.00078 mg/L | 0.000303 | 0.00078 mg/L | 0.000303 | 38.69% |
| Al 308.215† | -1215.6 | -0.0405 mg/L | 0.00313 | -0.0405 mg/L | 0.00313 | 7.72% |
| As 188.979† | -20.3 | -0.0033 mg/L | 0.00245 | -0.0033 mg/L | 0.00245 | 74.10% |
| B 249.772† | 3707.4 | 0.0155 mg/L | 0.00066 | 0.0155 mg/L | 0.00066 | 4.22% |
| Ba 233.527† | 63.9 | 0.0003 mg/L | 0.00005 | 0.0003 mg/L | 0.00005 | 17.23% |
| Be 313.107† | 580.7 | 0.00026 mg/L | 0.000026 | 0.00026 mg/L | 0.000026 | 9.91% |
| Ca 317.933† | 601.4 | 0.0141 mg/L | 0.00190 | 0.0141 mg/L | 0.00190 | 13.40% |
| Cd 214.440† | 36.7 | 0.00006 mg/L | 0.000037 | 0.00006 mg/L | 0.000037 | 63.34% |
| Co 228.616† | 22.5 | 0.0002 mg/L | 0.00012 | 0.0002 mg/L | 0.00012 | 60.02% |
| Cr 267.716† | -51.7 | -0.0002 mg/L | 0.00011 | -0.0002 mg/L | 0.00011 | 56.43% |
| Cu 324.752† | 1066.0 | 0.0024 mg/L | 0.00270 | 0.0024 mg/L | 0.00270 | 114.58% |
| Fe 238.204† | 76.1 | 0.0019 mg/L | 0.00055 | 0.0019 mg/L | 0.00055 | 28.05% |
| K 766.490† | 336.7 | 0.0636 mg/L | 0.02579 | 0.0636 mg/L | 0.02579 | 40.52% |
| Mg 279.077† | 19.3 | 0.0031 mg/L | 0.00184 | 0.0031 mg/L | 0.00184 | 58.89% |
| Mn 257.610† | 373.7 | 0.0004 mg/L | 0.00003 | 0.0004 mg/L | 0.00003 | 7.88% |
| Mo 202.031† | -29.5 | -0.0004 mg/L | 0.00025 | -0.0004 mg/L | 0.00025 | 55.45% |
| Na 330.237† | 255.5 | 4.162 mg/L | 0.2850 | 4.162 mg/L | 0.2850 | 6.85% |
| Ni 232.003† | 18.6 | 0.0003 mg/L | 0.00050 | 0.0003 mg/L | 0.00050 | 143.70% |

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|---------------|--------|----------|---------------|----------|---------|
| Y 371.029 | 2770644.0 | 0.875 mg/L | ✓ | 0.0075 | | | 0.86% |
| Sc 361.383 | 4772596.6 | 0.909 mg/L | ✓ | 0.0077 | | | 0.84% |
| Ag 328.068† | -2563.6 | 0.00279 mg/L | | 0.000239 | 0.00279 mg/L | 0.000239 | 8.59% |
| Al 308.215† | 13615.2 | 0.3891 mg/L | ✓ | 0.01702 | 0.3891 mg/L | 0.01702 | 4.37% |
| As 188.979† | -55.8 | 0.0021 mg/L | | 0.00390 | 0.0021 mg/L | 0.00390 | 184.59% |
| B 249.772† | 141225.3 | 0.3497 mg/L | | 0.00840 | 0.3497 mg/L | 0.00840 | 2.40% |
| Ba 233.527† | 19544.7 | 0.0852 mg/L | | 0.00173 | 0.0852 mg/L | 0.00173 | 2.03% |
| Be 313.107† | -2205.5 | 0.00004 mg/L | | 0.000019 | 0.00004 mg/L | 0.000019 | 41.90% |
| Ca 317.933† | 2239015.0 | 52.36 mg/L | | 0.773 | 52.36 mg/L | 0.773 | 1.48% |
| Cd 214.440† | 2942.8 | -0.00327 mg/L | | 0.000058 | -0.00327 mg/L | 0.000058 | 1.79% |
| Co 228.616† | 2165.7 | 0.0186 mg/L | | 0.00064 | 0.0186 mg/L | 0.00064 | 3.42% |
| Cr 267.716† | -161.9 | 0.0002 mg/L | | 0.00022 | 0.0002 mg/L | 0.00022 | 91.94% |
| Cu 324.752† | 271822.7 | 0.6169 mg/L | | 0.05487 | 0.6169 mg/L | 0.05487 | 8.89% |
| Fe 238.204† | 4684696.7 | 119.3 mg/L | | 1.52 | 119.3 mg/L | 1.52 | 1.27% |
| K 766.490† | 1268717.5 | 249.3 mg/L | | 3.64 | 249.3 mg/L | 3.64 | 1.46% |
| Mg 279.077† | 54633.2 | 9.231 mg/L | | 0.2537 | 9.231 mg/L | 0.2537 | 2.75% |
| Mn 257.610† | 82443.8 | 0.0786 mg/L | | 0.00194 | 0.0786 mg/L | 0.00194 | 2.47% |
| Mo 202.031† | -266.7 | 0.0008 mg/L | | 0.00071 | 0.0008 mg/L | 0.00071 | 89.04% |
| Na 330.237† | 10648.1 | 172.8 mg/L | | 5.15 | 172.8 mg/L | 5.15 | 2.98% |
| Ni 232.003† | 1715.6 | 0.0448 mg/L | | 0.00128 | 0.0448 mg/L | 0.00128 | 2.86% |
| Pb 220.353† | 169.8 | 0.0017 mg/L | | 0.00056 | 0.0017 mg/L | 0.00056 | 33.25% |
| Sb 206.836† | 2.9 | -0.0073 mg/L | | 0.00210 | -0.0073 mg/L | 0.00210 | 29.00% |
| Se 196.026† | -106.0 | -0.0049 mg/L | | 0.00615 | -0.0049 mg/L | 0.00615 | 125.77% |
| Tl 190.801† | -65.0 | 0.0180 mg/L | | 0.00082 | 0.0180 mg/L | 0.00082 | 4.54% |
| V 292.402† | 128135.8 | 0.2251 mg/L | | 0.00237 | 0.2251 mg/L | 0.00237 | 1.06% |
| Zn 213.857† | 35492.0 | 0.1034 mg/L | | 0.00081 | 0.1034 mg/L | 0.00081 | 0.78% |
| P 178.221† | 82.3 | 0.030 mg/L | | 0.0016 | 0.030 mg/L | 0.0016 | 5.17% |
| Si 251.611† | 855545.0 | 16.03 mg/L | | 0.347 | 16.03 mg/L | 0.347 | 2.17% |

Sequence No.: 80
 Sample ID: 21D0200-01
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 4/13/2021 1:20:12 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 21D0200-01
 Analyte Back Pressure Flow
 All 261.0 kPa 0.75 L/min

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Mean Data: 21D0200-01

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|--------|----------|--------------|----------|---------|
| Y 371.029 | 3104279.1 | 0.980 mg/L | ✓ | 0.0041 | | | 0.42% |
| Sc 361.383 | 5269023.5 | 1.00 mg/L | | 0.005 | | | 0.45% |
| Ag 328.068† | 1229.6 | 0.00270 mg/L | | 0.000356 | 0.00270 mg/L | 0.000356 | 13.19% |
| Al 308.215† | 195281.5 | 6.419 mg/L | | 0.1054 | 6.419 mg/L | 0.1054 | 1.64% |
| As 188.979† | 80.4 | 0.0129 mg/L | | 0.00041 | 0.0129 mg/L | 0.00041 | 3.15% |
| B 249.772† | 41657.4 | 0.1647 mg/L | ✓ | 0.00245 | 0.1647 mg/L | 0.00245 | 1.49% |
| Ba 233.527† | 20499.8 | 0.0924 mg/L | | 0.00121 | 0.0924 mg/L | 0.00121 | 1.31% |
| Be 313.107† | 2866.6 | 0.00049 mg/L | | 0.000016 | 0.00049 mg/L | 0.000016 | 3.35% |
| Ca 317.933† | 1579533.2 | 36.92 mg/L | ✓ | 0.690 | 36.92 mg/L | 0.690 | 1.87% |
| Cd 214.440† | 269.4 | 0.00027 mg/L | | 0.000014 | 0.00027 mg/L | 0.000014 | 5.30% |
| Co 228.616† | 453.5 | 0.0041 mg/L | | 0.00014 | 0.0041 mg/L | 0.00014 | 3.55% |
| Cr 267.716† | 2096.8 | 0.0078 mg/L | | 0.00012 | 0.0078 mg/L | 0.00012 | 1.56% |
| Cu 324.752† | 274371.6 | 0.6133 mg/L | ✓ | 0.03152 | 0.6133 mg/L | 0.03152 | 5.14% |
| Fe 238.204† | 170962.8 | 4.354 mg/L | ✓ | 0.0445 | 4.354 mg/L | 0.0445 | 1.02% |
| K 766.490† | 16913.8 | 3.273 mg/L | ✓ | 0.0384 | 3.273 mg/L | 0.0384 | 1.17% |
| Mg 279.077† | 22750.7 | 3.856 mg/L | ✓ | 0.0575 | 3.856 mg/L | 0.0575 | 1.49% |
| Mn 257.610† | 225927.6 | 0.2176 mg/L | | 0.00389 | 0.2176 mg/L | 0.00389 | 1.79% |
| Mo 202.031† | 28.6 | 0.0005 mg/L | | 0.00035 | 0.0005 mg/L | 0.00035 | 64.81% |
| Na 330.237† | 4792.1 | 77.89 mg/L | ✓ | 1.317 | 77.89 mg/L | 1.317 | 1.69% |
| Ni 232.003† | 339.0 | 0.0068 mg/L | | 0.00038 | 0.0068 mg/L | 0.00038 | 5.58% |
| Pb 220.353† | 3285.7 | 0.0915 mg/L | | 0.00040 | 0.0915 mg/L | 0.00040 | 0.43% |
| Sb 206.836† | -7.6 | -0.0017 mg/L | | 0.00164 | -0.0017 mg/L | 0.00164 | 96.00% |
| Se 196.026† | -15.6 | -0.0035 mg/L | | 0.00693 | -0.0035 mg/L | 0.00693 | 198.20% |
| Tl 190.801† | -10.2 | 0.0005 mg/L | | 0.00106 | 0.0005 mg/L | 0.00106 | 235.01% |
| V 292.402† | 7367.6 | 0.0131 mg/L | | 0.00029 | 0.0131 mg/L | 0.00029 | 2.22% |

| | | | | | | |
|-------------|-----------|-------------|---------|-------------|---------|-------|
| Zn 213.857† | 32413.3 | 0.1014 mg/L | 0.00161 | 0.1014 mg/L | 0.00161 | 1.59% |
| P 178.221† | 751.1 | 0.222 mg/L | 0.0072 | 0.222 mg/L | 0.0072 | 3.24% |
| Si 251.611† | 2219754.5 | 41.49 mg/L | 0.072 | 41.49 mg/L | 0.072 | 0.17% |

User canceled analysis.

=====
Analysis Begun

Start Time: 4/13/2021 1:25:26 PM Plasma On Time: 4/13/2021 6:12:27 AM
 Logged In Analyst: Optima7300DV Technique: ICP Continuous
 Spectrometer Model: Optima 7300 DV, S/N 077C9102801 Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210413_1.sif
 Batch ID:
 Results Data Set: 210413_1
 Results Library: C:\pe\Optima7300DV\Results\Results.mdb

Sequence No.: 81 Autosampler Location: 1
 Sample ID: CCB Date Collected: 4/13/2021 1:25:27 PM
 Analyst: Data Type: Original
 Initial Sample Wt: Initial Sample Vol:
 Dilution: Sample Prep Vol:

=====
Nebulizer Parameters: CCB

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 263.0 kPa | 0.75 L/min |

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4/13/21

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Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------|--------------|--------------|--------------------|----------|---------|
| Y 371.029 | 3226420.4 | 1.02 mg/L | 0.003 | | | | 0.31% |
| Sc 361.383 | 5371846.2 | 1.02 mg/L | 0.003 | | | | 0.27% |
| Ag 328.068† | 405.0 | 0.00100 mg/L | 0.000078 | 0.00100 mg/L | 0.000078 | | 7.79% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 308.215† | 2801.7 | 0.0922 mg/L | 0.00143 | 0.0922 mg/L | 0.00143 | | 1.55% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | | |
| As 188.979† | -15.5 | -0.0026 mg/L | 0.00062 | -0.0026 mg/L | 0.00062 | | 24.12% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.772† | 1009.5 | 0.0042 mg/L | 0.00006 | 0.0042 mg/L | 0.00006 | | 1.41% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | 46.6 | 0.0002 mg/L | 0.00007 | 0.0002 mg/L | 0.00007 | | 34.26% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | 664.9 | 0.00027 mg/L | 0.000016 | 0.00027 mg/L | 0.000016 | | 6.08% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933† | 6558.1 | 0.1535 mg/L | 0.00099 | 0.1535 mg/L | 0.00099 | | 0.64% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | | |
| Cd 214.440† | 96.5 | 0.00017 mg/L | 0.000041 | 0.00017 mg/L | 0.000041 | | 24.81% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | | |
| Co 228.616† | 151.8 | 0.0014 mg/L | 0.00012 | 0.0014 mg/L | 0.00012 | | 8.70% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | -63.9 | -0.0002 mg/L | 0.00008 | -0.0002 mg/L | 0.00008 | | 33.47% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | 182197.2 | 0.4074 mg/L | 0.00986 | 0.4074 mg/L | 0.00986 | | 2.42% |
| QC value greater than the upper limit for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204† | 1636.6 | 0.0417 mg/L | 0.00028 | 0.0417 mg/L | 0.00028 | | 0.68% |
| QC value within limits for Fe 238.204 Recovery = Not calculated | | | | | | | |
| K 766.490† | 1625.2 | 0.3193 mg/L | 0.03762 | 0.3193 mg/L | 0.03762 | | 11.78% |
| QC value within limits for K 766.490 Recovery = Not calculated | | | | | | | |
| Mg 279.077† | 1873.7 | 0.3179 mg/L | 0.00726 | 0.3179 mg/L | 0.00726 | | 2.29% |
| QC value within limits for Mg 279.077 Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 13143.7 | 0.0127 mg/L | 0.00028 | 0.0127 mg/L | 0.00028 | | 2.23% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | -152.7 | -0.0023 mg/L | 0.00028 | -0.0023 mg/L | 0.00028 | | 11.80% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 330.237† | 22.2 | 0.3545 mg/L | 0.98424 | 0.3545 mg/L | 0.98424 | | 277.65% |
| QC value within limits for Na 330.237 Recovery = Not calculated | | | | | | | |
| Ni 232.003† | -10.4 | -0.0002 mg/L | 0.00075 | -0.0002 mg/L | 0.00075 | | 455.87% |
| QC value within limits for Ni 232.003 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | -73.9 | -0.0023 mg/L | 0.00054 | -0.0023 mg/L | 0.00054 | | 23.10% |

| | | | | | | | | |
|------------------------------------|---------------------------------------|---------------------------|---------|--------------|---------|---------|--|--|
| Sb 206.836† | QC value within limits for Sb 206.836 | Recovery = Not calculated | | | | | | |
| | -27.6 | -0.0027 mg/L | 0.00128 | -0.0027 mg/L | 0.00128 | 47.44% | | |
| Se 196.026† | QC value within limits for Se 196.026 | Recovery = Not calculated | | | | | | |
| | -0.5 | -0.0001 mg/L | 0.00281 | -0.0001 mg/L | 0.00281 | >999.9% | | |
| Tl 190.801† | QC value within limits for Tl 190.801 | Recovery = Not calculated | | | | | | |
| | 16.4 | 0.0021 mg/L | 0.00102 | 0.0021 mg/L | 0.00102 | 48.96% | | |
| V 292.402† | QC value within limits for V 292.402 | Recovery = Not calculated | | | | | | |
| | 21.6 | 0.0001 mg/L | 0.00019 | 0.0001 mg/L | 0.00019 | 284.57% | | |
| Zn 213.857† | QC value within limits for Zn 213.857 | Recovery = Not calculated | | | | | | |
| | 1180.1 | 0.0028 mg/L | 0.00004 | 0.0028 mg/L | 0.00004 | 1.50% | | |
| P 178.221† | QC value within limits for P 178.221 | Recovery = Not calculated | | | | | | |
| | 1.2 | 0.000 mg/L | 0.0024 | 0.000 mg/L | 0.0024 | 767.49% | | |
| Si 251.611† | QC value within limits for Si 251.611 | Recovery = Not calculated | | | | | | |
| | 8887.7 | 0.166 mg/L | 0.0076 | 0.166 mg/L | 0.0076 | 4.58% | | |
| QC Failed. Continue with analysis. | | | | | | | | |

No Cu IN REL

Sequence No.: 82
Sample ID: CCV-1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 4/13/2021 1:29:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV-1
Analyte Back Pressure Flow
All 264.0 kPa 0.75 L/min

4/13/21

Mean Data: CCV-1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD | |
|---|--------------------------|---------------|--------------|----------|--------------------|----------|---------|--|
| Y 371.029 | 3191577.9 | 1.01 mg/L | mg/L | 0.012 | | | 1.18% | |
| Sc 361.383 | 5373684.8 | 1.02 mg/L | mg/L | 0.013 | | | 1.23% | |
| Ag 328.068† | -1374.5 | -0.00143 mg/L | mg/L | 0.000121 | -0.00143 mg/L | 0.000121 | 8.47% | |
| Al 308.215† | 2212.8 | 0.0423 mg/L | mg/L | 0.00670 | 0.0423 mg/L | 0.00670 | 15.83% | |
| As 188.979† | 6185.6 | 1.012 mg/L | mg/L | 0.0122 | 1.012 mg/L | 0.0122 | 1.21% | |
| QC value within limits for As 188.979 Recovery = 101.25% | | | | | | | | |
| B 249.772† | 2681.1 | 0.0110 mg/L | mg/L | 0.00017 | 0.0110 mg/L | 0.00017 | 1.60% | |
| Ba 233.527† | -518.3 | -0.0005 mg/L | mg/L | 0.00008 | -0.0005 mg/L | 0.00008 | 15.22% | |
| Be 313.107† | 11217417.7 | 0.98211 mg/L | mg/L | 0.013864 | 0.98211 mg/L | 0.013864 | 1.41% | |
| QC value within limits for Be 313.107 Recovery = 98.21% | | | | | | | | |
| Ca 317.933† | 48133.3 | 1.135 mg/L | mg/L | 0.0121 | 1.135 mg/L | 0.0121 | 1.07% | |
| Cd 214.440† | 618140.5 | 1.0086 mg/L | mg/L | 0.00203 | 1.0086 mg/L | 0.00203 | 0.20% | |
| QC value within limits for Cd 214.440 Recovery = 100.86% | | | | | | | | |
| Co 228.616† | 113839.5 | 1.025 mg/L | mg/L | 0.0176 | 1.025 mg/L | 0.0176 | 1.72% | |
| QC value within limits for Co 228.616 Recovery = 102.52% | | | | | | | | |
| Cr 267.716† | 276964.2 | 1.043 mg/L | mg/L | 0.0163 | 1.043 mg/L | 0.0163 | 1.56% | |
| QC value within limits for Cr 267.716 Recovery = 104.30% | | | | | | | | |
| Cu 324.752† | 530588.4 | 1.187 mg/L | mg/L | 0.0139 | 1.187 mg/L | 0.0139 | 1.17% | |
| QC value greater than the upper limit for Cu 324.752 Recovery = 118.69% | | | | | | | | |
| Fe 238.204† | 40330.6 | 1.035 mg/L | mg/L | 0.0053 | 1.035 mg/L | 0.0053 | 0.51% | |
| QC value within limits for Fe 238.204 Recovery = 103.54% | | | | | | | | |
| K 766.490† | 1133.0 | 0.2237 mg/L | mg/L | 0.02070 | 0.2237 mg/L | 0.02070 | 9.26% | |
| Mg 279.077† | 6866.8 | 1.172 mg/L | mg/L | 0.0153 | 1.172 mg/L | 0.0153 | 1.30% | |
| Mn 257.610† | 1078869.5 | 1.039 mg/L | mg/L | 0.0017 | 1.039 mg/L | 0.0017 | 0.16% | |
| QC value within limits for Mn 257.610 Recovery = 103.90% | | | | | | | | |
| Mo 202.031† | 64001.6 | 0.9766 mg/L | mg/L | 0.01649 | 0.9766 mg/L | 0.01649 | 1.69% | |
| QC value within limits for Mo 202.031 Recovery = 97.66% | | | | | | | | |
| Na 330.237† | 0.2 | -0.8099 mg/L | mg/L | 1.06255 | -0.8099 mg/L | 1.06255 | 131.20% | |
| Ni 232.003† | 63510.0 | 0.9709 mg/L | mg/L | 0.01665 | 0.9709 mg/L | 0.01665 | 1.71% | |
| QC value within limits for Ni 232.003 Recovery = 97.09% | | | | | | | | |
| Pb 220.353† | 37364.5 | 1.032 mg/L | mg/L | 0.0162 | 1.032 mg/L | 0.0162 | 1.57% | |
| QC value within limits for Pb 220.353 Recovery = 103.22% | | | | | | | | |
| Sb 206.836† | 10856.9 | 1.043 mg/L | mg/L | 0.0141 | 1.043 mg/L | 0.0141 | 1.35% | |
| QC value within limits for Sb 206.836 Recovery = 104.32% | | | | | | | | |
| Se 196.026† | 2970.9 | 0.9952 mg/L | mg/L | 0.01916 | 0.9952 mg/L | 0.01916 | 1.93% | |
| QC value within limits for Se 196.026 Recovery = 99.52% | | | | | | | | |
| Tl 190.801† | 8003.3 | 1.007 mg/L | mg/L | 0.0169 | 1.007 mg/L | 0.0169 | 1.68% | |
| QC value within limits for Tl 190.801 Recovery = 100.70% | | | | | | | | |
| V 292.402† | 564940.1 | 1.001 mg/L | mg/L | 0.0025 | 1.001 mg/L | 0.0025 | 0.25% | |

QC value within limits for V 292.402 Recovery = 100.13%
 Zn 213.857† 319428.4 1.007 mg/L 0.0169 1.007 mg/L 0.0169 1.68%
 QC value within limits for Zn 213.857 Recovery = 100.70%
 P 178.221† -8.6 0.002 mg/L 0.0033 0.002 mg/L 0.0033 216.16%
 Si 251.611† 16533.0 0.301 mg/L 0.0103 0.301 mg/L 0.0103 3.43%
 QC Failed. Continue with analysis.

No Cu in RL

Sequence No.: 83
 Sample ID: CCV-2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 4/13/2021 1:32:59 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV-2
 Analyte Back Pressure Flow
 All 264.0 kPa 0.75 L/min

4/13/21

Mean Data: CCV-2

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 3247800.7 | 1.03 mg/L | ✓ | 0.004 | | | 0.40% |
| Sc 361.383 | 5477137.0 | 1.04 mg/L | | 0.004 | | | 0.36% |
| Ag 328.068† | 181546.5 | 0.46425 mg/L | | 0.007373 | 0.46425 mg/L | 0.007373 | 1.59% |
| QC value within limits for Ag 328.068 Recovery = 92.85% | | | | | | | |
| Al 308.215† | 28734.0 | 0.9448 mg/L | | 0.01873 | 0.9448 mg/L | 0.01873 | 1.98% |
| QC value within limits for Al 308.215 Recovery = 94.48% | | | | | | | |
| As 188.979† | -14.7 | -0.0023 mg/L | | 0.00195 | -0.0023 mg/L | 0.00195 | 83.61% |
| B 249.772† | 239526.7 | 1.006 mg/L | | 0.0196 | 1.006 mg/L | 0.0196 | 1.95% |
| QC value within limits for B 249.772 Recovery = 100.65% | | | | | | | |
| Ba 233.527† | 235223.7 | 1.061 mg/L | | 0.0156 | 1.061 mg/L | 0.0156 | 1.47% |
| QC value within limits for Ba 233.527 Recovery = 106.13% | | | | | | | |
| Be 313.107† | 1635.6 | 0.00036 mg/L | | 0.000013 | 0.00036 mg/L | 0.000013 | 3.77% |
| Ca 317.933† | -57.2 | -0.0008 mg/L | | 0.00161 | -0.0008 mg/L | 0.00161 | 213.65% |
| Cd 214.440† | 134.0 | 0.00024 mg/L | | 0.000027 | 0.00024 mg/L | 0.000027 | 11.37% |
| Co 228.616† | -71.0 | 0.0005 mg/L | | 0.00015 | 0.0005 mg/L | 0.00015 | 31.04% |
| Cr 267.716† | 34.8 | 0.0001 mg/L | | 0.00018 | 0.0001 mg/L | 0.00018 | 141.54% |
| Cu 324.752† | 13507.6 | 0.0301 mg/L | | 0.01291 | 0.0301 mg/L | 0.01291 | 42.82% |
| Fe 238.204† | -158.9 | -0.0040 mg/L | | 0.00070 | -0.0040 mg/L | 0.00070 | 17.62% |
| K 766.490† | 51867.3 | 10.20 mg/L | | 0.248 | 10.20 mg/L | 0.248 | 2.43% |
| Mg 279.077† | 71.2 | 0.0120 mg/L | | 0.00308 | 0.0120 mg/L | 0.00308 | 25.54% |
| Mn 257.610† | 1056.2 | 0.0010 mg/L | | 0.00006 | 0.0010 mg/L | 0.00006 | 5.55% |
| Mo 202.031† | 9.0 | 0.0001 mg/L | | 0.00031 | 0.0001 mg/L | 0.00031 | 398.59% |
| Na 330.237† | 77.0 | 1.246 mg/L | | 0.1666 | 1.246 mg/L | 0.1666 | 13.37% |
| Ni 232.003† | -440.0 | -0.0068 mg/L | | 0.00072 | -0.0068 mg/L | 0.00072 | 10.53% |
| Pb 220.353† | -45.3 | -0.0012 mg/L | | 0.00066 | -0.0012 mg/L | 0.00066 | 56.95% |
| Sb 206.836† | 24.2 | 0.0022 mg/L | | 0.00138 | 0.0022 mg/L | 0.00138 | 62.16% |
| Se 196.026† | 3.6 | 0.0013 mg/L | | 0.00417 | 0.0013 mg/L | 0.00417 | 329.21% |
| Tl 190.801† | 37.2 | 0.0050 mg/L | | 0.00098 | 0.0050 mg/L | 0.00098 | 19.60% |
| V 292.402† | 92.5 | 0.0001 mg/L | | 0.00002 | 0.0001 mg/L | 0.00002 | 14.39% |
| Zn 213.857† | 476.7 | 0.0016 mg/L | | 0.00017 | 0.0016 mg/L | 0.00017 | 10.10% |
| P 178.221† | 3.7 | 0.001 mg/L | | 0.0030 | 0.001 mg/L | 0.0030 | 322.52% |
| Si 251.611† | 124658.0 | 2.331 mg/L | | 0.0381 | 2.331 mg/L | 0.0381 | 1.64% |

Sequence No.: 84
 Sample ID: CCV-3
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 4/13/2021 1:37:03 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV-3
 Analyte Back Pressure Flow
 All 262.0 kPa 0.75 L/min

Mean Data: CCV-3

Mean Corrected Calib. Sample

| Analyte | Intensity | Conc. Units | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|--|-----------|--------------|----------|--------------|----------|---------|
| Y 371.029 | 3225987.2 | 1.02 mg/L | 0.010 | | | 0.94% |
| Sc 361.383 | 5467001.8 | 1.04 mg/L | 0.011 | | | 1.03% |
| Ag 328.068† | 789.2 | 0.00174 mg/L | 0.000606 | 0.00174 mg/L | 0.000606 | 34.90% |
| Al 308.215† | 159.1 | -0.0126 mg/L | 0.00757 | -0.0126 mg/L | 0.00757 | 59.98% |
| As 188.979† | 14.4 | 0.0000 mg/L | 0.00185 | 0.0000 mg/L | 0.00185 | >999.9% |
| B 249.772† | 238152.0 | 1.000 mg/L | 0.0310 | 1.000 mg/L | 0.0310 | 3.10% |
| Ba 233.527† | 168.6 | 0.0007 mg/L | 0.00008 | 0.0007 mg/L | 0.00008 | 10.42% |
| Be 313.107† | 1362.2 | 0.00034 mg/L | 0.000028 | 0.00034 mg/L | 0.000028 | 8.15% |
| Ca 317.933† | 414283.7 | 9.684 mg/L | 0.2267 | 9.684 mg/L | 0.2267 | 2.34% |
| QC value within limits for Ca 317.933 Recovery = 96.84% | | | | | | |
| Cd 214.440† | 18.7 | 0.00021 mg/L | 0.000049 | 0.00021 mg/L | 0.000049 | 23.28% |
| Co 228.616† | -60.2 | 0.0004 mg/L | 0.00005 | 0.0004 mg/L | 0.00005 | 12.40% |
| Cr 267.716† | 10.3 | 0.0000 mg/L | 0.00015 | 0.0000 mg/L | 0.00015 | 394.44% |
| Cu 324.752† | 27685.7 | 0.0611 mg/L | 0.00769 | 0.0611 mg/L | 0.00769 | 12.59% |
| Fe 238.204† | -154.4 | -0.0037 mg/L | 0.00058 | -0.0037 mg/L | 0.00058 | 15.47% |
| K 766.490† | 49512.1 | 9.726 mg/L | 0.2372 | 9.726 mg/L | 0.2372 | 2.44% |
| QC value within limits for K 766.490 Recovery = 97.26% | | | | | | |
| Mg 279.077† | 55801.5 | 9.471 mg/L | 0.2368 | 9.471 mg/L | 0.2368 | 2.50% |
| QC value within limits for Mg 279.077 Recovery = 94.71% | | | | | | |
| Mn 257.610† | 2166.3 | 0.0020 mg/L | 0.00016 | 0.0020 mg/L | 0.00016 | 7.80% |
| Mo 202.031† | 64608.3 | 0.9860 mg/L | 0.02813 | 0.9860 mg/L | 0.02813 | 2.85% |
| Na 330.237† | 631.1 | 10.32 mg/L | 0.352 | 10.32 mg/L | 0.352 | 3.42% |
| QC value within limits for Na 330.237 Recovery = 103.20% | | | | | | |
| Ni 232.003† | 447.2 | 0.0023 mg/L | 0.00051 | 0.0023 mg/L | 0.00051 | 21.86% |
| Pb 220.353† | -139.6 | -0.0022 mg/L | 0.00047 | -0.0022 mg/L | 0.00047 | 21.51% |
| Sb 206.836† | -76.1 | -0.0047 mg/L | 0.00080 | -0.0047 mg/L | 0.00080 | 17.06% |
| Se 196.026† | -13.6 | -0.0041 mg/L | 0.00197 | -0.0041 mg/L | 0.00197 | 48.03% |
| Tl 190.801† | 11.3 | 0.0022 mg/L | 0.00100 | 0.0022 mg/L | 0.00100 | 44.93% |
| V 292.402† | 19.1 | -0.0004 mg/L | 0.00033 | -0.0004 mg/L | 0.00033 | 82.47% |
| Zn 213.857† | -267.9 | -0.0005 mg/L | 0.00009 | -0.0005 mg/L | 0.00009 | 17.05% |
| P 178.221† | 17526.1 | 5.187 mg/L | 0.1221 | 5.187 mg/L | 0.1221 | 2.35% |
| QC value within limits for P 178.221 Recovery = 103.75% | | | | | | |
| Si 251.611† | 13397.8 | 0.237 mg/L | 0.0073 | 0.237 mg/L | 0.0073 | 3.08% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 85
Sample ID: CCV-4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 4/13/2021 1:41:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV-4

Analyte Back Pressure Flow
All 261.0 kPa 0.75 L/min

Handwritten signature/initials

Mean Data: CCV-4

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 3312447.1 | 1.05 mg/L | | 0.018 | | | 1.68% |
| Sc 361.383 | 5556808.1 | 1.06 mg/L | | 0.017 | | | 1.62% |
| Ag 328.068† | 464.9 | 0.00118 mg/L | | 0.000340 | 0.00118 mg/L | 0.000340 | 28.72% |
| Al 308.215† | -275.7 | -0.0095 mg/L | | 0.00474 | -0.0095 mg/L | 0.00474 | 49.88% |
| As 188.979† | -27.0 | -0.0044 mg/L | | 0.00095 | -0.0044 mg/L | 0.00095 | 21.58% |
| B 249.772† | 3831.3 | 0.0161 mg/L | | 0.00071 | 0.0161 mg/L | 0.00071 | 4.40% |
| Ba 233.527† | 66.9 | 0.0003 mg/L | | 0.00012 | 0.0003 mg/L | 0.00012 | 39.44% |
| Be 313.107† | 1218.7 | 0.00032 mg/L | | 0.000031 | 0.00032 mg/L | 0.000031 | 9.80% |
| Ca 317.933† | 1210.8 | 0.0284 mg/L | | 0.00231 | 0.0284 mg/L | 0.00231 | 8.14% |
| Cd 214.440† | 62.8 | 0.00010 mg/L | | 0.000026 | 0.00010 mg/L | 0.000026 | 25.22% |
| Co 228.616† | 37.6 | 0.0003 mg/L | | 0.00013 | 0.0003 mg/L | 0.00013 | 38.52% |
| Cr 267.716† | -38.2 | -0.0001 mg/L | | 0.00017 | -0.0001 mg/L | 0.00017 | 118.52% |
| Cu 324.752† | 37151.5 | 0.0831 mg/L | | 0.00343 | 0.0831 mg/L | 0.00343 | 4.13% |
| Fe 238.204† | 150.6 | 0.0038 mg/L | | 0.00078 | 0.0038 mg/L | 0.00078 | 20.40% |
| K 766.490† | 352.5 | 0.0669 mg/L | | 0.00947 | 0.0669 mg/L | 0.00947 | 14.15% |
| Mg 279.077† | 300.2 | 0.0508 mg/L | | 0.00371 | 0.0508 mg/L | 0.00371 | 7.31% |
| Mn 257.610† | 2951.7 | 0.0028 mg/L | | 0.00010 | 0.0028 mg/L | 0.00010 | 3.46% |
| Mo 202.031† | -0.9 | 0.0000 mg/L | | 0.00015 | 0.0000 mg/L | 0.00015 | >999.9% |
| Na 330.237† | 238.3 | 3.880 mg/L | | 0.3646 | 3.880 mg/L | 0.3646 | 9.40% |
| Ni 232.003† | -33.6 | -0.0005 mg/L | | 0.00056 | -0.0005 mg/L | 0.00056 | 112.11% |

| | | | | | | |
|-------------|----------|--------------|---------|--------------|---------|---------|
| Pb 220.353† | -70.3 | -0.0020 mg/L | 0.00095 | -0.0020 mg/L | 0.00095 | 47.38% |
| Sb 206.836† | -20.0 | -0.0020 mg/L | 0.00043 | -0.0020 mg/L | 0.00043 | 21.85% |
| Se 196.026† | -2.0 | -0.0007 mg/L | 0.00242 | -0.0007 mg/L | 0.00242 | 345.04% |
| Tl 190.801† | 4.7 | 0.0006 mg/L | 0.00171 | 0.0006 mg/L | 0.00171 | 283.20% |
| V 292.402† | -22.1 | 0.0000 mg/L | 0.00012 | 0.0000 mg/L | 0.00012 | 364.05% |
| Zn 213.857† | 23.2 | -0.0001 mg/L | 0.00018 | -0.0001 mg/L | 0.00018 | 154.06% |
| P 178.221† | 8.5 | 0.003 mg/L | 0.0020 | 0.003 mg/L | 0.0020 | 77.82% |
| Si 251.611† | 134142.7 | 2.507 mg/L | 0.0357 | 2.507 mg/L | 0.0357 | 1.42% |

QC value within limits for Si 251.611 Recovery = 100.30%

All analyte(s) passed QC.

Sequence No.: 86

Autosampler Location: 60

Sample ID: RINSE

Date Collected: 4/13/2021 1:45:14 PM

Analyst:

Data Type: Original

Initial Sample Wt.:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Handwritten signature and date: 4/13/21

Nebulizer Parameters: RINSE

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 262.0 kPa | 0.75 L/min |

Mean Data: RINSE

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 3436233.4 | 1.09 mg/L | 0.016 | | | 1.43% |
| Sc 361.383 | 5694535.2 | 1.08 mg/L | 0.016 | | | 1.47% |
| Ag 328.068† | 362.1 | 0.00092 mg/L | 0.000392 | 0.00092 mg/L | 0.000392 | 42.60% |
| Al 308.215† | 80.0 | 0.0026 mg/L | 0.00712 | 0.0026 mg/L | 0.00712 | 272.52% |
| As 188.979† | -21.9 | -0.0036 mg/L | 0.00117 | -0.0036 mg/L | 0.00117 | 32.51% |
| B 249.772† | 5554.9 | 0.0233 mg/L | 0.00055 | 0.0233 mg/L | 0.00055 | 2.36% |
| Ba 233.527† | 59.2 | 0.0003 mg/L | 0.00005 | 0.0003 mg/L | 0.00005 | 19.36% |
| Be 313.107† | 1108.8 | 0.00031 mg/L | 0.000031 | 0.00031 mg/L | 0.000031 | 10.01% |
| Ca 317.933† | 2558.6 | 0.0599 mg/L | 0.00253 | 0.0599 mg/L | 0.00253 | 4.23% |
| Cd 214.440† | 62.0 | 0.00010 mg/L | 0.000031 | 0.00010 mg/L | 0.000031 | 30.00% |
| Co 228.616† | 14.1 | 0.0001 mg/L | 0.00015 | 0.0001 mg/L | 0.00015 | 125.73% |
| Cr 267.716† | -24.5 | -0.0001 mg/L | 0.00011 | -0.0001 mg/L | 0.00011 | 119.34% |
| Cu 324.752† | 32012.7 | 0.0716 mg/L | 0.00401 | 0.0716 mg/L | 0.00401 | 5.60% |
| Fe 238.204† | 395.9 | 0.0101 mg/L | 0.00094 | 0.0101 mg/L | 0.00094 | 9.37% |
| K 766.490† | 603.5 | 0.1185 mg/L | 0.01789 | 0.1185 mg/L | 0.01789 | 15.09% |
| Mg 279.077† | 315.9 | 0.0536 mg/L | 0.00395 | 0.0536 mg/L | 0.00395 | 7.37% |
| Mn 257.610† | 2990.4 | 0.0029 mg/L | 0.00005 | 0.0029 mg/L | 0.00005 | 1.87% |
| Mo 202.031† | -111.2 | -0.0017 mg/L | 0.00017 | -0.0017 mg/L | 0.00017 | 10.18% |
| Na 330.237† | 15.0 | 0.2408 mg/L | 0.27932 | 0.2408 mg/L | 0.27932 | 116.02% |
| Ni 232.003† | 5.6 | 0.0001 mg/L | 0.00067 | 0.0001 mg/L | 0.00067 | 655.78% |
| Pb 220.353† | -65.0 | -0.0019 mg/L | 0.00033 | -0.0019 mg/L | 0.00033 | 17.56% |
| Sb 206.836† | -10.9 | -0.0011 mg/L | 0.00078 | -0.0011 mg/L | 0.00078 | 73.12% |
| Se 196.026† | 6.0 | 0.0020 mg/L | 0.00076 | 0.0020 mg/L | 0.00076 | 37.80% |
| Tl 190.801† | 14.4 | 0.0018 mg/L | 0.00057 | 0.0018 mg/L | 0.00057 | 31.28% |
| V 292.402† | 4.1 | 0.0000 mg/L | 0.00030 | 0.0000 mg/L | 0.00030 | >999.9% |
| Zn 213.857† | 1114.5 | 0.0034 mg/L | 0.00019 | 0.0034 mg/L | 0.00019 | 5.68% |
| P 178.221† | -2.3 | -0.001 mg/L | 0.0048 | -0.001 mg/L | 0.0048 | 685.55% |
| Si 251.611† | 2050.3 | 0.038 mg/L | 0.0018 | 0.038 mg/L | 0.0018 | 4.56% |

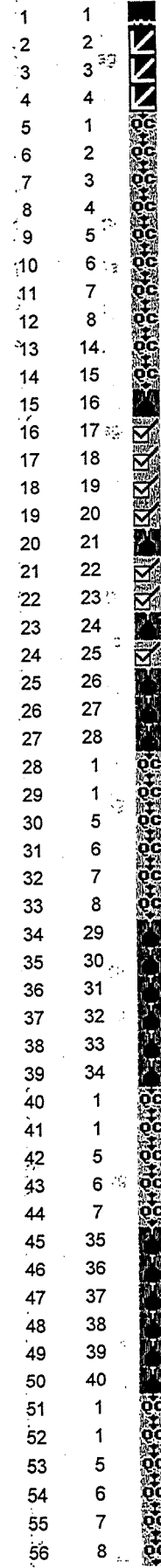
Analytical Sequence

Method: Master 200.7

| Seq. | Loc. | ID | Status |
|------|------|---------------|-----------|
| 1 | 1 | Calib Blank 1 | Applied |
| 2 | 2 | Calib Std 1 | Applied |
| 3 | 3 | Calib Std 2 | Applied |
| 4 | 4 | Calib Std 3 | Applied |
| 5 | 1 | ICB | QC Passed |
| 6 | 2 | IPC-1 | QC Passed |
| 7 | 3 | IPC-2 | QC Passed |
| 8 | 4 | IPC-3 | QC Passed |
| 9 | 5 | ICV-1 | QC Passed |
| 10 | 6 | ICV-2 | QC Passed |
| 11 | 7 | ICV-3 | QC Passed |
| 12 | 8 | ICV-4 | QC Passed |

MRL check 1 = 2104096 MRL 1 (200KSP1 & 2101209) & MRL check 2:
2104178 MRL 2 (200KSP1). spikes = 2100525 & 2100508 or
2100718. 2104096 is dissolved & 2104178 was
MH 4/1/21 digested per 200.2

Seq. Loc.



Sample ID

1 Calib Blank 1
 2 Calib Std 1 2101375
 3 Calib Std 2 2101441
 4 Calib Std 3 2101338
 5 ICB
 6 IPC-1 2101375
 7 IPC-2 2101441
 8 IPC-3 2101338
 9 ICV-1 2101382
 10 ICV-2 2101383
 11 ICV-3 2101384
 12 ICV-4 2101440
 13 MRL CHECK 1
 14 MRL CHECK 2
 15 2104096-BLK1
 16 2104096-BS1
 17 2104096-BSD1
 18 2104096-BSD1
 19 2104096-BSD2
 20 2104096-BSD2
 21 21D0046-27@5
 22 2104096-MS1
 23 2104096-MS3
 24 21D0046-31@5
 25 2104096-MS2
 26 21D0200-01
 27 21D0047-03@20
 28 21D0047-04@20
 29 CCB
 30 CCB
 31 CCV-1 2101382
 32 CCV-2 2101383
 33 CCV-3 2101384
 34 CCV-4 2101440
 35 21D0047-06@1000
 36 21D0047-07@20
 37 21D0046-26@5
 38 21D0046-28@5
 39 21D0046-29@5
 40 21D0046-30@5
 41 CCB
 42 CCB
 43 CCV-1
 44 CCV-2
 45 CCV-3
 46 21D0046-32@5
 47 21D0046-33@5
 48 21D0046-34@5
 49 21D0046-35@5
 50 21D0046-36@5
 51 21D0047-06@250
 52 CCB
 53 CCB
 54 CCV-1
 55 CCV-2
 56 CCV-3
 CCV-4

Set 1

Set 2

Set 3

MH 4/15/21

Set 1: 2104096 BS1/D1/BS2/D2/MS3 pass
MS1- Al, Ca, Cu, Fe, Mg, Mn M3
MS2- Al, Ca, Cu M3

CCB, CWS. pass

Set 2 & 3: CCB, CWS pass

Set 4: 2104178 BS1/D1/BS2/D2/MS2/MS3 pass

MS1- Ca, Na & M3

CCB, CWS pass

Set 5 site: CCB, CWS pass

Set 7: Pb ↑ in CW, NR

MH 4/14/21

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4/16/2021

Analytical Sequence

Method : Master 200.7

| Seq. | Loc. | Sample ID |
|------|------|-----------------|
| 57 | 41 | 2104178-BLK1 |
| 58 | 42 | 2104178-BS1 |
| 59 | 43 | 2104178-BSD1 |
| 60 | 44 | 2104178-BS2 |
| 61 | 45 | 2104178-BSD2 |
| 62 | 46 | 21D0117-01 |
| 63 | 47 | 2104178-MS1 |
| 64 | 48 | 21D0118-01 |
| 65 | 49 | 2104178-MS2 |
| 66 | 50 | 2104178-MS3 |
| 67 | 51 | 21D0047-01@20 |
| 68 | 52 | 21D0047-02@20 |
| 69 | 53 | 21D0047-03@20 |
| 70 | 54 | 21D0047-04@20 |
| 71 | 1 | CCB |
| 72 | 5 | CCV-1 |
| 73 | 6 | CCV-2 |
| 74 | 7 | CCV-3 |
| 75 | 8 | CCV-4 |
| 76 | 55 | 21D0047-05@20 |
| 77 | 56 | 21D0047-06@1000 |
| 78 | 57 | 21D0047-07@20 |
| 79 | 58 | 21D0111-01 |
| 80 | 59 | 21D0247-01 |
| 81 | 60 | 21D0231-01@20 |
| 82 | 61 | 21D0231-02@20 |
| 83 | 1 | CCB |
| 84 | 5 | CCV-1 |
| 85 | 6 | CCV-2 |
| 86 | 7 | CCV-3 |
| 87 | 8 | CCV-4 |
| 88 | 62 | 21D0231-03@20 |
| 89 | 63 | 21D0231-04@20 |
| 90 | 64 | 21D0231-05@20 |
| 91 | 65 | 21D0231-06@1000 |
| 92 | 66 | 21D0231-07@20 |
| 93 | 67 | 21D0273-03@50 |
| 94 | 68 | 21D0335-03@50 |
| 95 | 1 | CCB |
| 96 | 1 | CCB |
| 97 | 5 | CCV-1 |
| 98 | 6 | CCV-2 |
| 99 | 7 | CCV-3 |
| 100 | 8 | CCV-4 |
| 101 | 69 | 21D0273-03 |
| 102 | 70 | 21D0335-03 |
| 103 | 1 | CCB |
| 104 | 1 | CCB |
| 105 | 5 | CCV-1 |
| 106 | 6 | CCV-2 |
| 107 | 7 | CCV-3 |
| 108 | 71 | RINSE |

let 4

lets

lets

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MM
HISPA

let 7

Analysis Begun

Start Time: 4/15/2021 9:41:53 AM

Plasma On Time: 4/15/2021 6:26:54 AM

Logged In Analyst: Optima7300DV

Technique: ICP Continuous

Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210415_2.sif

Batch ID:

Results Data Set: 210415_2

Results Library: C:\pe\Optima7300DV\Results\Results.mdb

Method Loaded

Method Name: Master 200.7

Method Last Saved: 1/22/2021 7:35:25 AM

IEC File: 2020_IECa.iec

MSF File:

Method Description: 1 Cal point for all analytes

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank 1

Date Collected: 4/15/2021 9:41:54 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 256.0 kPa | 0.75 L/min |

Mean Data: Calib Blank 1

| Analyte | Mean Corrected | Std.Dev. | RSD | Conc. Units | Calib |
|-------------|----------------|----------|--------|-------------|-------|
| Y 371.029 | 2767386.7 | 58074.00 | 2.10% | 1.00 mg/L | |
| Sc 361.383 | 4611571.2 | 95910.14 | 2.08% | 1.00 mg/L | |
| Ag 328.068† | -578.9 | 34.47 | 5.95% | [0.00] mg/L | |
| Al 308.215† | 6910.4 | 120.66 | 1.75% | [0.00] mg/L | |
| As 188.979† | -60.3 | 5.44 | 9.03% | [0.00] mg/L | |
| B 249.772† | 2035.9 | 53.16 | 2.61% | [0.00] mg/L | |
| Ba 233.527† | -222.4 | 16.54 | 7.44% | [0.00] mg/L | |
| Be 313.107† | -12993.2 | 488.44 | 3.76% | [0.00] mg/L | |
| Ca 317.933† | 3076.1 | 45.29 | 1.47% | [0.00] mg/L | |
| Cd 214.440† | 288.9 | 31.59 | 10.93% | [0.00] mg/L | |
| Co 228.616† | 82.9 | 10.89 | 13.13% | [0.00] mg/L | |
| Cr 267.716† | 146.5 | 22.26 | 15.20% | [0.00] mg/L | |
| Cu 324.752† | 7955.6 | 194.48 | 2.44% | [0.00] mg/L | |
| Fe 238.204† | 187.9 | 11.71 | 6.23% | [0.00] mg/L | |
| K 766.490† | 855.5 | 154.99 | 18.12% | [0.00] mg/L | |
| Mg 279.077† | 122.4 | 13.24 | 10.82% | [0.00] mg/L | |
| Mn 257.610† | 347.2 | 18.43 | 5.31% | [0.00] mg/L | |
| Mo 202.031† | -18.9 | 12.80 | 67.77% | [0.00] mg/L | |
| Na 330.237† | 21.7 | 11.31 | 52.21% | [0.00] mg/L | |
| Ni 232.003† | -2277.4 | 51.53 | 2.26% | [0.00] mg/L | |
| Pb 220.353† | -199.5 | 21.38 | 10.72% | [0.00] mg/L | |
| Sb 206.836† | 118.3 | 11.57 | 9.79% | [0.00] mg/L | |
| Se 196.026† | 16.2 | 1.30 | 8.04% | [0.00] mg/L | |
| Tl 190.801† | -108.7 | 10.95 | 10.07% | [0.00] mg/L | |
| V 292.402† | 835.4 | 99.28 | 11.88% | [0.00] mg/L | |
| Zn 213.857† | 2230.5 | 66.38 | 2.98% | [0.00] mg/L | |
| P 178.221† | 54.3 | 9.50 | 17.50% | [0.00] mg/L | |
| Si 251.611† | 1155.3 | 35.08 | 3.04% | [0.00] mg/L | |

Sequence No.: 2

Autosampler Location: 2

Sample ID: Calib Std 1

Date Collected: 4/15/2021 9:45:58 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: Calib Std 1

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 256.0 kPa | 0.75 L/min |

Mean Data: Calib Std 1

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. Units | Calib |
|-------------|--------------------------|----------|-------|-------------|-------|
| Y 371.029 | 2756967.5 | 33361.38 | 1.21% | 0.996 | mg/L |
| Sc 361.383 | 4625309.9 | 30140.97 | 0.65% | 1.00 | mg/L |
| Al 308.215† | 268845.4 | 3959.76 | 1.47% | [10.0] | mg/L |
| Ba 233.527† | 185548.2 | 2646.05 | 1.43% | [1.0] | mg/L |
| Be 313.107† | 4731100.1 | 3167.93 | 0.07% | [0.5000] | mg/L |
| Cd 214.440† | 695427.3 | 8077.16 | 1.16% | [1.50] | mg/L |
| Co 228.616† | 89707.7 | 1451.11 | 1.62% | [1.0] | mg/L |
| Cr 267.716† | 232417.1 | 2947.10 | 1.27% | [1.0] | mg/L |
| Cu 324.752† | 400204.4 | 5854.68 | 1.46% | [1.0] | mg/L |
| Mn 257.610† | 877718.9 | 11905.02 | 1.36% | [1.00] | mg/L |
| Ni 232.003† | 54725.7 | 984.09 | 1.80% | [1.0] | mg/L |
| Pb 220.353† | 148328.3 | 2074.91 | 1.40% | [5.0] | mg/L |
| Se 196.026† | 4772.9 | 110.22 | 2.31% | [2.0] | mg/L |
| V 292.402† | 483182.5 | 6186.55 | 1.28% | [1.0] | mg/L |
| Zn 213.857† | 366621.7 | 4685.10 | 1.28% | [1.5] | mg/L |
| Si 251.611† | 224236.8 | 3048.29 | 1.36% | [5.00] | mg/L |

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Sequence No.: 3

Sample ID: Calib Std 2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 4/15/2021 9:49:20 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: Calib Std 2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 257.0 kPa | 0.75 L/min |

Mean Data: Calib Std 2

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. Units | Calib |
|-------------|--------------------------|----------|-------|-------------|-------|
| Y 371.029 | 2676232.2 | 55614.66 | 2.08% | 0.967 | mg/L |
| Sc 361.383 | 4531710.1 | 98213.10 | 2.17% | 0.983 | mg/L |
| As 188.979† | 24944.0 | 596.22 | 2.39% | [5.0] | mg/L |
| Ca 317.933† | 454419.4 | 9939.93 | 2.19% | [12.5] | mg/L |
| Fe 238.204† | 673546.8 | 15018.51 | 2.23% | [20.0] | mg/L |
| K 766.490† | 58756.5 | 1214.18 | 2.07% | [12.5] | mg/L |
| Mg 279.077† | 59690.5 | 1498.10 | 2.51% | [12.5] | mg/L |
| Mo 202.031† | 56448.7 | 1257.83 | 2.23% | [1.00] | mg/L |
| Na 330.237† | 707.6 | 47.05 | 6.65% | [12.5] | mg/L |
| P 178.221† | 27746.2 | 813.48 | 2.93% | [10.0] | mg/L |

Sequence No.: 4

Sample ID: Calib Std 3

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 4/15/2021 9:52:46 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: Calib Std 3

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 256.0 kPa | 0.75 L/min |

Mean Data: Calib Std 3

| Analyte | Mean Corrected Intensity | Std.Dev. | RSD | Conc. Units | Calib |
|-------------|--------------------------|----------|-------|-------------|-------|
| Y 371.029 | 2784484.6 | 19171.80 | 0.69% | 1.01 | mg/L |
| Sc 361.383 | 4662960.1 | 35595.92 | 0.76% | 1.01 | mg/L |
| Ag 328.068† | 169357.3 | 338.92 | 0.20% | [0.5] | mg/L |
| B 249.772† | 196226.5 | 443.90 | 0.23% | [1.0] | mg/L |

| | | | | |
|-------------|----------|--------|-------|--------------|
| Be 313.107† | 234721.9 | 387.54 | 0.17% | [0.025] mg/L |
| Sb 206.836† | 16744.2 | 224.72 | 1.34% | [2.0] mg/L |
| Tl 190.801† | 12986.5 | 194.15 | 1.50% | [2.0] mg/L |

Calibration Summary

| Analyte | Stds. | Equation | Intercept | Slope | Curvature | Corr. Coef. | Reslope |
|------------|-------|---------------|-----------|---------|-----------|-------------|---------|
| Ag 328.068 | 1 | Lin, Calc Int | 0.0 | 338700 | 0.00000 | 1.000000 ✓ | |
| Al 308.215 | 1 | Lin, Calc Int | 0.0 | 26880 | 0.00000 | 1.000000 | |
| As 188.979 | 1 | Lin, Calc Int | 0.0 | 4989 | 0.00000 | 1.000000 | |
| B 249.772 | 1 | Lin, Calc Int | 0.0 | 196200 | 0.00000 | 1.000000 | |
| Ba 233.527 | 1 | Lin, Calc Int | 0.0 | 185500 | 0.00000 | 1.000000 | |
| Be 313.107 | 2 | Lin, Calc Int | -914.2 | 9464000 | 0.00000 | 1.000000 | |
| Ca 317.933 | 1 | Lin, Calc Int | -0.0 | 36350 | 0.00000 | 1.000000 | |
| Cd 214.440 | 1 | Lin, Calc Int | 0.0 | 463600 | 0.00000 | 1.000000 | |
| Co 228.616 | 1 | Lin, Calc Int | 0.0 | 89710 | 0.00000 | 1.000000 | |
| Cr 267.716 | 1 | Lin, Calc Int | 0.0 | 232400 | 0.00000 | 1.000000 | |
| Cu 324.752 | 1 | Lin, Calc Int | 0.0 | 400200 | 0.00000 | 1.000000 | |
| Fe 238.204 | 1 | Lin, Calc Int | 0.0 | 33680 | 0.00000 | 1.000000 | |
| K 766.490 | 1 | Lin, Calc Int | -0.0 | 4701 | 0.00000 | 1.000000 | |
| Mg 279.077 | 1 | Lin, Calc Int | 0.0 | 4775 | 0.00000 | 1.000000 | |
| Mn 257.610 | 1 | Lin, Calc Int | 0.0 | 877700 | 0.00000 | 1.000000 | |
| Mo 202.031 | 1 | Lin, Calc Int | 0.0 | 56450 | 0.00000 | 1.000000 | |
| Na 330.237 | 1 | Lin, Calc Int | 0.0 | 56.61 | 0.00000 | 1.000000 | |
| Ni 232.003 | 1 | Lin, Calc Int | 0.0 | 54730 | 0.00000 | 1.000000 | |
| Pb 220.353 | 1 | Lin, Calc Int | 0.0 | 29670 | 0.00000 | 1.000000 | |
| Sb 206.836 | 1 | Lin, Calc Int | 0.0 | 8372 | 0.00000 | 1.000000 | |
| Se 196.026 | 1 | Lin, Calc Int | 0.0 | 2386 | 0.00000 | 1.000000 | |
| Tl 190.801 | 1 | Lin, Calc Int | 0.0 | 6493 | 0.00000 | 1.000000 | |
| V 292.402 | 1 | Lin, Calc Int | 0.0 | 483200 | 0.00000 | 1.000000 | |
| Zn 213.857 | 1 | Lin, Calc Int | 0.0 | 244400 | 0.00000 | 1.000000 | |
| P 178.221 | 1 | Lin, Calc Int | 0.0 | 2775 | 0.00000 | 1.000000 | |
| Si 251.611 | 1 | Lin, Calc Int | 0.0 | 44850 | 0.00000 | 1.000000 | |

Sequence No.: 5

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 4/15/2021 9:56:04 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICB

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 254.0 kPa | 0.75 L/min |

W 4/16/21

Mean Data: ICB

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 2736559.6 | 0.989 mg/L ✓ | 0.0119 | | | 1.21% |
| Sc 361.383 | 4547311.0 | 0.986 mg/L | 0.0106 | | | 1.08% |
| Ag 328.068† | -239.4 | -0.00071 mg/L | 0.000482 | -0.00071 mg/L | 0.000482 | 68.05% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | |
| Al 308.215† | 1.7 | 0.0000 mg/L | 0.00461 | 0.0000 mg/L | 0.00461 | >999.9% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | |
| As 188.979† | 7.3 | 0.0015 mg/L | 0.00072 | 0.0015 mg/L | 0.00072 | 49.59% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | |
| B 249.772† | 777.0 | 0.0040 mg/L | 0.00033 | 0.0040 mg/L | 0.00033 | 8.42% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | |
| Ba 233.527† | 22.9 | 0.0001 mg/L | 0.00009 | 0.0001 mg/L | 0.00009 | 76.63% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | |
| Be 313.107† | 699.4 | 0.00017 mg/L | 0.000023 | 0.00017 mg/L | 0.000023 | 13.23% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | |
| Ca 317.933† | 924.4 | 0.0254 mg/L | 0.00244 | 0.0254 mg/L | 0.00244 | 9.60% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | |
| Cd 214.440† | 70.9 | 0.00015 mg/L | 0.000047 | 0.00015 mg/L | 0.000047 | 30.44% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | |
| Co 228.616† | 11.6 | 0.0001 mg/L | 0.00016 | 0.0001 mg/L | 0.00016 | 122.16% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | |
| Cr 267.716† | 40.7 | 0.0002 mg/L | 0.00017 | 0.0002 mg/L | 0.00017 | 99.36% |

| | | | | | | | | |
|-------------|---------------------------------------|---------------------------|-------|-------------|---------|-------------|---------|---------|
| Cu 324.752† | QC value within limits for Cr 267.716 | Recovery = Not calculated | 918.3 | 0.0023 mg/L | 0.00040 | 0.0023 mg/L | 0.00040 | 17.26% |
| Fe 238.204† | QC value within limits for Cu 324.752 | Recovery = Not calculated | 45.7 | 0.0014 mg/L | 0.00035 | 0.0014 mg/L | 0.00035 | 25.48% |
| K 766.490† | QC value within limits for Fe 238.204 | Recovery = Not calculated | 191.4 | 0.0406 mg/L | 0.01717 | 0.0406 mg/L | 0.01717 | 42.24% |
| Mg 279.077† | QC value within limits for K 766.490 | Recovery = Not calculated | 35.9 | 0.0075 mg/L | 0.00314 | 0.0075 mg/L | 0.00314 | 41.73% |
| Mn 257.610† | QC value within limits for Mg 279.077 | Recovery = Not calculated | 714.2 | 0.0008 mg/L | 0.00008 | 0.0008 mg/L | 0.00008 | 9.93% |
| Mo 202.031† | QC value within limits for Mn 257.610 | Recovery = Not calculated | 38.8 | 0.0007 mg/L | 0.00023 | 0.0007 mg/L | 0.00023 | 33.91% |
| Na 330.237† | QC value within limits for Mo 202.031 | Recovery = Not calculated | 7.2 | 0.1256 mg/L | 0.25868 | 0.1256 mg/L | 0.25868 | 205.90% |
| Ni 232.003† | QC value within limits for Na 330.237 | Recovery = Not calculated | 138.8 | 0.0025 mg/L | 0.00090 | 0.0025 mg/L | 0.00090 | 35.60% |
| Pb 220.353† | QC value within limits for Ni 232.003 | Recovery = Not calculated | 25.9 | 0.0009 mg/L | 0.00081 | 0.0009 mg/L | 0.00081 | 93.77% |
| Sb 206.836† | QC value within limits for Pb 220.353 | Recovery = Not calculated | 45.4 | 0.0054 mg/L | 0.00090 | 0.0054 mg/L | 0.00090 | 16.51% |
| Se 196.026† | QC value within limits for Sb 206.836 | Recovery = Not calculated | 2.6 | 0.0011 mg/L | 0.00113 | 0.0011 mg/L | 0.00113 | 105.62% |
| Tl 190.801† | QC value within limits for Se 196.026 | Recovery = Not calculated | 3.6 | 0.0006 mg/L | 0.00123 | 0.0006 mg/L | 0.00123 | 218.54% |
| V 292.402† | QC value within limits for Tl 190.801 | Recovery = Not calculated | 21.8 | 0.0000 mg/L | 0.00017 | 0.0000 mg/L | 0.00017 | 365.02% |
| Zn 213.857† | QC value within limits for V 292.402 | Recovery = Not calculated | 625.9 | 0.0025 mg/L | 0.00025 | 0.0025 mg/L | 0.00025 | 9.89% |
| P 178.221† | QC value within limits for Zn 213.857 | Recovery = Not calculated | 0.4 | 0.000 mg/L | 0.0025 | 0.000 mg/L | 0.0025 | >999.9% |
| Si 251.611† | QC value within limits for P 178.221 | Recovery = Not calculated | 153.4 | 0.003 mg/L | 0.0006 | 0.003 mg/L | 0.0006 | 17.80% |
| | QC value within limits for Si 251.611 | Recovery = Not calculated | | | | | | |

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: IPC-1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 4/15/2021 10:00:08 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: IPC-1

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 254.0 kPa | 0.75 L/min |

Mean Data: IPC-1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Conc. Units | Std.Dev. | RSD |
|-------------|---------------------------------------|--------------------|--------------|----------|---------------|----------|---------|
| Y 371.029 | 2648166.0 | 0.957 mg/L | | 0.0149 | | | 1.56% |
| Sc 361.383 | 4538175.8 | 0.984 mg/L | | 0.0077 | | | 0.78% |
| Ag 328.068† | -867.6 | -0.00153 mg/L | | 0.000585 | -0.00153 mg/L | 0.000585 | 38.33% |
| Al 308.215† | 272382.6 | 10.11 mg/L | | 0.148 | 10.11 mg/L | 0.148 | 1.46% |
| | QC value within limits for Al 308.215 | Recovery = 101.05% | | | | | |
| As 188.979† | 5.0 | 0.0008 mg/L | | 0.00242 | 0.0008 mg/L | 0.00242 | 321.19% |
| B 249.772† | -562.2 | -0.0028 mg/L | | 0.00027 | -0.0028 mg/L | 0.00027 | 9.39% |
| Ba 233.527† | 185315.4 | 1.001 mg/L | | 0.0123 | 1.001 mg/L | 0.0123 | 1.23% |
| | QC value within limits for Ba 233.527 | Recovery = 100.06% | | | | | |
| Be 313.107† | 4696719.5 | 0.49638 mg/L | | 0.000374 | 0.49638 mg/L | 0.000374 | 0.08% |
| | QC value within limits for Be 313.107 | Recovery = 99.28% | | | | | |
| Ca 317.933† | 1794726.8 | 49.38 mg/L | | 0.622 | 49.38 mg/L | 0.622 | 1.26% |
| Cd 214.440† | 663433.8 | 1.4313 mg/L | | 0.02812 | 1.4313 mg/L | 0.02812 | 1.96% |
| | QC value within limits for Cd 214.440 | Recovery = 95.42% | | | | | |
| Co 228.616† | 89200.9 | 0.9939 mg/L | | 0.01327 | 0.9939 mg/L | 0.01327 | 1.34% |
| | QC value within limits for Co 228.616 | Recovery = 99.39% | | | | | |
| Cr 267.716† | 233796.4 | 1.007 mg/L | | 0.0113 | 1.007 mg/L | 0.0113 | 1.12% |
| | QC value within limits for Cr 267.716 | Recovery = 100.66% | | | | | |
| Cu 324.752† | 390618.2 | 0.9766 mg/L | | 0.01994 | 0.9766 mg/L | 0.01994 | 2.04% |
| | QC value within limits for Cu 324.752 | Recovery = 97.66% | | | | | |
| Fe 238.204† | -263.4 | 0.0004 mg/L | | 0.00039 | 0.0004 mg/L | 0.00039 | 92.45% |

| | | | | | | |
|--|----------|-------------|---------|-------------|---------|---------|
| K 766.490† | 95980.3 | 20.41 mg/L | 0.263 | 20.41 mg/L | 0.263 | 1.29% |
| Mg 279.077† | -4.0 | 0.0000 mg/L | 0.00308 | 0.0000 mg/L | 0.00308 | >999.9% |
| Mn 257.610† | 848967.5 | 0.9673 mg/L | 0.01826 | 0.9673 mg/L | 0.01826 | 1.89% |
| QC value within limits for Mn 257.610 Recovery = 96.73% | | | | | | |
| Mo 202.031† | 34.4 | 0.0002 mg/L | 0.00021 | 0.0002 mg/L | 0.00021 | 136.56% |
| Na 330.237† | 1056.1 | 17.35 mg/L | 0.626 | 17.35 mg/L | 0.626 | 3.61% |
| Ni 232.003† | 54494.3 | 0.9641 mg/L | 0.01352 | 0.9641 mg/L | 0.01352 | 1.40% |
| QC value within limits for Ni 232.003 Recovery = 96.41% | | | | | | |
| Pb 220.353† | 146598.7 | 4.941 mg/L | 0.0754 | 4.941 mg/L | 0.0754 | 1.53% |
| QC value within limits for Pb 220.353 Recovery = 98.81% | | | | | | |
| Sb 206.836† | 160.7 | 0.0091 mg/L | 0.00153 | 0.0091 mg/L | 0.00153 | 16.78% |
| Se 196.026† | 4861.5 | 2.039 mg/L | 0.0341 | 2.039 mg/L | 0.0341 | 1.67% |
| QC value within limits for Se 196.026 Recovery = 101.97% | | | | | | |
| Tl 190.801† | -6.5 | 0.0015 mg/L | 0.00236 | 0.0015 mg/L | 0.00236 | 155.36% |
| V 292.402† | 471112.6 | 0.9783 mg/L | 0.01737 | 0.9783 mg/L | 0.01737 | 1.78% |
| QC value within limits for V 292.402 Recovery = 97.83% | | | | | | |
| Zn 213.857† | 356623.9 | 1.453 mg/L | 0.0285 | 1.453 mg/L | 0.0285 | 1.96% |
| QC value within limits for Zn 213.857 Recovery = 96.85% | | | | | | |
| P 178.221† | 25.5 | 0.011 mg/L | 0.0017 | 0.011 mg/L | 0.0017 | 15.45% |
| Si 251.611† | 225321.4 | 5.031 mg/L | 0.0636 | 5.031 mg/L | 0.0636 | 1.26% |
| QC value within limits for Si 251.611 Recovery = 100.62% | | | | | | |
| All analyte(s) passed QC. / / | | | | | | |

Sequence No.: 7
 Sample ID: IPC-2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 4/15/2021 10:04:20 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: IPC-2

Analyte Back Pressure Flow
 All 257.0 kPa 0.75 L/min

W. Allen

Mean Data: IPC-2

| Analyte | Mean Corrected | | Calib. Units | Std.Dev. | Sample | | Std.Dev. | RSD |
|---|----------------|---------------|--------------|---------------|----------|---------|----------|-------|
| | Intensity | Conc. | | | Conc. | Units | | |
| Y 371.029 | 2646190.7 | 0.956 mg/L | 0.0060 | | | | | 0.63% |
| Sc 361.383 | 4472412.5 | 0.970 mg/L | 0.0057 | | | | | 0.59% |
| Ag 328.068† | -527.6 | -0.00031 mg/L | 0.000259 | -0.00031 mg/L | 0.000259 | 84.04% | | |
| Al 308.215† | 763.7 | 0.0102 mg/L | 0.00268 | 0.0102 mg/L | 0.00268 | 26.37% | | |
| As 188.979† | 24552.7 | 4.921 mg/L | 0.0520 | 4.921 mg/L | 0.0520 | 1.06% | | |
| QC value within limits for As 188.979 Recovery = 98.42% | | | | | | | | |
| B 249.772† | 15408.5 | 0.0386 mg/L | 0.00100 | 0.0386 mg/L | 0.00100 | 2.58% | | |
| Ba 233.527† | 239.6 | 0.0000 mg/L | 0.00007 | 0.0000 mg/L | 0.00007 | 207.41% | | |
| Be 313.107† | 1536.5 | 0.00024 mg/L | 0.000022 | 0.00024 mg/L | 0.000022 | 9.07% | | |
| Ca 317.933† | 452501.4 | 12.45 mg/L | 0.097 | 12.45 mg/L | 0.097 | 0.77% | | |
| QC value within limits for Ca 317.933 Recovery = 99.63% | | | | | | | | |
| Cd 214.440† | 412.6 | 0.00006 mg/L | 0.000019 | 0.00006 mg/L | 0.000019 | 32.45% | | |
| Co 228.616† | -9.6 | 0.0003 mg/L | 0.00026 | 0.0003 mg/L | 0.00026 | 93.54% | | |
| Cr 267.716† | 72.8 | 0.0003 mg/L | 0.00005 | 0.0003 mg/L | 0.00005 | 15.08% | | |
| Cu 324.752† | -343.3 | 0.0002 mg/L | 0.00021 | 0.0002 mg/L | 0.00021 | 96.97% | | |
| Fe 238.204† | 672158.8 | 19.96 mg/L | 0.169 | 19.96 mg/L | 0.169 | 0.85% | | |
| QC value within limits for Fe 238.204 Recovery = 99.80% | | | | | | | | |
| K 766.490† | 58901.2 | 12.51 mg/L | 0.114 | 12.51 mg/L | 0.114 | 0.91% | | |
| QC value within limits for K 766.490 Recovery = 100.08% | | | | | | | | |
| Mg 279.077† | 59349.6 | 12.43 mg/L | 0.346 | 12.43 mg/L | 0.346 | 2.78% | | |
| QC value within limits for Mg 279.077 Recovery = 99.43% | | | | | | | | |
| Mn 257.610† | 260.4 | -0.0001 mg/L | 0.00003 | -0.0001 mg/L | 0.00003 | 26.25% | | |
| Mo 202.031† | 55624.1 | 0.9862 mg/L | 0.00773 | 0.9862 mg/L | 0.00773 | 0.78% | | |
| QC value within limits for Mo 202.031 Recovery = 98.62% | | | | | | | | |
| Na 330.237† | 682.7 | 12.00 mg/L | 0.289 | 12.00 mg/L | 0.289 | 2.41% | | |
| QC value within limits for Na 330.237 Recovery = 96.00% | | | | | | | | |
| Ni 232.003† | 750.9 | 0.0110 mg/L | 0.00095 | 0.0110 mg/L | 0.00095 | 8.63% | | |
| Pb 220.353† | 46.7 | 0.0027 mg/L | 0.00063 | 0.0027 mg/L | 0.00063 | 23.47% | | |
| Sb 206.836† | -39.1 | -0.0032 mg/L | 0.00035 | -0.0032 mg/L | 0.00035 | 10.82% | | |
| Se 196.026† | -16.4 | -0.0013 mg/L | 0.00366 | -0.0013 mg/L | 0.00366 | 292.06% | | |
| Tl 190.801† | -9.3 | 0.0032 mg/L | 0.00187 | 0.0032 mg/L | 0.00187 | 57.77% | | |
| V 292.402† | -112.8 | -0.0009 mg/L | 0.00013 | -0.0009 mg/L | 0.00013 | 14.48% | | |
| Zn 213.857† | -45.6 | -0.0021 mg/L | 0.00020 | -0.0021 mg/L | 0.00020 | 9.57% | | |

P 178.221† 26544.3 9.571 mg/L 0.0887 9.571 mg/L 0.0887 0.93%
 QC value within limits for P 178.221 Recovery = 95.71%
 Si 251.611† 3173.7 0.064 mg/L 0.0014 0.064 mg/L 0.0014 2.11%
 All analyte(s) passed QC.

Sequence No.: 8

Sample ID: IPC-3

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 4/15/2021 10:08:07 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: IPC-3

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 256.0 kPa | 0.75 L/min |

Mean Data: IPC-3

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 2775898.1 | 1.00 mg/L | 0.021 | | | 2.06% |
| Sc 361.383 | 4646055.0 | 1.01 mg/L | 0.022 | | | 2.22% |
| Ag 328.068† | 174620.7 | 0.51554 mg/L | 0.016882 | 0.51554 mg/L | 0.016882 | 3.27% |
| QC value within limits for Ag 328.068 Recovery = 103.11% | | | | | | |
| Al 308.215† | 109.4 | 0.0040 mg/L | 0.00784 | 0.0040 mg/L | 0.00784 | 195.45% |
| As 188.979† | 19.5 | 0.0039 mg/L | 0.00182 | 0.0039 mg/L | 0.00182 | 46.46% |
| B 249.772† | 199525.5 | 1.017 mg/L | 0.0365 | 1.017 mg/L | 0.0365 | 3.59% |
| QC value within limits for B 249.772 Recovery = 101.68% | | | | | | |
| Ba 233.527† | 26.5 | 0.0001 mg/L | 0.00015 | 0.0001 mg/L | 0.00015 | 107.97% |
| Be 313.107† | 235065.5 | 0.02493 mg/L | 0.000083 | 0.02493 mg/L | 0.000083 | 0.33% |
| Ca 317.933† | 122.4 | 0.0034 mg/L | 0.00313 | 0.0034 mg/L | 0.00313 | 91.72% |
| Cd 214.440† | -865.1 | -0.00187 mg/L | 0.000029 | -0.00187 mg/L | 0.000029 | 1.56% |
| Co 228.616† | 4.1 | 0.0000 mg/L | 0.00016 | 0.0000 mg/L | 0.00016 | 344.98% |
| Cr 267.716† | 58.9 | 0.0003 mg/L | 0.00014 | 0.0003 mg/L | 0.00014 | 55.36% |
| Cu 324.752† | 1187.6 | 0.0030 mg/L | 0.00086 | 0.0030 mg/L | 0.00086 | 28.82% |
| Fe 238.204† | 526.8 | 0.0156 mg/L | 0.00199 | 0.0156 mg/L | 0.00199 | 12.74% |
| K 766.490† | 210.8 | 0.0447 mg/L | 0.03062 | 0.0447 mg/L | 0.03062 | 68.47% |
| Mg 279.077† | 41.2 | 0.0086 mg/L | 0.00422 | 0.0086 mg/L | 0.00422 | 48.84% |
| Mn 257.610† | 418.3 | 0.0005 mg/L | 0.00004 | 0.0005 mg/L | 0.00004 | 7.73% |
| Mo 202.031† | 143.8 | 0.0025 mg/L | 0.00052 | 0.0025 mg/L | 0.00052 | 20.40% |
| Na 330.237† | 11.7 | 0.2027 mg/L | 0.43732 | 0.2027 mg/L | 0.43732 | 215.76% |
| Ni 232.003† | -81.3 | -0.0015 mg/L | 0.00144 | -0.0015 mg/L | 0.00144 | 96.00% |
| Pb 220.353† | 46.3 | 0.0016 mg/L | 0.00071 | 0.0016 mg/L | 0.00071 | 45.64% |
| Sb 206.836† | 16632.5 | 1.987 mg/L | 0.0740 | 1.987 mg/L | 0.0740 | 3.72% |
| QC value within limits for Sb 206.836 Recovery = 99.33% | | | | | | |
| Se 196.026† | 4.0 | 0.0017 mg/L | 0.00487 | 0.0017 mg/L | 0.00487 | 286.65% |
| Tl 190.801† | 12649.3 | 1.948 mg/L | 0.0534 | 1.948 mg/L | 0.0534 | 2.74% |
| QC value within limits for Tl 190.801 Recovery = 97.40% | | | | | | |
| V 292.402† | -21.6 | 0.0000 mg/L | 0.00013 | 0.0000 mg/L | 0.00013 | 299.60% |
| Zn 213.857† | 1027.9 | 0.0042 mg/L | 0.00042 | 0.0042 mg/L | 0.00042 | 10.09% |
| P 178.221† | 11.0 | 0.004 mg/L | 0.0031 | 0.004 mg/L | 0.0031 | 77.91% |
| Si 251.611† | 36826.3 | 0.821 mg/L | 0.0275 | 0.821 mg/L | 0.0275 | 3.35% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 9

Sample ID: ICV-1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 4/15/2021 10:12:14 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: ICV-1

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 257.0 kPa | 0.75 L/min |

Mean Data: ICV-1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-----------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Y 371.029 | 2782751.6 | 1.01 mg/L | 0.010 | | | 0.97% |

| | | | | | | |
|--|-----------|---------------|----------|---------------|----------|---------|
| Sc 361.383 | 4676069.2 | 1.01 mg/L | 0.009 | | | 0.87% |
| Ag 328.068† | -1714.0 | -0.00299 mg/L | 0.000679 | -0.00299 mg/L | 0.000679 | 22.66% |
| Al 308.215† | 589.5 | -0.0081 mg/L | 0.00403 | -0.0081 mg/L | 0.00403 | 49.73% |
| As 188.979† | 4991.4 | 1.000 mg/L | 0.0043 | 1.000 mg/L | 0.0043 | 0.43% |
| QC value within limits for As 188.979 Recovery = 100.04% | | | | | | |
| B 249.772† | 5355.4 | 0.0271 mg/L | 0.00135 | 0.0271 mg/L | 0.00135 | 4.99% |
| Ba 233.527† | -455.1 | -0.0007 mg/L | 0.00014 | -0.0007 mg/L | 0.00014 | 21.31% |
| Be 313.107† | 9188865.6 | 0.97105 mg/L | 0.010521 | 0.97105 mg/L | 0.010521 | 1.08% |
| QC value within limits for Be 313.107 Recovery = 97.11% | | | | | | |
| Ca 317.933† | 36000.6 | 1.000 mg/L | 0.0292 | 1.000 mg/L | 0.0292 | 2.92% |
| Cd 214.440† | 434092.3 | 0.93657 mg/L | 0.016619 | 0.93657 mg/L | 0.016619 | 1.77% |
| QC value within limits for Cd 214.440 Recovery = 93.66% | | | | | | |
| Co 228.616† | 92888.6 | 1.035 mg/L | 0.0292 | 1.035 mg/L | 0.0292 | 2.82% |
| QC value within limits for Co 228.616 Recovery = 103.52% | | | | | | |
| Cr 267.716† | 239485.1 | 1.031 mg/L | 0.0273 | 1.031 mg/L | 0.0273 | 2.64% |
| QC value within limits for Cr 267.716 Recovery = 103.11% | | | | | | |
| Cu 324.752† | 376545.5 | 0.9413 mg/L | 0.02645 | 0.9413 mg/L | 0.02645 | 2.81% |
| QC value within limits for Cu 324.752 Recovery = 94.13% | | | | | | |
| Fe 238.204† | 32696.2 | 0.9792 mg/L | 0.02438 | 0.9792 mg/L | 0.02438 | 2.49% |
| QC value within limits for Fe 238.204 Recovery = 97.92% | | | | | | |
| K 766.490† | -32.9 | -0.0061 mg/L | 0.02302 | -0.0061 mg/L | 0.02302 | 376.88% |
| Mg 279.077† | 4515.8 | 0.9526 mg/L | 0.02950 | 0.9526 mg/L | 0.02950 | 3.10% |
| Mn 257.610† | 889471.8 | 1.013 mg/L | 0.0014 | 1.013 mg/L | 0.0014 | 0.14% |
| QC value within limits for Mn 257.610 Recovery = 101.33% | | | | | | |
| Mo 202.031† | 54195.3 | 0.9600 mg/L | 0.02402 | 0.9600 mg/L | 0.02402 | 2.50% |
| QC value within limits for Mo 202.031 Recovery = 96.00% | | | | | | |
| Na 330.237† | 3.4 | -0.7311 mg/L | 0.86972 | -0.7311 mg/L | 0.86972 | 118.96% |
| Ni 232.003† | 55596.7 | 0.9773 mg/L | 0.02843 | 0.9773 mg/L | 0.02843 | 2.91% |
| QC value within limits for Ni 232.003 Recovery = 97.73% | | | | | | |
| Pb 220.353† | 30204.3 | 1.017 mg/L | 0.0310 | 1.017 mg/L | 0.0310 | 3.05% |
| QC value within limits for Pb 220.353 Recovery = 101.75% | | | | | | |
| Sb 206.836† | 8877.9 | 1.054 mg/L | 0.0044 | 1.054 mg/L | 0.0044 | 0.42% |
| QC value within limits for Sb 206.836 Recovery = 105.36% | | | | | | |
| Se 196.026† | 2355.6 | 0.9883 mg/L | 0.00526 | 0.9883 mg/L | 0.00526 | 0.53% |
| QC value within limits for Se 196.026 Recovery = 98.83% | | | | | | |
| Tl 190.801† | 6160.7 | 0.9497 mg/L | 0.00906 | 0.9497 mg/L | 0.00906 | 0.95% |
| QC value within limits for Tl 190.801 Recovery = 94.97% | | | | | | |
| V 292.402† | 473447.6 | 0.9829 mg/L | 0.00205 | 0.9829 mg/L | 0.00205 | 0.21% |
| QC value within limits for V 292.402 Recovery = 98.29% | | | | | | |
| Zn 213.857† | 241678.0 | 0.9819 mg/L | 0.02477 | 0.9819 mg/L | 0.02477 | 2.52% |
| QC value within limits for Zn 213.857 Recovery = 98.19% | | | | | | |
| P 178.221† | -6.6 | 0.002 mg/L | 0.0014 | 0.002 mg/L | 0.0014 | 87.68% |
| Si 251.611† | 20529.4 | 0.450 mg/L | 0.0126 | 0.450 mg/L | 0.0126 | 2.80% |

All analyte(s) passed QC.
User canceled analysis.

=====
Analysis Begun

Start Time: 4/15/2021 10:15:55 AM Plasma On Time: 4/15/2021 6:26:54 AM
Logged In Analyst: Optima7300DV Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210415_2.sif
Batch ID:
Results Data Set: 210415_2
Results Library: C:\pe\Optima7300DV\Results\Results.mdb

=====
Sequence No.: 8 Autosampler Location: 4
Sample ID: IPC-3 Date Collected: 4/15/2021 10:15:56 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

=====
Nebulizer Parameters: IPC-3
Analyte Back Pressure Flow
All 256.0 kPa 0.75 L/min

=====
Mean Data: IPC-3

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 2785765.9 | 1.01 mg/L | 0.023 | | | 2.27% |
| Sc 361.383 | 4661138.3 | 1.01 mg/L | 0.023 | | | 2.28% |
| Ag 328.068† | 176354.5 | 0.52066 mg/L | 0.014556 | 0.52066 mg/L | 0.014556 | 2.80% |
| QC value within limits for Ag 328.068 Recovery = 104.13% | | | | | | |
| Al 308.215† | 206.9 | 0.0076 mg/L | 0.00486 | 0.0076 mg/L | 0.00486 | 63.69% |
| As 188.979† | 15.4 | 0.0031 mg/L | 0.00220 | 0.0031 mg/L | 0.00220 | 71.57% |
| B 249.772† | 203499.6 | 1.037 mg/L | 0.0330 | 1.037 mg/L | 0.0330 | 3.18% |
| QC value within limits for B 249.772 Recovery = 103.71% | | | | | | |
| Ba 233.527† | -4.5 | 0.0000 mg/L | 0.00009 | 0.0000 mg/L | 0.00009 | 348.98% |
| Be 313.107† | 235916.9 | 0.02502 mg/L | 0.000043 | 0.02502 mg/L | 0.000043 | 0.17% |
| Ca 317.933† | -174.9 | -0.0048 mg/L | 0.00267 | -0.0048 mg/L | 0.00267 | 55.88% |
| Cd 214.440† | -936.3 | -0.00202 mg/L | 0.000044 | -0.00202 mg/L | 0.000044 | 2.17% |
| Co 228.616† | 9.1 | 0.0001 mg/L | 0.00007 | 0.0001 mg/L | 0.00007 | 71.34% |
| Cr 267.716† | 30.4 | 0.0001 mg/L | 0.00014 | 0.0001 mg/L | 0.00014 | 110.73% |
| Cu 324.752† | 1148.3 | 0.0029 mg/L | 0.00060 | 0.0029 mg/L | 0.00060 | 20.83% |
| Fe 238.204† | 151.0 | 0.0045 mg/L | 0.00026 | 0.0045 mg/L | 0.00026 | 5.85% |
| K 766.490† | 65.9 | 0.0139 mg/L | 0.03893 | 0.0139 mg/L | 0.03893 | 280.35% |
| Mg 279.077† | 30.3 | 0.0063 mg/L | 0.00165 | 0.0063 mg/L | 0.00165 | 26.08% |
| Mn 257.610† | 498.3 | 0.0006 mg/L | 0.00003 | 0.0006 mg/L | 0.00003 | 4.63% |
| Mo 202.031† | 149.0 | 0.0026 mg/L | 0.00032 | 0.0026 mg/L | 0.00032 | 12.28% |
| Na 330.237† | 13.2 | 0.2298 mg/L | 0.36054 | 0.2298 mg/L | 0.36054 | 156.91% |
| Ni 232.003† | -220.5 | -0.0040 mg/L | 0.00095 | -0.0040 mg/L | 0.00095 | 23.50% |
| Pb 220.353† | 32.2 | 0.0011 mg/L | 0.00042 | 0.0011 mg/L | 0.00042 | 38.54% |
| Sb 206.836† | 17021.9 | 2.033 mg/L | 0.0582 | 2.033 mg/L | 0.0582 | 2.86% |
| QC value within limits for Sb 206.836 Recovery = 101.66% | | | | | | |
| Se 196.026† | 8.3 | 0.0035 mg/L | 0.00190 | 0.0035 mg/L | 0.00190 | 54.43% |
| Tl 190.801† | 12936.9 | 1.992 mg/L | 0.0420 | 1.992 mg/L | 0.0420 | 2.11% |
| QC value within limits for Tl 190.801 Recovery = 99.62% | | | | | | |
| V 292.402† | 34.6 | 0.0001 mg/L | 0.00025 | 0.0001 mg/L | 0.00025 | 354.11% |
| Zn 213.857† | 1072.4 | 0.0044 mg/L | 0.00041 | 0.0044 mg/L | 0.00041 | 9.28% |
| P 178.221† | -0.9 | 0.000 mg/L | 0.0031 | 0.000 mg/L | 0.0031 | 974.20% |
| Si 251.611† | 37308.0 | 0.832 mg/L | 0.0238 | 0.832 mg/L | 0.0238 | 2.86% |

All analyte(s) passed QC.
User canceled analysis.

(ND) Report & Return

=====
Analysis Begun

Start Time: 4/15/2021 10:19:42 AM Plasma On Time: 4/15/2021 6:26:54 AM
Logged In Analyst: Optima7300DV Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210415_2.sif
Batch ID:
Results Data Set: 210415_2
Results Library: C:\pe\Optima7300DV\Results\Results.mdb

=====
Sequence No.: 8 Autosampler Location: 4
Sample ID: IPC-3 Date Collected: 4/15/2021 10:19:43 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

=====
Nebulizer Parameters: IPC-3
Analyte Back Pressure Flow
All 256.0 kPa 0.75 L/min

=====
Mean Data: IPC-3

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|---------|
| Y 371.029 | 2816762.9 | 1.02 mg/L | 0.016 | | | 1.60% |
| Sc 361.383 | 4703356.6 | 1.02 mg/L | 0.016 | | | 1.58% |
| Ag 328.068† | 173561.8 | 0.51241 mg/L | 0.012567 | 0.51241 mg/L | 0.012567 | 2.45% |
| QC value within limits for Ag 328.068 Recovery = 102.48% | | | | | | |
| Al 308.215† | -16.7 | -0.0007 mg/L | 0.00489 | -0.0007 mg/L | 0.00489 | 721.45% |
| As 188.979† | 13.1 | 0.0026 mg/L | 0.00096 | 0.0026 mg/L | 0.00096 | 36.47% |
| B 249.772† | 201883.4 | 1.029 mg/L | 0.0266 | 1.029 mg/L | 0.0266 | 2.59% |

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QC value within limits for B 249.772 Recovery = 102.88%

| | | | | | | | |
|----|----------|----------|---------------|----------|---------------|----------|---------|
| Ba | 233.527† | 0.7 | 0.0000 mg/L | 0.00010 | 0.0000 mg/L | 0.00010 | >999.9% |
| Be | 313.107† | 235559.6 | 0.02499 mg/L | 0.000034 | 0.02499 mg/L | 0.000034 | 0.14% |
| Ca | 317.933† | -276.5 | -0.0076 mg/L | 0.000054 | -0.0076 mg/L | 0.000054 | 7.13% |
| Cd | 214.440† | -978.0 | -0.00211 mg/L | 0.000056 | -0.00211 mg/L | 0.000056 | 2.67% |
| Co | 228.616† | 3.0 | 0.0000 mg/L | 0.00015 | 0.0000 mg/L | 0.00015 | 452.79% |
| Cr | 267.716† | 45.6 | 0.0002 mg/L | 0.00016 | 0.0002 mg/L | 0.00016 | 80.04% |
| Cu | 324.752† | 644.4 | 0.0016 mg/L | 0.00030 | 0.0016 mg/L | 0.00030 | 18.75% |
| Fe | 238.204† | 121.4 | 0.0036 mg/L | 0.00018 | 0.0036 mg/L | 0.00018 | 4.86% |
| K | 766.490† | 0.6 | -0.0002 mg/L | 0.02595 | -0.0002 mg/L | 0.02595 | >999.9% |
| Mg | 279.077† | 13.6 | 0.0028 mg/L | 0.00186 | 0.0028 mg/L | 0.00186 | 65.45% |
| Mn | 257.610† | 199.6 | 0.0002 mg/L | 0.00003 | 0.0002 mg/L | 0.00003 | 13.01% |
| Mo | 202.031† | 52.3 | 0.0009 mg/L | 0.00005 | 0.0009 mg/L | 0.00005 | 4.89% |
| Na | 330.237† | 26.8 | 0.4702 mg/L | 0.46874 | 0.4702 mg/L | 0.46874 | 99.70% |
| Ni | 232.003† | -143.9 | -0.0026 mg/L | 0.00109 | -0.0026 mg/L | 0.00109 | 41.52% |
| Pb | 220.353† | 29.2 | 0.0010 mg/L | 0.00088 | 0.0010 mg/L | 0.00088 | 89.63% |
| Sb | 206.836† | 16719.1 | 1.997 mg/L | 0.0453 | 1.997 mg/L | 0.0453 | 2.27% |

QC value within limits for Sb 206.836 Recovery = 99.85%

| | | | | | | | |
|----|----------|---------|--------------|---------|--------------|---------|---------|
| Se | 196.026† | -0.5 | -0.0002 mg/L | 0.00599 | -0.0002 mg/L | 0.00599 | >999.9% |
| Tl | 190.801† | 12740.4 | 1.962 mg/L | 0.0448 | 1.962 mg/L | 0.0448 | 2.28% |

QC value within limits for Tl 190.801 Recovery = 98.11%

| | | | | | | | |
|----|----------|---------|-------------|---------|-------------|---------|---------|
| V | 292.402† | -5.0 | 0.0000 mg/L | 0.00015 | 0.0000 mg/L | 0.00015 | >999.9% |
| Zn | 213.857† | 776.3 | 0.0032 mg/L | 0.00037 | 0.0032 mg/L | 0.00037 | 11.47% |
| P | 178.221† | 0.8 | 0.000 mg/L | 0.0038 | 0.000 mg/L | 0.0038 | >999.9% |
| Si | 251.611† | 36600.9 | 0.816 mg/L | 0.0209 | 0.816 mg/L | 0.0209 | 2.57% |

All analyte(s) passed QC. ✓

Sequence No.: 9
 Sample ID: ICV-1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 4/15/2021 10:23:50 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICV-1

Analyte Back Pressure Flow
 All 254.0 kPa 0.75 L/min

4/16/21

Mean Data: ICV-1

| Analyte | Mean Corrected Intensity | Conc. | Calib. Units | Std.Dev. | Sample Conc. | Units | Std.Dev. | RSD |
|--|--------------------------|----------|--------------|----------|--------------|-------|----------|---------|
| Y 371.029 | 2754003.6 | 0.995 | mg/L | 0.0190 | | | | 1.91% |
| Sc 361.383 | 4612118.2 | 1.00 | mg/L | 0.019 | | | | 1.89% |
| Ag 328.068† | -1718.3 | -0.00300 | mg/L | 0.000696 | -0.00300 | mg/L | 0.000696 | 23.19% |
| Al 308.215† | 629.5 | -0.0067 | mg/L | 0.00720 | -0.0067 | mg/L | 0.00720 | 107.50% |
| As 188.979† | 4925.4 | 0.9871 | mg/L | 0.02158 | 0.9871 | mg/L | 0.02158 | 2.19% |
| QC value within limits for As 188.979 Recovery = 98.71% | | | | | | | | |
| B 249.772† | 7067.5 | 0.0358 | mg/L | 0.00084 | 0.0358 | mg/L | 0.00084 | 2.34% |
| Ba 233.527† | -467.2 | -0.0007 | mg/L | 0.00007 | -0.0007 | mg/L | 0.00007 | 9.38% |
| Be 313.107† | 9231211.1 | 0.97552 | mg/L | 0.013432 | 0.97552 | mg/L | 0.013432 | 1.38% |
| QC value within limits for Be 313.107 Recovery = 97.55% | | | | | | | | |
| Ca 317.933† | 36433.2 | 1.012 | mg/L | 0.0273 | 1.012 | mg/L | 0.0273 | 2.70% |
| Cd 214.440† | 432626.7 | 0.93341 | mg/L | 0.019070 | 0.93341 | mg/L | 0.019070 | 2.04% |
| QC value within limits for Cd 214.440 Recovery = 93.34% | | | | | | | | |
| Co 228.616† | 92202.0 | 1.028 | mg/L | 0.0281 | 1.028 | mg/L | 0.0281 | 2.73% |
| QC value within limits for Co 228.616 Recovery = 102.76% | | | | | | | | |
| Cr 267.716† | 239208.9 | 1.030 | mg/L | 0.0257 | 1.030 | mg/L | 0.0257 | 2.49% |
| QC value within limits for Cr 267.716 Recovery = 102.99% | | | | | | | | |
| Cu 324.752† | 378510.5 | 0.9462 | mg/L | 0.02417 | 0.9462 | mg/L | 0.02417 | 2.55% |
| QC value within limits for Cu 324.752 Recovery = 94.62% | | | | | | | | |
| Fe 238.204† | 32974.5 | 0.9874 | mg/L | 0.02575 | 0.9874 | mg/L | 0.02575 | 2.61% |
| QC value within limits for Fe 238.204 Recovery = 98.74% | | | | | | | | |
| K 766.490† | -34.1 | -0.0063 | mg/L | 0.04822 | -0.0063 | mg/L | 0.04822 | 761.91% |
| Mg 279.077† | 4561.3 | 0.9621 | mg/L | 0.02390 | 0.9621 | mg/L | 0.02390 | 2.48% |
| Mn 257.610† | 885041.6 | 1.008 | mg/L | 0.0015 | 1.008 | mg/L | 0.0015 | 0.15% |
| QC value within limits for Mn 257.610 Recovery = 100.83% | | | | | | | | |
| Mo 202.031† | 54395.2 | 0.9635 | mg/L | 0.02588 | 0.9635 | mg/L | 0.02588 | 2.69% |
| QC value within limits for Mo 202.031 Recovery = 96.35% | | | | | | | | |
| Na 330.237† | 1.6 | -0.7600 | mg/L | 0.27145 | -0.7600 | mg/L | 0.27145 | 35.72% |
| Ni 232.003† | 55469.4 | 0.9750 | mg/L | 0.02785 | 0.9750 | mg/L | 0.02785 | 2.86% |

| | | | | | | |
|--|----------|-------------|---------|-------------|---------|---------|
| QC value within limits for Ni 232.003 Recovery = 97.50% | | | | | | |
| Pb 220.353† | 30023.0 | 1.011 mg/L | 0.0268 | 1.011 mg/L | 0.0268 | 2.65% |
| QC value within limits for Pb 220.353 Recovery = 101.14% | | | | | | |
| Sb 206.836† | 8831.9 | 1.048 mg/L | 0.0203 | 1.048 mg/L | 0.0203 | 1.94% |
| QC value within limits for Sb 206.836 Recovery = 104.81% | | | | | | |
| Se 196.026† | 2339.1 | 0.9813 mg/L | 0.02316 | 0.9813 mg/L | 0.02316 | 2.36% |
| QC value within limits for Se 196.026 Recovery = 98.13% | | | | | | |
| Tl 190.801† | 6171.4 | 0.9514 mg/L | 0.01852 | 0.9514 mg/L | 0.01852 | 1.95% |
| QC value within limits for Tl 190.801 Recovery = 95.14% | | | | | | |
| V 292.402† | 474451.5 | 0.9849 mg/L | 0.00123 | 0.9849 mg/L | 0.00123 | 0.12% |
| QC value within limits for V 292.402 Recovery = 98.49% | | | | | | |
| Zn 213.857† | 241180.4 | 0.9799 mg/L | 0.02645 | 0.9799 mg/L | 0.02645 | 2.70% |
| QC value within limits for Zn 213.857 Recovery = 97.99% | | | | | | |
| P 178.221† | -19.0 | -0.003 mg/L | 0.0045 | -0.003 mg/L | 0.0045 | 157.99% |
| Si 251.611† | 20319.9 | 0.445 mg/L | 0.0096 | 0.445 mg/L | 0.0096 | 2.16% |
| All analyte(s) passed QC. ✓ | | | | | | |

Sequence No.: 10
Sample ID: ICV-2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 4/15/2021 10:27:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICV-2
Analyte Back Pressure Flow
All 255.0 kPa 0.75 L/min

Mean Data: ICV-2

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 2807461.4 | 1.01 mg/L | 0.006 | 0.006 | | | 0.60% |
| Sc 361.383 | 4711153.1 | 1.02 mg/L | 0.006 | 0.006 | | | 0.61% |
| Ag 328.068† | 162512.2 | 0.47977 mg/L | 0.009416 | 0.009416 | 0.47977 mg/L | 0.009416 | 1.96% |
| QC value within limits for Ag 328.068 Recovery = 95.95% | | | | | | | |
| Al 308.215† | 24566.7 | 0.9120 mg/L | 0.02058 | 0.02058 | 0.9120 mg/L | 0.02058 | 2.26% |
| QC value within limits for Al 308.215 Recovery = 91.20% | | | | | | | |
| As 188.979† | 15.5 | 0.0032 mg/L | 0.00113 | 0.00113 | 0.0032 mg/L | 0.00113 | 35.49% |
| B 249.772† | 190711.8 | 0.9718 mg/L | 0.02107 | 0.02107 | 0.9718 mg/L | 0.02107 | 2.17% |
| QC value within limits for B 249.772 Recovery = 97.18% | | | | | | | |
| Ba 233.527† | 189962.5 | 1.024 mg/L | 0.0196 | 0.0196 | 1.024 mg/L | 0.0196 | 1.92% |
| QC value within limits for Ba 233.527 Recovery = 102.38% | | | | | | | |
| Be 313.107† | 4069.8 | 0.00053 mg/L | 0.000057 | 0.000057 | 0.00053 mg/L | 0.000057 | 10.74% |
| Ca 317.933† | -490.5 | -0.0129 mg/L | 0.00027 | 0.00027 | -0.0129 mg/L | 0.00027 | 2.10% |
| Cd 214.440† | 188.3 | 0.00043 mg/L | 0.000033 | 0.000033 | 0.00043 mg/L | 0.000033 | 7.69% |
| Co 228.616† | -60.8 | 0.0004 mg/L | 0.00010 | 0.00010 | 0.0004 mg/L | 0.00010 | 25.24% |
| Cr 267.716† | 128.5 | 0.0006 mg/L | 0.00007 | 0.00007 | 0.0006 mg/L | 0.00007 | 12.46% |
| Cu 324.752† | 911.7 | 0.0022 mg/L | 0.00035 | 0.00035 | 0.0022 mg/L | 0.00035 | 15.59% |
| Fe 238.204† | 31.5 | 0.0010 mg/L | 0.00012 | 0.00012 | 0.0010 mg/L | 0.00012 | 12.01% |
| K 766.490† | 47838.4 | 10.18 mg/L | 0.148 | 0.148 | 10.18 mg/L | 0.148 | 1.45% |
| Mg 279.077† | 2.1 | 0.0004 mg/L | 0.00328 | 0.00328 | 0.0004 mg/L | 0.00328 | 764.22% |
| Mn 257.610† | 577.3 | 0.0007 mg/L | 0.00007 | 0.00007 | 0.0007 mg/L | 0.00007 | 11.07% |
| Mo 202.031† | 161.9 | 0.0028 mg/L | 0.00052 | 0.00052 | 0.0028 mg/L | 0.00052 | 18.35% |
| Na 330.237† | 54.0 | 0.9465 mg/L | 0.46618 | 0.46618 | 0.9465 mg/L | 0.46618 | 49.25% |
| Ni 232.003† | -11.6 | -0.0001 mg/L | 0.00063 | 0.00063 | -0.0001 mg/L | 0.00063 | 692.75% |
| Pb 220.353† | 51.7 | 0.0019 mg/L | 0.00036 | 0.00036 | 0.0019 mg/L | 0.00036 | 19.56% |
| Sb 206.836† | 117.1 | 0.0139 mg/L | 0.00187 | 0.00187 | 0.0139 mg/L | 0.00187 | 13.49% |
| Se 196.026† | 3.8 | 0.0016 mg/L | 0.00476 | 0.00476 | 0.0016 mg/L | 0.00476 | 289.22% |
| Tl 190.801† | 23.5 | 0.0039 mg/L | 0.00203 | 0.00203 | 0.0039 mg/L | 0.00203 | 51.46% |
| V 292.402† | 152.2 | 0.0003 mg/L | 0.00017 | 0.00017 | 0.0003 mg/L | 0.00017 | 56.54% |
| Zn 213.857† | 537.5 | 0.0024 mg/L | 0.00024 | 0.00024 | 0.0024 mg/L | 0.00024 | 9.99% |
| P 178.221† | -9.5 | -0.004 mg/L | 0.0016 | 0.0016 | -0.004 mg/L | 0.0016 | 44.52% |
| Si 251.611† | 98548.4 | 2.198 mg/L | 0.0424 | 0.0424 | 2.198 mg/L | 0.0424 | 1.93% |
| All analyte(s) passed QC. ✓ | | | | | | | |

Sequence No.: 11
Sample ID: ICV-3
Analyst:
Initial Sample Wt:

Autosampler Location: 7
Date Collected: 4/15/2021 10:31:44 AM
Data Type: Original
Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: ICV-3

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 256.0 kPa | 0.75 L/min |

Mean Data: ICV-3

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|---------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 2753402.0 | 0.995 mg/L | mg/L | 0.0073 | | | 0.73% |
| Sc 361.383 | 4636179.9 | 1.01 mg/L | mg/L | 0.008 | | | 0.80% |
| Ag 328.068† | 28.9 | -0.00019 mg/L | mg/L | 0.000248 | -0.00019 mg/L | 0.000248 | 127.59% |
| Al 308.215† | 493.2 | 0.0004 mg/L | mg/L | 0.00438 | 0.0004 mg/L | 0.00438 | >999.9% |
| As 188.979† | 49.1 | 0.0075 mg/L | mg/L | 0.00159 | 0.0075 mg/L | 0.00159 | 21.36% |
| B 249.772† | 196639.3 | 1.002 mg/L | mg/L | 0.0079 | 1.002 mg/L | 0.0079 | 0.79% |
| Ba 233.527† | 78.1 | 0.0004 mg/L | mg/L | 0.00011 | 0.0004 mg/L | 0.00011 | 28.01% |
| Be 313.107† | 278.2 | 0.00014 mg/L | mg/L | 0.000022 | 0.00014 mg/L | 0.000022 | 16.25% |
| Ca 317.933† | 356529.6 | 9.808 mg/L | mg/L | 0.1201 | 9.808 mg/L | 0.1201 | 1.22% |
| QC value within limits for Ca 317.933 Recovery = 98.08% | | | | | | | |
| Cd 214.440† | -78.8 | 0.00001 mg/L | mg/L | 0.000035 | 0.00001 mg/L | 0.000035 | 300.83% |
| Co 228.616† | -88.1 | 0.0000 mg/L | mg/L | 0.00019 | 0.0000 mg/L | 0.00019 | >999.9% |
| Cr 267.716† | 30.8 | 0.0001 mg/L | mg/L | 0.00011 | 0.0001 mg/L | 0.00011 | 188.67% |
| Cu 324.752† | 645.0 | 0.0008 mg/L | mg/L | 0.00031 | 0.0008 mg/L | 0.00031 | 39.16% |
| Fe 238.204† | -42.6 | -0.0011 mg/L | mg/L | 0.00021 | -0.0011 mg/L | 0.00021 | 19.33% |
| K 766.490† | 46768.6 | 9.941 mg/L | mg/L | 0.1224 | 9.941 mg/L | 0.1224 | 1.23% |
| QC value within limits for K 766.490 Recovery = 99.41% | | | | | | | |
| Mg 279.077† | 45496.4 | 9.532 mg/L | mg/L | 0.1171 | 9.532 mg/L | 0.1171 | 1.23% |
| QC value within limits for Mg 279.077 Recovery = 95.32% | | | | | | | |
| Mn 257.610† | -110.1 | -0.0002 mg/L | mg/L | 0.00002 | -0.0002 mg/L | 0.00002 | 13.51% |
| Mo 202.031† | 56040.3 | 0.9927 mg/L | mg/L | 0.00691 | 0.9927 mg/L | 0.00691 | 0.70% |
| Na 330.237† | 575.6 | 10.21 mg/L | mg/L | 0.274 | 10.21 mg/L | 0.274 | 2.68% |
| QC value within limits for Na 330.237 Recovery = 102.12% | | | | | | | |
| Ni 232.003† | 819.6 | 0.0102 mg/L | mg/L | 0.00108 | 0.0102 mg/L | 0.00108 | 10.66% |
| Pb 220.353† | -44.6 | 0.0002 mg/L | mg/L | 0.00014 | 0.0002 mg/L | 0.00014 | 63.91% |
| Sb 206.836† | -57.9 | -0.0042 mg/L | mg/L | 0.00164 | -0.0042 mg/L | 0.00164 | 38.81% |
| Se 196.026† | -2.1 | -0.0005 mg/L | mg/L | 0.00321 | -0.0005 mg/L | 0.00321 | 677.23% |
| Tl 190.801† | 1.2 | 0.0010 mg/L | mg/L | 0.00238 | 0.0010 mg/L | 0.00238 | 238.87% |
| V 292.402† | -169.0 | -0.0008 mg/L | mg/L | 0.00007 | -0.0008 mg/L | 0.00007 | 8.65% |
| Zn 213.857† | -645.8 | -0.0022 mg/L | mg/L | 0.00029 | -0.0022 mg/L | 0.00029 | 13.21% |
| P 178.221† | 13652.5 | 4.923 mg/L | mg/L | 0.0326 | 4.923 mg/L | 0.0326 | 0.66% |
| QC value within limits for P 178.221 Recovery = 98.46% | | | | | | | |
| Si 251.611† | 7257.7 | 0.148 mg/L | mg/L | 0.0013 | 0.148 mg/L | 0.0013 | 0.88% |
| All analyte(s) passed QC. | | | | | | | |

Sequence No.: 12

Autosampler Location: 8

Sample ID: ICV-4

Date Collected: 4/15/2021 10:35:50 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Nebulizer Parameters: ICV-4

| Analyte | Back Pressure | Flow |
|---------|---------------|------------|
| All | 256.0 kPa | 0.75 L/min |

Mean Data: ICV-4

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|---------------|--------------|----------|--------------------|----------|--------|
| Y 371.029 | 2830303.3 | 1.02 mg/L | mg/L | 0.018 | | | 1.76% |
| Sc 361.383 | 4732523.8 | 1.03 mg/L | mg/L | 0.018 | | | 1.75% |
| Ag 328.068† | -343.8 | -0.00101 mg/L | mg/L | 0.000296 | -0.00101 mg/L | 0.000296 | 29.16% |
| Al 308.215† | -361.7 | -0.0139 mg/L | mg/L | 0.00518 | -0.0139 mg/L | 0.00518 | 37.38% |
| As 188.979† | 30.6 | 0.0061 mg/L | mg/L | 0.00104 | 0.0061 mg/L | 0.00104 | 16.94% |
| B 249.772† | 3522.3 | 0.0179 mg/L | mg/L | 0.00066 | 0.0179 mg/L | 0.00066 | 3.67% |
| Ba 233.527† | 44.9 | 0.0002 mg/L | mg/L | 0.00004 | 0.0002 mg/L | 0.00004 | 16.29% |
| Be 313.107† | 794.2 | 0.00018 mg/L | mg/L | 0.000018 | 0.00018 mg/L | 0.000018 | 10.13% |
| Ca 317.933† | -455.8 | -0.0125 mg/L | mg/L | 0.00097 | -0.0125 mg/L | 0.00097 | 7.78% |
| Cd 214.440† | -47.3 | -0.00010 mg/L | mg/L | 0.000032 | -0.00010 mg/L | 0.000032 | 31.32% |

| | | | | | | |
|-------------|----------|--------------|---------|--------------|---------|---------|
| Co 228.616† | 30.9 | 0.0003 mg/L | 0.00008 | 0.0003 mg/L | 0.00008 | 22.42% |
| Cr 267.716† | -41.0 | -0.0002 mg/L | 0.00005 | -0.0002 mg/L | 0.00005 | 27.80% |
| Cu 324.752† | -187.6 | -0.0005 mg/L | 0.00027 | -0.0005 mg/L | 0.00027 | 55.55% |
| Fe 238.204† | 39.6 | 0.0012 mg/L | 0.00029 | 0.0012 mg/L | 0.00029 | 24.31% |
| K 766.490† | -50.6 | -0.0130 mg/L | 0.01946 | -0.0130 mg/L | 0.01946 | 149.73% |
| Mg 279.077† | 11.4 | 0.0023 mg/L | 0.00294 | 0.0023 mg/L | 0.00294 | 129.61% |
| Mn 257.610† | -162.0 | -0.0002 mg/L | 0.00002 | -0.0002 mg/L | 0.00002 | 11.44% |
| Mo 202.031† | 115.9 | 0.0021 mg/L | 0.00022 | 0.0021 mg/L | 0.00022 | 10.94% |
| Na 330.237† | 204.4 | 3.613 mg/L | 0.0502 | 3.613 mg/L | 0.0502 | 1.39% |
| Ni 232.003† | 642.0 | 0.0118 mg/L | 0.00035 | 0.0118 mg/L | 0.00035 | 2.98% |
| Pb 220.353† | 39.2 | 0.0013 mg/L | 0.00063 | 0.0013 mg/L | 0.00063 | 47.07% |
| Sb 206.836† | -19.1 | -0.0023 mg/L | 0.00202 | -0.0023 mg/L | 0.00202 | 88.17% |
| Se 196.026† | -7.1 | -0.0030 mg/L | 0.00176 | -0.0030 mg/L | 0.00176 | 59.06% |
| Tl 190.801† | 18.5 | 0.0029 mg/L | 0.00167 | 0.0029 mg/L | 0.00167 | 58.53% |
| V 292.402† | -171.6 | -0.0004 mg/L | 0.00011 | -0.0004 mg/L | 0.00011 | 29.85% |
| Zn 213.857† | -728.7 | -0.0030 mg/L | 0.00018 | -0.0030 mg/L | 0.00018 | 5.87% |
| P 178.221† | -11.5 | -0.004 mg/L | 0.0023 | -0.004 mg/L | 0.0023 | 56.06% |
| Si 251.611† | 110280.4 | 2.459 mg/L | 0.0645 | 2.459 mg/L | 0.0645 | 2.62% |

QC value within limits for Si 251.611 Recovery = 98.36%
 All analyte(s) passed QC.

Sequence No.: 13
 Sample ID: MRL CHECK 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 14
 Date Collected: 4/15/2021 10:39:56 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MRL CHECK 1

Analyte Back Pressure Flow
 All 257.0 kPa 0.75 L/min

2104090-MRLS

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 4/16/21

Mean Data: MRL CHECK 1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------------|----------|--------------------|----------|--------|
| Y 371.029 | 2779555.8 | 1.00 mg/L | 0.009 | | | 0.93% |
| Sc 361.383 | 4672303.4 | 1.01 mg/L | 0.010 | | | 1.00% |
| Ag 328.068† | 3307.5 | 0.00994 mg/L | 0.000143 | 0.00994 mg/L | 0.000143 | 1.44% |
| QC value within limits for Ag 328.068 Recovery = 99.43% | | | | | | |
| Al 308.215† | 50191.0 | 1.863 mg/L | 0.0567 | 1.863 mg/L | 0.0567 | 3.04% |
| QC value within limits for Al 308.215 Recovery = 93.16% | | | | | | |
| As 188.979† | 215.8 | 0.0432 mg/L | 0.00099 | 0.0432 mg/L | 0.00099 | 2.29% |
| QC value within limits for As 188.979 Recovery = 108.06% | | | | | | |
| B 249.772† | 24745.2 | 0.1253 mg/L | 0.00328 | 0.1253 mg/L | 0.00328 | 2.62% |
| QC value within limits for B 249.772 Recovery = 125.34% | | | | | | |
| Ba 233.527† | 9440.0 | 0.0511 mg/L | 0.00053 | 0.0511 mg/L | 0.00053 | 1.05% |
| QC value within limits for Ba 233.527 Recovery = 102.12% | | | | | | |
| Be 313.107† | 19557.9 | 0.00217 mg/L | 0.000032 | 0.00217 mg/L | 0.000032 | 1.49% |
| QC value within limits for Be 313.107 Recovery = 108.45% | | | | | | |
| Ca 317.933† | 139801.2 | 3.846 mg/L | 0.0821 | 3.846 mg/L | 0.0821 | 2.13% |
| QC value within limits for Ca 317.933 Recovery = 96.15% | | | | | | |
| Cd 214.440† | 804.1 | 0.00176 mg/L | 0.000058 | 0.00176 mg/L | 0.000058 | 3.29% |
| QC value within limits for Cd 214.440 Recovery = 87.93% | | | | | | |
| Co 228.616† | 8970.8 | 0.1000 mg/L | 0.00132 | 0.1000 mg/L | 0.00132 | 1.32% |
| QC value within limits for Co 228.616 Recovery = 100.02% | | | | | | |
| Cr 267.716† | 6942.8 | 0.0300 mg/L | 0.00040 | 0.0300 mg/L | 0.00040 | 1.33% |
| QC value within limits for Cr 267.716 Recovery = 99.86% | | | | | | |
| Cu 324.752† | 7434.8 | 0.0186 mg/L | 0.00102 | 0.0186 mg/L | 0.00102 | 5.49% |
| QC value within limits for Cu 324.752 Recovery = 92.92% | | | | | | |
| Fe 238.204† | 9488.1 | 0.2826 mg/L | 0.00701 | 0.2826 mg/L | 0.00701 | 2.48% |
| QC value within limits for Fe 238.204 Recovery = 94.19% | | | | | | |
| K 766.490† | 22565.7 | 4.796 mg/L | 0.0816 | 4.796 mg/L | 0.0816 | 1.70% |
| QC value within limits for K 766.490 Recovery = 95.92% | | | | | | |
| Mg 279.077† | 13607.5 | 2.849 mg/L | 0.0655 | 2.849 mg/L | 0.0655 | 2.30% |
| QC value within limits for Mg 279.077 Recovery = 94.98% | | | | | | |
| Mn 257.610† | 17293.9 | 0.0197 mg/L | 0.00049 | 0.0197 mg/L | 0.00049 | 2.47% |
| QC value within limits for Mn 257.610 Recovery = 98.49% | | | | | | |
| Mo 202.031† | 578.2 | 0.0102 mg/L | 0.00034 | 0.0102 mg/L | 0.00034 | 3.29% |
| QC value within limits for Mo 202.031 Recovery = 102.42% | | | | | | |
| Na 330.237† | 328.4 | 5.758 mg/L | 0.6813 | 5.758 mg/L | 0.6813 | 11.83% |

| | | | | | | |
|---------------------------------------|--------------------|-------------|---------|-------------|---------|--------|
| QC value within limits for Na 330.237 | Recovery = 115.16% | | | | | |
| Ni 232.003† | 3152.7 | 0.0569 mg/L | 0.00084 | 0.0569 mg/L | 0.00084 | 1.47% |
| QC value within limits for Ni 232.003 | Recovery = 113.76% | | | | | |
| Pb 220.353† | 1194.7 | 0.0405 mg/L | 0.00058 | 0.0405 mg/L | 0.00058 | 1.43% |
| QC value within limits for Pb 220.353 | Recovery = 101.31% | | | | | |
| Sb 206.836† | 1607.5 | 0.1918 mg/L | 0.00201 | 0.1918 mg/L | 0.00201 | 1.05% |
| QC value within limits for Sb 206.836 | Recovery = 95.88% | | | | | |
| Se 196.026† | 75.6 | 0.0319 mg/L | 0.00530 | 0.0319 mg/L | 0.00530 | 16.59% |
| QC value within limits for Se 196.026 | Recovery = 79.82% | | | | | |
| Tl 190.801† | 300.8 | 0.0467 mg/L | 0.00142 | 0.0467 mg/L | 0.00142 | 3.04% |
| QC value within limits for Tl 190.801 | Recovery = 93.30% | | | | | |
| V 292.402† | 47118.0 | 0.0976 mg/L | 0.00257 | 0.0976 mg/L | 0.00257 | 2.63% |
| QC value within limits for V 292.402 | Recovery = 97.60% | | | | | |
| Zn 213.857† | 8843.8 | 0.0359 mg/L | 0.00069 | 0.0359 mg/L | 0.00069 | 1.92% |
| QC value within limits for Zn 213.857 | Recovery = 89.78% | | | | | |
| P 178.221† | 1249.1 | 0.450 mg/L | 0.0121 | 0.450 mg/L | 0.0121 | 2.68% |
| QC value within limits for P 178.221 | Recovery = 90.05% | | | | | |
| Si 251.611† | 10215.4 | 0.228 mg/L | 0.0048 | 0.228 mg/L | 0.0048 | 2.09% |
| QC value within limits for Si 251.611 | Recovery = 113.93% | | | | | |

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: MRL CHECK 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 4/15/2021 10:43:41 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

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 4/16/21

Nebulizer Parameters: MRL CHECK 2

Analyte Back Pressure Flow
 All 257.0 kPa 0.75 L/min

2104178-MRL2

Mean Data: MRL CHECK 2

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---------------------------------------|--------------------------|--------------------|----------|--------------------|----------|-------|
| Y 371.029 | 3043400.8 | 1.10 mg/L | 0.004 | | | 0.39% |
| Sc 361.383 | 5110967.9 | 1.11 mg/L | 0.004 | | | 0.37% |
| Ag 328.068† | 2961.5 | 0.00891 mg/L | 0.000193 | 0.00891 mg/L | 0.000193 | 2.17% |
| QC value within limits for Ag 328.068 | Recovery = 89.06% | | | | | |
| Al 308.215† | 46093.2 | 1.711 mg/L | 0.0212 | 1.711 mg/L | 0.0212 | 1.24% |
| QC value within limits for Al 308.215 | Recovery = 85.55% | | | | | |
| As 188.979† | 218.3 | 0.0437 mg/L | 0.00143 | 0.0437 mg/L | 0.00143 | 3.26% |
| QC value within limits for As 188.979 | Recovery = 109.32% | | | | | |
| B 249.772† | 25331.8 | 0.1284 mg/L | 0.00214 | 0.1284 mg/L | 0.00214 | 1.67% |
| QC value within limits for B 249.772 | Recovery = 128.35% | | | | | |
| Ba 233.527† | 8844.5 | 0.0478 mg/L | 0.00042 | 0.0478 mg/L | 0.00042 | 0.87% |
| QC value within limits for Ba 233.527 | Recovery = 95.67% | | | | | |
| Be 313.107† | 18545.8 | 0.00206 mg/L | 0.000026 | 0.00206 mg/L | 0.000026 | 1.26% |
| QC value within limits for Be 313.107 | Recovery = 103.08% | | | | | |
| Ca 317.933† | 134572.1 | 3.702 mg/L | 0.1015 | 3.702 mg/L | 0.1015 | 2.74% |
| QC value within limits for Ca 317.933 | Recovery = 92.55% | | | | | |
| Cd 214.440† | 682.4 | 0.00149 mg/L | 0.000031 | 0.00149 mg/L | 0.000031 | 2.05% |
| QC value within limits for Cd 214.440 | Recovery = 74.65% | | | | | |
| Co 228.616† | 8478.3 | 0.0945 mg/L | 0.00047 | 0.0945 mg/L | 0.00047 | 0.50% |
| QC value within limits for Co 228.616 | Recovery = 94.53% | | | | | |
| Cr 267.716† | 6510.9 | 0.0281 mg/L | 0.00021 | 0.0281 mg/L | 0.00021 | 0.76% |
| QC value within limits for Cr 267.716 | Recovery = 93.65% | | | | | |
| Cu 324.752† | 6135.8 | 0.0153 mg/L | 0.00032 | 0.0153 mg/L | 0.00032 | 2.09% |
| QC value within limits for Cu 324.752 | Recovery = 76.69% | | | | | |
| Fe 238.204† | 9297.7 | 0.2769 mg/L | 0.00686 | 0.2769 mg/L | 0.00686 | 2.48% |
| QC value within limits for Fe 238.204 | Recovery = 92.29% | | | | | |
| K 766.490† | 21212.4 | 4.508 mg/L | 0.0932 | 4.508 mg/L | 0.0932 | 2.07% |
| QC value within limits for K 766.490 | Recovery = 90.17% | | | | | |
| Mg 279.077† | 12994.7 | 2.721 mg/L | 0.0595 | 2.721 mg/L | 0.0595 | 2.19% |
| QC value within limits for Mg 279.077 | Recovery = 90.70% | | | | | |
| Mn 257.610† | 15959.7 | 0.0182 mg/L | 0.00021 | 0.0182 mg/L | 0.00021 | 1.17% |
| QC value within limits for Mn 257.610 | Recovery = 90.88% | | | | | |
| Mo 202.031† | 532.9 | 0.0094 mg/L | 0.00020 | 0.0094 mg/L | 0.00020 | 2.11% |
| QC value within limits for Mo 202.031 | Recovery = 94.40% | | | | | |
| Na 330.237† | 304.2 | 5.334 mg/L | 0.5266 | 5.334 mg/L | 0.5266 | 9.87% |

| | | | | | | |
|---|---------|-------------|---------|-------------|---------|-------|
| QC value within limits for Na 330.237 Recovery = 106.68% | | | | | | |
| Ni 232.003† | 3175.5 | 0.0573 mg/L | 0.00052 | 0.0573 mg/L | 0.00052 | 0.91% |
| QC value within limits for Ni 232.003 Recovery = 114.69% | | | | | | |
| Pb 220.353† | 1135.3 | 0.0385 mg/L | 0.00052 | 0.0385 mg/L | 0.00052 | 1.35% |
| QC value within limits for Pb 220.353 Recovery = 96.26% | | | | | | |
| Sb 206.836† | 1498.3 | 0.1787 mg/L | 0.00181 | 0.1787 mg/L | 0.00181 | 1.01% |
| QC value within limits for Sb 206.836 Recovery = 89.36% | | | | | | |
| Se 196.026† | 71.2 | 0.0301 mg/L | 0.00109 | 0.0301 mg/L | 0.00109 | 3.61% |
| QC value within limits for Se 196.026 Recovery = 75.14% | | | | | | |
| Tl 190.801† | 276.5 | 0.0429 mg/L | 0.00089 | 0.0429 mg/L | 0.00089 | 2.08% |
| QC value within limits for Tl 190.801 Recovery = 85.76% | | | | | | |
| V 292.402† | 43454.5 | 0.0900 mg/L | 0.00116 | 0.0900 mg/L | 0.00116 | 1.28% |
| QC value within limits for V 292.402 Recovery = 90.01% | | | | | | |
| Zn 213.857† | 7910.0 | 0.0321 mg/L | 0.00035 | 0.0321 mg/L | 0.00035 | 1.10% |
| QC value within limits for Zn 213.857 Recovery = 80.23% | | | | | | |
| P 178.221† | 1161.0 | 0.418 mg/L | 0.0044 | 0.418 mg/L | 0.0044 | 1.05% |
| QC value within limits for P 178.221 Recovery = 83.70% | | | | | | |
| Si 251.611† | 2317.9 | 0.052 mg/L | 0.0013 | 0.052 mg/L | 0.0013 | 2.49% |
| QC value less than the lower limit for Si 251.611 Recovery = 25.88% | | | | | | |
| QC Failed. Continue with analysis. | | | | | | |

NO DW SiO2 IN WATER

Sequence No.: 15
 Sample ID: 2104096-BLK1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 4/15/2021 10:47:26 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104096-BLK1

Analyte Back Pressure Flow
 All 255.0 kPa 0.75 L/min

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Mean Data: 2104096-BLK1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|---------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 3064927.8 | 1.11 mg/L | 1.11 mg/L | 0.055 | | | 4.99% |
| Sc 361.383 | 5112378.0 | 1.11 mg/L | 1.11 mg/L | 0.055 | | | 4.94% |
| Ag 328.068† | -259.4 | -0.00077 mg/L | 0.000374 | 0.000374 | -0.00077 mg/L | 0.000374 | 48.79% |
| Al 308.215† | -805.2 | -0.0300 mg/L | 0.00851 | 0.00851 | -0.0300 mg/L | 0.00851 | 28.37% |
| As 188.979† | 22.1 | 0.0044 mg/L | 0.00100 | 0.00100 | 0.0044 mg/L | 0.00100 | 22.54% |
| B 249.772† | 1478.1 | 0.0075 mg/L | 0.00136 | 0.00136 | 0.0075 mg/L | 0.00136 | 18.05% |
| Ba 233.527† | 43.2 | 0.0002 mg/L | 0.00007 | 0.00007 | 0.0002 mg/L | 0.00007 | 29.83% |
| Be 313.107† | 1791.4 | 0.00029 mg/L | 0.000037 | 0.000037 | 0.00029 mg/L | 0.000037 | 12.94% |
| Ca 317.933† | 42.2 | 0.0011 mg/L | 0.00376 | 0.00376 | 0.0011 mg/L | 0.00376 | 329.15% |
| Cd 214.440† | -64.3 | -0.00014 mg/L | 0.000078 | 0.000078 | -0.00014 mg/L | 0.000078 | 55.97% |
| Co 228.616† | -2.7 | 0.0000 mg/L | 0.00015 | 0.00015 | 0.0000 mg/L | 0.00015 | 469.27% |
| Cr 267.716† | -46.2 | -0.0002 mg/L | 0.00004 | 0.00004 | -0.0002 mg/L | 0.00004 | 20.13% |
| Cu 324.752† | -715.7 | -0.0018 mg/L | 0.00048 | 0.00048 | -0.0018 mg/L | 0.00048 | 27.00% |
| Fe 238.204† | -70.2 | -0.0021 mg/L | 0.00019 | 0.00019 | -0.0021 mg/L | 0.00019 | 8.89% |
| K 766.490† | 76.8 | 0.0162 mg/L | 0.02829 | 0.02829 | 0.0162 mg/L | 0.02829 | 174.90% |
| Mg 279.077† | -2.4 | -0.0005 mg/L | 0.00228 | 0.00228 | -0.0005 mg/L | 0.00228 | 452.23% |
| Mn 257.610† | -136.2 | -0.0002 mg/L | 0.00003 | 0.00003 | -0.0002 mg/L | 0.00003 | 21.32% |
| Mo 202.031† | 1.0 | 0.0000 mg/L | 0.00018 | 0.00018 | 0.0000 mg/L | 0.00018 | >999.9% |
| Na 330.237† | 14.1 | 0.2511 mg/L | 0.40607 | 0.40607 | 0.2511 mg/L | 0.40607 | 161.73% |
| Ni 232.003† | 778.2 | 0.0142 mg/L | 0.00155 | 0.00155 | 0.0142 mg/L | 0.00155 | 10.89% |
| Pb 220.353† | 40.9 | 0.0014 mg/L | 0.00135 | 0.00135 | 0.0014 mg/L | 0.00135 | 97.46% |
| Sb 206.836† | -24.6 | -0.0029 mg/L | 0.00068 | 0.00068 | -0.0029 mg/L | 0.00068 | 23.06% |
| Se 196.026† | -13.1 | -0.0055 mg/L | 0.00148 | 0.00148 | -0.0055 mg/L | 0.00148 | 26.96% |
| Tl 190.801† | 26.9 | 0.0041 mg/L | 0.00100 | 0.00100 | 0.0041 mg/L | 0.00100 | 24.26% |
| V 292.402† | -162.9 | -0.0003 mg/L | 0.00026 | 0.00026 | -0.0003 mg/L | 0.00026 | 76.33% |
| Zn 213.857† | -849.1 | -0.0035 mg/L | 0.00032 | 0.00032 | -0.0035 mg/L | 0.00032 | 9.17% |
| P 178.221† | -9.1 | -0.003 mg/L | 0.0025 | 0.0025 | -0.003 mg/L | 0.0025 | 75.72% |
| Si 251.611† | 41.7 | 0.001 mg/L | 0.0019 | 0.0019 | 0.001 mg/L | 0.0019 | 210.08% |

Sequence No.: 16
 Sample ID: 2104096-BS1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 17
 Date Collected: 4/15/2021 10:51:31 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2104096-BS1

Analyte Back Pressure Flow
All 255.0 kPa 0.75 L/min

m 4/16/21

Mean Data: 2104096-BS1

| Analyte | Mean Corrected Intensity | Calib. Conc. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------------|----------|--------------------|----------|--------|
| Y 371.029 | 2746237.6 | 0.992 mg/L | 0.0147 | | | 1.48% |
| Sc 361.383 | 4635066.5 | 1.01 mg/L | 0.015 | | | 1.48% |
| Ag 328.068† | 17696.8 | 0.05312 mg/L | 0.001194 | 0.05312 mg/L | 0.001194 | 2.25% |
| Al 308.215† | 55892.4 | 2.052 mg/L | 0.0462 | 2.052 mg/L | 0.0462 | 2.25% |
| As 188.979† | 10224.7 | 2.047 mg/L | 0.0429 | 2.047 mg/L | 0.0429 | 2.10% |
| B 249.772† | 186347.4 | 0.9481 mg/L | 0.00155 | 0.9481 mg/L | 0.00155 | 0.16% |
| Ba 233.527† | 395685.1 | 2.133 mg/L | 0.0037 | 2.133 mg/L | 0.0037 | 0.17% |
| Be 313.107† | 478103.4 | 0.05063 mg/L | 0.000092 | 0.05063 mg/L | 0.000092 | 0.18% |
| Ca 317.933† | 363985.2 | 10.02 mg/L | 0.187 | 10.02 mg/L | 0.187 | 1.87% |
| Cd 214.440† | 23589.4 | 0.05119 mg/L | 0.000858 | 0.05119 mg/L | 0.000858 | 1.68% |
| Co 228.616† | 46719.8 | 0.5233 mg/L | 0.01126 | 0.5233 mg/L | 0.01126 | 2.15% |
| Cr 267.716† | 49766.3 | 0.2144 mg/L | 0.00385 | 0.2144 mg/L | 0.00385 | 1.79% |
| Cu 324.752† | 95553.7 | 0.2385 mg/L | 0.00038 | 0.2385 mg/L | 0.00038 | 0.16% |
| Fe 238.204† | 35862.0 | 1.069 mg/L | 0.0329 | 1.069 mg/L | 0.0329 | 3.08% |
| K 766.490† | 47507.5 | 10.10 mg/L | 0.150 | 10.10 mg/L | 0.150 | 1.48% |
| Mg 279.077† | 46727.5 | 9.791 mg/L | 0.3081 | 9.791 mg/L | 0.3081 | 3.15% |
| Mn 257.610† | 461880.5 | 0.5261 mg/L | 0.00059 | 0.5261 mg/L | 0.00059 | 0.11% |
| Mo 202.031† | 54773.0 | 0.9702 mg/L | 0.01911 | 0.9702 mg/L | 0.01911 | 1.97% |
| Na 330.237† | 625.0 | 10.63 mg/L | 1.169 | 10.63 mg/L | 1.169 | 10.99% |
| Ni 232.003† | 27693.4 | 0.4952 mg/L | 0.01091 | 0.4952 mg/L | 0.01091 | 2.20% |
| Pb 220.353† | 15347.3 | 0.5182 mg/L | 0.00905 | 0.5182 mg/L | 0.00905 | 1.75% |
| Sb 206.836† | 4250.3 | 0.5087 mg/L | 0.00990 | 0.5087 mg/L | 0.00990 | 1.95% |
| Se 196.026† | 4773.4 | 2.001 mg/L | 0.0414 | 2.001 mg/L | 0.0414 | 2.07% |
| Tl 190.801† | 11889.5 | 1.833 mg/L | 0.0332 | 1.833 mg/L | 0.0332 | 1.81% |
| V 292.402† | 249680.6 | 0.5170 mg/L | 0.00114 | 0.5170 mg/L | 0.00114 | 0.22% |
| Zn 213.857† | 124221.6 | 0.5056 mg/L | 0.00120 | 0.5056 mg/L | 0.00120 | 0.24% |
| P 178.221† | 12960.0 | 4.674 mg/L | 0.0536 | 4.674 mg/L | 0.0536 | 1.15% |
| Si 251.611† | 8832.3 | 0.187 mg/L | 0.0039 | 0.187 mg/L | 0.0039 | 2.09% |

Matrix Recovery Check: 2104096-BS1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|------------|----------------|----------------|-----------|-------|--------------|
| Ca 317.933 | 10.00 | 10.02 | 0.187 | mg/L | 100.2 |
| Fe 238.204 | 0.9979 | 1.069 | 0.033 | mg/L | 107.1 |
| K 766.490 | 10.02 | 10.10 | 0.150 | mg/L | 100.8 |
| Mg 279.077 | 9.999 | 9.791 | 0.308 | mg/L | 97.9 |
| Na 330.237 | 10.25 | 10.63 | 1.169 | mg/L | 103.8 |
| Ag 328.068 | 0.04923 | 0.05312 | 0.001 | mg/L | 107.8 |
| Al 308.215 | 1.970 | 2.052 | 0.046 | mg/L | 104.1 |
| As 188.979 | 2.004 | 2.047 | 0.043 | mg/L | 102.1 |
| B 249.772 | 1.008 | 0.9481 | 0.002 | mg/L | 94.1 |
| Ba 233.527 | 2.000 | 2.133 | 0.004 | mg/L | 106.7 |
| Be 313.107 | 0.05029 | 0.05063 | 0.000 | mg/L | 100.7 |
| Cd 214.440 | 0.04986 | 0.05119 | 0.001 | mg/L | 102.7 |
| Co 228.616 | 0.5000 | 0.5233 | 0.011 | mg/L | 104.7 |
| Cr 267.716 | 0.1998 | 0.2144 | 0.004 | mg/L | 107.3 |
| Cu 324.752 | 0.2482 | 0.2385 | 0.000 | mg/L | 96.1 |
| Mn 257.610 | 0.4998 | 0.5261 | 0.001 | mg/L | 105.3 |
| Mo 202.031 | 1.000 | 0.9702 | 0.019 | mg/L | 97.0 |
| Ni 232.003 | 0.5142 | 0.4952 | 0.011 | mg/L | 96.2 |
| Pb 220.353 | 0.5014 | 0.5182 | 0.009 | mg/L | 103.4 |
| Sb 206.836 | 0.4971 | 0.5087 | 0.010 | mg/L | 102.3 |
| Se 196.026 | 1.995 | 2.001 | 0.041 | mg/L | 100.3 |
| Tl 190.801 | 2.004 | 1.833 | 0.033 | mg/L | 91.4 |
| V 292.402 | 0.4997 | 0.5170 | 0.001 | mg/L | 103.5 |
| Zn 213.857 | 0.4965 | 0.5056 | 0.001 | mg/L | 101.8 |
| P 178.221 | 4.997 | 4.674 | 0.054 | mg/L | 93.5 |

Sequence No.: 17
Sample ID: 2104096-BSD1

Autosampler Location: 18
Date Collected: 4/15/2021 10:54:58 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2104096-BSD1

Analyte Back Pressure Flow
All 256.0 kPa 0.75 L/min

WPK
4/16/21

Mean Data: 2104096-BSD1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|--------------|--------------|----------|--------------------|----------|-------|
| Y 371.029 | 2702845.5 | 0.977 mg/L | mg/L | 0.0113 | | | 1.15% |
| Sc 361.383 | 4560501.2 | 0.989 mg/L | mg/L | 0.0119 | | | 1.21% |
| Ag 328.068† | 17537.4 | 0.05265 mg/L | mg/L | 0.001628 | 0.05265 mg/L | 0.001628 | 3.09% |
| Al 308.215† | 54896.1 | 2.015 mg/L | mg/L | 0.0367 | 2.015 mg/L | 0.0367 | 1.82% |
| As 188.979† | 10156.0 | 2.034 mg/L | mg/L | 0.0275 | 2.034 mg/L | 0.0275 | 1.35% |
| B 249.772† | 184304.8 | 0.9378 mg/L | mg/L | 0.00356 | 0.9378 mg/L | 0.00356 | 0.38% |
| Ba 233.527† | 393859.8 | 2.123 mg/L | mg/L | 0.0032 | 2.123 mg/L | 0.0032 | 0.15% |
| Be 313.107† | 479173.5 | 0.05074 mg/L | mg/L | 0.000074 | 0.05074 mg/L | 0.000074 | 0.15% |
| Ca 317.933† | 349892.8 | 9.632 mg/L | mg/L | 0.1721 | 9.632 mg/L | 0.1721 | 1.79% |
| Cd 214.440† | 23555.5 | 0.05111 mg/L | mg/L | 0.000886 | 0.05111 mg/L | 0.000886 | 1.73% |
| Co 228.616† | 46313.3 | 0.5187 mg/L | mg/L | 0.00792 | 0.5187 mg/L | 0.00792 | 1.53% |
| Cr 267.716† | 49103.2 | 0.2116 mg/L | mg/L | 0.00335 | 0.2116 mg/L | 0.00335 | 1.59% |
| Cu 324.752† | 94489.6 | 0.2359 mg/L | mg/L | 0.00027 | 0.2359 mg/L | 0.00027 | 0.11% |
| Fe 238.204† | 34720.8 | 1.035 mg/L | mg/L | 0.0325 | 1.035 mg/L | 0.0325 | 3.13% |
| K 766.490† | 45580.7 | 9.688 mg/L | mg/L | 0.1627 | 9.688 mg/L | 0.1627 | 1.68% |
| Mg 279.077† | 45261.8 | 9.484 mg/L | mg/L | 0.3065 | 9.484 mg/L | 0.3065 | 3.23% |
| Mn 257.610† | 460182.6 | 0.5242 mg/L | mg/L | 0.00043 | 0.5242 mg/L | 0.00043 | 0.08% |
| Mo 202.031† | 53618.9 | 0.9497 mg/L | mg/L | 0.01210 | 0.9497 mg/L | 0.01210 | 1.27% |
| Na 330.237† | 647.7 | 11.03 mg/L | mg/L | 0.785 | 11.03 mg/L | 0.785 | 7.11% |
| Ni 232.003† | 27443.7 | 0.4908 mg/L | mg/L | 0.00884 | 0.4908 mg/L | 0.00884 | 1.80% |
| Pb 220.353† | 15311.8 | 0.5170 mg/L | mg/L | 0.00826 | 0.5170 mg/L | 0.00826 | 1.60% |
| Sb 206.836† | 4259.4 | 0.5097 mg/L | mg/L | 0.01239 | 0.5097 mg/L | 0.01239 | 2.43% |
| Se 196.026† | 4852.9 | 2.035 mg/L | mg/L | 0.0478 | 2.035 mg/L | 0.0478 | 2.35% |
| Tl 190.801† | 11573.4 | 1.784 mg/L | mg/L | 0.0156 | 1.784 mg/L | 0.0156 | 0.87% |
| V 292.402† | 248529.1 | 0.5146 mg/L | mg/L | 0.00066 | 0.5146 mg/L | 0.00066 | 0.13% |
| Zn 213.857† | 124766.8 | 0.5079 mg/L | mg/L | 0.00099 | 0.5079 mg/L | 0.00099 | 0.20% |
| P 178.221† | 12588.4 | 4.540 mg/L | mg/L | 0.0521 | 4.540 mg/L | 0.0521 | 1.15% |
| Si 251.611† | 7184.1 | 0.151 mg/L | mg/L | 0.0036 | 0.151 mg/L | 0.0036 | 2.41% |

Duplicate Check: 2104096-BSD1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|------------|----------------|----------------|-----------|-------|----------------|
| Ca 317.933 | 10.02 | 9.632 | 0.172 | mg/L | 3.9 |
| Fe 238.204 | 1.069 | 1.035 | 0.032 | mg/L | 3.2 |
| K 766.490 | 10.10 | 9.688 | 0.163 | mg/L | 4.1 |
| Mg 279.077 | 9.791 | 9.484 | 0.306 | mg/L | 3.2 |
| Na 330.237 | 10.63 | 11.03 | 0.785 | mg/L | 3.7 |
| Y 371.029 | | | 0.000 | mg/L | Not calculated |
| Sc 361.383 | | | 0.000 | mg/L | Not calculated |
| Ag 328.068 | 0.05312 | 0.05265 | 0.002 | mg/L | 0.9 |
| Al 308.215 | 2.052 | 2.015 | 0.037 | mg/L | 1.8 |
| As 188.979 | 2.047 | 2.034 | 0.028 | mg/L | 0.7 |
| B 249.772 | 0.9481 | 0.9378 | 0.004 | mg/L | 1.1 |
| Ba 233.527 | 2.133 | 2.123 | 0.003 | mg/L | 0.5 |
| Be 313.107 | 0.05063 | 0.05074 | 0.000 | mg/L | 0.2 |
| Cd 214.440 | 0.05119 | 0.05111 | 0.001 | mg/L | 0.1 |
| Co 228.616 | 0.5233 | 0.5187 | 0.008 | mg/L | 0.9 |
| Cr 267.716 | 0.2144 | 0.2116 | 0.003 | mg/L | 1.3 |
| Cu 324.752 | 0.2385 | 0.2359 | 0.000 | mg/L | 1.1 |
| Mn 257.610 | 0.5261 | 0.5242 | 0.000 | mg/L | 0.4 |
| Mo 202.031 | 0.9702 | 0.9497 | 0.012 | mg/L | 2.1 |
| Ni 232.003 | 0.4952 | 0.4908 | 0.009 | mg/L | 0.9 |
| Pb 220.353 | 0.5182 | 0.5170 | 0.008 | mg/L | 0.2 |
| Sb 206.836 | 0.5087 | 0.5097 | 0.012 | mg/L | 0.2 |
| Se 196.026 | 2.001 | 2.035 | 0.048 | mg/L | 1.6 |
| Tl 190.801 | 1.833 | 1.784 | 0.016 | mg/L | 2.7 |
| V 292.402 | 0.5170 | 0.5146 | 0.001 | mg/L | 0.5 |
| Zn 213.857 | 0.5056 | 0.5079 | 0.001 | mg/L | 0.4 |

| | | | | | |
|------------|-------|-------|-------|------|------|
| P 178.221 | 4.674 | 4.540 | 0.052 | mg/L | 2.9 |
| Si 251.611 | 0.187 | 0.151 | 0.004 | mg/L | 21.6 |

| | |
|------------------------|---------------------------------------|
| Sequence No.: 18 | Autosampler Location: 19 |
| Sample ID: 2104096-BS2 | Date Collected: 4/15/2021 10:58:25 AM |
| Analyst: | Data Type: Original |
| Initial Sample Wt: | Initial Sample Vol: |
| Dilution: | Sample Prep Vol: |

Nebulizer Parameters: 2104096-BS2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 256.0 kPa | 0.75 L/min |

W. Smith

Mean Data: 2104096-BS2

| Analyte | Mean Corrected | | Calib. | | Sample | | Std.Dev. | RSD |
|-------------|----------------|----------|--------|----------|----------|------|----------|-----|
| | Intensity | Conc. | Units | Conc. | Units | | | |
| Y 371.029 | 2766866.6 | 1.000 | mg/L | 0.0015 | | | 0.15% | |
| Sc 361.383 | 4647239.4 | 1.01 | mg/L | 0.002 | | | 0.17% | |
| Ag 328.068† | -249.0 | -0.00073 | mg/L | 0.000246 | -0.00073 | mg/L | 33.69% | |
| Al 308.215† | -243.0 | -0.0102 | mg/L | 0.00408 | -0.0102 | mg/L | 40.06% | |
| As 188.979† | 14.2 | 0.0029 | mg/L | 0.00142 | 0.0029 | mg/L | 49.02% | |
| B 249.772† | 1769.6 | 0.0089 | mg/L | 0.00059 | 0.0089 | mg/L | 6.59% | |
| Ba 233.527† | 141.6 | 0.0008 | mg/L | 0.00006 | 0.0008 | mg/L | 7.47% | |
| Be 313.107† | 313.3 | 0.00013 | mg/L | 0.000011 | 0.00013 | mg/L | 8.42% | |
| Ca 317.933† | -328.7 | -0.0088 | mg/L | 0.00146 | -0.0088 | mg/L | 16.56% | |
| Cd 214.440† | -4.6 | -0.00001 | mg/L | 0.000056 | -0.00001 | mg/L | 491.87% | |
| Co 228.616† | 39.6 | 0.0004 | mg/L | 0.00022 | 0.0004 | mg/L | 50.18% | |
| Cr 267.716† | -2.5 | 0.0000 | mg/L | 0.00018 | 0.0000 | mg/L | >999.9% | |
| Cu 324.752† | 280.7 | 0.0006 | mg/L | 0.00027 | 0.0006 | mg/L | 42.43% | |
| Fe 238.204† | -28.7 | -0.0008 | mg/L | 0.00019 | -0.0008 | mg/L | 23.45% | |
| K 766.490† | -15.9 | -0.0099 | mg/L | 0.03317 | -0.0099 | mg/L | 335.23% | |
| Mg 279.077† | 36.6 | 0.0073 | mg/L | 0.00394 | 0.0073 | mg/L | 54.23% | |
| Mn 257.610† | 50.8 | 0.0001 | mg/L | 0.00003 | 0.0001 | mg/L | 50.95% | |
| Mo 202.031† | 108.7 | 0.0019 | mg/L | 0.00019 | 0.0019 | mg/L | 10.07% | |
| Na 330.237† | 596.5 | 10.54 | mg/L | 0.818 | 10.54 | mg/L | 7.77% | |
| Ni 232.003† | 429.3 | 0.0079 | mg/L | 0.00182 | 0.0079 | mg/L | 22.97% | |
| Pb 220.353† | -6.0 | -0.0002 | mg/L | 0.00030 | -0.0002 | mg/L | 172.50% | |
| Sb 206.836† | -15.3 | -0.0019 | mg/L | 0.00074 | -0.0019 | mg/L | 39.78% | |
| Se 196.026† | 0.5 | 0.0001 | mg/L | 0.00869 | 0.0001 | mg/L | >999.9% | |
| Tl 190.801† | 16.7 | 0.0026 | mg/L | 0.00130 | 0.0026 | mg/L | 49.92% | |
| V 292.402† | 4.8 | 0.0000 | mg/L | 0.00015 | 0.0000 | mg/L | >999.9% | |
| Zn 213.857† | -562.9 | -0.0023 | mg/L | 0.00034 | -0.0023 | mg/L | 14.47% | |
| P 178.221† | -0.6 | 0.000 | mg/L | 0.0032 | 0.000 | mg/L | >999.9% | |
| Si 251.611† | 427625.0 | 9.535 | mg/L | 0.0729 | 9.535 | mg/L | 0.76% | |

Matrix Recovery Check: 2104096-BS2

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|------------|----------------|----------------|-----------|-------|--------------|
| Si 251.611 | 10.00 | 9.535 | 0.073 | mg/L | 95.3 |

| | |
|-------------------------|---------------------------------------|
| Sequence No.: 19 | Autosampler Location: 20 |
| Sample ID: 2104096-BSD2 | Date Collected: 4/15/2021 11:02:31 AM |
| Analyst: | Data Type: Original |
| Initial Sample Wt: | Initial Sample Vol: |
| Dilution: | Sample Prep Vol: |

Nebulizer Parameters: 2104096-BSD2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 257.0 kPa | 0.75 L/min |

Mean Data: 2104096-BSD2

| Analyte | Mean Corrected | | Calib. | | Sample | | Std.Dev. | RSD |
|------------|----------------|-------|--------|-------|--------|--|----------|-----|
| | Intensity | Conc. | Units | Conc. | Units | | | |
| Y 371.029 | 2788972.1 | 1.01 | mg/L | 0.019 | | | 1.86% | |
| Sc 361.383 | 4683814.5 | 1.02 | mg/L | 0.019 | | | 1.90% | |

| | | | | | | |
|-------------|----------|---------------|----------|---------------|----------|---------|
| Ag 328.068† | -340.5 | -0.00100 mg/L | 0.000063 | -0.00100 mg/L | 0.000063 | 6.27% |
| Al 308.215† | -208.9 | -0.0089 mg/L | 0.00412 | -0.0089 mg/L | 0.00412 | 46.30% |
| As 188.979† | 24.1 | 0.0049 mg/L | 0.00101 | 0.0049 mg/L | 0.00101 | 20.74% |
| B 249.772† | 610.4 | 0.0030 mg/L | 0.00038 | 0.0030 mg/L | 0.00038 | 12.62% |
| Ba 233.527† | 505.9 | 0.0027 mg/L | 0.00030 | 0.0027 mg/L | 0.00030 | 10.94% |
| Be 313.107† | 1062.0 | 0.00021 mg/L | 0.000024 | 0.00021 mg/L | 0.000024 | 11.07% |
| Ca 317.933† | 335.3 | 0.0094 mg/L | 0.00183 | 0.0094 mg/L | 0.00183 | 19.37% |
| Cd 214.440† | -4.0 | -0.00001 mg/L | 0.000048 | -0.00001 mg/L | 0.000048 | 474.53% |
| Co 228.616† | 71.4 | 0.0008 mg/L | 0.00015 | 0.0008 mg/L | 0.00015 | 18.41% |
| Cr 267.716† | 46.3 | 0.0002 mg/L | 0.00012 | 0.0002 mg/L | 0.00012 | 59.86% |
| Cu 324.752† | -89.2 | -0.0003 mg/L | 0.00055 | -0.0003 mg/L | 0.00055 | 191.42% |
| Fe 238.204† | 6.2 | 0.0002 mg/L | 0.00018 | 0.0002 mg/L | 0.00018 | 87.31% |
| K 766.490† | 73.7 | 0.0093 mg/L | 0.01390 | 0.0093 mg/L | 0.01390 | 150.15% |
| Mg 279.077† | 81.1 | 0.0166 mg/L | 0.00108 | 0.0166 mg/L | 0.00108 | 6.53% |
| Mn 257.610† | 517.4 | 0.0006 mg/L | 0.00007 | 0.0006 mg/L | 0.00007 | 12.30% |
| Mo 202.031† | 90.9 | 0.0016 mg/L | 0.00020 | 0.0016 mg/L | 0.00020 | 12.37% |
| Na 330.237† | 587.4 | 10.38 mg/L | 0.294 | 10.38 mg/L | 0.294 | 2.83% |
| Ni 232.003† | 458.8 | 0.0085 mg/L | 0.00114 | 0.0085 mg/L | 0.00114 | 13.40% |
| Pb 220.353† | 39.6 | 0.0014 mg/L | 0.00029 | 0.0014 mg/L | 0.00029 | 21.01% |
| Sb 206.836† | -6.3 | -0.0008 mg/L | 0.00028 | -0.0008 mg/L | 0.00028 | 34.31% |
| Se 196.026† | 9.0 | 0.0037 mg/L | 0.00324 | 0.0037 mg/L | 0.00324 | 87.00% |
| Tl 190.801† | 34.3 | 0.0053 mg/L | 0.00202 | 0.0053 mg/L | 0.00202 | 38.01% |
| V 292.402† | 167.6 | 0.0003 mg/L | 0.00012 | 0.0003 mg/L | 0.00012 | 34.89% |
| Zn 213.857† | -398.9 | -0.0017 mg/L | 0.00020 | -0.0017 mg/L | 0.00020 | 12.00% |
| P 178.221† | 13.8 | 0.005 mg/L | 0.0010 | 0.005 mg/L | 0.0010 | 20.94% |
| Si 251.611† | 432167.7 | 9.636 mg/L | 0.2646 | 9.636 mg/L | 0.2646 | 2.75% |

Duplicate Check: 2104096-BSD2

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|------------|----------------|----------------|-----------|-------|----------------|
| Ca 317.933 | -0.0088 | 0.0094 | 0.002 | mg/L | 6015.1 |
| Fe 238.204 | -0.0008 | 0.0002 | 0.000 | mg/L | -336.8 |
| K 766.490 | -0.0099 | 0.0093 | 0.014 | mg/L | -6035.1 |
| Mg 279.077 | 0.0073 | 0.0166 | 0.001 | mg/L | 78.1 |
| Na 330.237 | 10.54 | 10.38 | 0.294 | mg/L | 1.6 |
| Y 371.029 | | | 0.000 | mg/L | Not calculated |
| Sc 361.383 | | | 0.000 | mg/L | Not calculated |
| Ag 328.068 | -0.00073 | -0.00100 | 0.000 | mg/L | -31.2 |
| Al 308.215 | -0.0102 | -0.0089 | 0.004 | mg/L | -13.4 |
| As 188.979 | 0.0029 | 0.0049 | 0.001 | mg/L | 50.9 |
| B 249.772 | 0.0089 | 0.0030 | 0.000 | mg/L | 99.1 |
| Ba 233.527 | 0.0008 | 0.0027 | 0.000 | mg/L | 112.4 |
| Be 313.107 | 0.00013 | 0.00021 | 0.000 | mg/L | 45.5 |
| Cd 214.440 | -0.00001 | -0.00001 | 0.000 | mg/L | -12.4 |
| Co 228.616 | 0.0004 | 0.0008 | 0.000 | mg/L | 57.0 |
| Cr 267.716 | 0.0000 | 0.0002 | 0.000 | mg/L | 224.9 |
| Cu 324.752 | 0.0006 | -0.0003 | 0.001 | mg/L | 536.2 |
| Mn 257.610 | 0.0001 | 0.0006 | 0.000 | mg/L | 164.0 |
| Mo 202.031 | 0.0019 | 0.0016 | 0.000 | mg/L | 17.8 |
| Ni 232.003 | 0.0079 | 0.0085 | 0.001 | mg/L | 6.5 |
| Pb 220.353 | -0.0002 | 0.0014 | 0.000 | mg/L | 257.8 |
| Sb 206.836 | -0.0019 | -0.0008 | 0.000 | mg/L | -79.8 |
| Se 196.026 | 0.0001 | 0.0037 | 0.003 | mg/L | 187.1 |
| Tl 190.801 | 0.0026 | 0.0053 | 0.002 | mg/L | 68.5 |
| V 292.402 | 0.0000 | 0.0003 | 0.000 | mg/L | 191.2 |
| Zn 213.857 | -0.0023 | -0.0017 | 0.000 | mg/L | -33.4 |
| P 178.221 | 0.000 | 0.005 | 0.001 | mg/L | 217.8 |
| Si 251.611 | 9.535 | 9.636 | 0.265 | mg/L | 1.1 |

Sequence No.: 20

Sample ID: 21D0046-27@5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 21

Date Collected: 4/15/2021 11:06:37 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: 21D0046-27@5

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 257.0 kPa | 0.75 L/min |

| | | | | | |
|------------|--------|--------|-------|------|-------|
| Mo 202.031 | 1.008 | 1.000 | 0.019 | mg/L | 99.2 |
| Ni 232.003 | 0.5252 | 0.5408 | 0.014 | mg/L | 103.1 |
| Pb 220.353 | 0.4920 | 0.5498 | 0.012 | mg/L | 111.6 |
| Sb 206.836 | 0.4978 | 0.5351 | 0.018 | mg/L | 107.5 |
| Se 196.026 | 2.006 | 2.171 | 0.050 | mg/L | 108.2 |
| Tl 190.801 | 2.005 | 2.077 | 0.037 | mg/L | 103.6 |
| V 292.402 | 0.5022 | 0.5178 | 0.001 | mg/L | 103.1 |
| Zn 213.857 | 2.385 | 2.348 | 0.001 | mg/L | 92.5 |
| P 178.221 | 5.126 | 5.345 | 0.090 | mg/L | 104.4 |

Sequence No.: 25
 Sample ID: 21D0200-01
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 26
 Date Collected: 4/15/2021 11:27:37 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 21D0200-01
 Analyte Back Pressure Flow
 All 265.0 kPa 0.75 L/min

Wulfein

Mean Data: 21D0200-01

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-------------|--------------------------|---------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 2717583.6 | 0.982 mg/L | ✓ | 0.0250 | | | 2.54% |
| Sc 361.383 | 4605309.0 | 0.999 mg/L | | 0.0253 | | | 2.54% |
| Ag 328.068† | 218.3 | 0.00003 mg/L | | 0.000210 | 0.00003 mg/L | 0.000210 | 816.97% |
| Al 308.215† | 526.6 | 0.0078 mg/L | | 0.00465 | 0.0078 mg/L | 0.00465 | 59.95% |
| As 188.979† | 85.6 | 0.0169 mg/L | | 0.00323 | 0.0169 mg/L | 0.00323 | 19.11% |
| B 249.772† | 33253.4 | 0.1680 mg/L | ✓ | 0.00566 | 0.1680 mg/L | 0.00566 | 3.37% |
| Ba 233.527† | 3484.1 | 0.0188 mg/L | | 0.00035 | 0.0188 mg/L | 0.00035 | 1.85% |
| Be 313.107† | 506.7 | 0.00018 mg/L | | 0.000040 | 0.00018 mg/L | 0.000040 | 22.15% |
| Ca 317.933† | 1104230.8 | 30.38 mg/L | ✓ | 0.270 | 30.38 mg/L | 0.270 | 0.89% |
| Cd 214.440† | -27.8 | -0.00009 mg/L | | 0.000051 | -0.00009 mg/L | 0.000051 | 57.59% |
| Co 228.616† | 70.2 | 0.0008 mg/L | | 0.00014 | 0.0008 mg/L | 0.00014 | 17.27% |
| Cr 267.716† | 95.0 | 0.0003 mg/L | | 0.00011 | 0.0003 mg/L | 0.00011 | 34.17% |
| Cu 324.752† | 1189.7 | 0.0024 mg/L | | 0.00089 | 0.0024 mg/L | 0.00089 | 37.29% |
| Fe 238.204† | 2974.5 | 0.0884 mg/L | ✓ | 0.00297 | 0.0884 mg/L | 0.00297 | 3.36% |
| K 766.490† | 4785.1 | 0.9725 mg/L | ✓ | 0.04610 | 0.9725 mg/L | 0.04610 | 4.74% |
| Mg 279.077† | 4913.0 | 1.026 mg/L | ✓ | 0.0224 | 1.026 mg/L | 0.0224 | 2.19% |
| Mn 257.610† | 120159.5 | 0.1369 mg/L | | 0.00459 | 0.1369 mg/L | 0.00459 | 3.35% |
| Mo 202.031† | 304.7 | 0.0053 mg/L | | 0.00045 | 0.0053 mg/L | 0.00045 | 8.44% |
| Na 330.237† | 3984.8 | 70.36 mg/L | ✓ | 1.752 | 70.36 mg/L | 1.752 | 2.49% |
| Ni 232.003† | 195.0 | 0.0045 mg/L | | 0.00242 | 0.0045 mg/L | 0.00242 | 53.34% |
| Pb 220.353† | -13.5 | 0.0002 mg/L | | 0.00083 | 0.0002 mg/L | 0.00083 | 518.59% |
| Sb 206.836† | -17.8 | -0.0025 mg/L | | 0.00053 | -0.0025 mg/L | 0.00053 | 21.03% |
| Se 196.026† | 26.0 | 0.0111 mg/L | | 0.00407 | 0.0111 mg/L | 0.00407 | 36.81% |
| Tl 190.801† | 11.2 | 0.0024 mg/L | | 0.00187 | 0.0024 mg/L | 0.00187 | 78.90% |
| V 292.402† | 622.8 | 0.0013 mg/L | | 0.00029 | 0.0013 mg/L | 0.00029 | 22.56% |
| Zn 213.857† | 467.8 | 0.0021 mg/L | | 0.00042 | 0.0021 mg/L | 0.00042 | 20.44% |
| P 178.221† | 155.1 | 0.056 mg/L | | 0.0050 | 0.056 mg/L | 0.0050 | 8.98% |
| Si 251.611† | 842390.7 | 18.78 mg/L | ✓ | 0.036 | 18.78 mg/L | 0.036 | 0.19% |

Sequence No.: 26
 Sample ID: 21D0047-03@20
 Analyst:
 Initial Sample Wt:
 Dilution: 20X

Autosampler Location: 27
 Date Collected: 4/15/2021 11:31:23 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 21D0047-03@20
 Analyte Back Pressure Flow
 All 265.0 kPa 0.75 L/min

Mean Data: 21D0047-03@20

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|-----------|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Y 371.029 | 2906074.5 | 1.05 mg/L | | 0.026 | | | 2.46% |

Sequence No.: 28
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 4/15/2021 11:38:57 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 262.0 kPa 0.75 L/min

Mean Data: CCB

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|---|--------------------------|---------------|--------------|----------|--------------------|----------|---------|
| Y 371.029 | 2653683.0 | 0.959 mg/L | mg/L | 0.0152 | | | 1.58% |
| Sc 361.383 | 4392131.1 | 0.952 mg/L | mg/L | 0.0147 | | | 1.54% |
| Ag 328.068† | -447.4 | -0.00132 mg/L | mg/L | 0.000283 | -0.00132 mg/L | 0.000283 | 21.47% |
| QC value within limits for Ag 328.068 Recovery = Not calculated | | | | | | | |
| Al 308.215† | -349.8 | -0.0131 mg/L | mg/L | 0.00317 | -0.0131 mg/L | 0.00317 | 24.22% |
| QC value within limits for Al 308.215 Recovery = Not calculated | | | | | | | |
| As 188.979† | 4.2 | 0.0008 mg/L | mg/L | 0.00181 | 0.0008 mg/L | 0.00181 | 217.74% |
| QC value within limits for As 188.979 Recovery = Not calculated | | | | | | | |
| B 249.772† | 49.4 | 0.0002 mg/L | mg/L | 0.00016 | 0.0002 mg/L | 0.00016 | 64.36% |
| QC value within limits for B 249.772 Recovery = Not calculated | | | | | | | |
| Ba 233.527† | -10.2 | -0.0001 mg/L | mg/L | 0.00016 | -0.0001 mg/L | 0.00016 | 285.47% |
| QC value within limits for Ba 233.527 Recovery = Not calculated | | | | | | | |
| Be 313.107† | 349.1 | 0.00013 mg/L | mg/L | 0.000032 | 0.00013 mg/L | 0.000032 | 23.93% |
| QC value within limits for Be 313.107 Recovery = Not calculated | | | | | | | |
| Ca 317.933† | 617.7 | 0.0170 mg/L | mg/L | 0.00205 | 0.0170 mg/L | 0.00205 | 12.06% |
| QC value within limits for Ca 317.933 Recovery = Not calculated | | | | | | | |
| Cd 214.440† | 14.5 | 0.00003 mg/L | mg/L | 0.000028 | 0.00003 mg/L | 0.000028 | 90.05% |
| QC value within limits for Cd 214.440 Recovery = Not calculated | | | | | | | |
| Co 228.616† | 58.3 | 0.0006 mg/L | mg/L | 0.00006 | 0.0006 mg/L | 0.00006 | 9.87% |
| QC value within limits for Co 228.616 Recovery = Not calculated | | | | | | | |
| Cr 267.716† | -14.1 | -0.0001 mg/L | mg/L | 0.00003 | -0.0001 mg/L | 0.00003 | 44.46% |
| QC value within limits for Cr 267.716 Recovery = Not calculated | | | | | | | |
| Cu 324.752† | -42.5 | -0.0001 mg/L | mg/L | 0.00039 | -0.0001 mg/L | 0.00039 | 357.29% |
| QC value within limits for Cu 324.752 Recovery = Not calculated | | | | | | | |
| Fe 238.204† | 61.8 | 0.0018 mg/L | mg/L | 0.00020 | 0.0018 mg/L | 0.00020 | 10.66% |
| QC value within limits for Fe 238.204 Recovery = Not calculated | | | | | | | |
| K 766.490† | 350.6 | 0.0744 mg/L | mg/L | 0.04023 | 0.0744 mg/L | 0.04023 | 54.11% |
| QC value within limits for K 766.490 Recovery = Not calculated | | | | | | | |
| Mg 279.077† | 72.4 | 0.0152 mg/L | mg/L | 0.00346 | 0.0152 mg/L | 0.00346 | 22.83% |
| QC value within limits for Mg 279.077 Recovery = Not calculated | | | | | | | |
| Mn 257.610† | 846.5 | 0.0010 mg/L | mg/L | 0.00012 | 0.0010 mg/L | 0.00012 | 12.09% |
| QC value within limits for Mn 257.610 Recovery = Not calculated | | | | | | | |
| Mo 202.031† | 5.2 | 0.0001 mg/L | mg/L | 0.00029 | 0.0001 mg/L | 0.00029 | 313.10% |
| QC value within limits for Mo 202.031 Recovery = Not calculated | | | | | | | |
| Na 330.237† | 20.6 | 0.3612 mg/L | mg/L | 0.55855 | 0.3612 mg/L | 0.55855 | 154.63% |
| QC value within limits for Na 330.237 Recovery = Not calculated | | | | | | | |
| Ni 232.003† | 230.3 | 0.0042 mg/L | mg/L | 0.00096 | 0.0042 mg/L | 0.00096 | 22.73% |
| QC value within limits for Ni 232.003 Recovery = Not calculated | | | | | | | |
| Pb 220.353† | 12.4 | 0.0004 mg/L | mg/L | 0.00056 | 0.0004 mg/L | 0.00056 | 135.08% |
| QC value within limits for Pb 220.353 Recovery = Not calculated | | | | | | | |
| Sb 206.836† | -10.1 | -0.0012 mg/L | mg/L | 0.00099 | -0.0012 mg/L | 0.00099 | 81.82% |
| QC value within limits for Sb 206.836 Recovery = Not calculated | | | | | | | |
| Se 196.026† | -9.3 | -0.0039 mg/L | mg/L | 0.00340 | -0.0039 mg/L | 0.00340 | 86.84% |
| QC value within limits for Se 196.026 Recovery = Not calculated | | | | | | | |
| Tl 190.801† | 4.8 | 0.0007 mg/L | mg/L | 0.00149 | 0.0007 mg/L | 0.00149 | 201.17% |
| QC value within limits for Tl 190.801 Recovery = Not calculated | | | | | | | |
| V 292.402† | 138.7 | 0.0003 mg/L | mg/L | 0.00030 | 0.0003 mg/L | 0.00030 | 104.31% |
| QC value within limits for V 292.402 Recovery = Not calculated | | | | | | | |
| Zn 213.857† | 675.7 | 0.0027 mg/L | mg/L | 0.00020 | 0.0027 mg/L | 0.00020 | 7.32% |
| QC value within limits for Zn 213.857 Recovery = Not calculated | | | | | | | |
| P 178.221† | 12.9 | 0.005 mg/L | mg/L | 0.0014 | 0.005 mg/L | 0.0014 | 30.51% |
| QC value within limits for P 178.221 Recovery = Not calculated | | | | | | | |
| Si 251.611† | 451.9 | 0.010 mg/L | mg/L | 0.0005 | 0.010 mg/L | 0.0005 | 5.05% |
| QC value within limits for Si 251.611 Recovery = Not calculated | | | | | | | |

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis Begun

Start Time: 4/15/2021 11:42:30 AM Plasma On Time: 4/15/2021 6:26:54 AM
Logged In Analyst: Optima7300DV Technique: ICP Continuous
Spectrometer Model: Optima 7300 DV, S/N No Serial #Autosampler Model: S10

Sample Information File: C:\pe\Optima7300DV\Sample Information\210415_2.sif
Batch ID:
Results Data Set: 210415_2
Results Library: C:\pe\Optima7300DV\Results\Results.mdb

=====
Sequence No.: 30 Autosampler Location: 5
Sample ID: CCV-1 Date Collected: 4/15/2021 11:42:31 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

=====
Nebulizer Parameters: CCV-1

Analyte Back Pressure Flow
All 255.0 kPa 0.75 L/min

=====
Mean Data: CCV-1

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. Units | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|---------------|--------------|----------|--------------------|----------|--------|
| Y 371.029 | 2772097.2 | 1.00 mg/L | 0.005 | | | | 0.52% |
| Sc 361.383 | 4648880.4 | 1.01 mg/L | 0.005 | | | | 0.53% |
| Ag 328.068+ | -1897.5 | -0.00353 mg/L | 0.000496 | | -0.00353 mg/L | 0.000496 | 14.06% |
| Al 308.215+ | 492.6 | -0.0119 mg/L | 0.00507 | | -0.0119 mg/L | 0.00507 | 42.70% |
| As 188.979+ | 4997.3 | 1.002 mg/L | 0.0057 | | 1.002 mg/L | 0.0057 | 0.57% |
| QC value within limits for As 188.979 Recovery = 100.15% | | | | | | | |
| B 249.772+ | 3890.1 | 0.0196 mg/L | 0.00028 | | 0.0196 mg/L | 0.00028 | 1.42% |
| Ba 233.527+ | -411.9 | -0.0004 mg/L | 0.00008 | | -0.0004 mg/L | 0.00008 | 17.78% |
| Be 313.107+ | 9432453.4 | 0.99679 mg/L | 0.015415 | | 0.99679 mg/L | 0.015415 | 1.55% |
| QC value within limits for Be 313.107 Recovery = 99.68% | | | | | | | |
| Ca 317.933+ | 37286.6 | 1.036 mg/L | 0.0104 | | 1.036 mg/L | 0.0104 | 1.01% |
| Cd 214.440+ | 438384.7 | 0.94583 mg/L | 0.016983 | | 0.94583 mg/L | 0.016983 | 1.80% |
| QC value within limits for Cd 214.440 Recovery = 94.58% | | | | | | | |
| Co 228.616+ | 93635.6 | 1.044 mg/L | 0.0306 | | 1.044 mg/L | 0.0306 | 2.93% |
| QC value within limits for Co 228.616 Recovery = 104.36% | | | | | | | |
| Cr 267.716+ | 241586.3 | 1.040 mg/L | 0.0291 | | 1.040 mg/L | 0.0291 | 2.80% |
| QC value within limits for Cr 267.716 Recovery = 104.02% | | | | | | | |
| Cu 324.752+ | 378791.6 | 0.9469 mg/L | 0.02834 | | 0.9469 mg/L | 0.02834 | 2.99% |
| QC value within limits for Cu 324.752 Recovery = 94.69% | | | | | | | |
| Fe 238.204+ | 33720.1 | 1.010 mg/L | 0.0070 | | 1.010 mg/L | 0.0070 | 0.69% |
| QC value within limits for Fe 238.204 Recovery = 100.97% | | | | | | | |
| K 766.490+ | -71.3 | -0.0139 mg/L | 0.01099 | | -0.0139 mg/L | 0.01099 | 79.18% |
| Mg 279.077+ | 4674.9 | 0.9860 mg/L | 0.01237 | | 0.9860 mg/L | 0.01237 | 1.25% |
| Mn 257.610+ | 893333.5 | 1.018 mg/L | 0.0006 | | 1.018 mg/L | 0.0006 | 0.06% |
| QC value within limits for Mn 257.610 Recovery = 101.77% | | | | | | | |
| Mo 202.031+ | 54829.1 | 0.9712 mg/L | 0.02925 | | 0.9712 mg/L | 0.02925 | 3.01% |
| QC value within limits for Mo 202.031 Recovery = 97.12% | | | | | | | |
| Na 330.237+ | -30.8 | -1.354 mg/L | 1.0507 | | -1.354 mg/L | 1.0507 | 77.61% |
| Ni 232.003+ | 56105.3 | 0.9862 mg/L | 0.03147 | | 0.9862 mg/L | 0.03147 | 3.19% |
| QC value within limits for Ni 232.003 Recovery = 98.62% | | | | | | | |
| Pb 220.353+ | 30505.0 | 1.028 mg/L | 0.0292 | | 1.028 mg/L | 0.0292 | 2.84% |
| QC value within limits for Pb 220.353 Recovery = 102.76% | | | | | | | |
| Sb 206.836+ | 8918.5 | 1.058 mg/L | 0.0040 | | 1.058 mg/L | 0.0040 | 0.38% |
| QC value within limits for Sb 206.836 Recovery = 105.84% | | | | | | | |
| Se 196.026+ | 2372.5 | 0.9954 mg/L | 0.01206 | | 0.9954 mg/L | 0.01206 | 1.21% |
| QC value within limits for Se 196.026 Recovery = 99.54% | | | | | | | |
| Tl 190.801+ | 6166.0 | 0.9505 mg/L | 0.00987 | | 0.9505 mg/L | 0.00987 | 1.04% |
| QC value within limits for Tl 190.801 Recovery = 95.05% | | | | | | | |
| V 292.402+ | 475749.7 | 0.9876 mg/L | 0.00216 | | 0.9876 mg/L | 0.00216 | 0.22% |
| QC value within limits for V 292.402 Recovery = 98.76% | | | | | | | |
| Zn 213.857+ | 247447.1 | 1.005 mg/L | 0.0294 | | 1.005 mg/L | 0.0294 | 2.92% |
| QC value within limits for Zn 213.857 Recovery = 100.55% | | | | | | | |

| | | | | | | |
|-------------|---------|------------|--------|------------|--------|---------|
| P 178.221† | -8.2 | 0.001 mg/L | 0.0016 | 0.001 mg/L | 0.0016 | 140.38% |
| Si 251.611† | 21240.5 | 0.466 mg/L | 0.0135 | 0.466 mg/L | 0.0135 | 2.90% |

All analyte(s) passed QC. ✓

| | |
|--------------------|---------------------------------------|
| Sequence No.: 31 | Autosampler Location: 6 |
| Sample ID: CCV-2 | Date Collected: 4/15/2021 11:46:21 AM |
| Analyst: | Data Type: Original |
| Initial Sample Wt: | Initial Sample Vol: |
| Dilution: | Sample Prep Vol: |

Nebulizer Parameters: CCV-2

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 257.0 kPa | 0.75 L/min |

Handwritten signature

Mean Data: CCV-2

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|--|--------------------------|--------------|--------|----------|--------------------|----------|---------|
| Y 371.029 | 2848924.7 | 1.03 mg/L | ✓ | 0.013 | | | 1.29% |
| Sc 361.383 | 4784731.7 | 1.04 mg/L | | 0.014 | | | 1.33% |
| Ag 328.068† | 163770.2 | 0.48349 mg/L | | 0.011132 | 0.48349 mg/L | 0.011132 | 2.30% |
| QC value within limits for Ag 328.068 Recovery = 96.70% | | | | | | | |
| Al 308.215† | 25209.8 | 0.9358 mg/L | | 0.03087 | 0.9358 mg/L | 0.03087 | 3.30% |
| QC value within limits for Al 308.215 Recovery = 93.58% | | | | | | | |
| As 188.979† | 28.2 | 0.0057 mg/L | | 0.00218 | 0.0057 mg/L | 0.00218 | 38.12% |
| B 249.772† | 193851.5 | 0.9877 mg/L | | 0.02438 | 0.9877 mg/L | 0.02438 | 2.47% |
| QC value within limits for B 249.772 Recovery = 98.77% | | | | | | | |
| Ba 233.527† | 194689.1 | 1.049 mg/L | | 0.0255 | 1.049 mg/L | 0.0255 | 2.44% |
| QC value within limits for Ba 233.527 Recovery = 104.93% | | | | | | | |
| Be 313.107† | 1347.5 | 0.00024 mg/L | | 0.000024 | 0.00024 mg/L | 0.000024 | 10.15% |
| Ca 317.933† | 438.5 | 0.0127 mg/L | | 0.00156 | 0.0127 mg/L | 0.00156 | 12.35% |
| Cd 214.440† | 53.2 | 0.00014 mg/L | | 0.000026 | 0.00014 mg/L | 0.000026 | 18.67% |
| Co 228.616† | -52.2 | 0.0005 mg/L | | 0.00007 | 0.0005 mg/L | 0.00007 | 13.24% |
| Cr 267.716† | 9.6 | 0.0000 mg/L | | 0.00005 | 0.0000 mg/L | 0.00005 | 120.33% |
| Cu 324.752† | 1623.9 | 0.0040 mg/L | | 0.00039 | 0.0040 mg/L | 0.00039 | 9.74% |
| Fe 238.204† | 94.4 | 0.0029 mg/L | | 0.00004 | 0.0029 mg/L | 0.00004 | 1.52% |
| K 766.490† | 48350.7 | 10.29 mg/L | | 0.132 | 10.29 mg/L | 0.132 | 1.28% |
| Mg 279.077† | 88.8 | 0.0186 mg/L | | 0.00046 | 0.0186 mg/L | 0.00046 | 2.50% |
| Mn 257.610† | 1804.4 | 0.0021 mg/L | | 0.00006 | 0.0021 mg/L | 0.00006 | 3.11% |
| Mo 202.031† | 145.3 | 0.0025 mg/L | | 0.00054 | 0.0025 mg/L | 0.00054 | 21.54% |
| Na 330.237† | 90.4 | 1.586 mg/L | | 0.2982 | 1.586 mg/L | 0.2982 | 18.80% |
| Ni 232.003† | 103.6 | 0.0020 mg/L | | 0.00096 | 0.0020 mg/L | 0.00096 | 47.00% |
| Pb 220.353† | 37.2 | 0.0014 mg/L | | 0.00046 | 0.0014 mg/L | 0.00046 | 33.72% |
| Sb 206.836† | 42.4 | 0.0049 mg/L | | 0.00076 | 0.0049 mg/L | 0.00076 | 15.33% |
| Se 196.026† | 12.3 | 0.0052 mg/L | | 0.00434 | 0.0052 mg/L | 0.00434 | 83.76% |
| Tl 190.801† | 39.6 | 0.0064 mg/L | | 0.00215 | 0.0064 mg/L | 0.00215 | 33.35% |
| V 292.402† | 50.6 | 0.0001 mg/L | | 0.00030 | 0.0001 mg/L | 0.00030 | 350.05% |
| Zn 213.857† | 1092.0 | 0.0046 mg/L | | 0.00041 | 0.0046 mg/L | 0.00041 | 8.81% |
| P 178.221† | 3.7 | 0.001 mg/L | | 0.0019 | 0.001 mg/L | 0.0019 | 164.52% |
| Si 251.611† | 100391.0 | 2.239 mg/L | ✓ | 0.0552 | 2.239 mg/L | 0.0552 | 2.46% |

All analyte(s) passed QC. ✓

| | |
|--------------------|---------------------------------------|
| Sequence No.: 32 | Autosampler Location: 7 |
| Sample ID: CCV-3 | Date Collected: 4/15/2021 11:50:25 AM |
| Analyst: | Data Type: Original |
| Initial Sample Wt: | Initial Sample Vol: |
| Dilution: | Sample Prep Vol: |

Nebulizer Parameters: CCV-3

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 256.0 kPa | 0.75 L/min |

Mean Data: CCV-3

| Analyte | Mean Corrected Intensity | Conc. Units | Calib. | Std.Dev. | Sample Conc. Units | Std.Dev. | RSD |
|------------|--------------------------|-------------|--------|----------|--------------------|----------|-------|
| Y 371.029 | 2764328.6 | 0.999 mg/L | ✓ | 0.0072 | | | 0.72% |
| Sc 361.383 | 4668486.2 | 1.01 mg/L | | 0.007 | | | 0.69% |

| | | | | | | |
|--|----------|---------------|----------|---------------|----------|---------|
| Ag 328.068† | -31.3 | -0.00038 mg/L | 0.000468 | -0.00038 mg/L | 0.000468 | 123.81% |
| Al 308.215† | 233.6 | -0.0095 mg/L | 0.00153 | -0.0095 mg/L | 0.00153 | 16.17% |
| As 188.979† | 53.6 | 0.0084 mg/L | 0.00084 | 0.0084 mg/L | 0.00084 | 10.02% |
| B 249.772† | 197970.5 | 1.008 mg/L | 0.0193 | 1.008 mg/L | 0.0193 | 1.92% |
| Ba 233.527† | 122.7 | 0.0006 mg/L | 0.00009 | 0.0006 mg/L | 0.00009 | 13.94% |
| Be 313.107† | 352.7 | 0.00014 mg/L | 0.000018 | 0.00014 mg/L | 0.000018 | 12.31% |
| Ca 317.933† | 367105.8 | 10.10 mg/L | 0.091 | 10.10 mg/L | 0.091 | 0.91% |
| QC value within limits for Ca 317.933 Recovery = 100.99% | | | | | | |
| Cd 214.440† | -103.1 | -0.00004 mg/L | 0.000023 | -0.00004 mg/L | 0.000023 | 56.52% |
| Co 228.616† | -85.5 | 0.0000 mg/L | 0.00017 | 0.0000 mg/L | 0.00017 | 508.55% |
| Cr 267.716† | 52.8 | 0.0001 mg/L | 0.00011 | 0.0001 mg/L | 0.00011 | 73.30% |
| Cu 324.752† | 335.6 | 0.0000 mg/L | 0.00039 | 0.0000 mg/L | 0.00039 | >999.9% |
| Fe 238.204† | -33.5 | -0.0008 mg/L | 0.00022 | -0.0008 mg/L | 0.00022 | 27.41% |
| K 766.490† | 47570.7 | 10.11 mg/L | 0.097 | 10.11 mg/L | 0.097 | 0.96% |
| QC value within limits for K 766.490 Recovery = 101.11% | | | | | | |
| Mg 279.077† | 46971.2 | 9.840 mg/L | 0.0789 | 9.840 mg/L | 0.0789 | 0.80% |
| QC value within limits for Mg 279.077 Recovery = 98.40% | | | | | | |
| Mn 257.610† | 55.8 | 0.0000 mg/L | 0.00004 | 0.0000 mg/L | 0.00004 | 157.83% |
| Mo 202.031† | 56332.0 | 0.9979 mg/L | 0.01761 | 0.9979 mg/L | 0.01761 | 1.76% |
| Na 330.237† | 579.3 | 10.28 mg/L | 0.422 | 10.28 mg/L | 0.422 | 4.11% |
| QC value within limits for Na 330.237 Recovery = 102.76% | | | | | | |
| Ni 232.003† | 909.0 | 0.0118 mg/L | 0.00032 | 0.0118 mg/L | 0.00032 | 2.68% |
| Pb 220.353† | -52.3 | 0.0000 mg/L | 0.00062 | 0.0000 mg/L | 0.00062 | >999.9% |
| Sb 206.836† | -74.1 | -0.0062 mg/L | 0.00082 | -0.0062 mg/L | 0.00082 | 13.29% |
| Se 196.026† | -7.7 | -0.0028 mg/L | 0.00068 | -0.0028 mg/L | 0.00068 | 24.42% |
| Tl 190.801† | -1.2 | 0.0006 mg/L | 0.00053 | 0.0006 mg/L | 0.00053 | 82.82% |
| V 292.402† | -68.8 | -0.0006 mg/L | 0.00023 | -0.0006 mg/L | 0.00023 | 40.21% |
| Zn 213.857† | -641.3 | -0.0022 mg/L | 0.00011 | -0.0022 mg/L | 0.00011 | 5.18% |
| P 178.221† | 13475.2 | 4.859 mg/L | 0.0451 | 4.859 mg/L | 0.0451 | 0.93% |
| QC value within limits for P 178.221 Recovery = 97.18% | | | | | | |
| Si 251.611† | 7615.1 | 0.156 mg/L | 0.0009 | 0.156 mg/L | 0.0009 | 0.58% |
| All analyte(s) passed QC. | | | | | | |

Sequence No.: 33

Sample ID: CCV-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 4/15/2021 11:54:31 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: CCV-4

| | | |
|---------|---------------|------------|
| Analyte | Back Pressure | Flow |
| All | 257.0 kPa | 0.75 L/min |

Handwritten signature

Mean Data: CCV-4

| Analyte | Mean Corrected | | Calib. Units / | Std.Dev. | Sample | | Std.Dev. | RSD |
|-------------|----------------|---------------|----------------|----------|---------------|-------|----------|---------|
| | Intensity | Conc. | | | Conc. | Units | | |
| Y 371.029 | 2854513.9 | 1.03 mg/L | | 0.015 | | | | 1.49% |
| Sc 361.383 | 4787956.1 | 1.04 mg/L | | 0.016 | | | | 1.53% |
| Ag 328.068† | -413.4 | -0.00122 mg/L | | 0.000264 | -0.00122 mg/L | | 0.000264 | 21.65% |
| Al 308.215† | -483.6 | -0.0184 mg/L | | 0.00515 | -0.0184 mg/L | | 0.00515 | 27.99% |
| As 188.979† | 15.0 | 0.0030 mg/L | | 0.00235 | 0.0030 mg/L | | 0.00235 | 77.72% |
| B 249.772† | 3043.7 | 0.0155 mg/L | | 0.00111 | 0.0155 mg/L | | 0.00111 | 7.18% |
| Ba 233.527† | 47.9 | 0.0003 mg/L | | 0.00009 | 0.0003 mg/L | | 0.00009 | 33.19% |
| Be 313.107† | 657.0 | 0.00017 mg/L | | 0.000028 | 0.00017 mg/L | | 0.000028 | 16.82% |
| Ca 317.933† | -286.2 | -0.0078 mg/L | | 0.00248 | -0.0078 mg/L | | 0.00248 | 31.83% |
| Cd 214.440† | -4.2 | -0.00001 mg/L | | 0.000050 | -0.00001 mg/L | | 0.000050 | 496.18% |
| Co 228.616† | 14.1 | 0.0002 mg/L | | 0.00001 | 0.0002 mg/L | | 0.00001 | 9.01% |
| Cr 267.716† | -17.3 | -0.0001 mg/L | | 0.00005 | -0.0001 mg/L | | 0.00005 | 70.80% |
| Cu 324.752† | -178.1 | -0.0005 mg/L | | 0.00028 | -0.0005 mg/L | | 0.00028 | 59.20% |
| Fe 238.204† | 59.1 | 0.0018 mg/L | | 0.00066 | 0.0018 mg/L | | 0.00066 | 37.45% |
| K 766.490† | 89.9 | 0.0168 mg/L | | 0.02351 | 0.0168 mg/L | | 0.02351 | 140.01% |
| Mg 279.077† | 13.6 | 0.0027 mg/L | | 0.00346 | 0.0027 mg/L | | 0.00346 | 127.33% |
| Mn 257.610† | 51.4 | 0.0001 mg/L | | 0.00007 | 0.0001 mg/L | | 0.00007 | 122.60% |
| Mo 202.031† | 114.0 | 0.0020 mg/L | | 0.00029 | 0.0020 mg/L | | 0.00029 | 14.34% |
| Na 330.237† | 213.8 | 3.779 mg/L | | 0.9123 | 3.779 mg/L | | 0.9123 | 24.14% |
| Ni 232.003† | 530.7 | 0.0097 mg/L | | 0.00074 | 0.0097 mg/L | | 0.00074 | 7.62% |
| Pb 220.353† | 11.2 | 0.0004 mg/L | | 0.00102 | 0.0004 mg/L | | 0.00102 | 258.23% |
| Sb 206.836† | -16.1 | -0.0019 mg/L | | 0.00133 | -0.0019 mg/L | | 0.00133 | 68.84% |
| Se 196.026† | -13.2 | -0.0056 mg/L | | 0.00216 | -0.0056 mg/L | | 0.00216 | 38.85% |

Analytical Standard Record

Turner Laboratories, Inc.

2101375

Description: ICP Cal Standard #1
 Standard Type: Calibration Standard
 Solvent: 1% HNO3
 Final Volume (mls): 100
 Vials: 1

Expires: 01/31/2022
 Prepared: 04/10/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/16/2021 09:56 by MH

ICP Calib Standard #1 with SiO2

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Nickel | 7440-02-0 | 1 | ug/mL |
| Barium | 7440-39-3 | 1 | ug/mL |
| Beryllium | 7440-41-7 | 0.5 | ug/mL |
| Cadmium | 7440-43-9 | 1.5 | ug/mL |
| Calcium | 7440-70-2 | 50 | ug/mL |
| Chromium | 7440-47-3 | 1 | ug/mL |
| Cobalt | 7440-48-4 | 1 | ug/mL |
| Copper | 7440-50-8 | 1 | ug/mL |
| Aluminum | 7429-90-5 | 10 | ug/mL |
| Manganese | 7439-96-5 | 1 | ug/mL |
| Zinc | 7440-66-6 | 1.5 | ug/mL |
| Potassium | 7440-09-7 | 20 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Selenium | 7782-49-2 | 2 | ug/mL |
| Silica | 7631-86-9 | 5 | ug/mL |
| Sodium | 7440-23-5 | 10 | ug/mL |
| Vanadium | 7440-62-2 | 1 | ug/mL |
| Yttrium | | 0.02 | ug/mL |
| Lead | 7439-92-1 | 5 | ug/mL |

Lot #: n/a
 Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------------|------------|--------------|------------|------------------------|-------|
| 2004492 | ICP Stock Calibration Standard #1 | 10/19/2020 | ** Vendor ** | 04/30/2022 | 11/13/2020 08:44 by MH | 1 |
| 2100713 | Silica Standard Solution 1000ppm | 02/25/2021 | ** Vendor ** | 01/31/2022 | 04/05/2021 08:01 by MH | 0.5 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2004492

Description: ICP Stock Calibration Standard #1
Standard Type: Calibration Standard
Solvent: 5% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 04/30/2022
Prepared: 10/19/2020
Prepared By: ** Vendor **
Department: ICP
Last Edit: 11/13/2020 08:44 by MH

1ml/100ml DI for ICP Calibration Standard #1
P/N 4400-150924AM02-Vol

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Lead | 7439-92-1 | 500 | ug/mL |
| Barium | 7440-39-3 | 100 | ug/mL |
| Beryllium | 7440-41-7 | 50 | ug/mL |
| Cadmium | 7440-43-9 | 150 | ug/mL |
| Calcium | 7440-70-2 | 5000 | ug/mL |
| Chromium | 7440-47-3 | 100 | ug/mL |
| Aluminum | 7429-90-5 | 1000 | ug/mL |
| Copper | 7440-50-8 | 100 | ug/mL |
| Zinc | 7440-66-6 | 150 | ug/mL |
| Manganese | 7439-96-5 | 100 | ug/mL |
| Nickel | 7440-02-0 | 100 | ug/mL |
| Potassium | 7440-09-7 | 2000 | ug/mL |
| Selenium | 7782-49-2 | 200 | ug/mL |
| Sodium | 7440-23-5 | 1000 | ug/mL |
| Vanadium | 7440-62-2 | 100 | ug/mL |
| Cobalt | 7440-48-4 | 100 | ug/mL |

Lot #: 10082634-3
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2100713

Description: Silica Standard Solution 1000ppm
Standard Type: Analyte Spike
Solvent: n/a
Final Volume (mls): 500
Vials: 1

Expires: 01/31/2022
Prepared: 02/25/2021
Prepared By: ** Vendor **
Department: SPECTRO
Last Edit: 04/05/2021 08:01 by MH

Cat# 194-49

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1000 | mg/L |

Lot #: A1011
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2101000

Description: ICP Internal Standard
Standard Type: Internal Standard
Solvent: 2% HNO3
Final Volume (mls): 250
Vials: 1

Expires: 07/31/2022
Prepared: 03/17/2021
Prepared By: Marissa Huff
Department: ICP
Last Edit: 04/13/2021 08:52 by MH

200 PPM Yttrium & Scandium Internal Standard

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Yttrium | | 4 | ug/mL |
| Scandium | | 4 | ug/mL |

Lot #: 2011112-100/2029324-100
Vendor: ESI

Parent Standards used in this standard:

| Standard | Description: | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------|------------|--------------|------------|------------------------|-------|
| 2100263 | ICP Scandium Standard | 01/21/2021 | ** Vendor ** | 07/31/2022 | 04/12/2021 07:56 by MH | 1 |
| 2100264 | ICP Yttrium Standard | 01/21/2021 | ** Vendor ** | 07/31/2022 | 04/13/2021 08:52 by MH | 1 |

Analytical Standard Record

Turner Laboratories, Inc.

2100263

Description: ICP Scandium Standard
Standard Type: Internal Standard
Solvent: 2% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 07/31/2022
Prepared: 01/21/2021
Prepared By: ** Vendor **
Department: EXPIRED STANDARDS
Last Edit: 04/12/2021 07:56 by MH

1000 ppm Scandium Standard
P/N S1-Sc-1000-Vol

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Scandium | | 1000 | ug/mL |

Lot #: 2011112-100
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2100264

Description: ICP Yttrium Standard
Standard Type: Internal Standard
Solvent: 2% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 07/31/2022
Prepared: 01/21/2021
Prepared By: ** Vendor **
Department: EXPIRED STANDARDS
Last Edit: 04/13/2021 08:52 by MH

1000 ppm Yttrium Standard
P/N S1-Y-100-Vol

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Yttrium | | 1000 | ug/mL |

Lot #: 2029324-100
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2101333

Description: ICP Cal Standard #2
 Standard Type: Calibration Standard
 Solvent: 1% HNO3
 Final Volume (mls): 100
 Vials: 1

Expires: 02/28/2022
 Prepared: 04/08/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/15/2021 11:18 by MH

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Sodium | 7440-23-5 | 12.5 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Potassium | 7440-09-7 | 12.5 | ug/mL |
| Phosphorus | | 10 | ug/mL |
| Molybdenum | 7439-98-7 | 1 | ug/mL |
| Magnesium | 7439-95-4 | 12.5 | ug/mL |
| Iron | 7439-89-6 | 20 | ug/mL |
| Calcium | 7440-70-2 | 12.5 | ug/mL |
| Arsenic | 7440-38-2 | 5 | ug/mL |

Lot #: 10087093-3
 Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003534 | ICP Stock Calibration Standard #2 | 08/14/2020 | ** Vendor ** | 02/28/2022 | 04/07/2021 10:38 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2003534

Description: ICP Stock Calibration Standard #2
Standard Type: Calibration Standard
Solvent: 5% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 02/28/2022
Prepared: 08/14/2020
Prepared By: ** Vendor **
Department: ICP
Last Edit: 04/07/2021 10:38 by MH

1ml/100 ml DI for ICP 7300DV Calibration Standard #2
P/N 4400-150924AM03

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Sodium | 7440-23-5 | 1250 | ug/mL |
| Potassium | 7440-09-7 | 1250 | ug/mL |
| Phosphorus | | 1000 | ug/mL |
| Molybdenum | 7439-98-7 | 100 | ug/mL |
| Magnesium | 7439-95-4 | 1250 | ug/mL |
| Iron | 7439-89-6 | 2000 | ug/mL |
| Calcium | 7440-70-2 | 1250 | ug/mL |
| Arsenic | 7440-38-2 | 500 | ug/mL |

Lot #: 10087093-3
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101338

Description: ICP Cal Standard #3
 Standard Type: Calibration Standard
 Solvent: 1% HNO3/ 2% HCl
 Final Volume (mls): 100
 Vials: 1

Expires: 11/30/2021
 Prepared: 04/08/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/16/2021 07:14 by MH

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Thallium | 7440-28-0 | 2 | ug/mL |
| Silver | 7440-22-4 | 0.5 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Boron | 7440-42-8 | 1 | ug/mL |
| Beryllium | 7440-41-7 | 0.025 | ug/mL |
| Antimony | 7440-36-0 | 2 | ug/mL |

Lot #: 10079343-4
 Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------------|------------|--------------|------------|------------------------|-------|
| 2002097 | ICP Stock Calibration Standard #3 | 05/18/2020 | ** Vendor ** | 11/30/2021 | 05/18/2020 12:46 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2002097

Description: ICP Stock Calibration Standard #3
Standard Type: Calibration Standard
Solvent: 5% HNO3 trace HF
Final Volume (mls): 100
Vials: 1

Expires: 11/30/2021
Prepared: 05/18/2020
Prepared By: ** Vendor **
Department: ICP
Last Edit: 05/18/2020 12:46 by MH

1ml/100ml DI for ICP Cal Standard #3
P/N 4400-150924AM04

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Thallium | 7440-28-0 | 200 | ug/mL |
| Silver | 7440-22-4 | 50 | ug/mL |
| Boron | 7440-42-8 | 100 | ug/mL |
| Beryllium | 7440-41-7 | 2.5 | ug/mL |
| Antimony | 7440-36-0 | 200 | ug/mL |

Lot #: 10079343-4
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101382

Description: ICP ICV/CCV #1
Standard Type: Calibration Standard
Solvent: 1% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 04/13/2022
Prepared: 04/13/2021
Prepared By: Marissa Huff
Department: EXPIRED STANDARDS
Last Edit: 04/16/2021 07:20 by MH

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 1 | ug/mL |
| Arsenic | 7440-38-2 | 1 | ug/mL |
| Beryllium | 7440-41-7 | 1 | ug/mL |
| Cadmium | 7440-43-9 | 1 | ug/mL |
| Calcium | 7440-70-2 | 1 | ug/mL |
| Chromium | 7440-47-3 | 1 | ug/mL |
| Cobalt | 7440-48-4 | 1 | ug/mL |
| Copper | 7440-50-8 | 1 | ug/mL |
| Iron | 7439-89-6 | 1 | ug/mL |
| Lead | 7439-92-1 | 1 | ug/mL |
| Antimony | 7440-36-0 | 1 | ug/mL |
| Magnesium | 7439-95-4 | 1 | ug/mL |
| Zinc | 7440-66-6 | 1 | ug/mL |
| Molybdenum | 7439-98-7 | 1 | ug/mL |
| Nickel | 7440-02-0 | 1 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Selenium | 7782-49-2 | 1 | ug/mL |
| Strontium | 7440-24-6 | 1 | ug/mL |
| Thallium | 7440-28-0 | 1 | ug/mL |
| Titanium | 7440-32-6 | 1 | ug/mL |
| Vanadium | 7440-62-2 | 1 | ug/mL |
| Yttrium | | 0.02 | ug/mL |
| Lithium | 7439-93-2 | 1 | ug/mL |

Lot #: 1074729-2
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101382

Page 2

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------|------------|--------------|------------|------------------------|-------|
| 2100526 | ICP ICV 1 Stock | 02/12/2021 | ** Vendor ** | 08/30/2022 | 03/31/2021 07:14 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

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Analytical Standard Record

Turner Laboratories, Inc.

2100526

Description: ICP ICV 1 Stock
 Standard Type: Analyte Spike
 Solvent: 2% HNO3 + Tr HF
 Final Volume (mls): 500
 Vials: 1

Expires: 08/30/2022
 Prepared: 02/12/2021
 Prepared By: ** Vendor **
 Department: ICP
 Last Edit: 03/31/2021 07:14 by MH

100 ppm Stock for ICV 1 and 6010C MS/MSD
 P/N 4400-011
 Quality Control Standard - 21 Elements

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Magnesium | 7439-95-4 | 100 | ug/mL |
| Arsenic | 7440-38-2 | 100 | ug/mL |
| Beryllium | 7440-41-7 | 100 | ug/mL |
| Cadmium | 7440-43-9 | 100 | ug/mL |
| Calcium | 7440-70-2 | 100 | ug/mL |
| Chromium | 7440-47-3 | 100 | ug/mL |
| Cobalt | 7440-48-4 | 100 | ug/mL |
| Copper | 7440-50-8 | 100 | ug/mL |
| Iron | 7439-89-6 | 100 | ug/mL |
| Antimony | 7440-36-0 | 100 | ug/mL |
| Lithium | 7439-93-2 | 100 | ug/mL |
| Zinc | 7440-66-6 | 100 | ug/mL |
| Manganese | 7439-96-5 | 100 | ug/mL |
| Molybdenum | 7439-98-7 | 100 | ug/mL |
| Nickel | 7440-02-0 | 100 | ug/mL |
| Selenium | 7782-49-2 | 100 | ug/mL |
| Strontium | 7440-24-6 | 100 | ug/mL |
| Thallium | 7440-28-0 | 100 | ug/mL |
| Titanium | 7440-32-6 | 100 | ug/mL |
| Vanadium | 7440-62-2 | 100 | ug/mL |
| Lead | 7439-92-1 | 100 | ug/mL |

Lot #: 1074729-2
 Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101383

Description: ICP ICV/CCV #2
 Standard Type: Calibration Standard
 Solvent: 1% HNO3/2%HCl
 Final Volume (mls): 100
 Vials: 1

Expires: 02/28/2022
 Prepared: 04/13/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/16/2021 07:22 by MH

1 of 1

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Sodium | 7440-23-5 | 1 | ug/mL |
| Silver | 7440-22-4 | 0.5 | ug/mL |
| Silicon | 7440-21-3 | 1 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Potassium | 7440-09-7 | 10 | ug/mL |
| Boron | 7440-42-8 | 1 | ug/mL |
| Barium | 7440-39-3 | 1 | ug/mL |
| Aluminum | 7429-90-5 | 1 | ug/mL |

Lot #: 1088799-2
 Vendor: CPI

| Parent Standards used in this standard: | | | | | | |
|---|-----------------------|------------|--------------|------------|------------------------|-------|
| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
| 2003706 | ICP ICV 2 Stock | 08/27/2020 | ** Vendor ** | 02/28/2022 | 03/26/2021 13:55 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2003706

Description: ICP ICV 2 Stock
Standard Type: Analyte Spike
Solvent: 5% HNO3
Final Volume (mls): 500
Vials: 1

Expires: 02/28/2022
Prepared: 08/27/2020
Prepared By: ** Vendor **
Department: ICP
Last Edit: 03/26/2021 13:55 by MH

P/N 4400-010106
Replacement for 2003533 (all the silver fell out of solution)

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Sodium | 7440-23-5 | 100 | ug/mL |
| Silver | 7440-22-4 | 50 | ug/mL |
| Silicon | 7440-21-3 | 100 | ug/mL |
| Potassium | 7440-09-7 | 1000 | ug/mL |
| Boron | 7440-42-8 | 100 | ug/mL |
| Barium | 7440-39-3 | 100 | ug/mL |
| Aluminum | 7429-90-5 | 100 | ug/mL |

Lot #: 1088799-2
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101384

Description: ICP ICV/CCV #3
 Standard Type: Calibration Standard
 Solvent: 1% HNO3
 Final Volume (mls): 100
 Vials: 1

Expires: 02/28/2022
 Prepared: 04/13/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/16/2021 07:25 by MH

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Sodium | 7440-23-5 | 10 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Potassium | 7440-09-7 | 10 | ug/mL |
| Phosphorus | | 5 | ug/mL |
| Molybdenum | 7439-98-7 | 1 | ug/mL |
| Magnesium | 7439-95-4 | 10 | ug/mL |
| Calcium | 7440-70-2 | 10 | ug/mL |
| Boron | 7440-42-8 | 1 | ug/mL |

Lot #: 2103403-250
 Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------|------------|--------------|------------|------------------------|-------|
| 2100508 | ICP Spike B | 02/11/2021 | ** Vendor ** | 02/28/2022 | 02/15/2021 10:39 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2100508

Description: ICP Spike B
Standard Type: Analyte Spike
Solvent: 2% HNO3 + Tr HF
Final Volume (mls): 250
Vials: 1

Expires: 02/28/2022
Prepared: 02/11/2021
Prepared By: ** Vendor **
Department: ICP
Last Edit: 02/15/2021 10:39 by MH

Custom Spike Mix for 200.7 analysis / 200.2 Digestions
P/N C1-160622RH01xVol

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Sodium | 7440-23-5 | 1000 | ug/mL |
| Potassium | 7440-09-7 | 1000 | ug/mL |
| Phosphorus | | 500 | ug/mL |
| Molybdenum | 7439-98-7 | 100 | ug/mL |
| Magnesium | 7439-95-4 | 1000 | ug/mL |
| Calcium | 7440-70-2 | 1000 | ug/mL |
| Boron | 7440-42-8 | 100 | ug/mL |

Lot #: 2103403-250
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2101376

Description: ICP ICV/CCV #4
 Standard Type: Calibration Standard
 Solvent: 1% HNO3
 Final Volume (mls): 100
 Vials: 1

Expires: 04/10/2022
 Prepared: 04/10/2021
 Prepared By: Marissa Huff
 Department: EXPIRED STANDARDS
 Last Edit: 04/15/2021 11:17 by MH

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Silica | 7631-86-9 | 2.5 | ug/mL |
| Scandium | | 0.02 | ug/mL |

Lot #: 0006470623
 Vendor: CPI

| Parent Standards used in this standard: | | | | | | |
|---|-----------------------------------|------------|--------------|------------|------------------------|-------|
| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
| 2005064 | Silica QCS Stock Standard 1000ppm | 12/01/2020 | ** Vendor ** | 07/31/2026 | 12/08/2020 16:13 by MH | 0.25 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2005064

Description: Silica QCS Stock Standard 1000ppm Expires: 07/31/2026
Standard Type: Analyte Spike Prepared: 12/01/2020
Solvent: N/A Prepared By: ** Vendor **
Final Volume (mls): 125 Department: SPECTRO
Vials: 1 Last Edit: 12/08/2020 16:13 by MH

QCS STANDARD
CAT # ICP-014A

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1000 | ug/mL |

Lot #: 0006470623
Vendor: Agilent

Analytical Standard Record

Turner Laboratories, Inc.

2101441

Description: ICP Cal Standard #2
 Standard Type: Calibration Standard
 Solvent: 1% HNO3
 Final Volume (mls): 100
 Vials: 1

Expires: 02/28/2022
 Prepared: 04/15/2021
 Prepared By: Marissa Huff
 Department: ICP
 Last Edit: 04/15/2021 11:18 by MH

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Sodium | 7440-23-5 | 12.5 | ug/mL |
| Scandium | | 0.02 | ug/mL |
| Potassium | 7440-09-7 | 12.5 | ug/mL |
| Phosphorus | | 10 | ug/mL |
| Molybdenum | 7439-98-7 | 1 | ug/mL |
| Magnesium | 7439-95-4 | 12.5 | ug/mL |
| Iron | 7439-89-6 | 20 | ug/mL |
| Calcium | 7440-70-2 | 12.5 | ug/mL |
| Arsenic | 7440-38-2 | 5 | ug/mL |

Lot #: 10087093-3
 Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003534 | ICP Stock Calibration Standard #2 | 08/14/2020 | ** Vendor ** | 02/28/2022 | 04/07/2021 10:38 by MH | 1 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101440

Description: ICP ICV/CCV #4
Standard Type: Calibration Standard
Solvent: 1% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 04/15/2022
Prepared: 04/15/2021
Prepared By: Marissa Huff
Department: ICP
Last Edit: 04/15/2021 11:17 by MH

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Yttrium | | 0.02 | ug/mL |
| Silica | 7631-86-9 | 2.5 | ug/mL |
| Scandium | | 0.02 | ug/mL |

Lot #: 0006470623
Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------------|------------|--------------|------------|------------------------|-------|
| 2005064 | Silica QCS Stock Standard 1000ppm | 12/01/2020 | ** Vendor ** | 07/31/2026 | 12/08/2020 16:13 by MH | 0.25 |
| 2101000 | ICP Internal Standard | 03/17/2021 | Marissa Huff | 07/31/2022 | 04/13/2021 08:52 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101359

Description: 1:1 Nitric for Metals 200.7 Digestions
Standard Type: Reagent
Solvent: DI H2O
Final Volume (mls): 500
Vials: 1

Expires: 04/09/2022
Prepared: 04/09/2021
Prepared By: Lilian Bodley
Department: ICP
Last Edit: 04/09/2021 13:39 by LB

500 mL HNO3 (2100816) in 500 mL DI H2O

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: K0618
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2100816

Description: Nitric Acid Trace Metal
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 2500
Vials: 4

Expires: 09/30/2025
Prepared: 03/05/2021
Prepared By: Lilian Bodley
Department: ICP
Last Edit: 04/13/2021 10:04 by LB

Received in lab 4) 2.5 L
P/N A200C-212

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: 198276
Vendor: ACP

Analytical Standard Record

Turner Laboratories, Inc.

2101360

Description: 1:1 HCl for 200.7 Digestions
Standard Type: Reagent
Solvent: DI H2O
Final Volume (mls): 500
Vials: 1

Expires: 04/09/2022
Prepared: 04/09/2021
Prepared By: Lilian Bodley
Department: ICP
Last Edit: 04/09/2021 13:39 by LB

Add 500 mL HCl (2100746) to 500 mL DI water.

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: 4119060

Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2100746

Description: Hydrochloric Acid Trace Metal
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 2500
Vials: 4

Expires: 10/08/2023
Prepared: 03/01/2021
Prepared By: Lilian Bodley
Department: ICP
Last Edit: 03/01/2021 14:39 by LB

Received in lab: 4) 2.5 L HCl

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: 4120020

Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

2001459

Description: ICP PQL Check
 Standard Type: Analyte Spike
 Solvent: 5% HNO3 + tr HF
 Final Volume (mls): 100
 Vials: 1

Expires: 04/30/2021
 Prepared: 04/08/2020
 Prepared By: ** Vendor **
 Department: ICP
 Last Edit: 09/10/2020 11:18 by MH

P/N 4400-140815NB05

Expiration sticker on bottle differs from C of A (C of A expiry date reflected in LIMS). contacted CPI to confirm validity period.

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Magnesium | 7439-95-4 | 300 | ug/mL |
| Antimony | 7440-36-0 | 20 | ug/mL |
| Arsenic | 7440-38-2 | 4 | ug/mL |
| Barium | 7440-39-3 | 5 | ug/mL |
| Beryllium | 7440-41-7 | 0.2 | ug/mL |
| Boron | 7440-42-8 | 10 | ug/mL |
| Cadmium | 7440-43-9 | 0.2 | ug/mL |
| Calcium | 7440-70-2 | 400 | ug/mL |
| Chromium | 7440-47-3 | 3 | ug/mL |
| Cobalt | 7440-48-4 | 10 | ug/mL |
| Copper | 7440-50-8 | 2 | ug/mL |
| Aluminum | 7429-90-5 | 200 | ug/mL |
| Lead | 7439-92-1 | 4 | ug/mL |
| Zinc | 7440-66-6 | 4 | ug/mL |
| Manganese | 7439-96-5 | 2 | ug/mL |
| Molybdenum | 7439-98-7 | 1 | ug/mL |
| Nickel | 7440-02-0 | 5 | ug/mL |
| Phosphorus | | 50 | ug/mL |
| Potassium | 7440-09-7 | 500 | ug/mL |
| Selenium | 7782-49-2 | 4 | ug/mL |
| Silver | 7440-22-4 | 1 | ug/mL |
| Sodium | 7440-23-5 | 500 | ug/mL |
| Thallium | 7440-28-0 | 5 | ug/mL |
| Vanadium | 7440-62-2 | 10 | ug/mL |
| Iron | 7439-89-6 | 30 | ug/mL |

Lot #: 10080053-3

Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2100525

Description: ICP Spike A
Standard Type: Analyte Spike
Solvent: 5% HNO3/ Tr HF
Final Volume (mls): 250
Vials: 1

Expires: 08/31/2022
Prepared: 02/12/2021
Prepared By: ** Vendor **
Department: ICP
Last Edit: 02/12/2021 15:06 by MH

Spike Solution for 200.7 Analysis / 200.2 Digestions
P/N 4400-SPIKE1-250

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Iron | 7439-89-6 | 100 | ug/mL |
| Antimony | 7440-36-0 | 50 | ug/mL |
| Arsenic | 7440-38-2 | 200 | ug/mL |
| Barium | 7440-39-3 | 200 | ug/mL |
| Beryllium | 7440-41-7 | 5 | ug/mL |
| Cadmium | 7440-43-9 | 5 | ug/mL |
| Chromium | 7440-47-3 | 20 | ug/mL |
| Aluminum | 7429-90-5 | 200 | ug/mL |
| Copper | 7440-50-8 | 25 | ug/mL |
| Zinc | 7440-66-6 | 50 | ug/mL |
| Lead | 7439-92-1 | 50 | ug/mL |
| Manganese | 7439-96-5 | 50 | ug/mL |
| Nickel | 7440-02-0 | 50 | ug/mL |
| Selenium | 7782-49-2 | 200 | ug/mL |
| Silver | 7440-22-4 | 5 | ug/mL |
| Thallium | 7440-28-0 | 200 | ug/mL |
| Vanadium | 7440-62-2 | 50 | ug/mL |
| Cobalt | 7440-48-4 | 50 | ug/mL |

Lot #: 10065588-12
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101204

Description: SiO₂ PQL check
 Standard Type: Analyte Spike
 Solvent: 1% HNO₃
 Final Volume (mls): 50
 Vials: 1

Expires: 01/31/2022
 Prepared: 04/01/2021
 Prepared By: ** Vendor **
 Department: ICP
 Last Edit: 04/05/2021 08:01 by MH

10 ppm SiO₂ to make SiO₂ pql check

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 10 | ug/mL |

Lot #: A1011
 Vendor: Hach

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2100713 | Silica Standard Solution 1000ppm | 02/25/2021 | ** Vendor ** | 01/31/2022 | 04/05/2021 08:01 by MH | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2003408

Description: Nitric Acid Trace Metal
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 2500
Vials: 4

Expires: 08/06/2021
Prepared: 08/06/2020
Prepared By: ** Vendor **
Department: ICP
Last Edit: 08/06/2020 08:06 by JG

Received in lab 4) 2.5 L
P/N N-2802

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: H2719
Vendor: ACP

ug/mL

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01

2104129-MS1

2104161-MS1

Dissolved & Total ICPMS Metals

EPA 200.8

Analysis Date – April 13, 14 & 15, 2021

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| Prep Batch | | 110 |
| Sequence log | (04/13/2021) | 112 |
| Analytical data | (04/13/2021) | 114 |
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| Analytical data | (04/14/2021) | 142 |
| Sequence log | (04/15/2021) | 162 |
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| Standard log entries and traceability | | 192 |

Date Prepared: 04/15/2021 11:00:00AM
 Prep Batch: 2104129
 Prep Code: E 200.8 D ICP/MS

Technician: CR

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|---------------------------------------|------------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|--------------------------|
| 2104129-BLK Blank | | Non-Potable Water | | 10 | / | / | 10 | |
| 2104129-BS1 LCS | | Non-Potable Water | | 10 | 2100198/25 | / | 10 | |
| 2104129-BSD LCS Dup | | Non-Potable Water | | 10 | 2100198/25 | / | 10 | |
| 2104129-MS1 Matrix Spike [21D0200-01] | | Non-Potable Water | | 10 | 2100198/25 | / | | |
| 21A0441-05RA3-03 | | Non-Potable Water | | 50 | | | 50 | Report to MDL |
| 21D0185-01 | Tribal Herd DW62 Well Id 263 | Drinking Water | | 50 | | | 50 | |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0248-01 | PLS | Non-Potable Water | | 50 | | | 50 | |
| 21D0250-01 | Durham | Drinking Water | | 50 | | | 50 | |
| 21D0250-02 | Hill | Drinking Water | | 50 | | | 50 | |
| 21D0250-03 | Saddle | Drinking Water | | 50 | | | 50 | |
| 21D0342-01 | Range Well E1 Well Id #606 | Drinking Water | | 50 | | | 50 | |

lab or field filtered through 0.45um

| Number | Reagent Name | Spike ID | Spike Name | Number | Surrogate Name |
|---------|-------------------------|----------|---------------------------------------|--------|----------------|
| 2003408 | Nitric Acid Trace Metal | 2100198 | ICP MS Cal Stock w/ Al & Zn (Virtual) | | |

Analysis: U by ICP/MS, Dissolved

Date Prepared: 04/12/2021 12:50:00PM

Prep Batch: 2104161 Prep Code: E 200.8 ICP/MS

Technician: LB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|---------------------------------------|----------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|-------------------------------|
| 2104161-BLK Blank | | Drinking Water | | 50 | / | / | 50 | |
| 2104161-BS1 LCS | | Drinking Water | | 50 | 2100198/125 | / | 50 | |
| 2104161-BS1 LCS | | Drinking Water | | 50 | 2100198/125 | / | 50 | |
| 2104161-MS1 Matrix Spike [21D0184-01] | | Drinking Water | | 50 | 2100198/125 | / | 50 | |
| 2104161-MS2 Matrix Spike [21D0256-01] | | Drinking Water | | 50 | 2100198/125 | / | 50 | |
| 21C0733-03 AVRW0112 | | Drinking Water | | 50 | | | 50 | |
| 21D0106-03 Concentrate | | Drinking Water | | 50 | | | 50 | |
| 21D0111-01 Composite | | Non-Potable Water | | 50 | | | 50 | Custom limit |
| 21D0115-01 Discharge | | Non-Potable Water | | 50 | | | 50 | |
| 21D0146-01 Well | | Drinking Water | | 50 | | | 50 | |
| 21D0148-01 MW19-12-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-02 BW-1-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-03 VW20-16-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-04 VW-20-13-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-05 TSDW19-1RRR-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-06 TS-MW19-13-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-07 TW-542020-20210405 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0184-01 Comp | | Non-Potable Water | | 50 | | | 50 | Added for BatchQC in: 2104161 |
| 21D0200-01 MW-9-20210407 | | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0215-03 Concentrate | | Drinking Water | | 50 | | | 50 | |
| 21D0256-01 Effluent | | Non-Potable Water | | 50 | | | 50 | Added for BatchQC in: 2104161 |
| 21D0273-03 Concentrate | | Drinking Water | | 50 | | | 50 | |

Digested at 95 deg C

Turner Report Sample List

4/13/2021 3:27:12 PM



Sample List Summary:

Instrument Name: iCAP RQ
 Filename: 210413_1.imexp

4/13/2021
4/14/2021

| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|--------------------------|------------|--------------|-----------------------|------------------|
| 1 | Blank | 3 | 1 | 4/13/2021 11:09:01 AM | TURNER\PEService |
| 2 | Cal Std 1 <i>2101339</i> | 3 | 1 | 4/13/2021 11:12:28 AM | TURNER\PEService |
| 3 | Cal Std 2 <i>2101340</i> | 3 | 1 | 4/13/2021 11:15:55 AM | TURNER\PEService |
| 4 | Cal Std 3 <i>2101341</i> | 3 | 1 | 4/13/2021 11:19:22 AM | TURNER\PEService |
| 5 | Cal Std 4 <i>2101342</i> | 3 | 1 | 4/13/2021 11:22:50 AM | TURNER\PEService |
| 6 | ICB | 3 | 1 | 4/13/2021 11:26:19 AM | TURNER\PEService |
| 7 | IPC <i>2101341</i> | 3 | 1 | 4/13/2021 11:29:45 AM | TURNER\PEService |
| 8 | ICV | 3 | 1 | 4/13/2021 11:33:13 AM | TURNER\PEService |
| 9 | ICV <i>2101343</i> | 3 | 1 | 4/13/2021 11:36:43 AM | TURNER\PEService |
| 10 | ICV <i>2101402</i> | 3 | 1 | 4/13/2021 11:45:49 AM | TURNER\PEService |
| 11 | 0.25 CHK STD | 3 | 1 | 4/13/2021 11:49:19 AM | TURNER\PEService |
| 12 | 0.50 CHK STD | 3 | 1 | 4/13/2021 11:52:45 AM | TURNER\PEService |
| 13 | 40 CHK STD | 3 | 1 | 4/13/2021 11:56:12 AM | TURNER\PEService |
| 14 | 2104105-BLK1 | 3 | 1 | 4/13/2021 11:59:39 AM | TURNER\PEService |
| 15 | 21C0683-05 | 3 | 1 | 4/13/2021 12:03:06 PM | TURNER\PEService |
| 16 | CCB | 3 | 1 | 4/13/2021 12:06:34 PM | TURNER\PEService |
| 17 | CCV <i>2101402</i> | 3 | 1 | 4/13/2021 12:10:01 PM | TURNER\PEService |
| 18 | 2104161-BLK1 | 3 | 1 | 4/13/2021 12:13:31 PM | TURNER\PEService |
| 19 | 2104161-BS1 | 3 | 1 | 4/13/2021 12:16:59 PM | TURNER\PEService |
| 20 | 2104161-BSD1 | 3 | 1 | 4/13/2021 12:20:27 PM | TURNER\PEService |
| 21 | TEST BS (NR) | 3 | 1 | 4/13/2021 12:23:56 PM | TURNER\PEService |
| 22 | TEST BSD (NR) | 3 | 1 | 4/13/2021 12:27:25 PM | TURNER\PEService |
| 23 | 21D0184-01 | 3 | 1 | 4/13/2021 12:30:54 PM | TURNER\PEService |
| 24 | 2104161-MS1 | 3 | 1 | 4/13/2021 12:34:24 PM | TURNER\PEService |
| 25 | 21D0256-01 | 3 | 1 | 4/13/2021 12:37:55 PM | TURNER\PEService |
| 26 | 2104161-MS2 | 3 | 1 | 4/13/2021 12:41:20 PM | TURNER\PEService |
| 27 | CCB | 3 | 1 | 4/13/2021 12:44:47 PM | TURNER\PEService |
| 28 | CCB | 3 | 1 | 4/13/2021 12:48:14 PM | TURNER\PEService |
| 29 | CCV | 3 | 1 | 4/13/2021 12:51:41 PM | TURNER\PEService |
| 30 | 21D0184-01@20 | 3 | 1 | 4/13/2021 12:58:15 PM | TURNER\PEService |
| 31 | 2104161-MS1@20 | 3 | 1 | 4/13/2021 1:01:42 PM | TURNER\PEService |
| 32 | 21D0256-01@20 | 3 | 1 | 4/13/2021 1:05:10 PM | TURNER\PEService |
| 33 | 2104161-MS2@20 | 3 | 1 | 4/13/2021 1:08:37 PM | TURNER\PEService |
| 34 | CCB | 3 | 1 | 4/13/2021 1:12:04 PM | TURNER\PEService |
| 35 | CCV | 3 | 1 | 4/13/2021 1:15:32 PM | TURNER\PEService |
| 36 | 21D0148-01 | 3 | 1 | 4/13/2021 1:20:06 PM | TURNER\PEService |
| 37 | 21D0148-02 | 3 | 1 | 4/13/2021 1:23:33 PM | TURNER\PEService |
| 38 | 21D0148-03 | 3 | 1 | 4/13/2021 1:27:01 PM | TURNER\PEService |
| 39 | 21D0148-04 | 3 | 1 | 4/13/2021 1:30:28 PM | TURNER\PEService |
| 40 | 21D0148-05 | 3 | 1 | 4/13/2021 1:33:56 PM | TURNER\PEService |
| 41 | 21D0148-06 | 3 | 1 | 4/13/2021 1:37:25 PM | TURNER\PEService |
| 42 | 21D0148-07 | 3 | 1 | 4/13/2021 1:40:54 PM | TURNER\PEService |
| 43 | 21D0200-01 | 3 | 1 | 4/13/2021 1:44:23 PM | TURNER\PEService |
| 44 | CCB | 3 | 1 | 4/13/2021 1:47:52 PM | TURNER\PEService |

OK
4/13/21

0.25 CHK STD = 0.25 mc st 1/3 2100805 diluted to 1mc
0.50 CHK STD = 0.50 mc st 2100805 diluted to 1mc

Turner Report Sample List

4/13/2021 3:27:12 PM



| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|----------------|------------|--------------|----------------------|------------------|
| 45 | CCV | 3 | 1 | 4/13/2021 1:51:20 PM | TURNER\PEService |
| 46 | 21D0148-01@5 | 3 | 1 | 4/13/2021 1:55:20 PM | TURNER\PEService |
| 47 | 21D0148-02@2 | 3 | 1 | 4/13/2021 1:58:48 PM | TURNER\PEService |
| 48 | 21D0148-03@10 | 3 | 1 | 4/13/2021 2:02:17 PM | TURNER\PEService |
| 49 | 21D0148-04@2 | 3 | 1 | 4/13/2021 2:05:46 PM | TURNER\PEService |
| 50 | 21D0148-05@5 | 3 | 1 | 4/13/2021 2:09:15 PM | TURNER\PEService |
| 51 | 21D0148-06@5 | 3 | 1 | 4/13/2021 2:12:45 PM | TURNER\PEService |
| 52 | 21D0148-07@5 | 3 | 1 | 4/13/2021 2:16:14 PM | TURNER\PEService |
| 53 | 21D0200-01@20 | 3 | 1 | 4/13/2021 2:19:45 PM | TURNER\PEService |
| 54 | 21D0148-01@10 | 3 | 1 | 4/13/2021 2:23:15 PM | TURNER\PEService |
| 55 | 21D0148-02@5 | 3 | 1 | 4/13/2021 2:26:44 PM | TURNER\PEService |
| 56 | CCB | 3 | 1 | 4/13/2021 2:31:02 PM | TURNER\PEService |
| 57 | CCV | 3 | 1 | 4/13/2021 2:34:30 PM | TURNER\PEService |
| 58 | 21D0106-03@100 | 3 | 1 | 4/13/2021 2:39:08 PM | TURNER\PEService |
| 59 | 21D0215-03@100 | 3 | 1 | 4/13/2021 2:42:38 PM | TURNER\PEService |
| 60 | 21D0273-03@100 | 3 | 1 | 4/13/2021 2:46:09 PM | TURNER\PEService |
| 61 | CCB | 3 | 1 | 4/13/2021 2:49:37 PM | TURNER\PEService |
| 62 | CCB | 3 | 1 | 4/13/2021 2:53:06 PM | TURNER\PEService |
| 63 | CCV | 3 | 1 | 4/13/2021 3:02:37 PM | TURNER\PEService |
| 64 | 21C0733-03 | 3 | 1 | 4/13/2021 3:06:10 PM | TURNER\PEService |
| 65 | 21D0115-01 | 3 | 1 | 4/13/2021 3:09:38 PM | TURNER\PEService |
| 66 | 21D0146-01 | 3 | 1 | 4/13/2021 3:13:06 PM | TURNER\PEService |
| 67 | 21D0111-01 | 3 | 1 | 4/13/2021 3:16:35 PM | TURNER\PEService |
| 68 | CCB | 3 | 1 | 4/13/2021 3:20:04 PM | TURNER\PEService |
| 69 | CCV | 3 | 1 | 4/13/2021 3:23:33 PM | TURNER\PEService |

Turner Report Sample List

4/13/2021 3:27:12 PM



Calibration Summary

| Index | 5 |
|--------------|-------------------------|
| Label | Cal Std 4 |
| Category | Correlation Coefficient |
| 6Li (STDR) | |
| 9Be (STDR) | .9999939 |
| 27Al (STDR) | .9999878 |
| 45Sc (STDR) | |
| 45Sc (KEDR) | |
| 51V (STDR) | .9999752 |
| 51V (KEDR) | .9997649 |
| 52Cr (STDR) | .9999915 |
| 52Cr (KEDR) | .9997305 |
| 55Mn (STDR) | .9999974 |
| 55Mn (KEDR) | .999792 |
| 59Co (STDR) | .9999842 |
| 59Co (KEDR) | .9997894 |
| 60Ni (STDR) | .9999567 |
| 60Ni (KEDR) | .9997792 |
| 63Cu (STDR) | .9999683 |
| 63Cu (KEDR) | .9999985 |
| 66Zn (STDR) | .9999957 |
| 66Zn (KEDR) | .9999646 |
| 74Ge (STDR) | |
| 74Ge (KEDR) | |
| 75As (STDR) | .9999925 |
| 75As (KEDR) | .9999615 |
| 82Se (STDR) | .9999742 |
| 82Se (KEDR) | .9997165 |
| 98Mo (STDR) | .9999868 |
| 98Mo (KEDR) | .9999984 |
| 107Ag (STDR) | .9999377 |
| 107Ag (KEDR) | .9999691 |
| 111Cd (STDR) | .9999952 |
| 111Cd (KEDR) | .9999962 |
| 115In (STDR) | |
| 115In (KEDR) | |
| 121Sb (STDR) | .999995 |
| 121Sb (KEDR) | .9999935 |
| 137Ba (STDR) | .9999952 |
| 137Ba (KEDR) | .9999958 |
| 205Tl (STDR) | .9999904 |
| 205Tl (KEDR) | .9999759 |
| 208Pb (STDR) | .9999871 |
| 208Pb (KEDR) | .9999949 |
| 209Bi (STDR) | |
| 209Bi (KEDR) | |
| 238U (STDR) | .999999 |
| 238U (KEDR) | .9999876 |

Cur 4/13/21

Turner Report Sample Summary

4/13/2021 11:12:27 AM
ICAP RQ ICP-MS



Analysis index: 1
Analysis name: Blank
Analysis started at: 4/13/2021 11:09:01 AM

| Category | Intensity average | Raw Intensity average |
|--------------------|-------------------|-----------------------|
| 6Li (STDR) [cps] | 65,949 | 65,949 |
| 9Be (STDR) [cps] | 97 | 97 |
| 27Al (STDR) [cps] | 11,630 | 11,630 |
| 45Sc (STDR) [cps] | 173,138 | 190,519 |
| 45Sc (KEDR) [cps] | 6,547 | 6,547 |
| 51V (STDR) [cps] | -9,002 | 223,167 |
| 51V (KEDR) [cps] | 236 | 236 |
| 55Mn (STDR) [cps] | 1,783 | 1,783 |
| 55Mn (KEDR) [cps] | 86 | 86 |
| 52Cr (STDR) [cps] | -47,259 | 13,594 |
| 52Cr (KEDR) [cps] | 184 | 184 |
| 59Co (STDR) [cps] | 187 | 187 |
| 59Co (KEDR) [cps] | 27 | 27 |
| 60Ni (STDR) [cps] | 427 | 427 |
| 60Ni (KEDR) [cps] | 136 | 136 |
| 63Cu (STDR) [cps] | 7,471 | 7,471 |
| 63Cu (KEDR) [cps] | 174 | 174 |
| 66Zn (STDR) [cps] | 5,116 | 5,116 |
| 66Zn (KEDR) [cps] | 1,448 | 1,448 |
| 74Ge (STDR) [cps] | 345,633 | 346,001 |
| 74Ge (KEDR) [cps] | 60,984 | 60,984 |
| 75As (STDR) [cps] | -69 | 9,197 |
| 75As (KEDR) [cps] | 7 | 7 |
| 82Se (STDR) [cps] | -155 | 232 |
| 82Se (KEDR) [cps] | 12 | 12 |
| 98Mo (STDR) [cps] | 137 | 140 |
| 98Mo (KEDR) [cps] | 83 | 83 |
| 107Ag (STDR) [cps] | 423 | 423 |
| 107Ag (KEDR) [cps] | 298 | 298 |
| 111Cd (STDR) [cps] | 313 | 3 |
| 111Cd (KEDR) [cps] | 1 | 1 |
| 115In (STDR) [cps] | 537,918 | 537,923 |
| 115In (KEDR) [cps] | 138,349 | 138,349 |
| 121Sb (STDR) [cps] | 256 | 257 |
| 121Sb (KEDR) [cps] | 88 | 88 |
| 137Ba (STDR) [cps] | 1,778 | 1,778 |
| 137Ba (KEDR) [cps] | 488 | 488 |
| 205Tl (STDR) [cps] | 2,137 | 2,137 |
| 205Tl (KEDR) [cps] | 2,327 | 2,327 |
| 208Pb (STDR) [cps] | 382 | 202 |
| 208Pb (KEDR) [cps] | 224 | 224 |
| 209Bi (STDR) [cps] | 761,605 | 761,605 |
| 209Bi (KEDR) [cps] | 790,164 | 790,164 |
| 238U (STDR) [cps] | 67 | 67 |
| 238U (KEDR) [cps] | 105 | 105 |

Blank
4/13/21

Turner Report Sample Summary

4/13/2021 11:15:55 AM
ICAP RQ ICP-MS



W. 4/13/21

Analysis index: 2
Analysis name: Cal Std 1
Analysis started at: 4/13/2021 11:12:28 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.909 % | 1.1 % | 65,888 cps | 65,888 cps |
| 9Be (STDR) | 1.000 ppb | 2.9 % | 3,254 cps | 3,254 cps |
| 27Al (STDR) | 1.000 ppb | 2.7 % | 27,251 cps | 27,251 cps |
| 45Sc (STDR) | 102.233 % | 0.4 % | 177,004 cps | 193,792 cps |
| 45Sc (KEDR) | 103.872 % | 2.7 % | 6,800 cps | 6,800 cps |
| 51V (STDR) | 1.000 ppb | 15.5 % | 13,689 cps | 271,052 cps |
| 51V (KEDR) | 1.000 ppb | 3.1 % | 4,459 cps | 4,459 cps |
| 55Mn (STDR) | 1.000 ppb | 1.3 % | 42,462 cps | 42,462 cps |
| 55Mn (KEDR) | 1.000 ppb | 4.2 % | 3,304 cps | 3,304 cps |
| 52Cr (STDR) | 1.000 ppb | 8.1 % | -30,132 cps | 40,452 cps |
| 52Cr (KEDR) | 1.000 ppb | 4.5 % | 6,495 cps | 6,495 cps |
| 59Co (STDR) | 1.000 ppb | 1.9 % | 30,905 cps | 30,905 cps |
| 59Co (KEDR) | 1.000 ppb | 1.2 % | 11,881 cps | 11,881 cps |
| 60Ni (STDR) | 1.000 ppb | 1.3 % | 8,014 cps | 8,014 cps |
| 60Ni (KEDR) | 1.000 ppb | 3.6 % | 3,590 cps | 3,590 cps |
| 63Cu (STDR) | 1.000 ppb | 1.3 % | 24,586 cps | 24,586 cps |
| 63Cu (KEDR) | 1.000 ppb | 1.4 % | 9,459 cps | 9,459 cps |
| 66Zn (STDR) | 1.000 ppb | 2.3 % | 12,119 cps | 12,119 cps |
| 66Zn (KEDR) | 1.000 ppb | 3.2 % | 3,500 cps | 3,500 cps |
| 74Ge (STDR) | 101.247 % | 0.1 % | 349,945 cps | 350,401 cps |
| 74Ge (KEDR) | 101.070 % | 1.1 % | 61,637 cps | 61,637 cps |
| 75As (STDR) | 1.000 ppb | 1.3 % | 5,031 cps | 15,051 cps |
| 75As (KEDR) | 1.000 ppb | 2.2 % | 857 cps | 857 cps |
| 82Se (STDR) | 1.000 ppb | 28.5 % | 361 cps | 867 cps |
| 82Se (KEDR) | 1.000 ppb | 44.3 % | 54 cps | 54 cps |
| 98Mo (STDR) | 1.000 ppb | 0.3 % | 17,772 cps | 17,776 cps |
| 98Mo (KEDR) | 1.000 ppb | 0.9 % | 11,074 cps | 11,074 cps |
| 107Ag (STDR) | 1.000 ppb | 0.8 % | 33,363 cps | 33,363 cps |
| 107Ag (KEDR) | 1.000 ppb | 0.4 % | 25,009 cps | 25,009 cps |
| 111Cd (STDR) | 1.000 ppb | 1.8 % | 8,699 cps | 8,470 cps |
| 111Cd (KEDR) | 1.000 ppb | 4.4 % | 4,474 cps | 4,474 cps |
| 115In (STDR) | 101.873 % | 0.5 % | 547,995 cps | 547,999 cps |
| 115In (KEDR) | 101.428 % | 1.2 % | 140,324 cps | 140,324 cps |
| 121Sb (STDR) | 1.000 ppb | 2.1 % | 29,236 cps | 29,238 cps |
| 121Sb (KEDR) | 1.000 ppb | 0.2 % | 9,820 cps | 9,820 cps |
| 137Ba (STDR) | 1.000 ppb | 3.4 % | 13,888 cps | 13,888 cps |
| 137Ba (KEDR) | 1.000 ppb | 3.0 % | 4,297 cps | 4,297 cps |
| 205Tl (STDR) | 1.000 ppb | 0.5 % | 109,387 cps | 109,387 cps |
| 205Tl (KEDR) | 1.000 ppb | 1.2 % | 121,154 cps | 121,154 cps |
| 208Pb (STDR) | 1.000 ppb | 0.1 % | 149,321 cps | 79,172 cps |
| 208Pb (KEDR) | 1.000 ppb | 0.4 % | 88,029 cps | 88,029 cps |
| 209Bi (STDR) | 99.775 % | 0.6 % | 759,893 cps | 759,893 cps |
| 209Bi (KEDR) | 101.201 % | 0.2 % | 799,652 cps | 799,652 cps |
| 238U (STDR) | 1.000 ppb | 0.5 % | 169,235 cps | 169,235 cps |
| 238U (KEDR) | 1.000 ppb | 1.4 % | 202,808 cps | 202,808 cps |

Turner Report Sample Summary

4/13/2021 11:19:22 AM
ICAP RQ ICP-MS



W. J. Smith

Analysis index: 3
Analysis name: Cal Std 2
Analysis started at: 4/13/2021 11:15:55 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.717 % | 1.0 % | 66,421 cps | 66,421 cps |
| 9Be (STDR) | 10.001 ppb | 1.9 % | 32,143 cps | 32,143 cps |
| 27Al (STDR) | 10.003 ppb | 1.2 % | 170,680 cps | 170,680 cps |
| 45Sc (STDR) | 101.094 % | 0.6 % | 175,033 cps | 191,364 cps |
| 45Sc (KEDR) | 101.617 % | 2.0 % | 6,653 cps | 6,653 cps |
| 51V (STDR) | 10.013 ppb | 0.7 % | 251,095 cps | 507,604 cps |
| 51V (KEDR) | 10.002 ppb | 2.4 % | 42,260 cps | 42,260 cps |
| 55Mn (STDR) | 9.999 ppb | 0.6 % | 401,445 cps | 401,445 cps |
| 55Mn (KEDR) | 10.001 ppb | 3.3 % | 31,977 cps | 31,977 cps |
| 52Cr (STDR) | 10.028 ppb | 0.9 % | 203,333 cps | 273,987 cps |
| 52Cr (KEDR) | 10.004 ppb | 2.2 % | 64,428 cps | 64,428 cps |
| 59Co (STDR) | 10.003 ppb | 0.5 % | 312,822 cps | 312,822 cps |
| 59Co (KEDR) | 10.003 ppb | 2.7 % | 120,222 cps | 120,222 cps |
| 60Ni (STDR) | 9.994 ppb | 0.7 % | 71,140 cps | 71,140 cps |
| 60Ni (KEDR) | 9.998 ppb | 2.8 % | 33,495 cps | 33,495 cps |
| 63Cu (STDR) | 10.002 ppb | 0.7 % | 179,477 cps | 179,477 cps |
| 63Cu (KEDR) | 10.000 ppb | 1.8 % | 92,000 cps | 92,000 cps |
| 66Zn (STDR) | 9.981 ppb | 0.2 % | 62,742 cps | 62,742 cps |
| 66Zn (KEDR) | 9.981 ppb | 2.0 % | 18,323 cps | 18,323 cps |
| 74Ge (STDR) | 100.722 % | 1.3 % | 348,129 cps | 348,995 cps |
| 74Ge (KEDR) | 100.581 % | 1.4 % | 61,339 cps | 61,339 cps |
| 75As (STDR) | 9.998 ppb | 1.2 % | 49,661 cps | 58,693 cps |
| 75As (KEDR) | 9.997 ppb | 1.2 % | 8,185 cps | 8,185 cps |
| 82Se (STDR) | 10.003 ppb | 0.4 % | 5,143 cps | 5,563 cps |
| 82Se (KEDR) | 9.976 ppb | 12.7 % | 351 cps | 351 cps |
| 98Mo (STDR) | 10.000 ppb | 1.8 % | 176,516 cps | 176,519 cps |
| 98Mo (KEDR) | 10.002 ppb | 1.3 % | 111,714 cps | 111,714 cps |
| 107Ag (STDR) | 10.002 ppb | 0.6 % | 334,836 cps | 334,836 cps |
| 107Ag (KEDR) | 10.003 ppb | 1.1 % | 254,822 cps | 254,822 cps |
| 111Cd (STDR) | 10.001 ppb | 0.7 % | 84,871 cps | 85,010 cps |
| 111Cd (KEDR) | 10.000 ppb | 1.2 % | 44,502 cps | 44,502 cps |
| 115In (STDR) | 101.892 % | 0.3 % | 548,093 cps | 548,098 cps |
| 115In (KEDR) | 101.036 % | 0.2 % | 139,782 cps | 139,782 cps |
| 121Sb (STDR) | 10.001 ppb | 1.3 % | 291,630 cps | 291,631 cps |
| 121Sb (KEDR) | 10.003 ppb | 0.7 % | 100,055 cps | 100,055 cps |
| 137Ba (STDR) | 9.999 ppb | 1.0 % | 121,387 cps | 121,387 cps |
| 137Ba (KEDR) | 9.997 ppb | 0.6 % | 37,442 cps | 37,442 cps |
| 205Tl (STDR) | 10.003 ppb | 0.2 % | 1,104,408 cps | 1,104,408 cps |
| 205Tl (KEDR) | 10.002 ppb | 0.5 % | 1,216,709 cps | 1,216,709 cps |
| 208Pb (STDR) | 10.002 ppb | 0.3 % | 1,518,376 cps | 806,742 cps |
| 208Pb (KEDR) | 10.001 ppb | 0.7 % | 892,380 cps | 892,380 cps |
| 209Bi (STDR) | 99.941 % | 0.6 % | 761,155 cps | 761,155 cps |
| 209Bi (KEDR) | 101.437 % | 1.0 % | 801,516 cps | 801,516 cps |
| 238U (STDR) | 10.001 ppb | 0.9 % | 1,720,200 cps | 1,720,200 cps |
| 238U (KEDR) | 10.001 ppb | 1.0 % | 2,060,577 cps | 2,060,577 cps |

Turner Report Sample Summary

4/13/2021 11:22:50 AM
ICAP RQ ICP-MS



Analysis index: 4
Analysis name: Cal Std 3
Analysis started at: 4/13/2021 11:19:22 AM

aw 4/13/21

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.411 % | 0.3 % | 65,560 cps | 65,560 cps |
| 9Be (STDR) | 50.025 ppb | 1.5 % | 160,375 cps | 160,375 cps |
| 27Al (STDR) | 50.009 ppb | 1.1 % | 803,113 cps | 803,113 cps |
| 45Sc (STDR) | 100.637 % | 0.6 % | 174,241 cps | 190,152 cps |
| 45Sc (KEDR) | 100.166 % | 5.8 % | 6,558 cps | 6,558 cps |
| 51V (STDR) | 50.019 ppb | 0.9 % | 1,293,597 cps | 1,532,564 cps |
| 51V (KEDR) | 50.019 ppb | 4.9 % | 209,070 cps | 209,070 cps |
| 55Mn (STDR) | 49.983 ppb | 0.6 % | 1,965,130 cps | 1,965,130 cps |
| 55Mn (KEDR) | 50.017 ppb | 4.1 % | 158,498 cps | 158,498 cps |
| 52Cr (STDR) | 50.042 ppb | 0.9 % | 1,222,778 cps | 1,288,375 cps |
| 52Cr (KEDR) | 50.001 ppb | 3.8 % | 316,501 cps | 316,501 cps |
| 59Co (STDR) | 49.996 ppb | 0.8 % | 1,543,397 cps | 1,543,397 cps |
| 59Co (KEDR) | 50.009 ppb | 3.1 % | 594,717 cps | 594,717 cps |
| 60Ni (STDR) | 49.989 ppb | 0.1 % | 348,346 cps | 348,346 cps |
| 60Ni (KEDR) | 49.994 ppb | 3.1 % | 164,022 cps | 164,022 cps |
| 63Cu (STDR) | 49.994 ppb | 0.8 % | 854,024 cps | 854,024 cps |
| 63Cu (KEDR) | 50.010 ppb | 2.3 % | 454,850 cps | 454,850 cps |
| 66Zn (STDR) | 49.979 ppb | 1.1 % | 286,621 cps | 286,621 cps |
| 66Zn (KEDR) | 50.022 ppb | 1.7 % | 85,655 cps | 85,655 cps |
| 74Ge (STDR) | 99.046 % | 0.7 % | 342,335 cps | 344,942 cps |
| 74Ge (KEDR) | 99.129 % | 0.9 % | 60,453 cps | 60,453 cps |
| 75As (STDR) | 50.045 ppb | 2.0 % | 250,304 cps | 252,627 cps |
| 75As (KEDR) | 50.054 ppb | 0.6 % | 41,475 cps | 41,475 cps |
| 82Se (STDR) | 50.016 ppb | 2.8 % | 26,095 cps | 26,510 cps |
| 82Se (KEDR) | 50.149 ppb | 3.3 % | 1,823 cps | 1,823 cps |
| 98Mo (STDR) | 50.018 ppb | 0.3 % | 874,356 cps | 874,358 cps |
| 98Mo (KEDR) | 49.997 ppb | 0.1 % | 547,851 cps | 547,851 cps |
| 107Ag (STDR) | 50.013 ppb | 0.6 % | 1,651,663 cps | 1,651,663 cps |
| 107Ag (KEDR) | 50.003 ppb | 1.3 % | 1,251,880 cps | 1,251,880 cps |
| 111Cd (STDR) | 50.034 ppb | 0.3 % | 422,298 cps | 423,523 cps |
| 111Cd (KEDR) | 50.027 ppb | 0.4 % | 221,464 cps | 221,464 cps |
| 115In (STDR) | 99.936 % | 1.3 % | 537,575 cps | 537,581 cps |
| 115In (KEDR) | 99.144 % | 0.7 % | 137,165 cps | 137,165 cps |
| 121Sb (STDR) | 50.037 ppb | 0.6 % | 1,458,863 cps | 1,458,864 cps |
| 121Sb (KEDR) | 50.034 ppb | 1.1 % | 499,658 cps | 499,658 cps |
| 137Ba (STDR) | 50.031 ppb | 1.6 % | 600,579 cps | 600,579 cps |
| 137Ba (KEDR) | 49.984 ppb | 0.7 % | 180,975 cps | 180,975 cps |
| 205Tl (STDR) | 50.011 ppb | 1.4 % | 5,544,742 cps | 5,544,742 cps |
| 205Tl (KEDR) | 49.946 ppb | 0.7 % | 5,883,200 cps | 5,883,200 cps |
| 208Pb (STDR) | 50.019 ppb | 1.1 % | 7,671,793 cps | 4,104,482 cps |
| 208Pb (KEDR) | 49.954 ppb | 0.5 % | 4,339,419 cps | 4,339,419 cps |
| 209Bi (STDR) | 100.082 % | 1.0 % | 762,230 cps | 762,230 cps |
| 209Bi (KEDR) | 101.049 % | 0.4 % | 798,453 cps | 798,453 cps |
| 238U (STDR) | 50.020 ppb | 0.9 % | 8,702,224 cps | 8,702,224 cps |
| 238U (KEDR) | 49.918 ppb | 0.4 % | 9,845,943 cps | 9,845,943 cps |

Turner Report Sample Summary

4/13/2021 11:26:19 AM
iCAP RQ ICP-MS



WU1314

Analysis index: 5
Analysis name: Cal Std 4
Analysis started at: 4/13/2021 11:22:50 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 98.359 % | 1.3 % | 64,866 cps | 64,866 cps |
| 9Be (STDR) | 100.124 ppb | 0.5 % | 319,167 cps | 319,167 cps |
| 27Al (STDR) | 100.192 ppb | 0.1 % | 1,597,269 cps | 1,597,269 cps |
| 45Sc (STDR) | 100.165 % | 1.0 % | 173,424 cps | 189,104 cps |
| 45Sc (KEDR) | 102.445 % | 1.1 % | 6,707 cps | 6,707 cps |
| 51V (STDR) | 99.735 ppb | 0.9 % | 2,548,339 cps | 2,786,849 cps |
| 51V (KEDR) | 99.156 ppb | 1.1 % | 409,561 cps | 409,561 cps |
| 55Mn (STDR) | 99.920 ppb | 0.8 % | 3,891,949 cps | 3,891,949 cps |
| 55Mn (KEDR) | 99.206 ppb | 0.3 % | 310,488 cps | 310,488 cps |
| 52Cr (STDR) | 99.983 ppb | 1.3 % | 2,475,255 cps | 2,538,885 cps |
| 52Cr (KEDR) | 99.096 ppb | 0.8 % | 618,101 cps | 618,101 cps |
| 59Co (STDR) | 99.781 ppb | 1.5 % | 3,035,214 cps | 3,035,214 cps |
| 59Co (KEDR) | 99.201 ppb | 0.5 % | 1,162,080 cps | 1,162,080 cps |
| 60Ni (STDR) | 99.639 ppb | 1.4 % | 680,054 cps | 680,054 cps |
| 60Ni (KEDR) | 99.182 ppb | 0.2 % | 320,002 cps | 320,002 cps |
| 63Cu (STDR) | 100.312 ppb | 0.9 % | 1,715,106 cps | 1,715,106 cps |
| 63Cu (KEDR) | 99.936 ppb | 0.4 % | 918,072 cps | 918,072 cps |
| 66Zn (STDR) | 99.947 ppb | 0.8 % | 562,956 cps | 562,956 cps |
| 66Zn (KEDR) | 99.687 ppb | 0.6 % | 169,087 cps | 169,087 cps |
| 74Ge (STDR) | 98.259 % | 0.5 % | 339,615 cps | 344,394 cps |
| 74Ge (KEDR) | 99.713 % | 0.7 % | 60,809 cps | 60,809 cps |
| 75As (STDR) | 99.892 ppb | 0.4 % | 493,573 cps | 490,393 cps |
| 75As (KEDR) | 99.682 ppb | 0.7 % | 82,042 cps | 82,042 cps |
| 82Se (STDR) | 99.722 ppb | 0.9 % | 51,116 cps | 51,516 cps |
| 82Se (KEDR) | 100.873 ppb | 3.5 % | 3,793 cps | 3,793 cps |
| 98Mo (STDR) | 100.197 ppb | 0.8 % | 1,739,858 cps | 1,739,863 cps |
| 98Mo (KEDR) | 99.930 ppb | 0.4 % | 1,089,196 cps | 1,089,196 cps |
| 107Ag (STDR) | 100.437 ppb | 0.9 % | 3,317,914 cps | 3,317,914 cps |
| 107Ag (KEDR) | 99.693 ppb | 0.3 % | 2,452,586 cps | 2,452,586 cps |
| 111Cd (STDR) | 100.094 ppb | 0.5 % | 832,870 cps | 836,504 cps |
| 111Cd (KEDR) | 99.912 ppb | 0.7 % | 437,698 cps | 437,698 cps |
| 115In (STDR) | 98.100 % | 0.8 % | 527,698 cps | 527,708 cps |
| 115In (KEDR) | 98.303 % | 1.4 % | 136,001 cps | 136,001 cps |
| 121Sb (STDR) | 100.090 ppb | 1.4 % | 2,874,137 cps | 2,874,138 cps |
| 121Sb (KEDR) | 99.884 ppb | 0.4 % | 984,405 cps | 984,405 cps |
| 137Ba (STDR) | 99.903 ppb | 0.3 % | 1,171,130 cps | 1,171,130 cps |
| 137Ba (KEDR) | 100.107 ppb | 2.1 % | 360,169 cps | 360,169 cps |
| 205Tl (STDR) | 100.170 ppb | 1.3 % | 10,966,651 cps | 10,966,651 cps |
| 205Tl (KEDR) | 100.243 ppb | 0.7 % | 11,793,738 cps | 11,793,738 cps |
| 208Pb (STDR) | 100.195 ppb | 0.6 % | 15,192,178 cps | 8,077,104 cps |
| 208Pb (KEDR) | 100.065 ppb | 1.0 % | 8,623,802 cps | 8,623,802 cps |
| 209Bi (STDR) | 98.198 % | 0.9 % | 747,879 cps | 747,879 cps |
| 209Bi (KEDR) | 100.007 % | 0.8 % | 790,216 cps | 790,216 cps |
| 238U (STDR) | 100.029 ppb | 1.2 % | 17,093,370 cps | 17,093,370 cps |
| 238U (KEDR) | 99.955 ppb | 0.7 % | 19,477,635 cps | 19,477,635 cps |

Turner Report Sample Summary

4/13/2021 11:29:45 AM
ICAP RQ ICP-MS



W. 4/13/21

Analysis index: 6
Analysis name: ICB
Analysis started at: 4/13/2021 11:26:19 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 96.784 % | 1.4 % | 63,828 cps | 63,828 cps |
| 9Be (STDR) | 0.015 ppb | 14.6 % | 142 cps | 142 cps |
| 27Al (STDR) | -0.012 ppb | 35.6 % | 11,128 cps | 11,128 cps |
| 45Sc (STDR) | 97.719 % | 0.9 % | 169,189 cps | 185,111 cps |
| 45Sc (KEDR) | 97.504 % | 3.5 % | 6,383 cps | 6,383 cps |
| 51V (STDR) | -0.021 ppb | 115.3 % | -9,318 cps | 186,254 cps |
| 51V (KEDR) | 0.041 ppb | 7.7 % | 390 cps | 390 cps |
| 55Mn (STDR) | 0.039 ppb | 5.5 % | 3,222 cps | 3,222 cps |
| 55Mn (KEDR) | 0.060 ppb | 14.4 % | 262 cps | 262 cps |
| 52Cr (STDR) | -0.019 ppb | 44.6 % | -46,629 cps | 13,564 cps |
| 52Cr (KEDR) | 0.024 ppb | 28.9 % | 324 cps | 324 cps |
| 59Co (STDR) | 0.011 ppb | 24.2 % | 503 cps | 503 cps |
| 59Co (KEDR) | 0.015 ppb | 4.1 % | 189 cps | 189 cps |
| 60Ni (STDR) | 0.033 ppb | 25.1 % | 635 cps | 635 cps |
| 60Ni (KEDR) | 0.041 ppb | 26.5 % | 260 cps | 260 cps |
| 63Cu (STDR) | -0.001 ppb | 339.7 % | 7,277 cps | 7,277 cps |
| 63Cu (KEDR) | 0.017 ppb | 20.2 % | 318 cps | 318 cps |
| 66Zn (STDR) | 0.011 ppb | 300.9 % | 5,053 cps | 5,053 cps |
| 66Zn (KEDR) | 0.027 ppb | 127.3 % | 1,450 cps | 1,450 cps |
| 74Ge (STDR) | 97.493 % | 0.6 % | 336,968 cps | 337,329 cps |
| 74Ge (KEDR) | 96.913 % | 0.6 % | 59,102 cps | 59,102 cps |
| 75As (STDR) | -0.041 ppb | 51.9 % | -273 cps | 8,631 cps |
| 75As (KEDR) | 0.023 ppb | 23.1 % | 25 cps | 25 cps |
| 82Se (STDR) | 0.034 ppb | 430.9 % | -133 cps | 300 cps |
| 82Se (KEDR) | 0.193 ppb | 102.5 % | 18 cps | 18 cps |
| 98Mo (STDR) | 0.039 ppb | 9.8 % | 805 cps | 808 cps |
| 98Mo (KEDR) | 0.048 ppb | 2.7 % | 594 cps | 594 cps |
| 107Ag (STDR) | 0.019 ppb | 19.7 % | 1,022 cps | 1,022 cps |
| 107Ag (KEDR) | 0.024 ppb | 10.9 % | 855 cps | 855 cps |
| 111Cd (STDR) | 0.004 ppb | 142.1 % | 339 cps | 90 cps |
| 111Cd (KEDR) | 0.013 ppb | 15.1 % | 57 cps | 57 cps |
| 115In (STDR) | 97.642 % | 1.2 % | 525,235 cps | 525,239 cps |
| 115In (KEDR) | 96.179 % | 0.8 % | 133,063 cps | 133,063 cps |
| 121Sb (STDR) | 0.016 ppb | 10.8 % | 696 cps | 697 cps |
| 121Sb (KEDR) | 0.016 ppb | 14.4 % | 236 cps | 236 cps |
| 137Ba (STDR) | 0.011 ppb | 100.3 % | 1,867 cps | 1,867 cps |
| 137Ba (KEDR) | 0.018 ppb | 82.9 % | 535 cps | 535 cps |
| 205Tl (STDR) | 0.056 ppb | 4.8 % | 8,244 cps | 8,244 cps |
| 205Tl (KEDR) | 0.073 ppb | 8.8 % | 10,780 cps | 10,780 cps |
| 208Pb (STDR) | 0.012 ppb | 1.6 % | 2,202 cps | 1,252 cps |
| 208Pb (KEDR) | 0.015 ppb | 12.7 % | 1,503 cps | 1,503 cps |
| 209Bi (STDR) | 97.922 % | 0.6 % | 745,781 cps | 745,781 cps |
| 209Bi (KEDR) | 98.275 % | 0.6 % | 776,531 cps | 776,531 cps |
| 238U (STDR) | 0.013 ppb | 5.8 % | 2,340 cps | 2,340 cps |
| 238U (KEDR) | 0.016 ppb | 10.1 % | 3,129 cps | 3,129 cps |

Turner Report Sample Summary

4/13/2021 11:33:13 AM
ICAP RQ ICP-MS



Handwritten signature and date: 4/13/21

Analysis index: 7
Analysis name: IPC
Analysis started at: 4/13/2021 11:29:45 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 97.757 % | 1.0 % | 64,469 cps | 64,469 cps |
| 9Be (STDR) | 49.613 ppb | 1.8 % | 156,940 cps | 156,940 cps |
| 27Al (STDR) | 49.419 ppb | 0.8 % | 779,074 cps | 779,074 cps |
| 45Sc (STDR) | 97.280 % | 0.2 % | 168,429 cps | 183,878 cps |
| 45Sc (KEDR) | 98.905 % | 1.5 % | 6,475 cps | 6,475 cps |
| 51V (STDR) | 51.166 ppb | 0.4 % | 1,269,101 cps | 1,491,437 cps |
| 51V (KEDR) | 51.135 ppb | 2.1 % | 204,416 cps | 204,416 cps |
| 55Mn (STDR) | 50.582 ppb | 2.0 % | 1,923,466 cps | 1,923,466 cps |
| 55Mn (KEDR) | 51.030 ppb | 1.6 % | 154,735 cps | 154,735 cps |
| 52Cr (STDR) | 50.349 ppb | 0.3 % | 1,191,809 cps | 1,254,901 cps |
| 52Cr (KEDR) | 51.247 ppb | 2.5 % | 309,352 cps | 309,352 cps |
| 59Co (STDR) | 50.274 ppb | 0.7 % | 1,495,336 cps | 1,495,336 cps |
| 59Co (KEDR) | 50.851 ppb | 1.0 % | 577,805 cps | 577,805 cps |
| 60Ni (STDR) | 50.165 ppb | 0.8 % | 335,137 cps | 335,137 cps |
| 60Ni (KEDR) | 50.746 ppb | 0.8 % | 158,926 cps | 158,926 cps |
| 63Cu (STDR) | 49.550 ppb | 0.9 % | 833,607 cps | 833,607 cps |
| 63Cu (KEDR) | 49.805 ppb | 1.5 % | 444,489 cps | 444,489 cps |
| 66Zn (STDR) | 49.858 ppb | 1.9 % | 277,982 cps | 277,982 cps |
| 66Zn (KEDR) | 50.789 ppb | 0.5 % | 84,455 cps | 84,455 cps |
| 74Ge (STDR) | 96.776 % | 0.8 % | 334,490 cps | 337,050 cps |
| 74Ge (KEDR) | 97.221 % | 0.4 % | 59,290 cps | 59,290 cps |
| 75As (STDR) | 50.125 ppb | 1.2 % | 243,948 cps | 245,524 cps |
| 75As (KEDR) | 50.093 ppb | 0.3 % | 40,217 cps | 40,217 cps |
| 82Se (STDR) | 51.399 ppb | 1.8 % | 25,923 cps | 26,311 cps |
| 82Se (KEDR) | 51.316 ppb | 4.8 % | 1,892 cps | 1,892 cps |
| 98Mo (STDR) | 49.915 ppb | 0.4 % | 858,459 cps | 858,462 cps |
| 98Mo (KEDR) | 49.720 ppb | 0.6 % | 533,001 cps | 533,001 cps |
| 107Ag (STDR) | 49.422 ppb | 1.1 % | 1,620,494 cps | 1,620,494 cps |
| 107Ag (KEDR) | 50.250 ppb | 1.0 % | 1,219,828 cps | 1,219,828 cps |
| 111Cd (STDR) | 50.324 ppb | 0.7 % | 416,100 cps | 417,221 cps |
| 111Cd (KEDR) | 49.560 ppb | 1.1 % | 214,512 cps | 214,512 cps |
| 115In (STDR) | 97.534 % | 0.2 % | 524,655 cps | 524,659 cps |
| 115In (KEDR) | 97.272 % | 0.8 % | 134,574 cps | 134,574 cps |
| 121Sb (STDR) | 50.110 ppb | 0.1 % | 1,431,471 cps | 1,431,471 cps |
| 121Sb (KEDR) | 49.495 ppb | 0.2 % | 482,548 cps | 482,548 cps |
| 137Ba (STDR) | 49.573 ppb | 0.4 % | 579,603 cps | 579,603 cps |
| 137Ba (KEDR) | 49.478 ppb | 1.3 % | 176,158 cps | 176,158 cps |
| 205Tl (STDR) | 49.521 ppb | 1.1 % | 5,427,603 cps | 5,427,603 cps |
| 205Tl (KEDR) | 49.679 ppb | 1.2 % | 5,750,706 cps | 5,750,706 cps |
| 208Pb (STDR) | 49.340 ppb | 0.8 % | 7,490,023 cps | 3,986,816 cps |
| 208Pb (KEDR) | 49.777 ppb | 1.5 % | 4,219,343 cps | 4,219,343 cps |
| 209Bi (STDR) | 98.314 % | 0.7 % | 748,761 cps | 748,761 cps |
| 209Bi (KEDR) | 98.345 % | 0.4 % | 777,087 cps | 777,087 cps |
| 238U (STDR) | 49.215 ppb | 0.6 % | 8,420,512 cps | 8,420,512 cps |
| 238U (KEDR) | 49.977 ppb | 0.8 % | 9,577,309 cps | 9,577,309 cps |

Turner Report Sample Summary

4/13/2021 11:36:43 AM
ICAP RQ ICP-MS



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Analysis index: 8
Analysis name: ICV
Analysis started at: 4/13/2021 11:33:13 AM

Repair & Re-run

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 98.532 % | 1.0 % | 64,980 cps | 64,980 cps |
| 9Be (STDR) | 53.232 ppb | 1.9 % | 169,764 cps | 169,764 cps |
| 27Al (STDR) | 108.871 ppb | 1.1 % | 1,719,279 cps | 1,719,279 cps |
| 45Sc (STDR) | 98.380 % | 0.4 % | 170,334 cps | 185,781 cps |
| 45Sc (KEDR) | 102.496 % | 2.8 % | 6,710 cps | 6,710 cps |
| 51V (STDR) | 55.395 ↑ | 0.8 | 1,390,251 cps | 1,635,013 cps |
| 51V (KEDR) | 54.124 ppb | 2.5 % | 222,793 cps | 222,793 cps |
| 55Mn (STDR) | 55.971 ↑ | 0.2 | 2,152,381 cps | 2,152,381 cps |
| 55Mn (KEDR) | 54.399 ppb | 2.0 % | 169,179 cps | 169,179 cps |
| 52Cr (STDR) | 54.534 ppb | 0.1 % | 1,309,335 cps | 1,378,863 cps |
| 52Cr (KEDR) | 54.101 ppb | 2.9 % | 335,945 cps | 335,945 cps |
| 59Co (STDR) | 54.417 ppb | 0.4 % | 1,636,940 cps | 1,636,940 cps |
| 59Co (KEDR) | 53.883 ppb | 2.3 % | 625,355 cps | 625,355 cps |
| 60Ni (STDR) | 55.013 | 0.4 | 371,659 cps | 371,659 cps |
| 60Ni (KEDR) | 54.390 ppb | 1.5 % | 173,811 cps | 173,811 cps |
| 63Cu (STDR) | 53.940 ppb | 0.5 % | 917,134 cps | 917,134 cps |
| 63Cu (KEDR) | 53.307 ppb | 1.6 % | 483,935 cps | 483,935 cps |
| 66Zn (STDR) | 108.895 ppb | 0.6 % | 608,141 cps | 608,141 cps |
| 66Zn (KEDR) | 108.612 ppb | 1.7 % | 181,516 cps | 181,516 cps |
| 74Ge (STDR) | 97.876 % | 0.6 % | 338,292 cps | 341,005 cps |
| 74Ge (KEDR) | 97.766 % | 1.0 % | 59,622 cps | 59,622 cps |
| 75As (STDR) | 55.132 ↑ | 1.1 | 271,408 cps | 273,020 cps |
| 75As (KEDR) | 54.588 ppb | 1.4 % | 44,079 cps | 44,079 cps |
| 82Se (STDR) | 53.850 ppb | 2.7 % | 27,496 cps | 27,911 cps |
| 82Se (KEDR) | 52.588 ppb | 9.1 % | 1,953 cps | 1,953 cps |
| 98Mo (STDR) | 53.687 ppb | 0.6 % | 935,779 cps | 935,781 cps |
| 98Mo (KEDR) | 53.965 ppb | 0.5 % | 584,869 cps | 584,869 cps |
| 107Ag (STDR) | 53.245 ppb | 0.7 % | 1,770,758 cps | 1,770,758 cps |
| 107Ag (KEDR) | 53.917 ppb | 0.5 % | 1,325,871 cps | 1,325,871 cps |
| 111Cd (STDR) | 53.772 ppb | 0.2 % | 451,093 cps | 453,245 cps |
| 111Cd (KEDR) | 53.464 ppb | 0.3 % | 234,637 cps | 234,637 cps |
| 115In (STDR) | 98.996 % | 0.4 % | 532,516 cps | 532,530 cps |
| 115In (KEDR) | 98.710 % | 0.8 % | 136,564 cps | 136,564 cps |
| 121Sb (STDR) | 54.497 ppb | 0.6 % | 1,580,041 cps | 1,580,044 cps |
| 121Sb (KEDR) | 53.783 ppb | 0.6 % | 531,948 cps | 531,948 cps |
| 137Ba (STDR) | 54.395 ppb | 0.7 % | 645,227 cps | 645,227 cps |
| 137Ba (KEDR) | 54.226 ppb | 0.3 % | 195,659 cps | 195,659 cps |
| 205Tl (STDR) | 56.420 ↑ | 1.2 | 6,271,559 cps | 6,271,559 cps |
| 205Tl (KEDR) | 57.034 ↑ | 1.2 | 6,670,100 cps | 6,670,100 cps |
| 208Pb (STDR) | 53.264 ppb | 0.8 % | 8,200,393 cps | 4,378,720 cps |
| 208Pb (KEDR) | 53.943 ppb | 0.5 % | 4,619,045 cps | 4,619,045 cps |
| 209Bi (STDR) | 99.708 % | 0.6 % | 759,381 cps | 759,381 cps |
| 209Bi (KEDR) | 99.347 % | 0.3 % | 785,005 cps | 785,005 cps |
| 238U (STDR) | 54.460 ppb | 0.2 % | 9,450,009 cps | 9,450,009 cps |
| 238U (KEDR) | 55.809 ↑ | 0.4 | 10,803,590 cps | 10,803,590 cps |

Turner Report Sample Summary

4/13/2021 11:40:12 AM
ICAP RQ ICP-MS



W. W. W. W.

Analysis index: 9
Analysis name: ICV
Analysis started at: 4/13/2021 11:36:43 AM

Remake & Refill

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.036 % | 0.4 % | 65,972 cps | 65,972 cps |
| 9Be (STDR) | 52.932 ppb | 0.9 % | 171,273 cps | 171,273 cps |
| 27Al (STDR) | 107.739 ppb | 0.9 % | 1,718,931 cps | 1,718,931 cps |
| 45Sc (STDR) | 98.964 % | 0.9 % | 171,344 cps | 187,207 cps |
| 45Sc (KEDR) | 100.407 % | 3.2 % | 6,573 cps | 6,573 cps |
| 51V (STDR) | 55.257 ↑ | 0.9 | 1,392,703 cps | 1,641,270 cps |
| 51V (KEDR) | 54.964 ppb | 2.2 % | 222,470 cps | 222,470 cps |
| 55Mn (STDR) | 56.221 † | 1.1 | 2,168,867 cps | 2,168,867 cps |
| 55Mn (KEDR) | 55.149 | 1.5 | 169,076 cps | 169,076 cps |
| 52Cr (STDR) | 54.241 ppb | 0.4 % | 1,307,312 cps | 1,377,347 cps |
| 52Cr (KEDR) | 54.973 ppb | 1.8 % | 335,919 cps | 335,919 cps |
| 59Co (STDR) | 54.567 ppb | 1.5 % | 1,644,826 cps | 1,644,826 cps |
| 59Co (KEDR) | 54.896 ppb | 2.4 % | 629,641 cps | 629,641 cps |
| 60Ni (STDR) | 54.991 ppb | 1.0 % | 372,174 cps | 372,174 cps |
| 60Ni (KEDR) | 54.725 ppb | 1.5 % | 172,939 cps | 172,939 cps |
| 63Cu (STDR) | 54.027 ppb | 0.6 % | 919,535 cps | 919,535 cps |
| 63Cu (KEDR) | 53.436 ppb | 0.8 % | 480,688 cps | 480,688 cps |
| 66Zn (STDR) | 109.216 ppb | 0.9 % | 610,047 cps | 610,047 cps |
| 66Zn (KEDR) | 108.293 ppb | 0.5 % | 179,679 cps | 179,679 cps |
| 74Ge (STDR) | 97.683 % | 0.6 % | 337,626 cps | 340,396 cps |
| 74Ge (KEDR) | 97.563 % | 0.9 % | 59,498 cps | 59,498 cps |
| 75As (STDR) | 54.013 ppb | 0.8 % | 265,443 cps | 270,531 cps |
| 75As (KEDR) | 54.359 ppb | 0.9 % | 43,795 cps | 43,795 cps |
| 82Se (STDR) | 52.387 ppb | 1.0 % | 26,746 cps | 27,139 cps |
| 82Se (KEDR) | 54.105 ppb | 2.8 % | 2,001 cps | 2,001 cps |
| 98Mo (STDR) | 52.943 ppb | 1.1 % | 926,665 cps | 926,668 cps |
| 98Mo (KEDR) | 53.685 ppb | 0.4 % | 577,158 cps | 577,158 cps |
| 107Ag (STDR) | 52.738 ppb | 0.3 % | 1,765,224 cps | 1,765,224 cps |
| 107Ag (KEDR) | 54.420 ppb | 0.4 % | 1,324,562 cps | 1,324,562 cps |
| 111Cd (STDR) | 53.569 ppb | 0.9 % | 452,738 cps | 454,900 cps |
| 111Cd (KEDR) | 54.012 ppb | 1.1 % | 234,388 cps | 234,388 cps |
| 115In (STDR) | 99.834 % | 0.6 % | 537,028 cps | 537,044 cps |
| 115In (KEDR) | 97.507 % | 0.4 % | 134,900 cps | 134,900 cps |
| 121Sb (STDR) | 54.361 ppb | 0.7 % | 1,588,685 cps | 1,588,687 cps |
| 121Sb (KEDR) | 54.368 ppb | 0.7 % | 531,753 cps | 531,753 cps |
| 137Ba (STDR) | 53.857 ppb | 0.2 % | 643,215 cps | 643,215 cps |
| 137Ba (KEDR) | 54.752 ppb | 0.4 % | 195,918 cps | 195,918 cps |
| 205Tl (STDR) | 56.477 † | 1.5 | 6,288,976 cps | 6,288,976 cps |
| 205Tl (KEDR) | 56.659 | 1.5 | 6,650,872 cps | 6,650,872 cps |
| 208Pb (STDR) | 53.352 ppb | 0.6 % | 8,226,474 cps | 4,389,671 cps |
| 208Pb (KEDR) | 53.038 ppb | 0.6 % | 4,561,263 cps | 4,561,263 cps |
| 209Bi (STDR) | 99.853 % | 0.7 % | 760,486 cps | 760,486 cps |
| 209Bi (KEDR) | 99.793 % | 0.9 % | 788,529 cps | 788,529 cps |
| 238U (STDR) | 54.783 ppb | 0.4 % | 9,519,971 cps | 9,519,971 cps |
| 238U (KEDR) | 55.355 ↑ | 1.2 | 10,763,145 cps | 10,763,145 cps |

Turner Report Sample Summary

4/13/2021 11:49:19 AM
ICAP RQ ICP-MS



W. Allison

Analysis index: 10
Analysis name: ICV
Analysis started at: 4/13/2021 11:45:49 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.919 % | 0.4 % | 65,895 cps | 65,895 cps |
| 9Be (STDR) | 48.645 ppb | 0.4 % | 157,230 cps | 157,230 cps |
| 27Al (STDR) | 98.525 ppb | 1.0 % | 1,571,168 cps | 1,571,168 cps |
| 45Sc (STDR) | 98.865 % | 1.1 % | 171,173 cps | 185,418 cps |
| 45Sc (KEDR) | 100.013 % | 0.9 % | 6,548 cps | 6,548 cps |
| 51V (STDR) | 50.592 ppb | 1.2 % | 1,274,441 cps | 1,509,065 cps |
| 51V (KEDR) | 50.236 ppb | 0.9 % | 202,870 cps | 202,870 cps |
| 55Mn (STDR) | 49.839 ppb | 1.0 % | 1,924,430 cps | 1,924,430 cps |
| 55Mn (KEDR) | 50.138 ppb | 1.0 % | 153,461 cps | 153,461 cps |
| 52Cr (STDR) | 49.589 ppb | 0.6 % | 1,191,443 cps | 1,252,537 cps |
| 52Cr (KEDR) | 49.900 ppb | 0.1 % | 304,250 cps | 304,250 cps |
| 59Co (STDR) | 49.469 ppb | 0.5 % | 1,493,526 cps | 1,493,526 cps |
| 59Co (KEDR) | 50.084 ppb | 0.8 % | 573,958 cps | 573,958 cps |
| 60Ni (STDR) | 49.927 ppb | 1.0 % | 338,532 cps | 338,532 cps |
| 60Ni (KEDR) | 49.786 ppb | 0.5 % | 157,226 cps | 157,226 cps |
| 63Cu (STDR) | 48.565 ppb | 1.0 % | 829,194 cps | 829,194 cps |
| 63Cu (KEDR) | 49.355 ppb | 1.5 % | 443,897 cps | 443,897 cps |
| 66Zn (STDR) | 99.791 ppb | 1.1 % | 559,396 cps | 559,396 cps |
| 66Zn (KEDR) | 99.992 ppb | 0.4 % | 166,082 cps | 166,082 cps |
| 74Ge (STDR) | 98.101 % | 0.3 % | 339,068 cps | 341,582 cps |
| 74Ge (KEDR) | 97.763 % | 1.3 % | 59,620 cps | 59,620 cps |
| 75As (STDR) | 49.900 ppb | 0.8 % | 246,190 cps | 248,115 cps |
| 75As (KEDR) | 50.695 ppb | 2.2 % | 40,925 cps | 40,925 cps |
| 82Se (STDR) | 49.519 ppb | 0.2 % | 25,315 cps | 25,686 cps |
| 82Se (KEDR) | 50.006 ppb | 4.6 % | 1,854 cps | 1,854 cps |
| 98Mo (STDR) | 48.638 ppb | 0.6 % | 848,235 cps | 848,237 cps |
| 98Mo (KEDR) | 49.201 ppb | 0.4 % | 530,567 cps | 530,567 cps |
| 107Ag (STDR) | 47.205 ppb | 1.0 % | 1,569,759 cps | 1,569,759 cps |
| 107Ag (KEDR) | 48.437 ppb | 1.6 % | 1,182,877 cps | 1,182,877 cps |
| 111Cd (STDR) | 48.967 ppb | 0.8 % | 410,638 cps | 412,229 cps |
| 111Cd (KEDR) | 49.084 ppb | 0.4 % | 213,759 cps | 213,759 cps |
| 115In (STDR) | 98.926 % | 0.3 % | 532,142 cps | 532,149 cps |
| 115In (KEDR) | 97.875 % | 1.5 % | 135,408 cps | 135,408 cps |
| 121Sb (STDR) | 49.263 ppb | 0.2 % | 1,427,982 cps | 1,427,984 cps |
| 121Sb (KEDR) | 49.454 ppb | 0.9 % | 485,286 cps | 485,286 cps |
| 137Ba (STDR) | 48.891 ppb | 0.4 % | 580,704 cps | 580,704 cps |
| 137Ba (KEDR) | 49.326 ppb | 0.3 % | 176,959 cps | 176,959 cps |
| 205Tl (STDR) | 50.745 ppb | 1.7 % | 5,676,460 cps | 5,676,460 cps |
| 205Tl (KEDR) | 51.258 ppb | 1.1 % | 6,005,073 cps | 6,005,073 cps |
| 208Pb (STDR) | 47.831 ppb | 0.6 % | 7,412,087 cps | 3,935,853 cps |
| 208Pb (KEDR) | 48.664 ppb | 0.6 % | 4,175,657 cps | 4,175,657 cps |
| 209Bi (STDR) | 100.367 % | 0.1 % | 764,402 cps | 764,402 cps |
| 209Bi (KEDR) | 99.566 % | 0.7 % | 786,733 cps | 786,733 cps |
| 238U (STDR) | 49.308 ppb | 2.4 % | 8,612,841 cps | 8,612,841 cps |
| 238U (KEDR) | 50.153 ppb | 0.9 % | 9,729,795 cps | 9,729,795 cps |

Turner Report Sample Summary

4/13/2021 11:52:45 AM
ICAP RQ ICP-MS



W. W. W. W.

Analysis index: 11
Analysis name: 0.25 CHK STD
Analysis started at: 4/13/2021 11:49:19 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.849 % | 0.9 % | 66,509 cps | 66,509 cps |
| 9Be (STDR) | 0.261 ppb | 13.7 % | 947 cps | 947 cps |
| 27Al (STDR) | 0.348 ppb | 13.7 % | 17,040 cps | 17,040 cps |
| 45Sc (STDR) | 97.726 % | 0.3 % | 169,201 cps | 184,821 cps |
| 45Sc (KEDR) | 98.777 % | 3.4 % | 6,467 cps | 6,467 cps |
| 51V (STDR) | 0.195 ppb | 22.8 % | -3,883 cps | 207,945 cps |
| 51V (KEDR) | 0.284 ppb | 5.3 % | 1,369 cps | 1,369 cps |
| 55Mn (STDR) | 0.287 ppb | 1.1 % | 12,745 cps | 12,745 cps |
| 55Mn (KEDR) | 0.312 ppb | 3.5 % | 1,033 cps | 1,033 cps |
| 52Cr (STDR) | 0.295 ppb | 5.5 % | -38,938 cps | 20,023 cps |
| 52Cr (KEDR) | 0.276 ppb | 3.9 % | 1,848 cps | 1,848 cps |
| 59Co (STDR) | 0.257 ppb | 1.6 % | 7,906 cps | 7,906 cps |
| 59Co (KEDR) | 0.266 ppb | 1.2 % | 3,065 cps | 3,065 cps |
| 60Ni (STDR) | 0.253 ppb | 7.8 % | 2,120 cps | 2,120 cps |
| 60Ni (KEDR) | 0.325 ppb | 16.4 % | 1,156 cps | 1,156 cps |
| 63Cu (STDR) | 0.082 ppb | 21.0 % | 8,703 cps | 8,703 cps |
| 63Cu (KEDR) | 0.253 ppb | 2.8 % | 2,439 cps | 2,439 cps |
| 66Zn (STDR) | 0.079 ppb | 7.1 % | 5,453 cps | 5,453 cps |
| 66Zn (KEDR) | 0.161 ppb | 10.8 % | 1,690 cps | 1,690 cps |
| 74Ge (STDR) | 98.186 % | 1.1 % | 339,362 cps | 339,713 cps |
| 74Ge (KEDR) | 98.235 % | 0.8 % | 59,908 cps | 59,908 cps |
| 75As (STDR) | 0.331 ppb | 26.9 % | 1,564 cps | 9,949 cps |
| 75As (KEDR) | 0.262 ppb | 15.7 % | 219 cps | 219 cps |
| 82Se (STDR) | 0.463 ppb | 33.3 % | 86 cps | 402 cps |
| 82Se (KEDR) | 0.345 ppb | 50.2 % | 24 cps | 24 cps |
| 98Mo (STDR) | 0.269 ppb | 3.5 % | 4,817 cps | 4,818 cps |
| 98Mo (KEDR) | 0.259 ppb | 2.1 % | 2,869 cps | 2,869 cps |
| 107Ag (STDR) | 0.256 ppb | 4.0 % | 8,887 cps | 8,887 cps |
| 107Ag (KEDR) | 0.268 ppb | 1.7 % | 6,808 cps | 6,808 cps |
| 111Cd (STDR) | 0.243 ppb | 1.2 % | 2,330 cps | 2,097 cps |
| 111Cd (KEDR) | 0.245 ppb | 7.5 % | 1,061 cps | 1,061 cps |
| 115In (STDR) | 98.354 % | 1.4 % | 529,063 cps | 529,066 cps |
| 115In (KEDR) | 97.265 % | 0.4 % | 134,565 cps | 134,565 cps |
| 121Sb (STDR) | 0.258 ppb | 1.6 % | 7,687 cps | 7,687 cps |
| 121Sb (KEDR) | 0.254 ppb | 1.4 % | 2,566 cps | 2,566 cps |
| 137Ba (STDR) | 0.242 ppb | 1.0 % | 4,584 cps | 4,584 cps |
| 137Ba (KEDR) | 0.272 ppb | 3.6 % | 1,443 cps | 1,443 cps |
| 205Tl (STDR) | 0.248 ppb | 2.0 % | 29,388 cps | 29,388 cps |
| 205Tl (KEDR) | 0.265 ppb | 0.7 % | 32,923 cps | 32,923 cps |
| 208Pb (STDR) | 0.251 ppb | 0.6 % | 38,615 cps | 20,462 cps |
| 208Pb (KEDR) | 0.264 ppb | 1.5 % | 22,562 cps | 22,562 cps |
| 209Bi (STDR) | 98.528 % | 0.6 % | 750,391 cps | 750,391 cps |
| 209Bi (KEDR) | 98.349 % | 0.4 % | 777,116 cps | 777,116 cps |
| 238U (STDR) | 0.251 ppb | 2.0 % | 43,133 cps | 43,133 cps |
| 238U (KEDR) | 0.269 ppb | 1.3 % | 51,711 cps | 51,711 cps |

Turner Report Sample Summary

4/13/2021 11:56:11 AM
ICAP RQ ICP-MS



W. K. 4/13/21

Analysis index: 12
Analysis name: 0.50 CHK STD
Analysis started at: 4/13/2021 11:52:45 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 98.367 % | 0.3 % | 64,871 cps | 64,871 cps |
| 9Be (STDR) | 0.494 ppb | 7.0 % | 1,667 cps | 1,667 cps |
| 27Al (STDR) | 0.334 ppb | 9.8 % | 16,539 cps | 16,539 cps |
| 45Sc (STDR) | ✓ 96.918 % | 0.5 % | 167,801 cps | 183,766 cps |
| 45Sc (KEDR) | 92.550 % | 16.7 % | 6,059 cps | 6,059 cps |
| 51V (STDR) | 0.478 ppb ✓ | 11.7 % | 3,208 cps | 220,926 cps |
| 51V (KEDR) | 0.583 ppb | 15.1 % | 2,365 cps | 2,365 cps |
| 55Mn (STDR) | 0.540 ppb | 0.8 % | 22,272 cps | 22,272 cps |
| 55Mn (KEDR) | 0.605 ppb | 16.4 % | 1,769 cps | 1,769 cps |
| 52Cr (STDR) | 0.590 ppb ✓ | 4.6 % | -31,391 cps | 26,333 cps |
| 52Cr (KEDR) | 0.597 ppb | 18.2 % | 3,483 cps | 3,483 cps |
| 59Co (STDR) | 0.507 ppb | 2.5 % | 15,306 cps | 15,306 cps |
| 59Co (KEDR) | 0.553 ppb | 16.4 % | 5,831 cps | 5,831 cps |
| 60Ni (STDR) | 0.475 ppb ✓ | 2.0 % | 3,591 cps | 3,591 cps |
| 60Ni (KEDR) | 0.543 ppb | 25.7 % | 1,682 cps | 1,682 cps |
| 63Cu (STDR) | 0.326 ppb ✓ | 5.4 % | 12,725 cps | 12,725 cps |
| 63Cu (KEDR) | 0.557 ppb | 20.1 % | 4,738 cps | 4,738 cps |
| 66Zn (STDR) | 0.958 ppb | 7.6 % | 10,259 cps | 10,259 cps |
| 66Zn (KEDR) | 1.137 ppb | 32.0 % | 3,026 cps | 3,026 cps |
| 74Ge (STDR) | ✓ 97.621 % | 0.5 % | 337,409 cps | 337,785 cps |
| 74Ge (KEDR) | 91.315 % | 10.6 % | 55,688 cps | 55,688 cps |
| 75As (STDR) | 0.529 ppb ✓ | 23.2 % | 2,529 cps | 11,355 cps |
| 75As (KEDR) | 0.560 ppb | 15.1 % | 424 cps | 424 cps |
| 82Se (STDR) | 0.494 ppb ✓ | 31.8 % | 102 cps | 488 cps |
| 82Se (KEDR) | 0.742 ppb | 14.4 % | 36 cps | 36 cps |
| 98Mo (STDR) | 0.504 ppb | 3.8 % | 8,889 cps | 8,892 cps |
| 98Mo (KEDR) | 0.553 ppb | 14.5 % | 5,534 cps | 5,534 cps |
| 107Ag (STDR) | 0.506 ppb ✓ | 0.4 % | 17,185 cps | 17,185 cps |
| 107Ag (KEDR) | 0.549 ppb | 14.0 % | 12,490 cps | 12,490 cps |
| 111Cd (STDR) | 0.483 ppb | 3.4 % | 4,345 cps | 4,179 cps |
| 111Cd (KEDR) | 0.544 ppb | 12.7 % | 2,162 cps | 2,162 cps |
| 115In (STDR) | ✓ 98.616 % | 1.0 % | 530,475 cps | 530,478 cps |
| 115In (KEDR) | 90.013 % | 12.9 % | 124,532 cps | 124,532 cps |
| 121Sb (STDR) | 0.507 ppb ✓ | 2.7 % | 14,888 cps | 14,889 cps |
| 121Sb (KEDR) | 0.554 ppb | 17.6 % | 5,009 cps | 5,009 cps |
| 137Ba (STDR) | 0.496 ppb ✓ | 0.6 % | 7,579 cps | 7,579 cps |
| 137Ba (KEDR) | 0.573 ppb | 25.4 % | 2,290 cps | 2,290 cps |
| 205Tl (STDR) | 0.491 ppb ✓ | 0.7 % | 55,793 cps | 55,793 cps |
| 205Tl (KEDR) | 0.546 ppb | 13.0 % | 60,711 cps | 60,711 cps |
| 208Pb (STDR) | 0.501 ppb ✓ | 1.5 % | 76,211 cps | 40,153 cps |
| 208Pb (KEDR) | 0.569 ppb | 14.6 % | 44,874 cps | 44,874 cps |
| 209Bi (STDR) | ✓ 98.025 % | 0.9 % | 746,565 cps | 746,565 cps |
| 209Bi (KEDR) | 92.093 % | 10.6 % | 727,682 cps | 727,682 cps |
| 238U (STDR) | 0.495 ppb ✓ | 0.5 % | 84,508 cps | 84,508 cps |
| 238U (KEDR) | 0.575 ppb | 13.6 % | 102,255 cps | 102,255 cps |

Turner Report Sample Summary

4/13/2021 11:59:39 AM
iCAP RQ ICP-MS



Handwritten: 4/13/21

Analysis index: 13
Analysis name: 40 CHK STD
Analysis started at: 4/13/2021 11:56:12 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.878 % | 0.9 % | 65,868 cps | 65,868 cps |
| 9Be (STDR) | 37.950 ppb | 1.6 % | 122,508 cps | 122,508 cps |
| 27Al (STDR) | 37.911 ppb | 1.0 % | 607,397 cps | 607,397 cps |
| 45Sc (STDR) | 97.620 % | 1.5 % | 169,018 cps | 185,158 cps |
| 45Sc (KEDR) | 101.019 % | 1.5 % | 6,613 cps | 6,613 cps |
| 51V (STDR) | 39.320 ppb | 0.4 % | 976,787 cps | 1,209,924 cps |
| 51V (KEDR) | 38.345 ppb | 1.2 % | 156,300 cps | 156,300 cps |
| 55Mn (STDR) | 38.477 ppb | 0.7 % | 1,468,999 cps | 1,468,999 cps |
| 55Mn (KEDR) | 37.986 ppb | 2.4 % | 117,244 cps | 117,244 cps |
| 52Cr (STDR) | 38.612 ppb | 1.0 % | 906,499 cps | 964,775 cps |
| 52Cr (KEDR) | 38.051 ppb | 1.6 % | 234,093 cps | 234,093 cps |
| 59Co (STDR) | 38.455 ppb | 0.8 % | 1,148,217 cps | 1,148,217 cps |
| 59Co (KEDR) | 38.118 ppb | 2.0 % | 440,183 cps | 440,183 cps |
| 60Ni (STDR) | 38.126 ppb | 0.6 % | 255,768 cps | 255,768 cps |
| 60Ni (KEDR) | 38.168 ppb | 1.8 % | 121,472 cps | 121,472 cps |
| 63Cu (STDR) | 37.170 ppb | 0.5 % | 629,571 cps | 629,571 cps |
| 63Cu (KEDR) | 37.125 ppb | 1.6 % | 336,289 cps | 336,289 cps |
| 66Zn (STDR) | 38.387 ppb | 1.3 % | 216,024 cps | 216,024 cps |
| 66Zn (KEDR) | 37.972 ppb | 0.9 % | 64,371 cps | 64,371 cps |
| 74Ge (STDR) | 97.174 % | 0.7 % | 335,866 cps | 337,874 cps |
| 74Ge (KEDR) | 98.267 % | 0.4 % | 59,928 cps | 59,928 cps |
| 75As (STDR) | 37.867 ppb | 0.8 % | 185,035 cps | 189,053 cps |
| 75As (KEDR) | 37.622 ppb | 1.0 % | 30,536 cps | 30,536 cps |
| 82Se (STDR) | 38.032 ppb | 2.1 % | 19,221 cps | 19,550 cps |
| 82Se (KEDR) | 36.253 ppb | 8.2 % | 1,356 cps | 1,356 cps |
| 98Mo (STDR) | 37.888 ppb | 0.4 % | 654,348 cps | 654,351 cps |
| 98Mo (KEDR) | 37.683 ppb | 0.9 % | 409,416 cps | 409,416 cps |
| 107Ag (STDR) | 37.789 ppb | 0.6 % | 1,244,283 cps | 1,244,283 cps |
| 107Ag (KEDR) | 37.915 ppb | 1.5 % | 933,743 cps | 933,743 cps |
| 111Cd (STDR) | 37.976 ppb | 1.2 % | 315,373 cps | 316,673 cps |
| 111Cd (KEDR) | 37.306 ppb | 0.6 % | 163,884 cps | 163,884 cps |
| 115In (STDR) | 97.943 % | 1.0 % | 526,851 cps | 526,854 cps |
| 115In (KEDR) | 98.764 % | 0.8 % | 136,639 cps | 136,639 cps |
| 121Sb (STDR) | 37.893 ppb | 1.0 % | 1,086,847 cps | 1,086,847 cps |
| 121Sb (KEDR) | 37.369 ppb | 0.4 % | 369,634 cps | 369,634 cps |
| 137Ba (STDR) | 38.052 ppb | 1.1 % | 446,914 cps | 446,914 cps |
| 137Ba (KEDR) | 37.373 ppb | 0.7 % | 134,800 cps | 134,800 cps |
| 205Tl (STDR) | 37.754 ppb | 1.4 % | 4,147,168 cps | 4,147,168 cps |
| 205Tl (KEDR) | 37.644 ppb | 1.3 % | 4,369,170 cps | 4,369,170 cps |
| 208Pb (STDR) | 37.522 ppb | 0.2 % | 5,707,793 cps | 3,027,948 cps |
| 208Pb (KEDR) | 37.624 ppb | 0.4 % | 3,196,087 cps | 3,196,087 cps |
| 209Bi (STDR) | 98.513 % | 0.6 % | 750,282 cps | 750,282 cps |
| 209Bi (KEDR) | 98.549 % | 1.1 % | 778,700 cps | 778,700 cps |
| 238U (STDR) | 37.136 ppb | 1.0 % | 6,366,850 cps | 6,366,850 cps |
| 238U (KEDR) | 37.715 ppb | 1.1 % | 7,241,912 cps | 7,241,912 cps |

Turner Report Sample Summary

4/13/2021 12:10:00 PM
ICAP RQ ICP-MS



Analysis index: 16
Analysis name: CCB
Analysis started at: 4/13/2021 12:06:34 PM

W 4/13/21

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 101.171 % | 1.5 % | 66,721 cps | 66,721 cps |
| 9Be (STDR) | 0.002 ppb | 289.2 % | 103 cps | 103 cps |
| 27Al (STDR) | -0.026 ppb | 97.5 % | 11,172 cps | 11,172 cps |
| 45Sc (STDR) | 98.330 % | 1.0 % | 170,247 cps | 187,135 cps |
| 45Sc (KEDR) | 99.172 % | 1.7 % | 6,493 cps | 6,493 cps |
| 51V (STDR) | 0.019 ppb | 285.1 % | -8,359 cps | 233,206 cps |
| 51V (KEDR) | 0.066 ppb | 19.6 % | 498 cps | 498 cps |
| 55Mn (STDR) | 0.012 ppb | 21.8 % | 2,227 cps | 2,227 cps |
| 55Mn (KEDR) | 0.009 ppb | 86.4 % | 113 cps | 113 cps |
| 52Cr (STDR) | 0.035 ppb | 91.6 % | -45,634 cps | 14,473 cps |
| 52Cr (KEDR) | 0.007 ppb | 31.4 % | 224 cps | 224 cps |
| 59Co (STDR) | 0.001 ppb | 103.6 % | 205 cps | 205 cps |
| 59Co (KEDR) | 0.001 ppb | 24.8 % | 38 cps | 38 cps |
| 60Ni (STDR) | -0.007 ppb | 111.7 % | 373 cps | 373 cps |
| 60Ni (KEDR) | -0.003 ppb | 154.7 % | 125 cps | 125 cps |
| 63Cu (STDR) | -0.241 ppb | 5.1 % | 3,280 cps | 3,280 cps |
| 63Cu (KEDR) | 0.000 ppb | 827.5 % | 174 cps | 174 cps |
| 66Zn (STDR) | -0.012 ppb | 333.6 % | 4,969 cps | 4,969 cps |
| 66Zn (KEDR) | 0.013 ppb | 151.4 % | 1,453 cps | 1,453 cps |
| 74Ge (STDR) | 98.514 % | 0.2 % | 340,496 cps | 340,876 cps |
| 74Ge (KEDR) | 98.763 % | 0.8 % | 60,230 cps | 60,230 cps |
| 75As (STDR) | -0.008 ppb | 571.6 % | -110 cps | 9,424 cps |
| 75As (KEDR) | 0.007 ppb | 1.7 % | 13 cps | 13 cps |
| 82Se (STDR) | 0.191 ppb | 54.0 % | -54 cps | 252 cps |
| 82Se (KEDR) | -0.063 ppb | 61.9 % | 9 cps | 9 cps |
| 98Mo (STDR) | 0.027 ppb | 17.2 % | 611 cps | 612 cps |
| 98Mo (KEDR) | 0.030 ppb | 3.7 % | 403 cps | 403 cps |
| 107Ag (STDR) | 0.009 ppb | 21.9 % | 725 cps | 725 cps |
| 107Ag (KEDR) | 0.010 ppb | 15.8 % | 528 cps | 528 cps |
| 111Cd (STDR) | -0.006 ppb | 59.5 % | 259 cps | 17 cps |
| 111Cd (KEDR) | 0.001 ppb | 24.3 % | 7 cps | 7 cps |
| 115In (STDR) | 98.747 % | 0.5 % | 531,178 cps | 531,182 cps |
| 115In (KEDR) | 96.820 % | 0.6 % | 133,949 cps | 133,949 cps |
| 121Sb (STDR) | 0.006 ppb | 22.3 % | 428 cps | 428 cps |
| 121Sb (KEDR) | 0.006 ppb | 14.7 % | 143 cps | 143 cps |
| 137Ba (STDR) | 0.142 ppb | 9.0 % | 3,425 cps | 3,425 cps |
| 137Ba (KEDR) | 0.172 ppb | 7.7 % | 1,080 cps | 1,080 cps |
| 205Tl (STDR) | 0.084 ppb | 2.5 % | 11,282 cps | 11,282 cps |
| 205Tl (KEDR) | 0.118 ppb | 10.1 % | 15,766 cps | 15,766 cps |
| 208Pb (STDR) | 0.001 ppb | 21.6 % | 500 cps | 267 cps |
| 208Pb (KEDR) | 0.000 ppb | 126.2 % | 255 cps | 255 cps |
| 209Bi (STDR) | 98.061 % | 0.6 % | 746,840 cps | 746,840 cps |
| 209Bi (KEDR) | 97.348 % | 0.4 % | 769,212 cps | 769,212 cps |
| 238U (STDR) | 0.000 ppb | 20.8 % | 150 cps | 150 cps |
| 238U (KEDR) | 0.001 ppb | 30.4 % | 211 cps | 211 cps |

Turner Report Sample Summary

4/13/2021 12:13:30 PM
iCAP RQ ICP-MS



Analysis index: 17
Analysis name: CCV
Analysis started at: 4/13/2021 12:10:01 PM

W 4/13/21

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 102.320 % | 2.1 % | 67,479 cps | 67,479 cps |
| 9Be (STDR) | 48.115 ppb | 1.3 % | 158,779 cps | 158,779 cps |
| 27Al (STDR) | 98.805 ppb | 1.2 % | 1,581,390 cps | 1,581,390 cps |
| 45Sc (STDR) | 97.497 % | 1.1 % | 168,804 cps | 185,340 cps |
| 45Sc (KEDR) | 100.624 % | 1.7 % | 6,588 cps | 6,588 cps |
| 51V (STDR) | 51.078 ppb | 0.5 % | 1,273,857 cps | 1,535,826 cps |
| 51V (KEDR) | 50.431 ppb | 0.9 % | 205,242 cps | 205,242 cps |
| 55Mn (STDR) | 50.238 ppb | 0.4 % | 1,925,138 cps | 1,925,138 cps |
| 55Mn (KEDR) | 50.428 ppb | 0.8 % | 155,732 cps | 155,732 cps |
| 52Cr (STDR) | 50.297 ppb | 0.4 % | 1,197,671 cps | 1,258,689 cps |
| 52Cr (KEDR) | 50.224 ppb | 0.8 % | 308,694 cps | 308,694 cps |
| 59Co (STDR) | 49.743 ppb | 1.0 % | 1,494,214 cps | 1,494,214 cps |
| 59Co (KEDR) | 49.867 ppb | 1.4 % | 577,243 cps | 577,243 cps |
| 60Ni (STDR) | 50.167 ppb | 0.1 % | 338,633 cps | 338,633 cps |
| 60Ni (KEDR) | 50.090 ppb | 0.9 % | 159,836 cps | 159,836 cps |
| 63Cu (STDR) | 48.963 ppb | 0.3 % | 833,753 cps | 833,753 cps |
| 63Cu (KEDR) | 49.144 ppb | 1.1 % | 447,004 cps | 447,004 cps |
| 66Zn (STDR) | 100.802 ppb | 0.5 % | 564,612 cps | 564,612 cps |
| 66Zn (KEDR) | 100.400 ppb | 1.7 % | 168,786 cps | 168,786 cps |
| 74Ge (STDR) | 98.525 % | 1.0 % | 340,536 cps | 343,132 cps |
| 74Ge (KEDR) | 99.201 % | 0.9 % | 60,497 cps | 60,497 cps |
| 75As (STDR) | 49.847 ppb | 0.7 % | 246,903 cps | 249,987 cps |
| 75As (KEDR) | 49.330 ppb | 0.8 % | 40,397 cps | 40,397 cps |
| 82Se (STDR) | 50.407 ppb | 1.2 % | 25,800 cps | 26,092 cps |
| 82Se (KEDR) | 49.722 ppb | 2.6 % | 1,865 cps | 1,865 cps |
| 98Mo (STDR) | 48.609 ppb | 1.3 % | 843,266 cps | 843,268 cps |
| 98Mo (KEDR) | 49.039 ppb | 0.9 % | 531,536 cps | 531,536 cps |
| 107Ag (STDR) | 47.589 ppb | 0.6 % | 1,568,486 cps | 1,568,486 cps |
| 107Ag (KEDR) | 48.577 ppb | 0.3 % | 1,188,304 cps | 1,188,304 cps |
| 111Cd (STDR) | 49.831 ppb | 0.7 % | 413,522 cps | 415,092 cps |
| 111Cd (KEDR) | 49.077 ppb | 0.6 % | 213,740 cps | 213,740 cps |
| 115In (STDR) | 97.739 % | 1.1 % | 525,758 cps | 525,766 cps |
| 115In (KEDR) | 97.719 % | 1.0 % | 135,193 cps | 135,193 cps |
| 121Sb (STDR) | 50.098 ppb | 0.2 % | 1,434,953 cps | 1,434,955 cps |
| 121Sb (KEDR) | 49.608 ppb | 1.0 % | 485,656 cps | 485,656 cps |
| 137Ba (STDR) | 49.914 ppb | 1.3 % | 585,961 cps | 585,961 cps |
| 137Ba (KEDR) | 49.501 ppb | 1.0 % | 176,774 cps | 176,774 cps |
| 205Tl (STDR) | 52.012 ppb | 0.9 % | 5,760,067 cps | 5,760,067 cps |
| 205Tl (KEDR) | 52.727 ppb | 0.6 % | 6,093,950 cps | 6,093,950 cps |
| 208Pb (STDR) | 48.212 ppb | 0.3 % | 7,396,953 cps | 3,925,755 cps |
| 208Pb (KEDR) | 48.505 ppb | 0.7 % | 4,104,300 cps | 4,104,300 cps |
| 209Bi (STDR) | 99.374 % | 0.9 % | 756,838 cps | 756,838 cps |
| 209Bi (KEDR) | 98.170 % | 0.7 % | 775,705 cps | 775,705 cps |
| 238U (STDR) | 49.203 ppb | 0.9 % | 8,508,831 cps | 8,508,831 cps |
| 238U (KEDR) | 50.230 ppb | 0.6 % | 9,608,521 cps | 9,608,521 cps |

Turner Report Sample Summary

4/13/2021 12:16:58 PM
iCAP RQ ICP-MS



W. M. 4/13/21

Analysis index: 18
Analysis name: 2104161-BLK1
Analysis started at: 4/13/2021 12:13:31 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.600 % | 0.2 % | 66,344 cps | 66,344 cps |
| 9Be (STDR) | 0.007 ppb | 94.3 % | 120 cps | 120 cps |
| 27Al (STDR) | 4.634 ppb | 1.1 % | 84,533 cps | 84,533 cps |
| 45Sc (STDR) | 97.446 % | 0.5 % | 168,717 cps | 185,288 cps |
| 45Sc (KEDR) | 99.745 % | 1.4 % | 6,530 cps | 6,530 cps |
| 51V (STDR) | -0.175 ppb | 38.3 % | -13,146 cps | 220,490 cps |
| 51V (KEDR) | 0.014 ppb | 37.9 % | 292 cps | 292 cps |
| 55Mn (STDR) | 0.087 ppb | 4.3 % | 5,053 cps | 5,053 cps |
| 55Mn (KEDR) | 0.083 ppb | 2.5 % | 339 cps | 339 cps |
| 52Cr (STDR) | 0.046 ppb | 25.2 % | -44,908 cps | 14,372 cps |
| 52Cr (KEDR) | 0.034 ppb | 9.2 % | 388 cps | 388 cps |
| 59Co (STDR) | 0.013 ppb | 20.1 % | 568 cps | 568 cps |
| 59Co (KEDR) | 0.012 ppb | 10.3 % | 164 cps | 164 cps |
| 60Ni (STDR) | 0.388 ppb | 5.3 % | 3,012 cps | 3,012 cps |
| 60Ni (KEDR) | 0.390 ppb | 3.6 % | 1,358 cps | 1,358 cps |
| 63Cu (STDR) | -0.090 ppb | 8.6 % | 5,763 cps | 5,763 cps |
| 63Cu (KEDR) | 0.186 ppb | 2.2 % | 1,833 cps | 1,833 cps |
| 66Zn (STDR) | 0.536 ppb | 5.0 % | 7,936 cps | 7,936 cps |
| 66Zn (KEDR) | 0.512 ppb | 11.9 % | 2,259 cps | 2,259 cps |
| 74Ge (STDR) | 97.395 % | 0.7 % | 336,629 cps | 336,996 cps |
| 74Ge (KEDR) | 97.320 % | 1.5 % | 59,350 cps | 59,350 cps |
| 75As (STDR) | 0.045 ppb | 324.6 % | 152 cps | 9,355 cps |
| 75As (KEDR) | 0.017 ppb | 68.7 % | 20 cps | 20 cps |
| 82Se (STDR) | 0.150 ppb | 105.8 % | -74 cps | 248 cps |
| 82Se (KEDR) | 0.033 ppb | 907.3 % | 13 cps | 13 cps |
| 98Mo (STDR) | 0.021 ppb | 28.1 % | 489 cps | 490 cps |
| 98Mo (KEDR) | 0.017 ppb | 33.2 % | 258 cps | 258 cps |
| 107Ag (STDR) | 0.007 ppb | 18.9 % | 653 cps | 653 cps |
| 107Ag (KEDR) | 0.011 ppb | 36.8 % | 540 cps | 540 cps |
| 111Cd (STDR) | -0.002 ppb | 378.7 % | 289 cps | 42 cps |
| 111Cd (KEDR) | 0.005 ppb | 47.7 % | 24 cps | 24 cps |
| 115In (STDR) | 97.162 % | 0.8 % | 522,652 cps | 522,706 cps |
| 115In (KEDR) | 96.039 % | 1.1 % | 132,870 cps | 132,870 cps |
| 121Sb (STDR) | 0.013 ppb | 28.5 % | 611 cps | 612 cps |
| 121Sb (KEDR) | 0.010 ppb | 10.8 % | 181 cps | 181 cps |
| 137Ba (STDR) | 0.046 ppb | 13.7 % | 2,254 cps | 2,254 cps |
| 137Ba (KEDR) | 0.079 ppb | 37.3 % | 746 cps | 746 cps |
| 205Tl (STDR) | 0.015 ppb | 6.4 % | 3,726 cps | 3,726 cps |
| 205Tl (KEDR) | 0.020 ppb | 10.3 % | 4,476 cps | 4,476 cps |
| 208Pb (STDR) | 0.024 ppb | 6.4 % | 4,017 cps | 2,115 cps |
| 208Pb (KEDR) | 0.025 ppb | 4.9 % | 2,296 cps | 2,296 cps |
| 209Bi (STDR) | 96.749 % | 0.3 % | 736,841 cps | 736,841 cps |
| 209Bi (KEDR) | 96.746 % | 0.7 % | 764,452 cps | 764,452 cps |
| 238U (STDR) | 0.004 ppb | 10.2 % | 820 cps | 820 cps |
| 238U (KEDR) | 0.004 ppb | 0.9 % | 888 cps | 888 cps |

Turner Report Sample Summary

4/13/2021 12:20:27 PM
iCAP RQ ICP-MS



W 4/15/21

Analysis index: 19
Analysis name: 2104161-BS1
Analysis started at: 4/13/2021 12:16:59 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.188 % | 2.0 % | 66,073 cps | 66,073 cps |
| 9Be (STDR) | 50.591 ppb | 0.6 % | 163,743 cps | 163,743 cps |
| 27Al (STDR) | 104.205 ppb | 0.7 % | 1,650,865 cps | 1,650,865 cps |
| 45Sc (STDR) | 97.495 % | 0.4 % | 168,802 cps | 184,966 cps |
| 45Sc (KEDR) | 101.745 % | 1.8 % | 6,661 cps | 6,661 cps |
| 51V (STDR) | 50.032 ppb | 0.4 % | 1,245,522 cps | 1,488,144 cps |
| 51V (KEDR) | 49.849 ppb | 1.4 % | 204,637 cps | 204,637 cps |
| 55Mn (STDR) | 49.782 ppb | 0.5 % | 1,902,445 cps | 1,902,445 cps |
| 55Mn (KEDR) | 49.939 ppb | 1.3 % | 155,310 cps | 155,310 cps |
| 52Cr (STDR) | 49.557 ppb | 0.8 % | 1,177,117 cps | 1,231,998 cps |
| 52Cr (KEDR) | 49.084 ppb | 0.7 % | 304,213 cps | 304,213 cps |
| 59Co (STDR) | 50.034 ppb | 0.9 % | 1,497,127 cps | 1,497,127 cps |
| 59Co (KEDR) | 49.353 ppb | 0.1 % | 574,412 cps | 574,412 cps |
| 60Ni (STDR) | 50.279 ppb | 1.1 % | 337,992 cps | 337,992 cps |
| 60Ni (KEDR) | 49.064 ppb | 0.5 % | 157,344 cps | 157,344 cps |
| 63Cu (STDR) | 49.273 ppb | 0.2 % | 834,875 cps | 834,875 cps |
| 63Cu (KEDR) | 48.991 ppb | 0.6 % | 447,271 cps | 447,271 cps |
| 66Zn (STDR) | 108.471 ppb | 0.6 % | 603,704 cps | 603,704 cps |
| 66Zn (KEDR) | 107.936 ppb | 0.7 % | 181,798 cps | 181,798 cps |
| 74Ge (STDR) | 97.752 % | 1.3 % | 337,863 cps | 340,566 cps |
| 74Ge (KEDR) | 99.106 % | 2.6 % | 60,439 cps | 60,439 cps |
| 75As (STDR) | 51.144 ppb | 0.9 % | 251,426 cps | 252,386 cps |
| 75As (KEDR) | 51.610 ppb | 2.3 % | 42,197 cps | 42,197 cps |
| 82Se (STDR) | 54.449 ppb | 1.2 % | 27,744 cps | 28,057 cps |
| 82Se (KEDR) | 54.571 ppb | 3.0 % | 2,040 cps | 2,040 cps |
| 98Mo (STDR) | 48.088 ppb | 1.3 % | 834,848 cps | 834,849 cps |
| 98Mo (KEDR) | 48.227 ppb | 1.7 % | 519,710 cps | 519,710 cps |
| 107Ag (STDR) | 49.141 ppb | 0.7 % | 1,626,184 cps | 1,626,184 cps |
| 107Ag (KEDR) | 50.172 ppb | 1.0 % | 1,218,119 cps | 1,218,119 cps |
| 111Cd (STDR) | 50.436 ppb | 0.8 % | 420,827 cps | 422,949 cps |
| 111Cd (KEDR) | 50.738 ppb | 1.6 % | 219,142 cps | 219,142 cps |
| 115In (STDR) | 98.414 % | 0.7 % | 529,384 cps | 529,438 cps |
| 115In (KEDR) | 96.836 % | 1.1 % | 133,972 cps | 133,972 cps |
| 121Sb (STDR) | 49.599 ppb | 0.2 % | 1,428,997 cps | 1,428,999 cps |
| 121Sb (KEDR) | 49.510 ppb | 0.7 % | 480,661 cps | 480,661 cps |
| 137Ba (STDR) | 49.240 ppb | 0.4 % | 579,915 cps | 579,915 cps |
| 137Ba (KEDR) | 49.608 ppb | 0.4 % | 176,022 cps | 176,022 cps |
| 205Tl (STDR) | 47.825 ppb | 0.4 % | 5,252,393 cps | 5,252,393 cps |
| 205Tl (KEDR) | 46.760 ppb | 0.3 % | 5,413,434 cps | 5,413,434 cps |
| 208Pb (STDR) | 48.549 ppb | 0.4 % | 7,382,693 cps | 3,928,141 cps |
| 208Pb (KEDR) | 48.501 ppb | 0.7 % | 4,112,130 cps | 4,112,130 cps |
| 209Bi (STDR) | 98.478 % | 0.3 % | 750,012 cps | 750,012 cps |
| 209Bi (KEDR) | 98.375 % | 0.2 % | 777,326 cps | 777,326 cps |
| 238U (STDR) | 47.765 ppb | 1.4 % | 8,186,273 cps | 8,186,273 cps |
| 238U (KEDR) | 47.852 ppb | 0.7 % | 9,172,798 cps | 9,172,798 cps |

Turner Report Sample Summary

4/13/2021 12:23:56 PM
ICAP RQ ICP-MS



Analysis index: 20
Analysis name: 2104161-BSD1
Analysis started at: 4/13/2021 12:20:27 PM

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| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.671 % | 1.3 % | 66,391 cps | 66,391 cps |
| 9Be (STDR) | 50.849 ppb | 1.0 % | 165,242 cps | 165,242 cps |
| 27Al (STDR) | 107.006 ppb | 1.1 % | 1,693,852 cps | 1,693,852 cps |
| 45Sc (STDR) | 96.962 % | 0.5 % | 167,878 cps | 184,409 cps |
| 45Sc (KEDR) | 100.280 % | 2.3 % | 6,565 cps | 6,565 cps |
| 51V (STDR) | 51.159 ppb | 1.0 % | 1,268,412 cps | 1,501,655 cps |
| 51V (KEDR) | 50.836 ppb | 2.1 % | 205,929 cps | 205,929 cps |
| 55Mn (STDR) | 50.783 ppb | 0.9 % | 1,934,036 cps | 1,934,036 cps |
| 55Mn (KEDR) | 50.999 ppb | 2.4 % | 156,647 cps | 156,647 cps |
| 52Cr (STDR) | 51.109 ppb | 0.3 % | 1,210,563 cps | 1,260,837 cps |
| 52Cr (KEDR) | 50.199 ppb | 2.1 % | 307,057 cps | 307,057 cps |
| 59Co (STDR) | 50.034 ppb | 0.3 % | 1,493,300 cps | 1,493,300 cps |
| 59Co (KEDR) | 50.216 ppb | 1.9 % | 577,850 cps | 577,850 cps |
| 60Ni (STDR) | 50.228 ppb | 1.1 % | 336,851 cps | 336,851 cps |
| 60Ni (KEDR) | 50.061 ppb | 1.8 % | 158,767 cps | 158,767 cps |
| 63Cu (STDR) | 49.215 ppb | 1.5 % | 832,439 cps | 832,439 cps |
| 63Cu (KEDR) | 49.223 ppb | 1.8 % | 444,765 cps | 444,765 cps |
| 66Zn (STDR) | 111.436 ppb | 1.0 % | 619,384 cps | 619,384 cps |
| 66Zn (KEDR) | 109.984 ppb | 1.6 % | 183,453 cps | 183,453 cps |
| 74Ge (STDR) | 97.802 % | 0.1 % | 338,035 cps | 340,759 cps |
| 74Ge (KEDR) | 98.367 % | 1.5 % | 59,989 cps | 59,989 cps |
| 75As (STDR) | 51.566 ppb | 0.9 % | 253,556 cps | 255,992 cps |
| 75As (KEDR) | 51.257 ppb | 0.5 % | 41,623 cps | 41,623 cps |
| 82Se (STDR) | 53.824 ppb | 1.1 % | 27,375 cps | 27,691 cps |
| 82Se (KEDR) | 55.573 ppb | 4.8 % | 2,067 cps | 2,067 cps |
| 98Mo (STDR) | 48.807 ppb | 0.6 % | 842,070 cps | 842,071 cps |
| 98Mo (KEDR) | 48.795 ppb | 0.8 % | 525,492 cps | 525,492 cps |
| 107Ag (STDR) | 49.876 ppb | 0.7 % | 1,636,060 cps | 1,636,060 cps |
| 107Ag (KEDR) | 50.486 ppb | 0.8 % | 1,227,971 cps | 1,227,971 cps |
| 111Cd (STDR) | 51.193 ppb | 0.6 % | 422,932 cps | 424,095 cps |
| 111Cd (KEDR) | 50.704 ppb | 0.6 % | 219,639 cps | 219,639 cps |
| 115In (STDR) | 97.334 % | 0.2 % | 523,580 cps | 523,651 cps |
| 115In (KEDR) | 97.230 % | 0.7 % | 134,516 cps | 134,516 cps |
| 121Sb (STDR) | 50.310 ppb | 0.4 % | 1,434,264 cps | 1,434,265 cps |
| 121Sb (KEDR) | 50.018 ppb | 0.3 % | 487,502 cps | 487,502 cps |
| 137Ba (STDR) | 49.703 ppb | 0.7 % | 579,951 cps | 579,951 cps |
| 137Ba (KEDR) | 49.773 ppb | 0.6 % | 177,212 cps | 177,212 cps |
| 205Tl (STDR) | 48.872 ppb | 0.8 % | 5,346,651 cps | 5,346,651 cps |
| 205Tl (KEDR) | 48.138 ppb | 1.1 % | 5,581,363 cps | 5,581,363 cps |
| 208Pb (STDR) | 48.795 ppb | 0.2 % | 7,393,258 cps | 3,919,055 cps |
| 208Pb (KEDR) | 49.039 ppb | 0.7 % | 4,163,805 cps | 4,163,805 cps |
| 209Bi (STDR) | 98.128 % | 0.4 % | 747,351 cps | 747,351 cps |
| 209Bi (KEDR) | 98.520 % | 0.6 % | 778,467 cps | 778,467 cps |
| 238U (STDR) | 48.259 ppb | 0.7 % | 8,241,500 cps | 8,241,500 cps |
| 238U (KEDR) | 48.411 ppb | 0.5 % | 9,293,493 cps | 9,293,493 cps |

Turner Report Sample Summary

4/13/2021 12:48:14 PM
iCAP RQ ICP-MS



Analysis index: 27
Analysis name: CCB
Analysis started at: 4/13/2021 12:44:47 PM

ReRun *4/13/21*

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.954 % | 0.7 % | 65,919 cps | 65,919 cps |
| 9Be (STDR) | -0.011 ppb | 67.8 % | 62 cps | 62 cps |
| 27Al (STDR) | 0.065 ppb | 24.7 % | 12,213 cps | 12,213 cps |
| 45Sc (STDR) | 93.350 % | 0.5 % | 161,625 cps | 178,189 cps |
| 45Sc (KEDR) | 97.516 % | 1.9 % | 6,384 cps | 6,384 cps |
| 51V (STDR) | -0.063 ppb | 292.2 % | -9,889 cps | 285,156 cps |
| 51V (KEDR) | 0.036 ppb | 49.1 % | 368 cps | 368 cps |
| 55Mn (STDR) | 0.004 ppb | 43.9 % | 1,797 cps | 1,797 cps |
| 55Mn (KEDR) | -0.012 ppb | 14.6 % | 48 cps | 48 cps |
| 52Cr (STDR) | 0.081 ppb | 22.1 % | -42,221 cps | 14,667 cps |
| 52Cr (KEDR) | 0.008 ppb | 54.2 % | 228 cps | 228 cps |
| 59Co (STDR) | 0.002 ppb | 36.8 % | 245 cps | 245 cps |
| 59Co (KEDR) | 0.000 ppb | 142.6 % | 22 cps | 22 cps |
| 60Ni (STDR) | -0.006 ppb | 73.7 % | 360 cps | 360 cps |
| 60Ni (KEDR) | -0.005 ppb | 61.6 % | 113 cps | 113 cps |
| 63Cu (STDR) | 0.566 ↑ | 4.9 | 16,067 cps | 16,067 cps |
| 63Cu (KEDR) | 0.000 ppb | 2,169.7 % | 165 cps | 165 cps |
| 66Zn (STDR) | 0.064 ppb | 58.3 % | 5,118 cps | 5,118 cps |
| 66Zn (KEDR) | -0.025 ppb | 103.3 % | 1,339 cps | 1,339 cps |
| 74Ge (STDR) | 93.399 % | 1.2 % | 322,818 cps | 323,315 cps |
| 74Ge (KEDR) | 94.323 % | 1.0 % | 57,522 cps | 57,522 cps |
| 75As (STDR) | -0.035 ppb | 349.2 % | -234 cps | 12,163 cps |
| 75As (KEDR) | 0.019 ppb | 44.5 % | 21 cps | 21 cps |
| 82Se (STDR) | -0.209 ppb | 103.7 % | -248 cps | 372 cps |
| 82Se (KEDR) | 0.066 ppb | 345.7 % | 13 cps | 13 cps |
| 98Mo (STDR) | 0.037 ppb | 11.6 % | 741 cps | 747 cps |
| 98Mo (KEDR) | 0.035 ppb | 7.9 % | 448 cps | 448 cps |
| 107Ag (STDR) | 0.007 ppb | 26.2 % | 615 cps | 615 cps |
| 107Ag (KEDR) | 0.010 ppb | 1.5 % | 512 cps | 512 cps |
| 111Cd (STDR) | -0.005 ppb | 88.6 % | 257 cps | 18 cps |
| 111Cd (KEDR) | 0.001 ppb | 106.9 % | 7 cps | 7 cps |
| 115In (STDR) | 95.197 % | 0.1 % | 512,082 cps | 512,086 cps |
| 115In (KEDR) | 94.300 % | 0.6 % | 130,463 cps | 130,463 cps |
| 121Sb (STDR) | 0.006 ppb | 11.5 % | 411 cps | 412 cps |
| 121Sb (KEDR) | 0.006 ppb | 37.5 % | 138 cps | 138 cps |
| 137Ba (STDR) | 0.002 ppb | 444.2 % | 1,715 cps | 1,715 cps |
| 137Ba (KEDR) | 0.013 ppb | 48.0 % | 506 cps | 506 cps |
| 205Tl (STDR) | 0.659 ↑ | 3.9 | 72,002 cps | 72,002 cps |
| 205Tl (KEDR) | 0.810 ↑ | 3.1 | 92,669 cps | 92,669 cps |
| 208Pb (STDR) | 0.001 ppb | 30.0 % | 577 cps | 325 cps |
| 208Pb (KEDR) | 0.002 ppb | 6.5 % | 406 cps | 406 cps |
| 209Bi (STDR) | 95.236 % | 1.1 % | 725,321 cps | 725,321 cps |
| 209Bi (KEDR) | 94.857 % | 0.7 % | 749,526 cps | 749,526 cps |
| 238U (STDR) | 0.003 ppb | 23.1 % | 592 cps | 592 cps |
| 238U (KEDR) | 0.004 ppb | 8.4 % | 774 cps | 774 cps |

Turner Report Sample Summary

4/13/2021 12:51:41 PM
ICAP RQ ICP-MS



W 4/13/21

Analysis index: 28
Analysis name: CCB
Analysis started at: 4/13/2021 12:48:14 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 101.067 % | 1.8 % | 66,652 cps | 66,652 cps |
| 9Be (STDR) | -0.006 ppb | 21.0 % | 77 cps | 77 cps |
| 27Al (STDR) | 0.076 ppb | 38.1 % | 12,501 cps | 12,501 cps |
| 45Sc (STDR) | 94.152 % | 1.5 % | 163,013 cps | 179,955 cps |
| 45Sc (KEDR) | 97.618 % | 2.7 % | 6,391 cps | 6,391 cps |
| 51V (STDR) | -0.142 ppb | 118.2 % | -11,954 cps | 309,231 cps |
| 51V (KEDR) | 0.047 ppb | 12.2 % | 413 cps | 413 cps |
| 55Mn (STDR) | 0.005 ppb | 69.1 % | 1,875 cps | 1,875 cps |
| 55Mn (KEDR) | -0.007 ppb | 116.3 % | 61 cps | 61 cps |
| 52Cr (STDR) | 0.093 ppb | 16.3 % | -42,347 cps | 15,356 cps |
| 52Cr (KEDR) | 0.012 ppb | 45.3 % | 252 cps | 252 cps |
| 59Co (STDR) | 0.003 ppb | 50.3 % | 273 cps | 273 cps |
| 59Co (KEDR) | 0.003 ppb | 48.6 % | 64 cps | 64 cps |
| 60Ni (STDR) | -0.006 ppb | 160.6 % | 367 cps | 367 cps |
| 60Ni (KEDR) | -0.004 ppb | 61.6 % | 117 cps | 117 cps |
| 63Cu (STDR) | 0.404 ppb | 3.6 % | 13,631 cps | 13,631 cps |
| 63Cu (KEDR) | 0.002 ppb | 89.8 % | 180 cps | 180 cps |
| 66Zn (STDR) | 0.001 ppb | 2,478.2 % | 4,843 cps | 4,843 cps |
| 66Zn (KEDR) | -0.029 ppb | 127.9 % | 1,327 cps | 1,327 cps |
| 74Ge (STDR) | 94.706 % | 0.4 % | 327,335 cps | 327,826 cps |
| 74Ge (KEDR) | 93.717 % | 1.4 % | 57,153 cps | 57,153 cps |
| 75As (STDR) | 0.138 ppb | 56.6 % | 588 cps | 12,915 cps |
| 75As (KEDR) | 0.011 ppb | 26.8 % | 15 cps | 15 cps |
| 82Se (STDR) | -0.150 ppb | 100.1 % | -221 cps | 323 cps |
| 82Se (KEDR) | 0.115 ppb | 182.9 % | 15 cps | 15 cps |
| 98Mo (STDR) | 0.023 ppb | 18.1 % | 522 cps | 528 cps |
| 98Mo (KEDR) | 0.024 ppb | 7.3 % | 323 cps | 323 cps |
| 107Ag (STDR) | 0.003 ppb | 57.1 % | 495 cps | 495 cps |
| 107Ag (KEDR) | 0.006 ppb | 9.2 % | 421 cps | 421 cps |
| 111Cd (STDR) | -0.001 ppb | 182.8 % | 288 cps | 47 cps |
| 111Cd (KEDR) | 0.005 ppb | 40.6 % | 21 cps | 21 cps |
| 115In (STDR) | 95.117 % | 1.0 % | 511,652 cps | 511,657 cps |
| 115In (KEDR) | 93.335 % | 0.9 % | 129,128 cps | 129,128 cps |
| 121Sb (STDR) | 0.008 ppb | 17.6 % | 460 cps | 460 cps |
| 121Sb (KEDR) | 0.005 ppb | 55.8 % | 133 cps | 133 cps |
| 137Ba (STDR) | 0.001 ppb | 604.8 % | 1,708 cps | 1,708 cps |
| 137Ba (KEDR) | 0.018 ppb | 85.0 % | 516 cps | 516 cps |
| 205Tl (STDR) | 0.323 ppb | 0.9 % | 36,721 cps | 36,721 cps |
| 205Tl (KEDR) | 0.350 ppb | 1.1 % | 41,147 cps | 41,147 cps |
| 208Pb (STDR) | 0.004 ppb | 5.2 % | 1,007 cps | 540 cps |
| 208Pb (KEDR) | 0.004 ppb | 17.8 % | 540 cps | 540 cps |
| 209Bi (STDR) | 96.330 % | 1.6 % | 733,655 cps | 733,655 cps |
| 209Bi (KEDR) | 94.583 % | 0.8 % | 747,358 cps | 747,358 cps |
| 238U (STDR) | 0.005 ppb | 9.2 % | 943 cps | 943 cps |
| 238U (KEDR) | 0.006 ppb | 6.1 % | 1,192 cps | 1,192 cps |

Turner Report Sample Summary

4/13/2021 12:55:11 PM
ICAP RQ ICP-MS



W
4/13/21

Analysis index: 29
Analysis name: CCV
Analysis started at: 4/13/2021 12:51:41 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 101.352 % | 0.3 % | 66,840 cps | 66,840 cps |
| 9Be (STDR) | 48.320 ppb | 0.3 % | 157,647 cps | 157,647 cps |
| 27Al (STDR) | 97.987 ppb | 0.3 % | 1,530,716 cps | 1,530,716 cps |
| 45Sc (STDR) | ✓ 93.860 % | 0.2 % | 162,508 cps | 179,256 cps |
| 45Sc (KEDR) | 97.058 % | 4.5 % | 6,354 cps | 6,354 cps |
| 51V (STDR) | 50.016 ppb | 0.6 % | 1,198,861 cps | 1,541,747 cps |
| 51V (KEDR) | 49.753 ppb | 3.4 % | 194,411 cps | 194,411 cps |
| 55Mn (STDR) | 49.844 ppb | 1.0 % | 1,834,156 cps | 1,834,156 cps |
| 55Mn (KEDR) | 50.004 ppb | 3.5 % | 147,889 cps | 147,889 cps |
| 52Cr (STDR) | 49.501 ppb | 0.5 % | 1,132,101 cps | 1,190,694 cps |
| 52Cr (KEDR) | 49.517 ppb | 3.4 % | 292,034 cps | 292,034 cps |
| 59Co (STDR) | 49.511 ppb | 0.9 % | 1,426,695 cps | 1,426,695 cps |
| 59Co (KEDR) | 48.870 ppb | 3.0 % | 540,508 cps | 540,508 cps |
| 60Ni (STDR) | 49.488 ppb | 0.7 % | 320,403 cps | 320,403 cps |
| 60Ni (KEDR) | 48.857 ppb | 2.5 % | 148,869 cps | 148,869 cps |
| 63Cu (STDR) | 49.094 ppb | 0.3 % | 801,215 cps | 801,215 cps |
| 63Cu (KEDR) | 48.140 ppb | 1.6 % | 417,366 cps | 417,366 cps |
| 66Zn (STDR) | 100.976 ppb | 0.5 % | 541,647 cps | 541,647 cps |
| 66Zn (KEDR) | 99.839 ppb | 1.6 % | 159,682 cps | 159,682 cps |
| 74Ge (STDR) | ✓ 94.172 % | 1.0 % | 325,491 cps | 328,069 cps |
| 74Ge (KEDR) | 93.875 % | 1.3 % | 57,249 cps | 57,249 cps |
| 75As (STDR) | 50.349 ppb | 0.0 % | 238,481 cps | 243,896 cps |
| 75As (KEDR) | 49.500 ppb | 2.1 % | 38,371 cps | 38,371 cps |
| 82Se (STDR) | 49.808 ppb | 0.4 % | 24,461 cps | 24,993 cps |
| 82Se (KEDR) | 50.076 ppb | 2.7 % | 1,785 cps | 1,785 cps |
| 98Mo (STDR) | 48.452 ppb | 0.5 % | 812,806 cps | 812,811 cps |
| 98Mo (KEDR) | 48.456 ppb | 0.4 % | 502,989 cps | 502,989 cps |
| 107Ag (STDR) | 47.570 ppb | 0.1 % | 1,522,780 cps | 1,522,780 cps |
| 107Ag (KEDR) | 48.478 ppb | 0.4 % | 1,140,808 cps | 1,140,808 cps |
| 111Cd (STDR) | 49.132 ppb | 0.2 % | 396,763 cps | 398,612 cps |
| 111Cd (KEDR) | 48.851 ppb | 0.4 % | 205,068 cps | 205,068 cps |
| 115In (STDR) | ✓ 95.295 % | 0.8 % | 512,608 cps | 512,615 cps |
| 115In (KEDR) | 94.378 % | 0.4 % | 130,571 cps | 130,571 cps |
| 121Sb (STDR) | 49.915 ppb | 0.9 % | 1,394,161 cps | 1,394,163 cps |
| 121Sb (KEDR) | 49.844 ppb | 0.5 % | 471,464 cps | 471,464 cps |
| 137Ba (STDR) | 49.696 ppb | 0.7 % | 569,254 cps | 569,254 cps |
| 137Ba (KEDR) | 49.539 ppb | 1.1 % | 171,087 cps | 171,087 cps |
| 205Tl (STDR) | 52.592 ppb | 0.1 % | 5,695,532 cps | 5,695,532 cps |
| 205Tl (KEDR) | 53.056 ppb | 1.1 % | 5,953,953 cps | 5,953,953 cps |
| 208Pb (STDR) | 48.158 ppb | 1.2 % | 7,225,555 cps | 3,822,864 cps |
| 208Pb (KEDR) | 48.437 ppb | 0.7 % | 3,980,369 cps | 3,980,369 cps |
| 209Bi (STDR) | ✓ 97.188 % | 0.9 % | 740,192 cps | 740,192 cps |
| 209Bi (KEDR) | 95.349 % | 1.3 % | 753,414 cps | 753,414 cps |
| 238U (STDR) | 49.987 ppb | 1.3 % | 8,454,218 cps | 8,454,218 cps |
| 238U (KEDR) | 50.148 ppb | 0.9 % | 9,316,517 cps | 9,316,517 cps |

Turner Report Sample Summary

4/13/2021 1:15:31 PM
iCAP RQ ICP-MS



W. H. H. H.

Analysis index: 34
Analysis name: CCB
Analysis started at: 4/13/2021 1:12:04 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 105.633 % | 1.4 % | 69,664 cps | 69,664 cps |
| 9Be (STDR) | -0.009 ppb | 21.6 % | 72 cps | 72 cps |
| 27Al (STDR) | 0.019 ppb | 89.6 % | 11,996 cps | 11,996 cps |
| 45Sc (STDR) | 96.105 % | 2.1 % | 166,395 cps | 184,275 cps |
| 45Sc (KEDR) | 93.912 % | 1.7 % | 6,148 cps | 6,148 cps |
| 51V (STDR) | -0.183 ppb | 79.0 % | -13,148 cps | 335,762 cps |
| 51V (KEDR) | 0.044 ppb | 27.1 % | 388 cps | 388 cps |
| 55Mn (STDR) | 0.003 ppb | 41.0 % | 1,845 cps | 1,845 cps |
| 55Mn (KEDR) | -0.013 ppb | 26.6 % | 44 cps | 44 cps |
| 52Cr (STDR) | 0.085 ppb | 20.9 % | -43,445 cps | 15,805 cps |
| 52Cr (KEDR) | 0.010 ppb | 38.0 % | 228 cps | 228 cps |
| 59Co (STDR) | 0.002 ppb | 21.8 % | 233 cps | 233 cps |
| 59Co (KEDR) | -0.001 ppb | 97.4 % | 18 cps | 18 cps |
| 60Ni (STDR) | -0.017 ppb | 37.3 % | 297 cps | 297 cps |
| 60Ni (KEDR) | -0.003 ppb | 39.0 % | 118 cps | 118 cps |
| 63Cu (STDR) | 0.234 ppb | 9.9 % | 11,110 cps | 11,110 cps |
| 63Cu (KEDR) | -0.002 ppb | 137.4 % | 148 cps | 148 cps |
| 66Zn (STDR) | -0.003 ppb | 1,469.4 % | 4,934 cps | 4,934 cps |
| 66Zn (KEDR) | -0.036 ppb | 223.8 % | 1,301 cps | 1,301 cps |
| 74Ge (STDR) | 96.927 % | 0.6 % | 335,012 cps | 335,539 cps |
| 74Ge (KEDR) | 93.639 % | 0.3 % | 57,105 cps | 57,105 cps |
| 75As (STDR) | 0.052 ppb | 247.9 % | 181 cps | 13,581 cps |
| 75As (KEDR) | 0.008 ppb | 68.7 % | 13 cps | 13 cps |
| 82Se (STDR) | -0.060 ppb | 248.7 % | -180 cps | 285 cps |
| 82Se (KEDR) | 0.045 ppb | 415.8 % | 13 cps | 13 cps |
| 98Mo (STDR) | 0.009 ppb | 16.1 % | 285 cps | 288 cps |
| 98Mo (KEDR) | 0.010 ppb | 44.3 % | 177 cps | 177 cps |
| 107Ag (STDR) | 0.001 ppb | 123.7 % | 448 cps | 448 cps |
| 107Ag (KEDR) | 0.003 ppb | 41.1 % | 352 cps | 352 cps |
| 111Cd (STDR) | -0.010 ppb | 47.5 % | 219 cps | 7 cps |
| 111Cd (KEDR) | 0.000 ppb | 251.0 % | 3 cps | 3 cps |
| 115In (STDR) | 97.145 % | 0.5 % | 522,561 cps | 522,565 cps |
| 115In (KEDR) | 92.569 % | 0.8 % | 128,068 cps | 128,068 cps |
| 121Sb (STDR) | 0.001 ppb | 62.6 % | 267 cps | 268 cps |
| 121Sb (KEDR) | 0.000 ppb | 1,866.0 % | 83 cps | 83 cps |
| 137Ba (STDR) | -0.006 ppb | 98.1 % | 1,660 cps | 1,660 cps |
| 137Ba (KEDR) | 0.016 ppb | 46.9 % | 508 cps | 508 cps |
| 205Tl (STDR) | 0.128 ppb | 2.3 % | 16,177 cps | 16,177 cps |
| 205Tl (KEDR) | 0.147 ppb | 2.4 % | 18,587 cps | 18,587 cps |
| 208Pb (STDR) | 0.000 ppb | 48.2 % | 430 cps | 238 cps |
| 208Pb (KEDR) | 0.000 ppb | 84.0 % | 239 cps | 239 cps |
| 209Bi (STDR) | 98.678 % | 0.3 % | 751,535 cps | 751,535 cps |
| 209Bi (KEDR) | 94.972 % | 1.4 % | 750,432 cps | 750,432 cps |
| 238U (STDR) | 0.000 ppb | 20.0 % | 122 cps | 122 cps |
| 238U (KEDR) | 0.000 ppb | 34.5 % | 178 cps | 178 cps |

Turner Report Sample Summary

4/13/2021 1:19:02 PM
ICAP RQ ICP-MS



W 4/13/21

Analysis index: 35
Analysis name: CCV
Analysis started at: 4/13/2021 1:15:32 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 109.364 % | 0.5 % | 72,124 cps | 72,124 cps |
| 9Be (STDR) | 47.904 ppb | 0.5 % | 168,415 cps | 168,415 cps |
| 27Al (STDR) | 96.811 ppb | 0.5 % | 1,616,007 cps | 1,616,007 cps |
| 45Sc (STDR) | 99.362 % | 1.3 % | 172,034 cps | 190,157 cps |
| 45Sc (KEDR) | 99.465 % | 1.2 % | 6,512 cps | 6,512 cps |
| 51V (STDR) | 50.396 ppb | 1.2 % | 1,277,546 cps | 1,657,187 cps |
| 51V (KEDR) | 50.125 ppb | 1.3 % | 200,847 cps | 200,847 cps |
| 55Mn (STDR) | 49.961 ppb | 0.6 % | 1,942,933 cps | 1,942,933 cps |
| 55Mn (KEDR) | 50.331 ppb | 0.1 % | 152,623 cps | 152,623 cps |
| 52Cr (STDR) | 49.454 ppb | 0.5 % | 1,195,786 cps | 1,257,674 cps |
| 52Cr (KEDR) | 49.924 ppb | 1.3 % | 301,906 cps | 301,906 cps |
| 59Co (STDR) | 49.212 ppb | 0.2 % | 1,497,533 cps | 1,497,533 cps |
| 59Co (KEDR) | 49.656 ppb | 0.7 % | 562,910 cps | 562,910 cps |
| 60Ni (STDR) | 49.573 ppb | 0.7 % | 338,861 cps | 338,861 cps |
| 60Ni (KEDR) | 49.584 ppb | 1.4 % | 154,838 cps | 154,838 cps |
| 63Cu (STDR) | 48.827 ppb | 0.7 % | 840,928 cps | 840,928 cps |
| 63Cu (KEDR) | 48.822 ppb | 0.8 % | 433,688 cps | 433,688 cps |
| 66Zn (STDR) | 100.286 ppb | 0.6 % | 567,413 cps | 567,413 cps |
| 66Zn (KEDR) | 99.588 ppb | 0.6 % | 163,182 cps | 163,182 cps |
| 74Ge (STDR) | 99.184 % | 0.4 % | 342,812 cps | 345,532 cps |
| 74Ge (KEDR) | 96.136 % | 1.0 % | 58,628 cps | 58,628 cps |
| 75As (STDR) | 49.758 ppb | 1.1 % | 248,169 cps | 255,225 cps |
| 75As (KEDR) | 49.593 ppb | 0.5 % | 39,370 cps | 39,370 cps |
| 82Se (STDR) | 49.033 ppb | 2.0 % | 25,321 cps | 25,837 cps |
| 82Se (KEDR) | 48.646 ppb | 2.3 % | 1,774 cps | 1,774 cps |
| 98Mo (STDR) | 48.344 ppb | 1.1 % | 850,323 cps | 850,327 cps |
| 98Mo (KEDR) | 48.780 ppb | 0.6 % | 517,160 cps | 517,160 cps |
| 107Ag (STDR) | 46.996 ppb | 0.2 % | 1,574,864 cps | 1,574,864 cps |
| 107Ag (KEDR) | 48.020 ppb | 0.9 % | 1,152,941 cps | 1,152,941 cps |
| 111Cd (STDR) | 49.261 ppb | 0.1 % | 416,130 cps | 418,421 cps |
| 111Cd (KEDR) | 48.828 ppb | 0.7 % | 209,041 cps | 209,041 cps |
| 115In (STDR) | 99.611 % | 1.5 % | 535,828 cps | 535,835 cps |
| 115In (KEDR) | 96.208 % | 0.3 % | 133,103 cps | 133,103 cps |
| 121Sb (STDR) | 49.640 ppb | 1.3 % | 1,449,752 cps | 1,449,754 cps |
| 121Sb (KEDR) | 49.303 ppb | 0.6 % | 475,788 cps | 475,788 cps |
| 137Ba (STDR) | 49.454 ppb | 1.9 % | 592,919 cps | 592,919 cps |
| 137Ba (KEDR) | 48.815 ppb | 0.8 % | 172,385 cps | 172,385 cps |
| 205Tl (STDR) | 51.340 ppb | 1.1 % | 5,844,947 cps | 5,844,947 cps |
| 205Tl (KEDR) | 51.650 ppb | 0.8 % | 5,980,833 cps | 5,980,833 cps |
| 208Pb (STDR) | 47.679 ppb | 0.6 % | 7,522,323 cps | 3,991,415 cps |
| 208Pb (KEDR) | 48.154 ppb | 1.3 % | 4,084,618 cps | 4,084,618 cps |
| 209Bi (STDR) | 102.199 % | 0.8 % | 778,355 cps | 778,355 cps |
| 209Bi (KEDR) | 98.432 % | 0.4 % | 777,771 cps | 777,771 cps |
| 238U (STDR) | 49.926 ppb | 0.9 % | 8,879,339 cps | 8,879,339 cps |
| 238U (KEDR) | 50.683 ppb | 0.4 % | 9,720,997 cps | 9,720,997 cps |

Turner Report Sample Summary

4/13/2021 1:47:52 PM
iCAP RQ ICP-MS



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Analysis index: 43
Analysis name: 21D0200-01
Analysis started at: 4/13/2021 1:44:23 PM

Report KeD

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ↑ 132.306 | 1.5 | 87,254 cps | 87,254 cps |
| 9Be (STDR) | 0.274 ppb | 2.9 % | 1,222 cps | 1,222 cps |
| 27Al (STDR) | 8,334.108 >LDR | 3.2 % | 100,082,657 cps | 100,082,657 cps |
| 45Sc (STDR) | ↓ 26.633 | 10.0 | 46,112 cps | 364,943 cps |
| 45Sc (KEDR) | ✓ 120.378 % | 4.1 % | 7,881 cps | 7,881 cps |
| 51V (STDR) | 31.819 ppb | 4.1 % | 344,264 cps | 778,379 cps |
| 51V (KEDR) | 11.656 ppb | 2.8 % | 54,866 cps | 54,866 cps |
| 55Mn (STDR) | 392.099 ppb | 3.9 % | 8,169,155 cps | 8,169,155 cps |
| 55Mn (KEDR) | 173.127 ppb ✓ | 2.6 % | 600,222 cps | 600,222 cps |
| 52Cr (STDR) | 15.296 ppb | 3.3 % | 153,679 cps | 220,940 cps |
| 52Cr (KEDR) | 6.767 ppb ✓ | 2.5 % | 47,803 cps | 47,803 cps |
| 59Co (STDR) | 3.696 ppb | 2.5 % | 72,545 cps | 72,545 cps |
| 59Co (KEDR) | 1.955 ppb ✓ | 1.7 % | 24,785 cps | 24,785 cps |
| 60Ni (STDR) | 9.050 ppb | 2.9 % | 41,735 cps | 41,735 cps |
| 60Ni (KEDR) | 4.878 ppb ✓ | 2.4 % | 17,047 cps | 17,047 cps |
| 63Cu (STDR) | 25.467 ppb | 2.0 % | 332,397 cps | 332,397 cps |
| 63Cu (KEDR) | 16.013 ppb ✓ | 1.4 % | 155,212 cps | 155,212 cps |
| 66Zn (STDR) | 121.981 ppb | 0.9 % | 573,766 cps | 573,766 cps |
| 66Zn (KEDR) | 90.821 ppb ✓ | 1.0 % | 159,348 cps | 159,348 cps |
| 74Ge (STDR) | 103.986 % | 1.5 % | 359,410 cps | 360,082 cps |
| 74Ge (KEDR) | ✓ 97.542 % | 0.7 % | 59,485 cps | 59,485 cps |
| 75As (STDR) | 12.598 ppb | 0.9 % | 65,748 cps | 82,926 cps |
| 75As (KEDR) | 13.521 ppb ✓ | 0.9 % | 10,886 cps | 10,886 cps |
| 82Se (STDR) | -0.337 ppb | 38.2 % | -342 cps | 318 cps |
| 82Se (KEDR) | 0.852 ppb ✓ | 61.6 % | 43 cps | 43 cps |
| 98Mo (STDR) | 2.681 ppb | 0.1 % | 48,242 cps | 48,246 cps |
| 98Mo (KEDR) | 2.705 ppb ✓ | 1.1 % | 28,552 cps | 28,552 cps |
| 107Ag (STDR) | 0.105 ppb | 1.8 % | 3,992 cps | 3,992 cps |
| 107Ag (KEDR) | 0.105 ppb ✓ | 1.5 % | 2,766 cps | 2,766 cps |
| 111Cd (STDR) | 0.262 ppb | 4.0 % | 2,539 cps | 1,973 cps |
| 111Cd (KEDR) | 0.249 ppb ✓ | 2.9 % | 1,049 cps | 1,049 cps |
| 115In (STDR) | 99.625 % | 0.9 % | 535,900 cps | 539,799 cps |
| 115In (KEDR) | ✓ 94.076 % | 1.1 % | 130,154 cps | 130,154 cps |
| 121Sb (STDR) | 0.466 ppb | 1.7 % | 13,810 cps | 13,819 cps |
| 121Sb (KEDR) | 0.464 ppb ✓ | 4.2 % | 4,442 cps | 4,442 cps |
| 137Ba (STDR) | 99.531 ppb | 1.1 % | 1,175,517 cps | 1,175,517 cps |
| 137Ba (KEDR) | 98.130 ppb ✓ | 1.4 % | 334,444 cps | 334,444 cps |
| 205Tl (STDR) | 0.329 ppb | 2.7 % | 37,421 cps | 37,421 cps |
| 205Tl (KEDR) | 0.337 ppb ✓ | 2.1 % | 38,524 cps | 38,524 cps |
| 208Pb (STDR) | 99.338 ppb | 0.5 % | 14,785,741 cps | 7,773,778 cps |
| 208Pb (KEDR) | 97.851 ppb ✓ | 0.9 % | 7,725,630 cps | 7,725,630 cps |
| 209Bi (STDR) | 96.358 % | 1.2 % | 733,863 cps | 733,863 cps |
| 209Bi (KEDR) | ✓ 91.577 % ✓ | 1.5 % | 723,611 cps | 723,611 cps |
| 238U (STDR) | 4.106 ppb | 1.0 % | 688,560 cps | 688,560 cps |
| 238U (KEDR) | 4.363 ppb ✓ | 1.0 % | 778,496 cps | 778,496 cps |

Refer to box

Turner Report Sample Summary

4/13/2021 1:51:20 PM
ICAP RQ ICP-MS



Handwritten signature and date: 4/13/21

Analysis index: 44
Analysis name: CCB
Analysis started at: 4/13/2021 1:47:52 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 116.081 % | 2.4 % | 76,554 cps | 76,554 cps |
| 9Be (STDR) | -0.016 ppb | 9.7 % | 50 cps | 50 cps |
| 27Al (STDR) | 0.427 ppb | 9.4 % | 20,692 cps | 20,692 cps |
| 45Sc (STDR) | 108.882 % | 0.8 % | 188,516 cps | 209,236 cps |
| 45Sc (KEDR) | 108.775 % | 3.1 % | 7,121 cps | 7,121 cps |
| 51V (STDR) | -0.305 ppb | 48.9 % | -18,374 cps | 366,729 cps |
| 51V (KEDR) | 0.047 ppb | 18.0 % | 458 cps | 458 cps |
| 55Mn (STDR) | 0.138 ppb | 7.5 % | 7,871 cps | 7,871 cps |
| 55Mn (KEDR) | 0.161 ppb | 23.9 % | 623 cps | 623 cps |
| 52Cr (STDR) | -0.062 ppb | 53.0 % | -53,340 cps | 15,318 cps |
| 52Cr (KEDR) | 0.012 ppb | 25.1 % | 278 cps | 278 cps |
| 59Co (STDR) | 0.002 ppb | 70.2 % | 270 cps | 270 cps |
| 59Co (KEDR) | 0.000 ppb | 307.7 % | 25 cps | 25 cps |
| 60Ni (STDR) | 0.013 ppb | 173.6 % | 567 cps | 567 cps |
| 60Ni (KEDR) | 0.003 ppb | 266.6 % | 156 cps | 156 cps |
| 63Cu (STDR) | 0.005 ppb | 222.1 % | 8,296 cps | 8,296 cps |
| 63Cu (KEDR) | 0.002 ppb | 101.8 % | 207 cps | 207 cps |
| 66Zn (STDR) | -0.042 ppb | 73.7 % | 5,366 cps | 5,366 cps |
| 66Zn (KEDR) | 0.033 ppb | 46.0 % | 1,594 cps | 1,594 cps |
| 74Ge (STDR) | 110.426 % | 2.3 % | 381,668 cps | 382,210 cps |
| 74Ge (KEDR) | 104.970 % | 2.1 % | 64,015 cps | 64,015 cps |
| 75As (STDR) | -0.212 ppb | 50.4 % | -1,249 cps | 12,475 cps |
| 75As (KEDR) | 0.011 ppb | 60.7 % | 17 cps | 17 cps |
| 82Se (STDR) | -0.030 ppb | 454.1 % | -187 cps | 313 cps |
| 82Se (KEDR) | 0.179 ppb | 58.4 % | 19 cps | 19 cps |
| 98Mo (STDR) | 0.009 ppb | 28.1 % | 319 cps | 322 cps |
| 98Mo (KEDR) | 0.007 ppb | 19.7 % | 168 cps | 168 cps |
| 107Ag (STDR) | -0.002 ppb | 30.4 % | 375 cps | 375 cps |
| 107Ag (KEDR) | -0.001 ppb | 103.5 % | 280 cps | 280 cps |
| 111Cd (STDR) | -0.010 ppb | 31.2 % | 242 cps | 8 cps |
| 111Cd (KEDR) | 0.000 ppb | 151.5 % | 3 cps | 3 cps |
| 115In (STDR) | 107.361 % | 1.6 % | 577,512 cps | 577,522 cps |
| 115In (KEDR) | 101.027 % | 1.5 % | 139,770 cps | 139,770 cps |
| 121Sb (STDR) | 0.001 ppb | 41.1 % | 319 cps | 320 cps |
| 121Sb (KEDR) | 0.001 ppb | 151.6 % | 96 cps | 96 cps |
| 137Ba (STDR) | 0.011 ppb | 4.0 % | 2,039 cps | 2,039 cps |
| 137Ba (KEDR) | 0.035 ppb | 51.9 % | 623 cps | 623 cps |
| 205Tl (STDR) | 0.049 ppb | 4.6 % | 8,046 cps | 8,046 cps |
| 205Tl (KEDR) | 0.050 ppb | 2.2 % | 8,449 cps | 8,449 cps |
| 208Pb (STDR) | 0.007 ppb | 14.0 % | 1,517 cps | 803 cps |
| 208Pb (KEDR) | 0.007 ppb | 15.7 % | 876 cps | 876 cps |
| 209Bi (STDR) | 105.798 % | 1.3 % | 805,761 cps | 805,761 cps |
| 209Bi (KEDR) | 102.705 % | 1.8 % | 811,537 cps | 811,537 cps |
| 238U (STDR) | 0.001 ppb | 14.3 % | 167 cps | 167 cps |
| 238U (KEDR) | 0.001 ppb | 16.0 % | 232 cps | 232 cps |

Turner Report Sample Summary

4/13/2021 1:54:51 PM
ICAP RQ ICP-MS



W 4/13/21

Analysis index: 45
Analysis name: CCV
Analysis started at: 4/13/2021 1:51:20 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 119.909 % | 1.3 % | 79,078 cps | 79,078 cps |
| 9Be (STDR) | 47.579 ppb | 1.1 % | 183,564 cps | 183,564 cps |
| 27Al (STDR) | 98.702 ppb | 0.6 % | 1,818,453 cps | 1,818,453 cps |
| 45Sc (STDR) | 110.382 % | 0.6 % | 191,114 cps | 212,182 cps |
| 45Sc (KEDR) | 111.131 % | 0.8 % | 7,275 cps | 7,275 cps |
| 51V (STDR) | 46.297 ppb | 8.4 % | 1,303,317 cps | 1,687,026 cps |
| 51V (KEDR) | 49.413 ppb | 1.4 % | 220,460 cps | 220,460 cps |
| 55Mn (STDR) | 50.749 ppb | 0.7 % | 2,194,012 cps | 2,194,012 cps |
| 55Mn (KEDR) | 49.254 ppb | 2.1 % | 165,899 cps | 165,899 cps |
| 52Cr (STDR) | 49.615 ppb | 1.7 % | 1,333,617 cps | 1,404,025 cps |
| 52Cr (KEDR) | 48.598 ppb | 0.8 % | 327,049 cps | 327,049 cps |
| 59Co (STDR) | 49.474 ppb | 0.6 % | 1,674,277 cps | 1,674,277 cps |
| 59Co (KEDR) | 49.213 ppb | 1.4 % | 618,235 cps | 618,235 cps |
| 60Ni (STDR) | 49.293 ppb | 0.2 % | 374,746 cps | 374,746 cps |
| 60Ni (KEDR) | 48.993 ppb | 1.8 % | 169,442 cps | 169,442 cps |
| 63Cu (STDR) | 48.787 ppb | 0.4 % | 934,691 cps | 934,691 cps |
| 63Cu (KEDR) | 48.637 ppb | 1.7 % | 477,630 cps | 477,630 cps |
| 66Zn (STDR) | 100.786 ppb | 0.4 % | 634,460 cps | 634,460 cps |
| 66Zn (KEDR) | 98.858 ppb | 1.8 % | 178,766 cps | 178,766 cps |
| 74Ge (STDR) | 110.422 % | 1.2 % | 381,654 cps | 384,613 cps |
| 74Ge (KEDR) | 105.574 % | 0.9 % | 64,384 cps | 64,384 cps |
| 75As (STDR) | 50.065 ppb | 0.2 % | 277,893 cps | 283,567 cps |
| 75As (KEDR) | 49.990 ppb | 1.5 % | 43,558 cps | 43,558 cps |
| 82Se (STDR) | 49.680 ppb | 0.4 % | 28,479 cps | 28,895 cps |
| 82Se (KEDR) | 48.090 ppb | 4.0 % | 1,918 cps | 1,918 cps |
| 98Mo (STDR) | 48.132 ppb | 0.5 % | 934,100 cps | 934,103 cps |
| 98Mo (KEDR) | 49.096 ppb | 1.5 % | 563,741 cps | 563,741 cps |
| 107Ag (STDR) | 47.080 ppb | 1.1 % | 1,734,691 cps | 1,734,691 cps |
| 107Ag (KEDR) | 48.919 ppb | 0.8 % | 1,265,489 cps | 1,265,489 cps |
| 111Cd (STDR) | 49.285 ppb | 0.8 % | 457,053 cps | 458,735 cps |
| 111Cd (KEDR) | 49.435 ppb | 2.2 % | 227,463 cps | 227,463 cps |
| 115In (STDR) | 109.191 % | 0.9 % | 587,358 cps | 587,368 cps |
| 115In (KEDR) | 103.182 % | 1.6 % | 142,752 cps | 142,752 cps |
| 121Sb (STDR) | 50.169 ppb | 0.9 % | 1,603,165 cps | 1,603,169 cps |
| 121Sb (KEDR) | 49.936 ppb | 0.8 % | 516,268 cps | 516,268 cps |
| 137Ba (STDR) | 49.835 ppb | 0.5 % | 650,444 cps | 650,444 cps |
| 137Ba (KEDR) | 49.721 ppb | 1.2 % | 187,596 cps | 187,596 cps |
| 205Tl (STDR) | 51.630 ppb | 0.3 % | 6,262,907 cps | 6,262,907 cps |
| 205Tl (KEDR) | 51.726 ppb | 1.0 % | 6,328,125 cps | 6,328,125 cps |
| 208Pb (STDR) | 47.872 ppb | 0.9 % | 8,039,319 cps | 4,268,259 cps |
| 208Pb (KEDR) | 48.194 ppb | 0.4 % | 4,317,010 cps | 4,317,010 cps |
| 209Bi (STDR) | 108.749 % | 0.9 % | 828,238 cps | 828,238 cps |
| 209Bi (KEDR) | 103.928 % | 0.7 % | 821,201 cps | 821,201 cps |
| 238U (STDR) | 49.223 ppb | 0.8 % | 9,316,295 cps | 9,316,295 cps |
| 238U (KEDR) | 50.222 ppb | 0.2 % | 10,170,510 cps | 10,170,510 cps |

iCAP RQ Report

4/14/2021 1:42:57 PM



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Sample List Summary:

Instrument Name: iCAP RQ
 Filename: 210414_1a.imexp

| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|-------------------|------------|--------------|-----------------------|------------------|
| 1 | RINSE | 3 | 1 | 4/14/2021 11:41:04 AM | TURNER\PEService |
| 2 | Blank | 3 | 1 | 4/14/2021 11:44:29 AM | TURNER\PEService |
| 3 | Cal Std 1 2101339 | 3 | 1 | 4/14/2021 11:47:55 AM | TURNER\PEService |
| 4 | Cal Std 2 2101340 | 3 | 1 | 4/14/2021 11:51:22 AM | TURNER\PEService |
| 5 | Cal Std 3 2101341 | 3 | 1 | 4/14/2021 11:54:50 AM | TURNER\PEService |
| 6 | Cal Std 4 2101342 | 3 | 1 | 4/14/2021 11:58:18 AM | TURNER\PEService |
| 7 | ICB | 3 | 1 | 4/14/2021 12:01:47 PM | TURNER\PEService |
| 8 | IPC 2101341 | 3 | 1 | 4/14/2021 12:05:14 PM | TURNER\PEService |
| 9 | ICV 2101402 | 3 | 1 | 4/14/2021 12:08:42 PM | TURNER\PEService |
| 10 | 0.25 CHK STD | 3 | 1 | 4/14/2021 12:12:12 PM | TURNER\PEService |
| 11 | 0.50 CHK STD | 3 | 1 | 4/14/2021 12:15:38 PM | TURNER\PEService |
| 12 | 40 CHK STD | 3 | 1 | 4/14/2021 12:19:05 PM | TURNER\PEService |
| 13 | 0.25 CHK STD | 3 | 1 | 4/14/2021 12:23:58 PM | TURNER\PEService |
| 14 | 0.50 CHK STD | 3 | 1 | 4/14/2021 12:27:25 PM | TURNER\PEService |
| 15 | 2104161-BLK1 | 3 | 1 | 4/14/2021 12:32:51 PM | TURNER\PEService |
| 16 | 21D0148-01@20 | 3 | 1 | 4/14/2021 12:36:19 PM | TURNER\PEService |
| 17 | 21D0148-02@2 | 3 | 1 | 4/14/2021 12:39:46 PM | TURNER\PEService |
| 18 | 21D0148-07@5 | 3 | 1 | 4/14/2021 12:43:15 PM | TURNER\PEService |
| 19 | 21D0200-01@20 | 3 | 1 | 4/14/2021 12:46:43 PM | TURNER\PEService |
| 20 | CCB | 3 | 1 | 4/14/2021 12:50:12 PM | TURNER\PEService |
| 21 | CCV | 3 | 1 | 4/14/2021 12:53:39 PM | TURNER\PEService |
| 22 | CCV 2104102 | 3 | 1 | 4/14/2021 12:57:09 PM | TURNER\PEService |
| 23 | 21D0146-01 | 3 | 1 | 4/14/2021 1:00:39 PM | TURNER\PEService |
| 24 | 21D0111-01@10 | 3 | 1 | 4/14/2021 1:04:09 PM | TURNER\PEService |
| 25 | RINSE | 3 | 1 | 4/14/2021 1:07:38 PM | TURNER\PEService |
| 26 | 21D0146-01@2 | 3 | 1 | 4/14/2021 1:11:05 PM | TURNER\PEService |
| 27 | 21D0111-01@20 | 3 | 1 | 4/14/2021 1:14:36 PM | TURNER\PEService |
| 28 | 21D0111-01@50 | 3 | 1 | 4/14/2021 1:20:28 PM | TURNER\PEService |
| 29 | 21D0111-01@100 | 3 | 1 | 4/14/2021 1:26:52 PM | TURNER\PEService |
| 30 | CCB | 3 | 1 | 4/14/2021 1:31:25 PM | TURNER\PEService |
| 31 | CCV | 3 | 1 | 4/14/2021 1:34:53 PM | TURNER\PEService |
| 32 | CCV | 3 | 1 | 4/14/2021 1:38:23 PM | TURNER\PEService |

Handwritten notes:
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 4/14/21

0.25 CHK STD = 0.25 mL of 2100805 diluted to 10mL
 0.50 CHK STD = 0.50 mL of 2100805 diluted to 10mL
 40 CHK STD = 0.02 mL of 2003633 diluted to 10mL

iCAP RQ Report

4/14/2021 1:42:57 PM



Calibration Summary

| Index | 6 |
|--------------|-------------------------|
| Label | Cal Std 4 |
| Category | Correlation Coefficient |
| 6Li (STDR) | |
| 9Be (STDR) | .9999988 |
| 27Al (STDR) | .9999926 |
| 45Sc (STDR) | |
| 45Sc (KEDR) | |
| 51V (STDR) | .9992456 |
| 51V (KEDR) | .9999471 |
| 52Cr (STDR) | .9999623 |
| 52Cr (KEDR) | .9999667 |
| 55Mn (STDR) | .9999981 |
| 55Mn (KEDR) | .9999977 |
| 59Co (STDR) | .9999773 |
| 59Co (KEDR) | .9999752 |
| 60Ni (STDR) | .9999983 |
| 60Ni (KEDR) | .9999636 |
| 63Cu (STDR) | .9999449 |
| 63Cu (KEDR) | .9999993 |
| 66Zn (STDR) | .999984 |
| 66Zn (KEDR) | .999987 |
| 74Ge (STDR) | |
| 74Ge (KEDR) | |
| 75As (STDR) | .9999987 |
| 75As (KEDR) | .999976 |
| 82Se (STDR) | .9999838 |
| 82Se (KEDR) | .9999541 |
| 98Mo (STDR) | .999979 |
| 98Mo (KEDR) | .999965 |
| 107Ag (STDR) | .9998746 |
| 107Ag (KEDR) | .9999997 |
| 111Cd (STDR) | .9999942 |
| 111Cd (KEDR) | .9999794 |
| 115In (STDR) | |
| 115In (KEDR) | |
| 121Sb (STDR) | .9999997 |
| 121Sb (KEDR) | .9999983 |
| 137Ba (STDR) | .9999983 |
| 137Ba (KEDR) | .9999991 |
| 205Tl (STDR) | .9999973 |
| 205Tl (KEDR) | .9999816 |
| 208Pb (STDR) | .9999988 |
| 208Pb (KEDR) | .999985 |
| 209Bi (STDR) | |
| 209Bi (KEDR) | |
| 238U (STDR) | .9999987 |
| 238U (KEDR) | .9999468 |

Handwritten signature and date: 4/14/21

Turner Report Sample Summary

4/14/2021 11:44:29 AM
ICAP RQ ICP-MS



Analysis index: 1
Analysis name: RINSE
Analysis started at: 4/14/2021 11:41:04 AM

4/14/21

| Category | Intensity average | Raw Intensity average |
|--------------------|-------------------|-----------------------|
| 6Li (STDR) [cps] | 111,794 | 111,794 |
| 9Be (STDR) [cps] | 90 | 90 |
| 27Al (STDR) [cps] | 14,704 | 14,704 |
| 45Sc (STDR) [cps] | 292,742 | 323,151 |
| 45Sc (KEDR) [cps] | 10,062 | 10,062 |
| 51V (STDR) [cps] | 83,626 | 1,509,624 |
| 51V (KEDR) [cps] | 1,120 | 1,120 |
| 55Mn (STDR) [cps] | 3,487 | 3,487 |
| 55Mn (KEDR) [cps] | 61 | 61 |
| 52Cr (STDR) [cps] | -78,011 | 33,421 |
| 52Cr (KEDR) [cps] | 362 | 362 |
| 59Co (STDR) [cps] | 295 | 295 |
| 59Co (KEDR) [cps] | 12 | 12 |
| 60Ni (STDR) [cps] | 342 | 342 |
| 60Ni (KEDR) [cps] | 142 | 142 |
| 63Cu (STDR) [cps] | 938 | 938 |
| 63Cu (KEDR) [cps] | 338 | 338 |
| 66Zn (STDR) [cps] | 5,695 | 5,695 |
| 66Zn (KEDR) [cps] | 1,454 | 1,454 |
| 74Ge (STDR) [cps] | 564,837 | 566,208 |
| 74Ge (KEDR) [cps] | 88,315 | 88,315 |
| 75As (STDR) [cps] | -671 | 35,138 |
| 75As (KEDR) [cps] | 14 | 14 |
| 82Se (STDR) [cps] | -154 | 365 |
| 82Se (KEDR) [cps] | 13 | 13 |
| 98Mo (STDR) [cps] | 106 | 108 |
| 98Mo (KEDR) [cps] | 44 | 44 |
| 107Ag (STDR) [cps] | 67 | 67 |
| 107Ag (KEDR) [cps] | 68 | 68 |
| 111Cd (STDR) [cps] | 297 | 8 |
| 111Cd (KEDR) [cps] | 4 | 4 |
| 115In (STDR) [cps] | 817,135 | 817,139 |
| 115In (KEDR) [cps] | 187,213 | 187,213 |
| 121Sb (STDR) [cps] | 266 | 267 |
| 121Sb (KEDR) [cps] | 80 | 80 |
| 137Ba (STDR) [cps] | 2,484 | 2,484 |
| 137Ba (KEDR) [cps] | 690 | 690 |
| 205Tl (STDR) [cps] | 1,345 | 1,345 |
| 205Tl (KEDR) [cps] | 1,282 | 1,282 |
| 208Pb (STDR) [cps] | 368 | 200 |
| 208Pb (KEDR) [cps] | 169 | 169 |
| 209Bi (STDR) [cps] | 1,053,614 | 1,053,614 |
| 209Bi (KEDR) [cps] | 1,027,153 | 1,027,153 |
| 238U (STDR) [cps] | 33 | 33 |
| 238U (KEDR) [cps] | 42 | 42 |

Turner Report Sample Summary

4/14/2021 11:47:55 AM
ICAP RQ ICP-MS



W. M. M. M.

Analysis index: 2
Analysis name: Blank
Analysis started at: 4/14/2021 11:44:29 AM

| Category | Intensity average | Raw Intensity average |
|--------------------|-------------------|-----------------------|
| 6Li (STDR) [cps] | 112,299 | 112,299 |
| 9Be (STDR) [cps] | 67 | 67 |
| 27Al (STDR) [cps] | 15,204 | 15,204 |
| 45Sc (STDR) [cps] | 285,256 | 317,550 |
| 45Sc (KEDR) [cps] | 9,464 | 9,464 |
| 51V (STDR) [cps] | 90,959 | 1,559,483 |
| 51V (KEDR) [cps] | 1,122 | 1,122 |
| 55Mn (STDR) [cps] | 3,475 | 3,475 |
| 55Mn (KEDR) [cps] | 45 | 45 |
| 52Cr (STDR) [cps] | -76,343 | 33,199 |
| 52Cr (KEDR) [cps] | 353 | 353 |
| 59Co (STDR) [cps] | 270 | 270 |
| 59Co (KEDR) [cps] | 13 | 13 |
| 60Ni (STDR) [cps] | 345 | 345 |
| 60Ni (KEDR) [cps] | 108 | 108 |
| 63Cu (STDR) [cps] | 1,042 | 1,042 |
| 63Cu (KEDR) [cps] | 349 | 349 |
| 66Zn (STDR) [cps] | 5,488 | 5,488 |
| 66Zn (KEDR) [cps] | 1,509 | 1,509 |
| 74Ge (STDR) [cps] | 561,222 | 562,582 |
| 74Ge (KEDR) [cps] | 84,896 | 84,896 |
| 75As (STDR) [cps] | -898 | 34,490 |
| 75As (KEDR) [cps] | 23 | 23 |
| 82Se (STDR) [cps] | -107 | 413 |
| 82Se (KEDR) [cps] | 20 | 20 |
| 98Mo (STDR) [cps] | 102 | 103 |
| 98Mo (KEDR) [cps] | 66 | 66 |
| 107Ag (STDR) [cps] | 102 | 102 |
| 107Ag (KEDR) [cps] | 66 | 66 |
| 111Cd (STDR) [cps] | 332 | 5 |
| 111Cd (KEDR) [cps] | 1 | 1 |
| 115In (STDR) [cps] | 812,153 | 812,157 |
| 115In (KEDR) [cps] | 176,307 | 176,307 |
| 121Sb (STDR) [cps] | 251 | 252 |
| 121Sb (KEDR) [cps] | 73 | 73 |
| 137Ba (STDR) [cps] | 2,577 | 2,577 |
| 137Ba (KEDR) [cps] | 678 | 678 |
| 205Tl (STDR) [cps] | 1,322 | 1,322 |
| 205Tl (KEDR) [cps] | 1,355 | 1,355 |
| 208Pb (STDR) [cps] | 373 | 190 |
| 208Pb (KEDR) [cps] | 213 | 213 |
| 209Bi (STDR) [cps] | 1,044,413 | 1,044,413 |
| 209Bi (KEDR) [cps] | 987,864 | 987,864 |
| 238U (STDR) [cps] | 17 | 17 |
| 238U (KEDR) [cps] | 18 | 18 |

Turner Report Sample Summary

4/14/2021 11:51:22 AM
iCAP RQ ICP-MS



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Analysis index: 3
Analysis name: Cal Std 1
Analysis started at: 4/14/2021 11:47:55 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.954 % | 0.7 % | 112,247 cps | 112,247 cps |
| 9Be (STDR) | 1.000 ppb | 3.7 % | 5,128 cps | 5,128 cps |
| 27Al (STDR) | 1.000 ppb | 3.0 % | 47,658 cps | 47,658 cps |
| 45Sc (STDR) | 100.469 % | 0.7 % | 286,593 cps | 319,782 cps |
| 45Sc (KEDR) | 106.318 % | 1.0 % | 10,062 cps | 10,062 cps |
| 51V (STDR) | 1.000 ppb | 21.6 % | 189,943 cps | 1,830,195 cps |
| 51V (KEDR) | 1.000 ppb | 3.9 % | 7,640 cps | 7,640 cps |
| 55Mn (STDR) | 1.000 ppb | 1.5 % | 68,794 cps | 68,794 cps |
| 55Mn (KEDR) | 1.000 ppb | 2.3 % | 4,763 cps | 4,763 cps |
| 52Cr (STDR) | 1.000 ppb | 2.2 % | -45,287 cps | 76,898 cps |
| 52Cr (KEDR) | 1.000 ppb | 1.8 % | 9,707 cps | 9,707 cps |
| 59Co (STDR) | 1.000 ppb | 0.6 % | 49,833 cps | 49,833 cps |
| 59Co (KEDR) | 1.000 ppb | 3.0 % | 17,350 cps | 17,350 cps |
| 60Ni (STDR) | 1.000 ppb | 1.2 % | 11,684 cps | 11,684 cps |
| 60Ni (KEDR) | 1.000 ppb | 5.9 % | 5,004 cps | 5,004 cps |
| 63Cu (STDR) | 1.000 ppb | 1.1 % | 28,795 cps | 28,795 cps |
| 63Cu (KEDR) | 1.000 ppb | 1.2 % | 13,658 cps | 13,658 cps |
| 66Zn (STDR) | 1.000 ppb | 2.7 % | 18,813 cps | 18,813 cps |
| 66Zn (KEDR) | 1.000 ppb | 2.2 % | 4,922 cps | 4,922 cps |
| 74Ge (STDR) | 100.086 % | 1.1 % | 561,704 cps | 563,219 cps |
| 74Ge (KEDR) | 103.729 % | 0.5 % | 88,062 cps | 88,062 cps |
| 75As (STDR) | 1.000 ppb | 11.5 % | 6,287 cps | 43,810 cps |
| 75As (KEDR) | 1.000 ppb | 0.9 % | 1,265 cps | 1,265 cps |
| 82Se (STDR) | 1.000 ppb | 15.9 % | 637 cps | 1,215 cps |
| 82Se (KEDR) | 1.000 ppb | 7.8 % | 73 cps | 73 cps |
| 98Mo (STDR) | 1.000 ppb | 2.8 % | 27,156 cps | 27,158 cps |
| 98Mo (KEDR) | 1.000 ppb | 1.5 % | 15,540 cps | 15,540 cps |
| 107Ag (STDR) | 1.000 ppb | 0.4 % | 50,020 cps | 50,020 cps |
| 107Ag (KEDR) | 1.000 ppb | 1.2 % | 34,287 cps | 34,287 cps |
| 111Cd (STDR) | 1.000 ppb | 1.6 % | 12,684 cps | 12,379 cps |
| 111Cd (KEDR) | 1.000 ppb | 0.9 % | 5,802 cps | 5,802 cps |
| 115In (STDR) | 101.785 % | 1.2 % | 826,650 cps | 826,658 cps |
| 115In (KEDR) | 105.032 % | 0.2 % | 185,179 cps | 185,179 cps |
| 121Sb (STDR) | 1.000 ppb | 1.4 % | 43,736 cps | 43,736 cps |
| 121Sb (KEDR) | 1.000 ppb | 2.8 % | 13,614 cps | 13,614 cps |
| 137Ba (STDR) | 1.000 ppb | 1.7 % | 20,896 cps | 20,896 cps |
| 137Ba (KEDR) | 1.000 ppb | 2.1 % | 5,810 cps | 5,810 cps |
| 205Tl (STDR) | 1.000 ppb | 1.5 % | 152,842 cps | 152,842 cps |
| 205Tl (KEDR) | 1.000 ppb | 0.6 % | 156,270 cps | 156,270 cps |
| 208Pb (STDR) | 1.000 ppb | 1.3 % | 205,767 cps | 109,914 cps |
| 208Pb (KEDR) | 1.000 ppb | 0.5 % | 112,831 cps | 112,831 cps |
| 209Bi (STDR) | 99.868 % | 0.9 % | 1,043,038 cps | 1,043,038 cps |
| 209Bi (KEDR) | 102.999 % | 0.3 % | 1,017,492 cps | 1,017,492 cps |
| 238U (STDR) | 1.000 ppb | 0.6 % | 227,470 cps | 227,470 cps |
| 238U (KEDR) | 1.000 ppb | 1.5 % | 254,832 cps | 254,832 cps |

Turner Report Sample Summary

4/14/2021 11:54:50 AM
iCAP RQ ICP-MS



W. J. ...

Analysis index: 4
Analysis name: Cal Std 2
Analysis started at: 4/14/2021 11:51:22 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.379 % | 1.3 % | 111,602 cps | 111,602 cps |
| 9Be (STDR) | 10.006 ppb | 1.2 % | 53,456 cps | 53,456 cps |
| 27Al (STDR) | 9.984 ppb | 0.8 % | 291,552 cps | 291,552 cps |
| 45Sc (STDR) | 99.709 % | 0.1 % | 284,425 cps | 318,295 cps |
| 45Sc (KEDR) | 107.993 % | 2.0 % | 10,220 cps | 10,220 cps |
| 51V (STDR) | 9.922 ppb | 2.1 % | 637,313 cps | 2,309,239 cps |
| 51V (KEDR) | 9.996 ppb | 1.7 % | 64,027 cps | 64,027 cps |
| 55Mn (STDR) | 10.000 ppb | 0.6 % | 649,217 cps | 649,217 cps |
| 55Mn (KEDR) | 9.998 ppb | 2.0 % | 46,503 cps | 46,503 cps |
| 52Cr (STDR) | 10.024 ppb | 1.2 % | 333,221 cps | 456,258 cps |
| 52Cr (KEDR) | 10.000 ppb | 1.4 % | 94,688 cps | 94,688 cps |
| 59Co (STDR) | 10.001 ppb | 0.5 % | 499,387 cps | 499,387 cps |
| 59Co (KEDR) | 10.001 ppb | 1.6 % | 176,298 cps | 176,298 cps |
| 60Ni (STDR) | 9.999 ppb | 0.9 % | 112,422 cps | 112,422 cps |
| 60Ni (KEDR) | 9.998 ppb | 1.0 % | 48,015 cps | 48,015 cps |
| 63Cu (STDR) | 10.000 ppb | 1.3 % | 276,837 cps | 276,837 cps |
| 63Cu (KEDR) | 10.001 ppb | 1.3 % | 134,698 cps | 134,698 cps |
| 66Zn (STDR) | 9.960 ppb | 1.1 % | 99,977 cps | 99,977 cps |
| 66Zn (KEDR) | 9.967 ppb | 0.8 % | 26,534 cps | 26,534 cps |
| 74Ge (STDR) | 99.665 % | 0.9 % | 559,342 cps | 561,464 cps |
| 74Ge (KEDR) | 102.877 % | 1.7 % | 87,339 cps | 87,339 cps |
| 75As (STDR) | 10.011 ppb | 3.4 % | 79,933 cps | 115,627 cps |
| 75As (KEDR) | 9.998 ppb | 0.4 % | 12,095 cps | 12,095 cps |
| 82Se (STDR) | 10.006 ppb | 2.5 % | 7,802 cps | 8,311 cps |
| 82Se (KEDR) | 9.993 ppb | 4.3 % | 500 cps | 500 cps |
| 98Mo (STDR) | 10.002 ppb | 0.6 % | 272,481 cps | 272,484 cps |
| 98Mo (KEDR) | 10.001 ppb | 0.9 % | 156,031 cps | 156,031 cps |
| 107Ag (STDR) | 10.002 ppb | 0.7 % | 500,126 cps | 500,126 cps |
| 107Ag (KEDR) | 10.002 ppb | 0.3 % | 349,160 cps | 349,160 cps |
| 111Cd (STDR) | 10.005 ppb | 0.4 % | 127,662 cps | 127,984 cps |
| 111Cd (KEDR) | 10.004 ppb | 0.6 % | 60,198 cps | 60,198 cps |
| 115In (STDR) | 100.018 % | 0.2 % | 812,299 cps | 812,307 cps |
| 115In (KEDR) | 105.102 % | 0.4 % | 185,302 cps | 185,302 cps |
| 121Sb (STDR) | 10.003 ppb | 0.4 % | 443,333 cps | 443,333 cps |
| 121Sb (KEDR) | 9.999 ppb | 0.7 % | 133,780 cps | 133,780 cps |
| 137Ba (STDR) | 9.998 ppb | 1.3 % | 179,362 cps | 179,362 cps |
| 137Ba (KEDR) | 9.995 ppb | 0.3 % | 49,252 cps | 49,252 cps |
| 205Tl (STDR) | 10.000 ppb | 1.3 % | 1,519,918 cps | 1,519,918 cps |
| 205Tl (KEDR) | 10.001 ppb | 1.5 % | 1,563,216 cps | 1,563,216 cps |
| 208Pb (STDR) | 10.001 ppb | 1.2 % | 2,083,465 cps | 1,102,932 cps |
| 208Pb (KEDR) | 10.001 ppb | 0.6 % | 1,140,154 cps | 1,140,154 cps |
| 209Bi (STDR) | 100.049 % | 1.0 % | 1,044,926 cps | 1,044,926 cps |
| 209Bi (KEDR) | 102.895 % | 1.1 % | 1,016,462 cps | 1,016,462 cps |
| 238U (STDR) | 10.001 ppb | 0.4 % | 2,290,488 cps | 2,290,488 cps |
| 238U (KEDR) | 10.000 ppb | 0.4 % | 2,546,162 cps | 2,546,162 cps |

Turner Report Sample Summary

4/14/2021 11:58:18 AM
ICAP RQ ICP-MS



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Analysis index: 5
Analysis name: Cal Std 3
Analysis started at: 4/14/2021 11:54:50 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 98.091 % | 2.0 % | 110,155 cps | 110,155 cps |
| 9Be (STDR) | 49.997 ppb | 2.5 % | 262,746 cps | 262,746 cps |
| 27Al (STDR) | 49.944 ppb | 0.7 % | 1,333,170 cps | 1,333,170 cps |
| 45Sc (STDR) | 97.098 % | 0.5 % | 276,977 cps | 310,547 cps |
| 45Sc (KEDR) | 104.300 % | 0.5 % | 9,871 cps | 9,871 cps |
| 51V (STDR) | 49.614 ppb | 1.8 % | 2,326,257 cps | 3,842,343 cps |
| 51V (KEDR) | 50.035 ppb | 0.3 % | 311,132 cps | 311,132 cps |
| 55Mn (STDR) | 50.011 ppb | 1.1 % | 3,174,338 cps | 3,174,338 cps |
| 55Mn (KEDR) | 49.999 ppb | 0.5 % | 225,348 cps | 225,348 cps |
| 52Cr (STDR) | 50.039 ppb | 1.1 % | 1,958,732 cps | 2,068,735 cps |
| 52Cr (KEDR) | 50.028 ppb | 1.0 % | 463,946 cps | 463,946 cps |
| 59Co (STDR) | 49.990 ppb | 0.2 % | 2,427,330 cps | 2,427,330 cps |
| 59Co (KEDR) | 50.004 ppb | 0.8 % | 858,303 cps | 858,303 cps |
| 60Ni (STDR) | 49.978 ppb | 1.1 % | 542,361 cps | 542,361 cps |
| 60Ni (KEDR) | 50.024 ppb | 0.5 % | 235,981 cps | 235,981 cps |
| 63Cu (STDR) | 49.986 ppb | 0.5 % | 1,341,038 cps | 1,341,038 cps |
| 63Cu (KEDR) | 50.011 ppb | 0.4 % | 658,032 cps | 658,032 cps |
| 66Zn (STDR) | 49.948 ppb | 0.8 % | 458,027 cps | 458,027 cps |
| 66Zn (KEDR) | 49.947 ppb | 0.9 % | 120,345 cps | 120,345 cps |
| 74Ge (STDR) | 97.855 % | 0.9 % | 549,183 cps | 553,983 cps |
| 74Ge (KEDR) | 100.656 % | 0.5 % | 85,453 cps | 85,453 cps |
| 75As (STDR) | 50.011 ppb | 0.2 % | 397,859 cps | 424,212 cps |
| 75As (KEDR) | 50.027 ppb | 0.9 % | 59,909 cps | 59,909 cps |
| 82Se (STDR) | 50.046 ppb | 1.0 % | 39,669 cps | 40,158 cps |
| 82Se (KEDR) | 50.098 ppb | 2.9 % | 2,491 cps | 2,491 cps |
| 98Mo (STDR) | 49.957 ppb | 1.1 % | 1,309,556 cps | 1,309,558 cps |
| 98Mo (KEDR) | 50.008 ppb | 0.6 % | 765,161 cps | 765,161 cps |
| 107Ag (STDR) | 50.004 ppb | 0.6 % | 2,464,091 cps | 2,464,091 cps |
| 107Ag (KEDR) | 50.012 ppb | 0.7 % | 1,715,212 cps | 1,715,212 cps |
| 111Cd (STDR) | 50.010 ppb | 0.7 % | 629,743 cps | 631,518 cps |
| 111Cd (KEDR) | 50.033 ppb | 1.1 % | 298,935 cps | 298,935 cps |
| 115In (STDR) | 98.445 % | 0.5 % | 799,520 cps | 799,530 cps |
| 115In (KEDR) | 102.652 % | 1.0 % | 180,982 cps | 180,982 cps |
| 121Sb (STDR) | 50.009 ppb | 0.8 % | 2,190,773 cps | 2,190,774 cps |
| 121Sb (KEDR) | 50.020 ppb | 0.5 % | 660,165 cps | 660,165 cps |
| 137Ba (STDR) | 50.011 ppb | 0.5 % | 878,612 cps | 878,612 cps |
| 137Ba (KEDR) | 49.992 ppb | 1.3 % | 237,294 cps | 237,294 cps |
| 205Tl (STDR) | 49.986 ppb | 1.5 % | 7,458,449 cps | 7,458,449 cps |
| 205Tl (KEDR) | 49.919 ppb | 1.4 % | 7,384,676 cps | 7,384,676 cps |
| 208Pb (STDR) | 50.002 ppb | 1.0 % | 10,311,903 cps | 5,475,008 cps |
| 208Pb (KEDR) | 49.915 ppb | 1.2 % | 5,379,617 cps | 5,379,617 cps |
| 209Bi (STDR) | 98.964 % | 0.6 % | 1,033,592 cps | 1,033,592 cps |
| 209Bi (KEDR) | 101.384 % | 0.6 % | 1,001,538 cps | 1,001,538 cps |
| 238U (STDR) | 49.989 ppb | 0.3 % | 11,262,488 cps | 11,262,488 cps |
| 238U (KEDR) | 49.940 ppb | 1.5 % | 12,165,837 cps | 12,165,837 cps |

Turner Report Sample Summary

4/14/2021 12:01:47 PM
iCAP RQ ICP-MS



W. Miller

Analysis index: 6
Analysis name: Cal Std 4
Analysis started at: 4/14/2021 11:58:18 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 96.796 % | 1.5 % | 108,701 cps | 108,701 cps |
| 9Be (STDR) | 99.945 ppb | 0.8 % | 517,513 cps | 517,513 cps |
| 27Al (STDR) | 99.997 ppb | 0.7 % | 2,629,421 cps | 2,629,421 cps |
| 45Sc (STDR) | 96.524 % | 0.5 % | 275,340 cps | 308,219 cps |
| 45Sc (KEDR) | ✓ 104.750 % | 1.6 % | 9,913 cps | 9,913 cps |
| 51V (STDR) | 98.915 ppb | 1.1 % | 4,333,507 cps | 5,693,931 cps |
| 51V (KEDR) | 99.607 ppb | 2.2 % | 608,962 cps | 608,962 cps |
| 55Mn (STDR) | 99.928 ppb | 0.4 % | 6,256,827 cps | 6,256,827 cps |
| 55Mn (KEDR) | 100.083 ppb | 1.1 % | 451,158 cps | 451,158 cps |
| 52Cr (STDR) | 100.312 ppb | 0.5 % | 4,014,362 cps | 4,121,820 cps |
| 52Cr (KEDR) | 99.688 ppb | 1.9 % | 912,432 cps | 912,432 cps |
| 59Co (STDR) | 100.263 ppb | 0.9 % | 4,858,560 cps | 4,858,560 cps |
| 59Co (KEDR) | 99.725 ppb | 1.2 % | 1,684,030 cps | 1,684,030 cps |
| 60Ni (STDR) | 99.949 ppb | 1.2 % | 1,068,651 cps | 1,068,651 cps |
| 60Ni (KEDR) | 99.672 ppb | 0.5 % | 461,209 cps | 461,209 cps |
| 63Cu (STDR) | 100.410 ppb | 1.3 % | 2,698,225 cps | 2,698,225 cps |
| 63Cu (KEDR) | 100.038 ppb | 0.3 % | 1,306,460 cps | 1,306,460 cps |
| 66Zn (STDR) | 100.011 ppb | 0.5 % | 898,351 cps | 898,351 cps |
| 66Zn (KEDR) | 99.994 ppb | 0.8 % | 236,736 cps | 236,736 cps |
| 74Ge (STDR) | ✓ 96.039 % | 0.6 % | 538,991 cps | 547,020 cps |
| 74Ge (KEDR) | 98.957 % | 0.3 % | 84,011 cps | 84,011 cps |
| 75As (STDR) | 100.022 ppb | 0.6 % | 782,414 cps | 796,137 cps |
| 75As (KEDR) | 99.736 ppb | 0.6 % | 116,224 cps | 116,224 cps |
| 82Se (STDR) | 100.194 ppb | 0.6 % | 78,594 cps | 79,066 cps |
| 82Se (KEDR) | 100.301 ppb | 1.2 % | 4,942 cps | 4,942 cps |
| 98Mo (STDR) | 100.233 ppb | 1.1 % | 2,597,899 cps | 2,597,902 cps |
| 98Mo (KEDR) | 99.674 ppb | 1.4 % | 1,482,217 cps | 1,482,217 cps |
| 107Ag (STDR) | 100.622 ppb | 0.6 % | 4,974,378 cps | 4,974,378 cps |
| 107Ag (KEDR) | 99.996 ppb | 0.5 % | 3,375,726 cps | 3,375,726 cps |
| 111Cd (STDR) | 100.130 ppb | 0.2 % | 1,240,235 cps | 1,244,183 cps |
| 111Cd (KEDR) | ✓ 99.762 ppb | 0.7 % | 581,579 cps | 581,579 cps |
| 115In (STDR) | 96.343 % | 1.7 % | 782,453 cps | 782,469 cps |
| 115In (KEDR) | 101.092 % | 0.3 % | 178,232 cps | 178,232 cps |
| 121Sb (STDR) | 100.018 ppb | 0.5 % | 4,294,254 cps | 4,294,254 cps |
| 121Sb (KEDR) | 100.054 ppb | 1.0 % | 1,303,569 cps | 1,303,569 cps |
| 137Ba (STDR) | 100.068 ppb | 0.9 % | 1,727,811 cps | 1,727,811 cps |
| 137Ba (KEDR) | 100.043 ppb | 0.6 % | 468,346 cps | 468,346 cps |
| 205Tl (STDR) | 100.085 ppb | 0.8 % | 14,841,724 cps | 14,841,724 cps |
| 205Tl (KEDR) | 99.855 ppb | 0.8 % | 14,541,014 cps | 14,541,014 cps |
| 208Pb (STDR) | 100.060 ppb | 0.3 % | 20,496,593 cps | 10,887,565 cps |
| 208Pb (KEDR) | 99.914 ppb | 1.3 % | 10,626,429 cps | 10,626,429 cps |
| 209Bi (STDR) | 98.093 % | 1.4 % | 1,024,496 cps | 1,024,496 cps |
| 209Bi (KEDR) | 100.383 % | 0.1 % | 991,651 cps | 991,651 cps |
| 238U (STDR) | 99.943 ppb | 1.8 % | 22,266,420 cps | 22,266,420 cps |
| 238U (KEDR) | 99.623 ppb | 0.1 % | 23,687,314 cps | 23,687,314 cps |

Turner Report Sample Summary

4/14/2021 12:05:13 PM
ICAP RQ ICP-MS



W. J. J. J.

Analysis index: 7
Analysis name: ICB
Analysis started at: 4/14/2021 12:01:47 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 94.997 % | 1.1 % | 106,680 cps | 106,680 cps |
| 9Be (STDR) | 0.010 ppb | 33.0 % | 112 cps | 112 cps |
| 27Al (STDR) | 0.001 ppb | 1,198.9 % | 14,467 cps | 14,467 cps |
| 45Sc (STDR) | 94.991 % | 0.2 % | 270,967 cps | 303,690 cps |
| 45Sc (KEDR) | 102.961 % | 2.4 % | 9,744 cps | 9,744 cps |
| 51V (STDR) | -1.749 ppb | 157.5 % | 12,528 cps | 1,327,132 cps |
| 51V (KEDR) | 0.007 ppb | 103.5 % | 1,185 cps | 1,185 cps |
| 55Mn (STDR) | 0.006 ppb | 35.5 % | 3,647 cps | 3,647 cps |
| 55Mn (KEDR) | 0.012 ppb | 42.4 % | 98 cps | 98 cps |
| 52Cr (STDR) | 0.071 ppb | 34.3 % | -69,724 cps | 32,736 cps |
| 52Cr (KEDR) | 0.008 ppb | 66.4 % | 433 cps | 433 cps |
| 59Co (STDR) | 0.007 ppb | 1.3 % | 602 cps | 602 cps |
| 59Co (KEDR) | 0.009 ppb | 12.6 % | 158 cps | 158 cps |
| 60Ni (STDR) | 0.004 ppb | 43.0 % | 372 cps | 372 cps |
| 60Ni (KEDR) | 0.008 ppb | 45.8 % | 147 cps | 147 cps |
| 63Cu (STDR) | 0.004 ppb | 10.8 % | 1,098 cps | 1,098 cps |
| 63Cu (KEDR) | 0.010 ppb | 14.4 % | 479 cps | 479 cps |
| 66Zn (STDR) | -0.019 ppb | 54.5 % | 5,061 cps | 5,061 cps |
| 66Zn (KEDR) | -0.065 ppb | 62.3 % | 1,352 cps | 1,352 cps |
| 74Ge (STDR) | 95.289 % | 0.6 % | 534,783 cps | 535,995 cps |
| 74Ge (KEDR) | 98.379 % | 1.1 % | 83,520 cps | 83,520 cps |
| 75As (STDR) | 0.000 ppb | 8,042.3 % | -855 cps | 30,796 cps |
| 75As (KEDR) | 0.020 ppb | 43.1 % | 46 cps | 46 cps |
| 82Se (STDR) | -0.044 ppb | 89.2 % | -137 cps | 330 cps |
| 82Se (KEDR) | -0.082 ppb | 128.8 % | 16 cps | 16 cps |
| 98Mo (STDR) | 0.055 ppb | 2.9 % | 1,528 cps | 1,530 cps |
| 98Mo (KEDR) | 0.063 ppb | 7.1 % | 998 cps | 998 cps |
| 107Ag (STDR) | 0.013 ppb | 6.0 % | 727 cps | 727 cps |
| 107Ag (KEDR) | 0.017 ppb | 17.3 % | 630 cps | 630 cps |
| 111Cd (STDR) | 0.007 ppb | 55.0 % | 413 cps | 98 cps |
| 111Cd (KEDR) | 0.008 ppb | 38.0 % | 46 cps | 46 cps |
| 115In (STDR) | 96.971 % | 0.5 % | 787,555 cps | 787,559 cps |
| 115In (KEDR) | 100.774 % | 0.3 % | 177,672 cps | 177,672 cps |
| 121Sb (STDR) | 0.011 ppb | 5.2 % | 703 cps | 703 cps |
| 121Sb (KEDR) | 0.017 ppb | 15.6 % | 288 cps | 288 cps |
| 137Ba (STDR) | 0.010 ppb | 52.2 % | 2,672 cps | 2,672 cps |
| 137Ba (KEDR) | 0.005 ppb | 45.8 % | 708 cps | 708 cps |
| 205Tl (STDR) | 0.076 ppb | 2.2 % | 12,496 cps | 12,496 cps |
| 205Tl (KEDR) | 0.095 ppb | 8.5 % | 15,138 cps | 15,138 cps |
| 208Pb (STDR) | 0.008 ppb | 7.5 % | 1,990 cps | 1,082 cps |
| 208Pb (KEDR) | 0.012 ppb | 12.5 % | 1,489 cps | 1,489 cps |
| 209Bi (STDR) | 97.713 % | 0.6 % | 1,020,524 cps | 1,020,524 cps |
| 209Bi (KEDR) | 99.614 % | 0.5 % | 984,055 cps | 984,055 cps |
| 238U (STDR) | 0.008 ppb | 3.5 % | 1,787 cps | 1,787 cps |
| 238U (KEDR) | 0.012 ppb | 11.8 % | 2,862 cps | 2,862 cps |

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Turner Report Sample Summary

4/14/2021 12:08:42 PM
iCAP RQ ICP-MS



W. C. Smith

Analysis index: 8
Analysis name: IPC
Analysis started at: 4/14/2021 12:05:14 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 96.256 % | 1.2 % | 108,094 cps | 108,094 cps |
| 9Be (STDR) | 50.282 ppb | 0.8 % | 258,819 cps | 258,819 cps |
| 27Al (STDR) | 50.458 ppb | 0.8 % | 1,322,112 cps | 1,322,112 cps |
| 45Sc (STDR) | 95.383 % | 1.2 % | 272,085 cps | 304,920 cps |
| 45Sc (KEDR) | 102.864 % | 2.3 % | 9,735 cps | 9,735 cps |
| 51V (STDR) | 51.967 ppb | 1.2 % | 2,296,761 cps | 3,662,799 cps |
| 51V (KEDR) | 50.208 ppb | 1.2 % | 304,083 cps | 304,083 cps |
| 55Mn (STDR) | 51.456 ppb | 0.5 % | 3,198,895 cps | 3,198,895 cps |
| 55Mn (KEDR) | 50.464 ppb | 1.8 % | 225,970 cps | 225,970 cps |
| 52Cr (STDR) | 50.938 ppb | 1.4 % | 1,984,279 cps | 2,092,331 cps |
| 52Cr (KEDR) | 50.013 ppb | 1.6 % | 453,304 cps | 453,304 cps |
| 59Co (STDR) | 50.842 ppb | 0.7 % | 2,449,221 cps | 2,449,221 cps |
| 59Co (KEDR) | 50.121 ppb | 1.3 % | 844,654 cps | 844,654 cps |
| 60Ni (STDR) | 50.705 ppb | 1.1 % | 539,291 cps | 539,291 cps |
| 60Ni (KEDR) | 50.272 ppb | 1.1 % | 232,483 cps | 232,483 cps |
| 63Cu (STDR) | 49.788 ppb | 0.8 % | 1,332,713 cps | 1,332,713 cps |
| 63Cu (KEDR) | 49.505 ppb | 0.4 % | 648,454 cps | 648,454 cps |
| 66Zn (STDR) | 50.014 ppb | 0.6 % | 450,557 cps | 450,557 cps |
| 66Zn (KEDR) | 49.871 ppb | 0.6 % | 119,582 cps | 119,582 cps |
| 74Ge (STDR) | 96.082 % | 1.0 % | 539,234 cps | 543,894 cps |
| 74Ge (KEDR) | 100.558 % | 0.8 % | 85,370 cps | 85,370 cps |
| 75As (STDR) | 50.177 ppb | 0.8 % | 392,357 cps | 415,089 cps |
| 75As (KEDR) | 49.511 ppb | 1.6 % | 58,621 cps | 58,621 cps |
| 82Se (STDR) | 50.448 ppb | 1.9 % | 39,629 cps | 40,099 cps |
| 82Se (KEDR) | 51.134 ppb | 2.9 % | 2,564 cps | 2,564 cps |
| 98Mo (STDR) | 49.799 ppb | 0.7 % | 1,300,315 cps | 1,300,317 cps |
| 98Mo (KEDR) | 49.921 ppb | 1.7 % | 749,621 cps | 749,621 cps |
| 107Ag (STDR) | 49.869 ppb | 1.8 % | 2,490,134 cps | 2,490,134 cps |
| 107Ag (KEDR) | 50.084 ppb | 1.6 % | 1,703,255 cps | 1,703,255 cps |
| 111Cd (STDR) | 49.759 ppb | 0.5 % | 623,394 cps | 625,879 cps |
| 111Cd (KEDR) | 50.034 ppb | 1.2 % | 293,544 cps | 293,544 cps |
| 115In (STDR) | 97.537 % | 0.2 % | 792,151 cps | 792,160 cps |
| 115In (KEDR) | 101.640 % | 1.3 % | 179,197 cps | 179,197 cps |
| 121Sb (STDR) | 49.612 ppb | 0.9 % | 2,154,985 cps | 2,154,986 cps |
| 121Sb (KEDR) | 49.868 ppb | 1.3 % | 652,965 cps | 652,965 cps |
| 137Ba (STDR) | 49.837 ppb | 0.5 % | 869,966 cps | 869,966 cps |
| 137Ba (KEDR) | 49.556 ppb | 1.6 % | 233,251 cps | 233,251 cps |
| 205Tl (STDR) | 49.779 ppb | 0.8 % | 7,389,769 cps | 7,389,769 cps |
| 205Tl (KEDR) | 49.955 ppb | 1.4 % | 7,272,336 cps | 7,272,336 cps |
| 208Pb (STDR) | 49.780 ppb | 0.4 % | 10,203,874 cps | 5,432,853 cps |
| 208Pb (KEDR) | 49.553 ppb | 0.5 % | 5,267,422 cps | 5,267,422 cps |
| 209Bi (STDR) | 98.140 % | 0.3 % | 1,024,986 cps | 1,024,986 cps |
| 209Bi (KEDR) | 100.322 % | 0.3 % | 991,044 cps | 991,044 cps |
| 238U (STDR) | 50.340 ppb | 1.1 % | 11,222,462 cps | 11,222,462 cps |
| 238U (KEDR) | 50.162 ppb | 0.6 % | 11,919,813 cps | 11,919,813 cps |

Turner Report Sample Summary

4/14/2021 12:12:11 PM
iCAP RQ ICP-MS



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Analysis index: 9
Analysis name: ICV
Analysis started at: 4/14/2021 12:08:42 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 97.023 % | 1.4 % | 108,957 cps | 108,957 cps |
| 9Be (STDR) | 48.776 ppb | 1.3 % | 253,078 cps | 253,078 cps |
| 27Al (STDR) | 99.500 ppb | 1.1 % | 2,615,300 cps | 2,615,300 cps |
| 45Sc (STDR) | 96.249 % | 0.8 % | 274,555 cps | 307,824 cps |
| 45Sc (KEDR) | 104.054 % | 3.1 % | 9,847 cps | 9,847 cps |
| 51V (STDR) | 51.297 ppb | 1.3 % | 2,280,530 cps | 3,571,533 cps |
| 51V (KEDR) | 49.235 ppb | 2.1 % | 300,101 cps | 300,101 cps |
| 55Mn (STDR) | 50.394 ppb | 0.3 % | 3,141,661 cps | 3,141,661 cps |
| 55Mn (KEDR) | 49.460 ppb | 3.5 % | 222,100 cps | 222,100 cps |
| 52Cr (STDR) | 49.234 ppb | 1.0 % | 1,924,528 cps | 2,028,360 cps |
| 52Cr (KEDR) | 48.827 ppb | 2.6 % | 444,977 cps | 444,977 cps |
| 59Co (STDR) | 50.082 ppb | 0.5 % | 2,413,324 cps | 2,413,324 cps |
| 59Co (KEDR) | 49.113 ppb | 3.3 % | 827,214 cps | 827,214 cps |
| 60Ni (STDR) | 50.022 ppb | 0.6 % | 531,877 cps | 531,877 cps |
| 60Ni (KEDR) | 49.441 ppb | 2.6 % | 228,325 cps | 228,325 cps |
| 63Cu (STDR) | 48.807 ppb | 1.0 % | 1,303,622 cps | 1,303,622 cps |
| 63Cu (KEDR) | 48.781 ppb | 2.1 % | 636,495 cps | 636,495 cps |
| 66Zn (STDR) | 99.878 ppb | 0.3 % | 890,839 cps | 890,839 cps |
| 66Zn (KEDR) | 98.879 ppb | 1.6 % | 234,091 cps | 234,091 cps |
| 74Ge (STDR) | 95.203 % | 0.5 % | 534,302 cps | 538,908 cps |
| 74Ge (KEDR) | 99.229 % | 1.3 % | 84,242 cps | 84,242 cps |
| 75As (STDR) | 50.059 ppb | 0.8 % | 387,950 cps | 409,030 cps |
| 75As (KEDR) | 49.482 ppb | 0.8 % | 57,848 cps | 57,848 cps |
| 82Se (STDR) | 50.997 ppb | 0.6 % | 39,756 cps | 40,181 cps |
| 82Se (KEDR) | 49.632 ppb | 2.7 % | 2,468 cps | 2,468 cps |
| 98Mo (STDR) | 49.023 ppb | 1.0 % | 1,273,990 cps | 1,273,992 cps |
| 98Mo (KEDR) | 49.081 ppb | 0.4 % | 737,246 cps | 737,246 cps |
| 107Ag (STDR) | 47.301 ppb | 1.9 % | 2,354,579 cps | 2,354,579 cps |
| 107Ag (KEDR) | 48.108 ppb | 0.5 % | 1,644,761 cps | 1,644,761 cps |
| 111Cd (STDR) | 48.624 ppb | 0.8 % | 607,728 cps | 610,291 cps |
| 111Cd (KEDR) | 48.887 ppb | 0.5 % | 288,957 cps | 288,957 cps |
| 115In (STDR) | 97.372 % | 0.3 % | 790,806 cps | 790,818 cps |
| 115In (KEDR) | 102.613 % | 1.0 % | 180,914 cps | 180,914 cps |
| 121Sb (STDR) | 49.303 ppb | 0.4 % | 2,139,896 cps | 2,139,899 cps |
| 121Sb (KEDR) | 49.477 ppb | 0.8 % | 653,948 cps | 653,948 cps |
| 137Ba (STDR) | 48.613 ppb | 0.4 % | 850,029 cps | 850,029 cps |
| 137Ba (KEDR) | 49.368 ppb | 0.6 % | 234,444 cps | 234,444 cps |
| 205Tl (STDR) | 51.206 ppb | 1.3 % | 7,690,314 cps | 7,690,314 cps |
| 205Tl (KEDR) | 51.943 ppb | 0.8 % | 7,611,402 cps | 7,611,402 cps |
| 208Pb (STDR) | 48.311 ppb | 1.7 % | 10,022,083 cps | 5,316,737 cps |
| 208Pb (KEDR) | 48.709 ppb | 0.7 % | 5,211,175 cps | 5,211,175 cps |
| 209Bi (STDR) | 99.354 % | 1.5 % | 1,037,670 cps | 1,037,670 cps |
| 209Bi (KEDR) | 100.967 % | 0.6 % | 997,413 cps | 997,413 cps |
| 238U (STDR) | 50.940 ppb | 1.3 % | 11,495,458 cps | 11,495,458 cps |
| 238U (KEDR) | 50.745 ppb | 0.9 % | 12,135,775 cps | 12,135,775 cps |

Turner Report Sample Summary

4/14/2021 12:15:38 PM
ICAP RQ ICP-MS



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Analysis index: 10
Analysis name: 0.25 CHK STD
Analysis started at: 4/14/2021 12:12:12 PM

Remake & ReRun

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 101.661 % | 1.2 % | 114,164 cps | 114,164 cps |
| 9Be (STDR) | 0.262 ppb | 10.0 % | 1,490 cps | 1,490 cps |
| 27Al (STDR) | 0.732 ppb | 1.8 % | 35,310 cps | 35,310 cps |
| 45Sc (STDR) | 100.238 % | 1.2 % | 285,934 cps | 322,337 cps |
| 45Sc (KEDR) | 105.807 % | 2.1 % | 10,013 cps | 10,013 cps |
| 51V (STDR) | 3.832 ppb | 11.1 % | 261,199 cps | 2,670,808 cps |
| 51V (KEDR) | 0.355 ppb | 8.4 % | 3,362 cps | 3,362 cps |
| 55Mn (STDR) | 0.316 ppb | 1.9 % | 23,864 cps | 23,864 cps |
| 55Mn (KEDR) | 0.304 ppb | 2.2 % | 1,433 cps | 1,433 cps |
| 52Cr (STDR) | -1.809 ppb | 2.1 % | -152,313 cps | 70,509 cps |
| 52Cr (KEDR) | 0.273 ppb | 8.7 % | 2,890 cps | 2,890 cps |
| 59Co (STDR) | 0.247 ppb | 3.1 % | 12,580 cps | 12,580 cps |
| 59Co (KEDR) | 0.252 ppb | 2.6 % | 4,310 cps | 4,310 cps |
| 60Ni (STDR) | 0.275 ppb | 2.0 % | 3,370 cps | 3,370 cps |
| 60Ni (KEDR) | 0.281 ppb | 4.2 % | 1,428 cps | 1,428 cps |
| 63Cu (STDR) | 0.433 ppb | 1.2 % | 12,967 cps | 12,967 cps |
| 63Cu (KEDR) | 0.430 ppb | 3.4 % | 6,039 cps | 6,039 cps |
| 66Zn (STDR) | 1.558 ppb | 3.7 % | 19,665 cps | 19,665 cps |
| 66Zn (KEDR) | 1.519 ppb | 1.9 % | 5,154 cps | 5,154 cps |
| 74Ge (STDR) | 97.929 % | 0.6 % | 549,602 cps | 552,006 cps |
| 74Ge (KEDR) | 100.255 % | 1.6 % | 85,113 cps | 85,113 cps |
| 75As (STDR) | 0.275 ppb | 31.7 % | 1,317 cps | 63,628 cps |
| 75As (KEDR) | 0.276 ppb | 5.9 % | 349 cps | 349 cps |
| 82Se (STDR) | 0.508 ppb | 35.7 % | 303 cps | 835 cps |
| 82Se (KEDR) | 0.566 ppb | 24.1 % | 48 cps | 48 cps |
| 98Mo (STDR) | 0.294 ppb | 2.7 % | 7,953 cps | 7,956 cps |
| 98Mo (KEDR) | 0.298 ppb | 5.7 % | 4,553 cps | 4,553 cps |
| 107Ag (STDR) | 0.251 ppb | 2.4 % | 12,950 cps | 12,950 cps |
| 107Ag (KEDR) | 0.264 ppb | 2.6 % | 9,082 cps | 9,082 cps |
| 111Cd (STDR) | 0.241 ppb | 0.8 % | 3,430 cps | 3,092 cps |
| 111Cd (KEDR) | 0.247 ppb | 5.1 % | 1,456 cps | 1,456 cps |
| 115In (STDR) | 100.081 % | 1.6 % | 812,810 cps | 812,817 cps |
| 115In (KEDR) | 102.325 % | 0.3 % | 180,406 cps | 180,406 cps |
| 121Sb (STDR) | 0.266 ppb | 3.3 % | 12,118 cps | 12,118 cps |
| 121Sb (KEDR) | 0.265 ppb | 2.2 % | 3,564 cps | 3,564 cps |
| 137Ba (STDR) | 0.472 ppb | 1.0 % | 10,965 cps | 10,965 cps |
| 137Ba (KEDR) | 0.451 ppb | 6.8 % | 2,814 cps | 2,814 cps |
| 205Tl (STDR) | 0.293 ppb | 2.2 % | 45,247 cps | 45,247 cps |
| 205Tl (KEDR) | 0.315 ppb | 0.8 % | 46,647 cps | 46,647 cps |
| 208Pb (STDR) | 0.258 ppb | 1.7 % | 53,892 cps | 28,576 cps |
| 208Pb (KEDR) | 0.279 ppb | 1.6 % | 29,481 cps | 29,481 cps |
| 209Bi (STDR) | 99.219 % | 0.9 % | 1,036,258 cps | 1,036,258 cps |
| 209Bi (KEDR) | 99.140 % | 0.7 % | 979,368 cps | 979,368 cps |
| 238U (STDR) | 0.255 ppb | 1.2 % | 57,531 cps | 57,531 cps |
| 238U (KEDR) | 0.275 ppb | 1.6 % | 64,520 cps | 64,520 cps |

Turner Report Sample Summary

4/14/2021 12:19:04 PM
iCAP RQ ICP-MS



W. M. M. M.

Analysis index: 11
Analysis name: 0.50 CHK STD
Analysis started at: 4/14/2021 12:15:38 PM

Remake + ReRun

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 101.618 % | 1.6 % | 114,116 cps | 114,116 cps |
| 9Be (STDR) | 0.485 ppb | 1.4 % | 2,702 cps | 2,702 cps |
| 27Al (STDR) | 0.898 ppb | 4.3 % | 40,093 cps | 40,093 cps |
| 45Sc (STDR) | 101.447 % | 1.0 % | 289,383 cps | 326,097 cps |
| 45Sc (KEDR) | 104.618 % | 2.3 % | 9,901 cps | 9,901 cps |
| 51V (STDR) | 5.372 ppb | 15.0 % | 333,670 cps | 2,893,330 cps |
| 51V (KEDR) | 0.589 ppb | 1.9 % | 4,753 cps | 4,753 cps |
| 55Mn (STDR) | 0.547 ppb | 0.6 % | 39,243 cps | 39,243 cps |
| 55Mn (KEDR) | 0.519 ppb | 4.1 % | 2,383 cps | 2,383 cps |
| 52Cr (STDR) | -1.528 ppb | 1.4 % | -142,230 cps | 79,162 cps |
| 52Cr (KEDR) | 0.503 ppb | 2.9 % | 4,963 cps | 4,963 cps |
| 59Co (STDR) | 0.472 ppb | 1.7 % | 24,133 cps | 24,133 cps |
| 59Co (KEDR) | 0.484 ppb | 2.8 % | 8,165 cps | 8,165 cps |
| 60Ni (STDR) | 0.492 ppb | 4.2 % | 5,828 cps | 5,828 cps |
| 60Ni (KEDR) | 0.487 ppb | 2.6 % | 2,360 cps | 2,360 cps |
| 63Cu (STDR) | 0.623 ppb | 2.4 % | 18,450 cps | 18,450 cps |
| 63Cu (KEDR) | 0.644 ppb | 3.3 % | 8,747 cps | 8,747 cps |
| 66Zn (STDR) | 1.743 ppb | 1.6 % | 21,637 cps | 21,637 cps |
| 66Zn (KEDR) | 1.698 ppb | 5.2 % | 5,505 cps | 5,505 cps |
| 74Ge (STDR) | 99.201 % | 1.0 % | 556,740 cps | 559,205 cps |
| 74Ge (KEDR) | 98.810 % | 0.7 % | 83,886 cps | 83,886 cps |
| 75As (STDR) | 0.525 ppb | 67.6 % | 3,357 cps | 67,095 cps |
| 75As (KEDR) | 0.502 ppb | 5.5 % | 607 cps | 607 cps |
| 82Se (STDR) | 0.592 ppb | 1.9 % | 374 cps | 912 cps |
| 82Se (KEDR) | 0.566 ppb | 33.8 % | 48 cps | 48 cps |
| 98Mo (STDR) | 0.502 ppb | 1.2 % | 13,620 cps | 13,622 cps |
| 98Mo (KEDR) | 0.500 ppb | 2.3 % | 7,462 cps | 7,462 cps |
| 107Ag (STDR) | 0.471 ppb | 1.9 % | 24,365 cps | 24,365 cps |
| 107Ag (KEDR) | 0.500 ppb | 0.2 % | 16,832 cps | 16,832 cps |
| 111Cd (STDR) | 0.479 ppb | 0.9 % | 6,520 cps | 6,193 cps |
| 111Cd (KEDR) | 0.506 ppb | 4.0 % | 2,927 cps | 2,927 cps |
| 115In (STDR) | 100.540 % | 1.5 % | 816,539 cps | 816,545 cps |
| 115In (KEDR) | 100.326 % | 0.8 % | 176,882 cps | 176,882 cps |
| 121Sb (STDR) | 0.493 ppb | 2.1 % | 22,298 cps | 22,298 cps |
| 121Sb (KEDR) | 0.501 ppb | 0.8 % | 6,552 cps | 6,552 cps |
| 137Ba (STDR) | 0.634 ppb | 0.8 % | 13,954 cps | 13,954 cps |
| 137Ba (KEDR) | 0.629 ppb | 1.9 % | 3,609 cps | 3,609 cps |
| 205Tl (STDR) | 0.497 ppb | 1.2 % | 76,947 cps | 76,947 cps |
| 205Tl (KEDR) | 0.511 ppb | 1.6 % | 75,950 cps | 75,950 cps |
| 208Pb (STDR) | 0.491 ppb | 1.1 % | 103,365 cps | 54,529 cps |
| 208Pb (KEDR) | 0.514 ppb | 1.1 % | 55,035 cps | 55,035 cps |
| 209Bi (STDR) | 100.498 % | 1.0 % | 1,049,614 cps | 1,049,614 cps |
| 209Bi (KEDR) | 100.733 % | 0.1 % | 995,100 cps | 995,100 cps |
| 238U (STDR) | 0.491 ppb | 1.7 % | 112,036 cps | 112,036 cps |
| 238U (KEDR) | 0.518 ppb | 0.4 % | 123,706 cps | 123,706 cps |

Turner Report Sample Summary

4/14/2021 12:22:31 PM
iCAP RQ ICP-MS



W. M. M. 4/14/21

Analysis index: 12
Analysis name: 40 CHK STD
Analysis started at: 4/14/2021 12:19:05 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 102.016 % | 0.3 % | 114,563 cps | 114,563 cps |
| 9Be (STDR) | 38.312 ppb | 0.4 % | 209,075 cps | 209,075 cps |
| 27Al (STDR) | 38.712 ppb | 0.8 % | 1,080,282 cps | 1,080,282 cps |
| 45Sc (STDR) | 101.370 % | 0.7 % | 289,162 cps | 324,971 cps |
| 45Sc (KEDR) | ✓ 106.724 % | 1.1 % | 10,100 cps | 10,100 cps |
| 51V (STDR) | 42.625 ppb | 1.1 % | 2,007,357 cps | 4,668,104 cps |
| 51V (KEDR) | 38.923 ppb | 0.7 % | 243,487 cps | 243,487 cps |
| 55Mn (STDR) | 39.782 ppb | 0.9 % | 2,604,311 cps | 2,604,311 cps |
| 55Mn (KEDR) | 38.388 ppb | 1.5 % | 176,692 cps | 176,692 cps |
| 52Cr (STDR) | 36.291 ppb | 1.2 % | 1,470,490 cps | 1,697,454 cps |
| 52Cr (KEDR) | 38.679 ppb | 0.2 % | 361,475 cps | 361,475 cps |
| 59Co (STDR) | 38.330 ppb | 1.8 % | 1,936,490 cps | 1,936,490 cps |
| 59Co (KEDR) | 38.463 ppb | 0.5 % | 663,624 cps | 663,624 cps |
| 60Ni (STDR) | 38.629 ppb | 0.6 % | 430,543 cps | 430,543 cps |
| 60Ni (KEDR) | 38.333 ppb | 0.9 % | 181,331 cps | 181,331 cps |
| 63Cu (STDR) | 38.458 ppb | 1.4 % | 1,075,680 cps | 1,075,680 cps |
| 63Cu (KEDR) | 38.270 ppb | 0.7 % | 511,257 cps | 511,257 cps |
| 66Zn (STDR) | 38.868 ppb | 1.1 % | 365,950 cps | 365,950 cps |
| 66Zn (KEDR) | 38.240 ppb | 0.8 % | 93,588 cps | 93,588 cps |
| 74Ge (STDR) | 99.314 % | 0.8 % | 557,370 cps | 562,696 cps |
| 74Ge (KEDR) | ✓ 101.416 % | 1.0 % | 86,098 cps | 86,098 cps |
| 75As (STDR) | 38.448 ppb | 1.4 % | 310,474 cps | 370,829 cps |
| 75As (KEDR) | 38.160 ppb | 0.9 % | 45,557 cps | 45,557 cps |
| 82Se (STDR) | 39.317 ppb | 0.8 % | 31,848 cps | 32,342 cps |
| 82Se (KEDR) | 37.305 ppb | 0.7 % | 1,887 cps | 1,887 cps |
| 98Mo (STDR) | 39.030 ppb | 0.9 % | 1,048,168 cps | 1,048,171 cps |
| 98Mo (KEDR) | 39.350 ppb | 1.0 % | 590,663 cps | 590,663 cps |
| 107Ag (STDR) | 38.331 ppb | 0.4 % | 1,964,960 cps | 1,964,960 cps |
| 107Ag (KEDR) | 39.541 ppb | 1.9 % | 1,339,546 cps | 1,339,546 cps |
| 111Cd (STDR) | 38.816 ppb | 1.0 % | 498,898 cps | 500,588 cps |
| 111Cd (KEDR) | 39.250 ppb | 1.1 % | 229,055 cps | 229,055 cps |
| 115In (STDR) | ✓ 99.972 % | 0.9 % | 811,923 cps | 811,930 cps |
| 115In (KEDR) | 100.955 % | 1.6 % | 177,990 cps | 177,990 cps |
| 121Sb (STDR) | 38.603 ppb | 1.1 % | 1,717,651 cps | 1,717,652 cps |
| 121Sb (KEDR) | 38.855 ppb | 1.0 % | 505,843 cps | 505,843 cps |
| 137Ba (STDR) | 39.062 ppb | 1.1 % | 698,005 cps | 698,005 cps |
| 137Ba (KEDR) | 39.450 ppb | 0.5 % | 185,248 cps | 185,248 cps |
| 205Tl (STDR) | 38.998 ppb | 1.6 % | 5,883,947 cps | 5,883,947 cps |
| 205Tl (KEDR) | 39.158 ppb | 1.6 % | 5,746,279 cps | 5,746,279 cps |
| 208Pb (STDR) | 38.844 ppb | 1.4 % | 8,089,697 cps | 4,280,427 cps |
| 208Pb (KEDR) | 39.209 ppb | 0.4 % | 4,203,322 cps | 4,203,322 cps |
| 209Bi (STDR) | ✓ 99.712 % | 1.3 % | 1,041,410 cps | 1,041,410 cps |
| 209Bi (KEDR) | 101.191 % | 0.7 % | 999,633 cps | 999,633 cps |
| 238U (STDR) | 39.211 ppb | 0.7 % | 8,881,050 cps | 8,881,050 cps |
| 238U (KEDR) | 39.312 ppb | 0.9 % | 9,421,929 cps | 9,421,929 cps |

Turner Report Sample Summary

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ICAP RQ ICP-MS



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Analysis index: 13
Analysis name: 0.25 CHK STD
Analysis started at: 4/14/2021 12:23:58 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 96.453 % | 0.9 % | 108,316 cps | 108,316 cps |
| 9Be (STDR) | 0.260 ppb | 4.8 % | 1,405 cps | 1,405 cps |
| 27Al (STDR) | 0.312 ppb | 7.2 % | 22,762 cps | 22,762 cps |
| 45Sc (STDR) | 96.129 % | 0.8 % | 274,213 cps | 305,801 cps |
| 45Sc (KEDR) | 98.611 % | 25.5 % | 9,332 cps | 9,332 cps |
| 51V (STDR) | -1.651 ppb | 203.3 % | 17,593 cps | 1,459,639 cps |
| 51V (KEDR) | 0.313 ppb | 49.1 % | 2,789 cps | 2,789 cps |
| 55Mn (STDR) | 0.295 ppb | 3.8 % | 21,799 cps | 21,799 cps |
| 55Mn (KEDR) | 0.300 ppb | 30.5 % | 1,285 cps | 1,285 cps |
| 52Cr (STDR) | 0.336 ppb | 5.0 % | -59,774 cps | 44,554 cps |
| 52Cr (KEDR) | 0.286 ppb | 35.8 % | 2,713 cps | 2,713 cps |
| 59Co (STDR) | 0.271 ppb | 2.7 % | 13,382 cps | 13,382 cps |
| 59Co (KEDR) | 0.276 ppb | 28.4 % | 4,347 cps | 4,347 cps |
| 60Ni (STDR) | 0.272 ppb | 4.9 % | 3,240 cps | 3,240 cps |
| 60Ni (KEDR) | 0.271 ppb | 33.0 % | 1,268 cps | 1,268 cps |
| 63Cu (STDR) | 0.265 ppb | 0.9 % | 8,129 cps | 8,129 cps |
| 63Cu (KEDR) | 0.289 ppb | 30.0 % | 3,895 cps | 3,895 cps |
| 66Zn (STDR) | 1.008 ppb | 2.6 % | 14,310 cps | 14,310 cps |
| 66Zn (KEDR) | 1.113 ppb | 40.0 % | 3,943 cps | 3,943 cps |
| 74Ge (STDR) | 96.430 % | 0.3 % | 541,186 cps | 542,461 cps |
| 74Ge (KEDR) | 99.777 % | 19.8 % | 84,707 cps | 84,707 cps |
| 75As (STDR) | 0.354 ppb | 26.2 % | 1,925 cps | 34,637 cps |
| 75As (KEDR) | 0.259 ppb | 28.6 % | 316 cps | 316 cps |
| 82Se (STDR) | 0.324 ppb | 60.2 % | 152 cps | 575 cps |
| 82Se (KEDR) | 0.274 ppb | 98.8 % | 32 cps | 32 cps |
| 98Mo (STDR) | 0.276 ppb | 2.9 % | 7,307 cps | 7,309 cps |
| 98Mo (KEDR) | 0.281 ppb | 30.1 % | 4,049 cps | 4,049 cps |
| 107Ag (STDR) | 0.267 ppb | 1.9 % | 13,444 cps | 13,444 cps |
| 107Ag (KEDR) | 0.276 ppb | 29.2 % | 8,903 cps | 8,903 cps |
| 111Cd (STDR) | 0.271 ppb | 2.7 % | 3,716 cps | 3,400 cps |
| 111Cd (KEDR) | 0.271 ppb | 31.8 % | 1,486 cps | 1,486 cps |
| 115In (STDR) | 97.390 % | 0.8 % | 790,952 cps | 790,956 cps |
| 115In (KEDR) | 100.497 | 26.4 | 177,184 cps | 177,184 cps |
| 121Sb (STDR) | 0.276 ppb | 0.4 % | 12,194 cps | 12,194 cps |
| 121Sb (KEDR) | 0.282 ppb | 30.4 % | 3,532 cps | 3,532 cps |
| 137Ba (STDR) | 0.257 ppb | 4.1 % | 6,972 cps | 6,972 cps |
| 137Ba (KEDR) | 0.285 ppb | 42.0 % | 1,908 cps | 1,908 cps |
| 205Tl (STDR) | 0.284 ppb | 1.6 % | 43,022 cps | 43,022 cps |
| 205Tl (KEDR) | 0.300 ppb | 29.2 % | 42,418 cps | 42,418 cps |
| 208Pb (STDR) | 0.273 ppb | 1.8 % | 55,799 cps | 29,538 cps |
| 208Pb (KEDR) | 0.287 ppb | 29.7 % | 28,847 cps | 28,847 cps |
| 209Bi (STDR) | 97.278 % | 0.9 % | 1,015,987 cps | 1,015,987 cps |
| 209Bi (KEDR) | 98.982 % | 24.4 % | 977,803 cps | 977,803 cps |
| 238U (STDR) | 0.273 ppb | 1.1 % | 60,346 cps | 60,346 cps |
| 238U (KEDR) | 0.290 ppb | 28.8 % | 64,762 cps | 64,762 cps |

Turner Report Sample Summary

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Analysis index: 14
Analysis name: 0.50 CHK STD
Analysis started at: 4/14/2021 12:27:25 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 96.220 % | 0.9 % | 108,054 cps | 108,054 cps |
| 9Be (STDR) | 0.475 ppb | 1.3 % | 2,507 cps | 2,507 cps |
| 27Al (STDR) | 0.581 ppb | 0.8 % | 29,640 cps | 29,640 cps |
| 45Sc (STDR) | ✓ 95.583 % | 0.6 % | 272,656 cps | 304,808 cps |
| 45Sc (KEDR) | 101.154 % | 0.5 % | 9,573 cps | 9,573 cps |
| 51V (STDR) | 0.561 ppb | 388.2 % | 111,193 cps | 1,564,511 cps |
| 51V (KEDR) | 0.501 ppb | 5.9 % | 4,110 cps | 4,110 cps |
| 55Mn (STDR) | 0.510 ppb | 0.9 % | 34,941 cps | 34,941 cps |
| 55Mn (KEDR) | 0.525 ppb | 2.8 % | 2,362 cps | 2,362 cps |
| 52Cr (STDR) | 0.521 ppb | ✓ 4.0 % | -51,858 cps | 52,212 cps |
| 52Cr (KEDR) | 0.489 ppb | 2.4 % | 4,719 cps | 4,719 cps |
| 59Co (STDR) | 0.487 ppb | 0.2 % | 23,614 cps | 23,614 cps |
| 59Co (KEDR) | 0.495 ppb | 1.7 % | 8,245 cps | 8,245 cps |
| 60Ni (STDR) | 0.499 ppb | 2.7 % | 5,613 cps | 5,613 cps |
| 60Ni (KEDR) | 0.510 ppb | 5.2 % | 2,437 cps | 2,437 cps |
| 63Cu (STDR) | 0.498 ppb | 0.9 % | 14,243 cps | 14,243 cps |
| 63Cu (KEDR) | 0.498 ppb | 3.7 % | 6,802 cps | 6,802 cps |
| 66Zn (STDR) | 1.082 ppb | 1.5 % | 14,780 cps | 14,780 cps |
| 66Zn (KEDR) | 1.004 ppb | 3.1 % | 3,863 cps | 3,863 cps |
| 74Ge (STDR) | ✓ 95.009 % | 0.9 % | 533,211 cps | 534,498 cps |
| 74Ge (KEDR) | 99.745 % | 1.3 % | 84,680 cps | 84,680 cps |
| 75As (STDR) | 0.453 ppb | 13.1 % | 2,658 cps | 35,151 cps |
| 75As (KEDR) | 0.474 ppb | 2.2 % | 580 cps | 580 cps |
| 82Se (STDR) | 0.505 ppb | 9.0 % | 291 cps | 782 cps |
| 82Se (KEDR) | 0.235 ppb | 75.6 % | 32 cps | 32 cps |
| 98Mo (STDR) | 0.508 ppb | 1.1 % | 13,225 cps | 13,225 cps |
| 98Mo (KEDR) | 0.506 ppb | 0.6 % | 7,636 cps | 7,636 cps |
| 107Ag (STDR) | 0.476 ppb | 1.2 % | 23,632 cps | 23,632 cps |
| 107Ag (KEDR) | 0.500 ppb | 0.6 % | 17,016 cps | 17,016 cps |
| 111Cd (STDR) | 0.485 ppb | 1.3 % | 6,337 cps | 6,003 cps |
| 111Cd (KEDR) | 0.489 ppb | 0.8 % | 2,864 cps | 2,864 cps |
| 115In (STDR) | ✓ 96.729 % | 1.4 % | 785,585 cps | 785,590 cps |
| 115In (KEDR) | 101.547 % | 1.6 % | 179,034 cps | 179,034 cps |
| 121Sb (STDR) | 0.480 ppb | 2.7 % | 20,929 cps | 20,929 cps |
| 121Sb (KEDR) | 0.491 ppb | 1.5 % | 6,494 cps | 6,494 cps |
| 137Ba (STDR) | 0.486 ppb | 3.1 % | 10,900 cps | 10,900 cps |
| 137Ba (KEDR) | 0.493 ppb | 7.3 % | 3,003 cps | 3,003 cps |
| 205Tl (STDR) | 0.489 ppb | 0.5 % | 73,555 cps | 73,555 cps |
| 205Tl (KEDR) | 0.514 ppb | 0.8 % | 76,037 cps | 76,037 cps |
| 208Pb (STDR) | 0.492 ppb | ✓ 1.4 % | 100,799 cps | 53,886 cps |
| 208Pb (KEDR) | 0.511 ppb | 1.5 % | 54,429 cps | 54,429 cps |
| 209Bi (STDR) | ✓ 97.746 % | 0.8 % | 1,020,872 cps | 1,020,872 cps |
| 209Bi (KEDR) | 100.135 % | 0.5 % | 989,193 cps | 989,193 cps |
| 238U (STDR) | 0.498 ppb | 1.3 % | 110,604 cps | 110,604 cps |
| 238U (KEDR) | 0.515 ppb | 0.8 % | 122,279 cps | 122,279 cps |

Turner Report Sample Summary

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Analysis index: 15
Analysis name: 2104161-BLK1
Analysis started at: 4/14/2021 12:32:51 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 94.836 % | 3.3 % | 106,500 cps | 106,500 cps |
| 9Be (STDR) | 0.005 ppb | 91.4 % | 87 cps | 87 cps |
| 27Al (STDR) | 5.704 ppb | 1.6 % | 160,425 cps | 160,425 cps |
| 45Sc (STDR) | 94.491 % | 0.4 % | 269,541 cps | 301,094 cps |
| 45Sc (KEDR) | 98.705 % | 6.8 % | 9,341 cps | 9,341 cps |
| 51V (STDR) | -1.150 ppb | 308.4 % | 37,881 cps | 1,473,079 cps |
| 51V (KEDR) | 0.013 ppb | 98.9 % | 1,178 cps | 1,178 cps |
| 55Mn (STDR) | 0.083 ppb | 3.9 % | 8,383 cps | 8,383 cps |
| 55Mn (KEDR) | 0.076 ppb | 7.8 % | 370 cps | 370 cps |
| 52Cr (STDR) | 0.141 ppb | 4.0 % | -66,514 cps | 32,290 cps |
| 52Cr (KEDR) | 0.025 ppb | 19.0 % | 562 cps | 562 cps |
| 59Co (STDR) | 0.011 ppb | 7.2 % | 768 cps | 768 cps |
| 59Co (KEDR) | 0.011 ppb | 8.4 % | 183 cps | 183 cps |
| 60Ni (STDR) | 0.421 ppb | 3.2 % | 4,743 cps | 4,743 cps |
| 60Ni (KEDR) | 0.422 ppb | 7.8 % | 1,983 cps | 1,983 cps |
| 63Cu (STDR) | 0.189 ppb | 0.8 % | 5,968 cps | 5,968 cps |
| 63Cu (KEDR) | 0.210 ppb | 1.1 % | 2,995 cps | 2,995 cps |
| 66Zn (STDR) | 0.808 ppb | 2.5 % | 12,268 cps | 12,268 cps |
| 66Zn (KEDR) | 0.798 ppb | 12.5 % | 3,300 cps | 3,300 cps |
| 74Ge (STDR) | 94.440 % | 0.1 % | 530,017 cps | 531,194 cps |
| 74Ge (KEDR) | 97.559 % | 3.2 % | 82,824 cps | 82,824 cps |
| 75As (STDR) | -0.036 ppb | 102.1 % | -1,121 cps | 29,704 cps |
| 75As (KEDR) | -0.004 ppb | 137.7 % | 18 cps | 18 cps |
| 82Se (STDR) | -0.152 ppb | 44.9 % | -219 cps | 280 cps |
| 82Se (KEDR) | -0.145 ppb | 41.7 % | 13 cps | 13 cps |
| 98Mo (STDR) | 0.011 ppb | 19.3 % | 370 cps | 372 cps |
| 98Mo (KEDR) | 0.010 ppb | 20.8 % | 210 cps | 210 cps |
| 107Ag (STDR) | 0.007 ppb | 13.7 % | 433 cps | 433 cps |
| 107Ag (KEDR) | 0.007 ppb | 1.8 % | 286 cps | 286 cps |
| 111Cd (STDR) | 0.000 ppb | 818.7 % | 320 cps | 35 cps |
| 111Cd (KEDR) | 0.001 ppb | 26.1 % | 8 cps | 8 cps |
| 115In (STDR) | 95.031 % | 0.4 % | 771,800 cps | 771,886 cps |
| 115In (KEDR) | 97.430 % | 5.7 % | 171,775 cps | 171,775 cps |
| 121Sb (STDR) | 0.005 ppb | 32.4 % | 466 cps | 467 cps |
| 121Sb (KEDR) | 0.004 ppb | 69.7 % | 119 cps | 119 cps |
| 137Ba (STDR) | 0.023 ppb | 42.4 % | 2,842 cps | 2,842 cps |
| 137Ba (KEDR) | 0.035 ppb | 48.6 % | 816 cps | 816 cps |
| 205Tl (STDR) | 0.005 ppb | 14.3 % | 1,935 cps | 1,935 cps |
| 205Tl (KEDR) | 0.004 ppb | 14.6 % | 1,939 cps | 1,939 cps |
| 208Pb (STDR) | 0.028 ppb | 3.6 % | 6,024 cps | 3,197 cps |
| 208Pb (KEDR) | 0.031 ppb | 7.7 % | 3,364 cps | 3,364 cps |
| 209Bi (STDR) | 96.325 % | 0.9 % | 1,006,032 cps | 1,006,032 cps |
| 209Bi (KEDR) | 96.554 % | 4.4 % | 953,818 cps | 953,818 cps |
| 238U (STDR) | 0.001 ppb | 15.6 % | 193 cps | 193 cps |
| 238U (KEDR) | 0.001 ppb | 6.1 % | 208 cps | 208 cps |

Turner Report Sample Summary

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ICAP RQ ICP-MS



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Analysis index: 19
Analysis name: 21D0200-01@20
Analysis started at: 4/14/2021 12:46:43 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 95.826 % | 0.7 % | 107,612 cps | 107,612 cps |
| 9Be (STDR) | 0.021 ppb | 26.3 % | 173 cps | 173 cps |
| 27Al (STDR) | 303.637 ppb | 1.2 % | 7,750,811 cps | 7,750,811 cps |
| 45Sc (STDR) | 92.752 % | 0.5 % | 264,581 cps | 317,886 cps |
| 45Sc (KEDR) | 101.278 % | 0.8 % | 9,585 cps | 9,585 cps |
| 51V (STDR) | -1.680 ppb | 50.0 % | 15,441 cps | 1,949,010 cps |
| 51V (KEDR) | 0.695 ppb | 3.0 % | 5,230 cps | 5,230 cps |
| 55Mn (STDR) | 10.552 ppb | 0.2 % | 645,677 cps | 645,677 cps |
| 55Mn (KEDR) | 10.067 ppb | 1.0 % | 44,023 cps | 44,023 cps |
| 52Cr (STDR) | -2.000 ppb | 1.5 % | -150,367 cps | 55,381 cps |
| 52Cr (KEDR) | 0.417 ppb | 4.3 % | 4,045 cps | 4,045 cps |
| 59Co (STDR) | 0.120 ppb | 2.8 % | 5,920 cps | 5,920 cps |
| 59Co (KEDR) | 0.113 ppb | 1.8 % | 1,870 cps | 1,870 cps |
| 60Ni (STDR) | 0.328 ppb | 2.4 % | 3,756 cps | 3,756 cps |
| 60Ni (KEDR) | 0.294 ppb | 10.5 % | 1,427 cps | 1,427 cps |
| 63Cu (STDR) | 1.183 ppb | 0.4 % | 32,202 cps | 32,202 cps |
| 63Cu (KEDR) | 1.136 ppb | 1.1 % | 14,745 cps | 14,745 cps |
| 66Zn (STDR) | 5.642 ppb | 0.5 % | 54,890 cps | 54,890 cps |
| 66Zn (KEDR) | 5.426 ppb | 1.1 % | 13,880 cps | 13,880 cps |
| 74Ge (STDR) | 95.628 % | 0.4 % | 536,684 cps | 538,574 cps |
| 74Ge (KEDR) | 96.375 % | 0.4 % | 81,819 cps | 81,819 cps |
| 75As (STDR) | 0.472 ppb | 31.8 % | 2,827 cps | 52,202 cps |
| 75As (KEDR) | 0.619 ppb | 5.9 % | 725 cps | 725 cps |
| 82Se (STDR) | 0.041 ppb | 49.1 % | -71 cps | 502 cps |
| 82Se (KEDR) | 0.170 ppb | 215.1 % | 28 cps | 28 cps |
| 98Mo (STDR) | 0.135 ppb | 3.3 % | 3,627 cps | 3,631 cps |
| 98Mo (KEDR) | 0.135 ppb | 1.7 % | 2,003 cps | 2,003 cps |
| 107Ag (STDR) | 0.008 ppb | 3.3 % | 475 cps | 475 cps |
| 107Ag (KEDR) | 0.007 ppb | 16.8 % | 285 cps | 285 cps |
| 111Cd (STDR) | 0.010 ppb | 72.0 % | 447 cps | 165 cps |
| 111Cd (KEDR) | 0.014 ppb | 6.8 % | 81 cps | 81 cps |
| 115In (STDR) | 97.815 % | 1.1 % | 794,404 cps | 794,691 cps |
| 115In (KEDR) | 97.715 % | 0.6 % | 172,279 cps | 172,279 cps |
| 121Sb (STDR) | 0.032 ppb | 5.4 % | 1,632 cps | 1,633 cps |
| 121Sb (KEDR) | 0.032 ppb | 14.2 % | 472 cps | 472 cps |
| 137Ba (STDR) | 5.024 ppb | 0.5 % | 90,243 cps | 90,243 cps |
| 137Ba (KEDR) | 5.155 ppb | 0.6 % | 24,025 cps | 24,025 cps |
| 205Tl (STDR) | 0.015 ppb | 10.2 % | 3,516 cps | 3,516 cps |
| 205Tl (KEDR) | 0.017 ppb | 6.3 % | 3,756 cps | 3,756 cps |
| 208Pb (STDR) | 5.050 ppb | 0.4 % | 1,039,398 cps | 549,282 cps |
| 208Pb (KEDR) | 5.275 ppb | 0.3 % | 548,903 cps | 548,903 cps |
| 209Bi (STDR) | 98.508 % | 1.8 % | 1,028,830 cps | 1,028,830 cps |
| 209Bi (KEDR) | 98.193 % | 0.7 % | 970,010 cps | 970,010 cps |
| 238U (STDR) | 0.205 ppb | 0.9 % | 45,960 cps | 45,960 cps |
| 238U (KEDR) | 0.213 ppb | 0.4 % | 49,643 cps | 49,643 cps |

Turner Report Sample Summary

4/14/2021 12:53:39 PM
ICAP RQ ICP-MS



W. M. M.

Analysis index: 20
Analysis name: CCB
Analysis started at: 4/14/2021 12:50:12 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 90.232 % | 0.4 % | 101,329 cps | 101,329 cps |
| 9Be (STDR) | 0.003 ppb | 145.3 % | 77 cps | 77 cps |
| 27Al (STDR) | -0.001 ppb | 1,271.5 % | 14,115 cps | 14,115 cps |
| 45Sc (STDR) | 95.487 % | 1.3 % | 272,383 cps | 302,950 cps |
| 45Sc (KEDR) | 102.908 % | 0.3 % | 9,739 cps | 9,739 cps |
| 51V (STDR) | -3.679 ppb | 19.4 % | -69,790 cps | 1,295,557 cps |
| 51V (KEDR) | 0.005 ppb | 325.7 % | 1,176 cps | 1,176 cps |
| 55Mn (STDR) | 0.002 ppb | 120.6 % | 3,444 cps | 3,444 cps |
| 55Mn (KEDR) | 0.006 ppb | 66.1 % | 73 cps | 73 cps |
| 52Cr (STDR) | -0.088 ppb | 18.3 % | -76,795 cps | 26,827 cps |
| 52Cr (KEDR) | -0.003 ppb | 113.3 % | 329 cps | 329 cps |
| 59Co (STDR) | 0.001 ppb | 69.9 % | 298 cps | 298 cps |
| 59Co (KEDR) | 0.000 ppb | 426.3 % | 12 cps | 12 cps |
| 60Ni (STDR) | 0.008 ppb | 53.0 % | 417 cps | 417 cps |
| 60Ni (KEDR) | 0.001 ppb | 187.7 % | 113 cps | 113 cps |
| 63Cu (STDR) | -0.005 ppb | 10.7 % | 882 cps | 882 cps |
| 63Cu (KEDR) | -0.004 ppb | 24.5 % | 299 cps | 299 cps |
| 66Zn (STDR) | -0.026 ppb | 78.1 % | 5,071 cps | 5,071 cps |
| 66Zn (KEDR) | -0.049 ppb | 9.4 % | 1,404 cps | 1,404 cps |
| 74Ge (STDR) | 97.155 % | 1.2 % | 545,253 cps | 546,345 cps |
| 74Ge (KEDR) | 99.815 % | 0.2 % | 84,740 cps | 84,740 cps |
| 75As (STDR) | -0.009 ppb | 530.0 % | -937 cps | 27,574 cps |
| 75As (KEDR) | -0.001 ppb | 99.9 % | 22 cps | 22 cps |
| 82Se (STDR) | -0.109 ppb | 109.3 % | -190 cps | 302 cps |
| 82Se (KEDR) | -0.170 ppb | 45.6 % | 12 cps | 12 cps |
| 98Mo (STDR) | 0.000 ppb | 1,880.1 % | 97 cps | 100 cps |
| 98Mo (KEDR) | -0.001 ppb | 29.2 % | 47 cps | 47 cps |
| 107Ag (STDR) | 0.000 ppb | 223.8 % | 77 cps | 77 cps |
| 107Ag (KEDR) | 0.000 ppb | 19.9 % | 54 cps | 54 cps |
| 111Cd (STDR) | -0.003 ppb | 61.5 % | 281 cps | 3 cps |
| 111Cd (KEDR) | 0.000 ppb | 272.8 % | 3 cps | 3 cps |
| 115In (STDR) | 97.395 % | 0.3 % | 790,998 cps | 791,002 cps |
| 115In (KEDR) | 102.118 % | 0.7 % | 180,041 cps | 180,041 cps |
| 121Sb (STDR) | -0.001 ppb | 112.1 % | 213 cps | 213 cps |
| 121Sb (KEDR) | 0.000 ppb | 490.0 % | 71 cps | 71 cps |
| 137Ba (STDR) | 0.007 ppb | 94.6 % | 2,634 cps | 2,634 cps |
| 137Ba (KEDR) | 0.005 ppb | 227.8 % | 718 cps | 718 cps |
| 205Tl (STDR) | 0.000 ppb | 78.8 % | 1,228 cps | 1,228 cps |
| 205Tl (KEDR) | -0.001 ppb | 23.7 % | 1,253 cps | 1,253 cps |
| 208Pb (STDR) | 0.000 ppb | 46.5 % | 400 cps | 217 cps |
| 208Pb (KEDR) | 0.000 ppb | 80.1 % | 208 cps | 208 cps |
| 209Bi (STDR) | 98.548 % | 0.9 % | 1,029,249 cps | 1,029,249 cps |
| 209Bi (KEDR) | 100.549 % | 0.7 % | 993,291 cps | 993,291 cps |
| 238U (STDR) | 0.000 ppb | 151.1 % | 18 cps | 18 cps |
| 238U (KEDR) | 0.000 ppb | 64.9 % | 24 cps | 24 cps |

Turner Report Sample Summary

4/14/2021 12:57:09 PM
iCAP RQ ICP-MS



Analysis index: 21
Analysis name: CCV
Analysis started at: 4/14/2021 12:53:39 PM

Reed *M. H. H. H. H. H.*

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 91.704 % | 0.6 % | 102,983 cps | 102,983 cps |
| 9Be (STDR) | 48.793 ppb | 0.2 % | 240,458 cps | 240,458 cps |
| 27Al (STDR) | 99.193 ppb | 1.4 % | 2,547,305 cps | 2,547,305 cps |
| 45Sc (STDR) | 96.693 % | 1.5 % | 275,822 cps | 306,698 cps |
| 45Sc (KEDR) | 105.702 % | 1.1 % | 10,003 cps | 10,003 cps |
| 51V (STDR) | 39.621 ↓ | 2.0 | 1,792,438 cps | 3,195,653 cps |
| 51V (KEDR) | 49.188 ppb | 0.9 % | 305,097 cps | 305,097 cps |
| 55Mn (STDR) | 48.640 ppb | 0.2 % | 3,055,141 cps | 3,055,141 cps |
| 55Mn (KEDR) | 49.010 ppb | 0.3 % | 224,227 cps | 224,227 cps |
| 52Cr (STDR) | 48.131 ppb | 1.2 % | 1,892,083 cps | 1,994,731 cps |
| 52Cr (KEDR) | 48.598 ppb | 1.1 % | 450,829 cps | 450,829 cps |
| 59Co (STDR) | 49.157 ppb | 1.1 % | 2,388,957 cps | 2,388,957 cps |
| 59Co (KEDR) | 48.717 ppb | 0.6 % | 836,716 cps | 836,716 cps |
| 60Ni (STDR) | 49.748 ppb | 0.8 % | 533,640 cps | 533,640 cps |
| 60Ni (KEDR) | 48.693 ppb | 0.5 % | 229,343 cps | 229,343 cps |
| 63Cu (STDR) | 48.859 ppb | 0.6 % | 1,317,664 cps | 1,317,664 cps |
| 63Cu (KEDR) | 48.444 ppb | 0.4 % | 645,098 cps | 645,098 cps |
| 66Zn (STDR) | 99.587 ppb | 0.7 % | 897,642 cps | 897,642 cps |
| 66Zn (KEDR) | 98.583 ppb | 1.1 % | 238,378 cps | 238,378 cps |
| 74Ge (STDR) | 96.435 % | 0.9 % | 541,213 cps | 545,702 cps |
| 74Ge (KEDR) | 101.536 % | 0.8 % | 86,201 cps | 86,201 cps |
| 75As (STDR) | 49.707 ppb | 1.7 % | 390,205 cps | 408,929 cps |
| 75As (KEDR) | 49.721 ppb | 1.5 % | 59,473 cps | 59,473 cps |
| 82Se (STDR) | 49.898 ppb | 1.6 % | 39,440 cps | 39,877 cps |
| 82Se (KEDR) | 47.981 ppb | 5.3 % | 2,440 cps | 2,440 cps |
| 98Mo (STDR) | 48.915 ppb | 0.1 % | 1,291,885 cps | 1,291,886 cps |
| 98Mo (KEDR) | 48.346 ppb | 1.1 % | 741,408 cps | 741,408 cps |
| 107Ag (STDR) | 46.706 ppb | 0.7 % | 2,365,650 cps | 2,365,650 cps |
| 107Ag (KEDR) | 47.698 ppb | 1.1 % | 1,663,449 cps | 1,663,449 cps |
| 111Cd (STDR) | 48.582 ppb | 0.6 % | 618,176 cps | 620,535 cps |
| 111Cd (KEDR) | 48.658 ppb | 0.1 % | 293,271 cps | 293,271 cps |
| 115In (STDR) | 99.189 % | 1.3 % | 805,566 cps | 805,578 cps |
| 115In (KEDR) | 104.599 % | 0.3 % | 184,415 cps | 184,415 cps |
| 121Sb (STDR) | 49.242 ppb | 0.8 % | 2,175,246 cps | 2,175,248 cps |
| 121Sb (KEDR) | 49.383 ppb | 0.4 % | 665,298 cps | 665,298 cps |
| 137Ba (STDR) | 49.276 ppb | 0.8 % | 875,089 cps | 875,089 cps |
| 137Ba (KEDR) | 49.415 ppb | 0.5 % | 239,102 cps | 239,102 cps |
| 205Tl (STDR) | 51.065 ppb | 1.8 % | 7,722,045 cps | 7,722,045 cps |
| 205Tl (KEDR) | 51.412 ppb | 1.4 % | 7,664,947 cps | 7,664,947 cps |
| 208Pb (STDR) | 48.351 ppb | 0.7 % | 10,095,912 cps | 5,365,337 cps |
| 208Pb (KEDR) | 48.897 ppb | 0.5 % | 5,322,023 cps | 5,322,023 cps |
| 209Bi (STDR) | 99.977 % | 0.7 % | 1,044,168 cps | 1,044,168 cps |
| 209Bi (KEDR) | 102.715 % | 0.2 % | 1,014,687 cps | 1,014,687 cps |
| 238U (STDR) | 50.298 ppb | 0.4 % | 11,423,085 cps | 11,423,085 cps |
| 238U (KEDR) | 50.203 ppb | 0.6 % | 12,214,011 cps | 12,214,011 cps |

Turner Report Sample Summary

4/14/2021 1:00:39 PM
iCAP RQ ICP-MS



W. J. ...

Analysis index: 22
Analysis name: CCV
Analysis started at: 4/14/2021 12:57:09 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 92.735 % | 0.7 % | 104,141 cps | 104,141 cps |
| 9Be (STDR) | 47.932 ppb | 0.8 % | 238,673 cps | 238,673 cps |
| 27Al (STDR) | 99.530 ppb | 1.2 % | 2,570,786 cps | 2,570,786 cps |
| 45Sc (STDR) | 96.811 % | 0.7 % | 276,159 cps | 306,695 cps |
| 45Sc (KEDR) | 104.573 % | 3.0 % | 9,896 cps | 9,896 cps |
| 51V (STDR) | 49.960 ppb | 0.5 % | 2,240,826 cps | 3,526,766 cps |
| 51V (KEDR) | 49.156 ppb | 2.3 % | 301,363 cps | 301,363 cps |
| 55Mn (STDR) | 49.067 ppb | 1.1 % | 3,087,302 cps | 3,087,302 cps |
| 55Mn (KEDR) | 48.808 ppb | 2.1 % | 220,617 cps | 220,617 cps |
| 52Cr (STDR) | 49.999 ppb | 0.2 % | 1,971,669 cps | 2,073,530 cps |
| 52Cr (KEDR) | 48.589 ppb | 2.2 % | 445,482 cps | 445,482 cps |
| 59Co (STDR) | 49.759 ppb | 1.2 % | 2,423,143 cps | 2,423,143 cps |
| 59Co (KEDR) | 48.770 ppb | 1.7 % | 827,321 cps | 827,321 cps |
| 60Ni (STDR) | 49.536 ppb | 1.1 % | 532,447 cps | 532,447 cps |
| 60Ni (KEDR) | 49.053 ppb | 1.9 % | 228,169 cps | 228,169 cps |
| 63Cu (STDR) | 48.650 ppb | 1.1 % | 1,314,890 cps | 1,314,890 cps |
| 63Cu (KEDR) | 48.471 ppb | 1.8 % | 637,257 cps | 637,257 cps |
| 66Zn (STDR) | 98.651 ppb | 0.6 % | 891,344 cps | 891,344 cps |
| 66Zn (KEDR) | 98.002 ppb | 1.4 % | 233,889 cps | 233,889 cps |
| 74Ge (STDR) | 96.698 % | 0.8 % | 542,691 cps | 547,130 cps |
| 74Ge (KEDR) | 100.137 % | 0.5 % | 85,012 cps | 85,012 cps |
| 75As (STDR) | 49.664 ppb | 1.3 % | 390,885 cps | 408,166 cps |
| 75As (KEDR) | 49.032 ppb | 2.2 % | 57,836 cps | 57,836 cps |
| 82Se (STDR) | 49.801 ppb | 1.5 % | 39,388 cps | 39,914 cps |
| 82Se (KEDR) | 48.491 ppb | 0.6 % | 2,430 cps | 2,430 cps |
| 98Mo (STDR) | 49.215 ppb | 1.0 % | 1,294,599 cps | 1,294,601 cps |
| 98Mo (KEDR) | 48.816 ppb | 1.2 % | 736,546 cps | 736,546 cps |
| 107Ag (STDR) | 48.406 ppb | 0.7 % | 2,435,883 cps | 2,435,883 cps |
| 107Ag (KEDR) | 47.593 ppb | 0.8 % | 1,631,821 cps | 1,631,821 cps |
| 111Cd (STDR) | 48.538 ppb | 0.6 % | 612,913 cps | 614,941 cps |
| 111Cd (KEDR) | 48.716 ppb | 0.4 % | 288,561 cps | 288,561 cps |
| 115In (STDR) | 98.325 % | 0.8 % | 798,548 cps | 798,559 cps |
| 115In (KEDR) | 102.761 % | 1.1 % | 181,175 cps | 181,175 cps |
| 121Sb (STDR) | 49.261 ppb | 0.9 % | 2,158,097 cps | 2,158,099 cps |
| 121Sb (KEDR) | 49.404 ppb | 0.9 % | 654,208 cps | 654,208 cps |
| 137Ba (STDR) | 49.490 ppb | 0.3 % | 872,442 cps | 872,442 cps |
| 137Ba (KEDR) | 49.879 ppb | 1.2 % | 237,584 cps | 237,584 cps |
| 205Tl (STDR) | 51.759 ppb | 0.2 % | 7,800,721 cps | 7,800,721 cps |
| 205Tl (KEDR) | 51.730 ppb | 1.5 % | 7,642,544 cps | 7,642,544 cps |
| 208Pb (STDR) | 48.747 ppb | 0.1 % | 10,146,633 cps | 5,397,603 cps |
| 208Pb (KEDR) | 48.828 ppb | 1.1 % | 5,268,041 cps | 5,268,041 cps |
| 209Bi (STDR) | 99.666 % | 1.6 % | 1,040,928 cps | 1,040,928 cps |
| 209Bi (KEDR) | 101.837 % | 1.2 % | 1,006,008 cps | 1,006,008 cps |
| 238U (STDR) | 50.825 ppb | 0.9 % | 11,505,793 cps | 11,505,793 cps |
| 238U (KEDR) | 50.139 ppb | 1.3 % | 12,092,860 cps | 12,092,860 cps |

iCAP RQ Report

4/16/2021 9:14:58 AM



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Sample List Summary:

Instrument Name: iCAP RQ
 Filename: 210415_1.imexp

| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|--------------------------|------------|--------------|-----------------------|------------------|
| 1 | Blank | 3 | 1 | 4/15/2021 10:32:51 AM | TURNER\PEService |
| 2 | Cal Std 1 <i>2101110</i> | 3 | 1 | 4/15/2021 10:36:17 AM | TURNER\PEService |
| 3 | Cal Std 2 <i>2101109</i> | 3 | 1 | 4/15/2021 10:39:44 AM | TURNER\PEService |
| 4 | Cal Std 3 <i>2101118</i> | 3 | 1 | 4/15/2021 10:43:12 AM | TURNER\PEService |
| 5 | Cal Std 4 <i>2101107</i> | 3 | 1 | 4/15/2021 10:46:40 AM | TURNER\PEService |
| 6 | ICB | 3 | 1 | 4/15/2021 10:50:09 AM | TURNER\PEService |
| 7 | IPC <i>2101118</i> | 3 | 1 | 4/15/2021 10:53:35 AM | TURNER\PEService |
| 8 | ICV | 3 | 1 | 4/15/2021 10:57:03 AM | TURNER\PEService |
| 9 | ICV <i>2101142</i> | 3 | 1 | 4/15/2021 11:00:32 AM | TURNER\PEService |
| 10 | 0.25 CHK STD | 3 | 1 | 4/15/2021 11:04:02 AM | TURNER\PEService |
| 11 | 0.50 CHK STD | 3 | 1 | 4/15/2021 11:07:29 AM | TURNER\PEService |
| 12 | 40 CHK STD | 3 | 1 | 4/15/2021 11:10:55 AM | TURNER\PEService |
| 13 | 2104129-BLK1 | 3 | 1 | 4/15/2021 11:14:22 AM | TURNER\PEService |
| 14 | 2104129-BS1 | 3 | 1 | 4/15/2021 11:17:50 AM | TURNER\PEService |
| 15 | 2104129-BSD1 | 3 | 1 | 4/15/2021 11:21:17 AM | TURNER\PEService |
| 16 | 21D0200-01@20 | 3 | 1 | 4/15/2021 11:24:45 AM | TURNER\PEService |
| 17 | 2104129-MS1@20 | 3 | 1 | 4/15/2021 11:28:14 AM | TURNER\PEService |
| 18 | 21D0200-01 | 3 | 1 | 4/15/2021 11:31:42 AM | TURNER\PEService |
| 19 | 2104129-MS1 | 3 | 1 | 4/15/2021 11:35:11 AM | TURNER\PEService |
| 20 | RINSE | 3 | 1 | 4/15/2021 11:42:47 AM | TURNER\PEService |
| 21 | 21D0200-01@5 | 3 | 1 | 4/15/2021 11:46:14 AM | TURNER\PEService |
| 22 | 2104129-MS1@5 | 3 | 1 | 4/15/2021 11:49:42 AM | TURNER\PEService |
| 23 | CCB | 3 | 1 | 4/15/2021 11:57:37 AM | TURNER\PEService |
| 24 | CCV | 3 | 1 | 4/15/2021 12:01:04 PM | TURNER\PEService |
| 25 | CCV | 3 | 1 | 4/15/2021 12:04:34 PM | TURNER\PEService |
| 26 | CCV <i>2101142</i> | 3 | 1 | 4/15/2021 12:10:30 PM | TURNER\PEService |
| 27 | 21D0185-01 | 3 | 1 | 4/15/2021 12:14:24 PM | TURNER\PEService |
| 28 | 21D0342-01 | 3 | 1 | 4/15/2021 12:17:55 PM | TURNER\PEService |
| 29 | 21A0441-05RE2@10 | 3 | 1 | 4/15/2021 12:21:25 PM | TURNER\PEService |
| 30 | 21A0441-05RE2 | 3 | 1 | 4/15/2021 12:24:51 PM | TURNER\PEService |
| 31 | 21D0250-01 | 3 | 1 | 4/15/2021 12:28:18 PM | TURNER\PEService |
| 32 | 21D0250-02 | 3 | 1 | 4/15/2021 12:31:45 PM | TURNER\PEService |
| 33 | 21D0250-03 | 3 | 1 | 4/15/2021 12:35:12 PM | TURNER\PEService |
| 34 | 21D0248-01@100 | 3 | 1 | 4/15/2021 12:38:40 PM | TURNER\PEService |
| 35 | CCB | 3 | 1 | 4/15/2021 12:42:08 PM | TURNER\PEService |
| 36 | CCB | 3 | 1 | 4/15/2021 12:45:36 PM | TURNER\PEService |
| 37 | CCV | 3 | 1 | 4/15/2021 1:06:03 PM | TURNER\PEService |
| 38 | CCV | 3 | 1 | 4/15/2021 1:09:34 PM | TURNER\PEService |
| 39 | CCB | 3 | 1 | 4/15/2021 1:13:58 PM | TURNER\PEService |
| 40 | 2104153-BLK1 | 3 | 1 | 4/15/2021 1:19:19 PM | TURNER\PEService |
| 41 | 2104153-BS1 | 3 | 1 | 4/15/2021 1:22:48 PM | TURNER\PEService |
| 42 | 2104153-BSD1 | 3 | 1 | 4/15/2021 1:26:17 PM | TURNER\PEService |
| 43 | 2104153-BS1 | 3 | 1 | 4/15/2021 1:30:21 PM | TURNER\PEService |
| 44 | 2104153-BSD1 | 3 | 1 | 4/15/2021 1:33:50 PM | TURNER\PEService |

CR
4/16/21

0.25 CHK STD = 0.25 mc of 1/4 2100805 diluted to 10mc
0.50 CHK STD = 0.50 mc of 2100805 diluted to 10mc
100 2100805 diluted to 10mc

iCAP RQ Report

4/16/2021 9:14:58 AM



| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|----------------|------------|--------------|----------------------|------------------|
| 45 | 21D0251-01 | 3 | 1 | 4/15/2021 1:37:46 PM | TURNER\PEService |
| 46 | 2104153-MS1 | 3 | 1 | 4/15/2021 1:41:16 PM | TURNER\PEService |
| 47 | 21D0310-01 | 3 | 1 | 4/15/2021 1:44:46 PM | TURNER\PEService |
| 48 | 2104153-MS2 | 3 | 1 | 4/15/2021 1:48:17 PM | TURNER\PEService |
| 49 | 21D0275-01 | 3 | 1 | 4/15/2021 1:51:44 PM | TURNER\PEService |
| 50 | 21D0251-02 | 3 | 1 | 4/15/2021 1:55:12 PM | TURNER\PEService |
| 51 | 21D0342-01 | 3 | 1 | 4/15/2021 1:58:39 PM | TURNER\PEService |
| 52 | CCB | 3 | 1 | 4/15/2021 2:02:08 PM | TURNER\PEService |
| 53 | CCV | 3 | 1 | 4/15/2021 2:05:36 PM | TURNER\PEService |
| 54 | 21D0251-01@5 | 3 | 1 | 4/15/2021 2:09:08 PM | TURNER\PEService |
| 55 | 2104153-MS1@5 | 3 | 1 | 4/15/2021 2:12:38 PM | TURNER\PEService |
| 56 | 21D0310-01@2 | 3 | 1 | 4/15/2021 2:16:09 PM | TURNER\PEService |
| 57 | 2104153-MS2@2 | 3 | 1 | 4/15/2021 2:19:39 PM | TURNER\PEService |
| 58 | 21D0275-01@5 | 3 | 1 | 4/15/2021 2:23:10 PM | TURNER\PEService |
| 59 | 21D0251-02@5 | 3 | 1 | 4/15/2021 2:26:40 PM | TURNER\PEService |
| 60 | CCB | 3 | 1 | 4/15/2021 2:30:11 PM | TURNER\PEService |
| 61 | CCV | 3 | 1 | 4/15/2021 2:33:40 PM | TURNER\PEService |
| 62 | 21D0259-01 | 3 | 1 | 4/15/2021 2:37:12 PM | TURNER\PEService |
| 63 | 21D0301-01 | 3 | 1 | 4/15/2021 2:40:41 PM | TURNER\PEService |
| 64 | 21D0416-01 | 3 | 1 | 4/15/2021 2:44:10 PM | TURNER\PEService |
| 65 | 21D0417-01 | 3 | 1 | 4/15/2021 2:47:40 PM | TURNER\PEService |
| 66 | 21D0417-02 | 3 | 1 | 4/15/2021 2:51:10 PM | TURNER\PEService |
| 67 | 21D0322-01 | 3 | 1 | 4/15/2021 2:54:41 PM | TURNER\PEService |
| 68 | 21D0306-01 | 3 | 1 | 4/15/2021 2:58:11 PM | TURNER\PEService |
| 69 | 21D0307-01 | 3 | 1 | 4/15/2021 3:01:43 PM | TURNER\PEService |
| 70 | CCB | 3 | 1 | 4/15/2021 3:05:14 PM | TURNER\PEService |
| 71 | CCV | 3 | 1 | 4/15/2021 3:08:44 PM | TURNER\PEService |
| 72 | 21D0273-02 | 3 | 1 | 4/15/2021 3:12:17 PM | TURNER\PEService |
| 73 | 21D0355-02 | 3 | 1 | 4/15/2021 3:15:46 PM | TURNER\PEService |
| 74 | 21D0273-01@100 | 3 | 1 | 4/15/2021 3:19:15 PM | TURNER\PEService |
| 75 | 21D0355-02@100 | 3 | 1 | 4/15/2021 3:22:45 PM | TURNER\PEService |
| 76 | CCB | 3 | 1 | 4/15/2021 3:26:14 PM | TURNER\PEService |
| 77 | CCB | 3 | 1 | 4/15/2021 3:29:44 PM | TURNER\PEService |
| 78 | CCV | 3 | 1 | 4/15/2021 3:33:14 PM | TURNER\PEService |
| 79 | 2104130-BLK1 | 3 | 1 | 4/15/2021 3:36:47 PM | TURNER\PEService |
| 80 | 2104130-BS1 | 3 | 1 | 4/15/2021 3:40:17 PM | TURNER\PEService |
| 81 | 2104130-BSD1 | 3 | 1 | 4/15/2021 3:43:47 PM | TURNER\PEService |
| 82 | 21D0238-01 | 3 | 1 | 4/15/2021 3:47:18 PM | TURNER\PEService |
| 83 | 2104130-MS1 | 3 | 1 | 4/15/2021 3:50:49 PM | TURNER\PEService |
| 84 | 21D0253-01 | 3 | 1 | 4/15/2021 3:54:20 PM | TURNER\PEService |
| 85 | 2104130-MS2 | 3 | 1 | 4/15/2021 3:57:52 PM | TURNER\PEService |
| 86 | 21D0235-01 | 3 | 1 | 4/15/2021 4:01:24 PM | TURNER\PEService |
| 87 | 21D0236-01 | 3 | 1 | 4/15/2021 4:04:56 PM | TURNER\PEService |
| 88 | 21D0237-01 | 3 | 1 | 4/15/2021 4:08:27 PM | TURNER\PEService |
| 89 | CCB | 3 | 1 | 4/15/2021 4:11:57 PM | TURNER\PEService |
| 90 | CCV | 3 | 1 | 4/15/2021 4:15:28 PM | TURNER\PEService |
| 91 | 21D0241-01 | 3 | 1 | 4/15/2021 4:19:01 PM | TURNER\PEService |
| 92 | 21D0242-01 | 3 | 1 | 4/15/2021 4:22:32 PM | TURNER\PEService |

iCAP RQ Report

4/16/2021 9:14:58 AM



| Index: | Label: | Main runs: | Survey runs: | Start time: | User name: |
|--------|------------|------------|--------------|----------------------|------------------|
| 93 | 21D0243-01 | 3 | 1 | 4/15/2021 4:26:02 PM | TURNER\PEService |
| 94 | 21D0244-01 | 3 | 1 | 4/15/2021 4:29:33 PM | TURNER\PEService |
| 95 | 21D0260-01 | 3 | 1 | 4/15/2021 4:33:04 PM | TURNER\PEService |
| 96 | 21D0261-01 | 3 | 1 | 4/15/2021 4:36:36 PM | TURNER\PEService |
| 97 | 21D0262-01 | 3 | 1 | 4/15/2021 4:40:07 PM | TURNER\PEService |
| 98 | 21D0263-01 | 3 | 1 | 4/15/2021 4:43:39 PM | TURNER\PEService |
| 99 | 21D0351-01 | 3 | 1 | 4/15/2021 4:47:12 PM | TURNER\PEService |
| 100 | 21D0355-01 | 3 | 1 | 4/15/2021 4:50:45 PM | TURNER\PEService |
| 101 | CCB | 3 | 1 | 4/15/2021 4:54:18 PM | TURNER\PEService |
| 102 | CCV | 3 | 1 | 4/15/2021 4:57:49 PM | TURNER\PEService |
| 103 | 21D0254-01 | 3 | 1 | 4/15/2021 5:01:23 PM | TURNER\PEService |
| 104 | 21D0254-02 | 3 | 1 | 4/15/2021 5:04:55 PM | TURNER\PEService |
| 105 | 21D0254-03 | 3 | 1 | 4/15/2021 5:08:27 PM | TURNER\PEService |
| 106 | 21D0254-04 | 3 | 1 | 4/15/2021 5:11:58 PM | TURNER\PEService |
| 107 | 21D0254-05 | 3 | 1 | 4/15/2021 5:15:30 PM | TURNER\PEService |
| 108 | CCB | 3 | 1 | 4/15/2021 5:19:02 PM | TURNER\PEService |
| 109 | CCV | 3 | 1 | 4/15/2021 5:22:33 PM | TURNER\PEService |

Handwritten signature and date: [Signature] 4/16/21

iCAP RQ Report

4/16/2021 9:14:58 AM



Calibration Summary

| Index | 5 |
|--------------|-------------------------|
| Label | Cal Std 4 |
| Category | Correlation Coefficient |
| 6Li (STDR) | |
| 9Be (STDR) | .9999859 |
| 27Al (STDR) | .9999904 |
| 45Sc (STDR) | |
| 45Sc (KEDR) | |
| 51V (STDR) | .9998932 |
| 51V (KEDR) | .9999988 |
| 52Cr (STDR) | .9999459 |
| 52Cr (KEDR) | .9999824 |
| 55Mn (STDR) | .9999674 |
| 55Mn (KEDR) | .9999956 |
| 59Co (STDR) | .9999594 |
| 59Co (KEDR) | .9999725 |
| 60Ni (STDR) | .9999229 |
| 60Ni (KEDR) | .9999259 |
| 63Cu (STDR) | .9998841 |
| 63Cu (KEDR) | .9998754 |
| 66Zn (STDR) | .9995226 |
| 66Zn (KEDR) | .999514 |
| 74Ge (STDR) | |
| 74Ge (KEDR) | |
| 75As (STDR) | .9999765 |
| 75As (KEDR) | .9998122 |
| 82Se (STDR) | .9999252 |
| 82Se (KEDR) | .9998487 |
| 98Mo (STDR) | .9999844 |
| 98Mo (KEDR) | .9998599 |
| 107Ag (STDR) | .9999599 |
| 107Ag (KEDR) | .9998162 |
| 111Cd (STDR) | .9999739 |
| 111Cd (KEDR) | .9999052 |
| 115In (STDR) | |
| 115In (KEDR) | |
| 121Sb (STDR) | .999953 |
| 121Sb (KEDR) | .9999645 |
| 137Ba (STDR) | .9999576 |
| 137Ba (KEDR) | .9999663 |
| 205Tl (STDR) | .9998788 |
| 205Tl (KEDR) | .9999925 |
| 208Pb (STDR) | .9999335 |
| 208Pb (KEDR) | .9999731 |
| 209Bi (STDR) | |
| 209Bi (KEDR) | |
| 238U (STDR) | .9999387 |
| 238U (KEDR) | .9999957 |

W
4/16/21

Turner Report Sample Summary

4/15/2021 10:36:17 AM
iCAP RQ ICP-MS



Analysis index: 1
Analysis name: Blank
Analysis started at: 4/15/2021 10:32:51 AM

| Category | Intensity average | Raw Intensity average |
|--------------------|-------------------|-----------------------|
| 6Li (STDR) [cps] | 107,519 | 107,519 |
| 9Be (STDR) [cps] | 73 | 73 |
| 27Al (STDR) [cps] | 20,624 | 20,624 |
| 45Sc (STDR) [cps] | 288,324 | 324,203 |
| 45Sc (KEDR) [cps] | 10,306 | 10,306 |
| 51V (STDR) [cps] | 1,850 | 45,438 |
| 51V (KEDR) [cps] | 72 | 72 |
| 55Mn (STDR) [cps] | 2,815 | 2,815 |
| 55Mn (KEDR) [cps] | 118 | 118 |
| 52Cr (STDR) [cps] | 11,610 | 11,814 |
| 52Cr (KEDR) [cps] | 179 | 179 |
| 59Co (STDR) [cps] | 337 | 337 |
| 59Co (KEDR) [cps] | 31 | 31 |
| 60Ni (STDR) [cps] | 513 | 513 |
| 60Ni (KEDR) [cps] | 158 | 158 |
| 63Cu (STDR) [cps] | 2,372 | 2,372 |
| 63Cu (KEDR) [cps] | 440 | 440 |
| 66Zn (STDR) [cps] | 6,342 | 6,342 |
| 66Zn (KEDR) [cps] | 1,693 | 1,693 |
| 74Ge (STDR) [cps] | 585,705 | 585,818 |
| 74Ge (KEDR) [cps] | 92,930 | 92,930 |
| 75As (STDR) [cps] | -828 | 1,783 |
| 75As (KEDR) [cps] | 7 | 7 |
| 82Se (STDR) [cps] | -267 | 163 |
| 82Se (KEDR) [cps] | 13 | 13 |
| 98Mo (STDR) [cps] | 231 | 233 |
| 98Mo (KEDR) [cps] | 128 | 128 |
| 107Ag (STDR) [cps] | 203 | 203 |
| 107Ag (KEDR) [cps] | 153 | 153 |
| 111Cd (STDR) [cps] | 424 | 0 |
| 111Cd (KEDR) [cps] | 1 | 1 |
| 115In (STDR) [cps] | 857,052 | 857,057 |
| 115In (KEDR) [cps] | 194,294 | 194,294 |
| 121Sb (STDR) [cps] | 83 | 83 |
| 121Sb (KEDR) [cps] | 19 | 19 |
| 137Ba (STDR) [cps] | 190 | 190 |
| 137Ba (KEDR) [cps] | 57 | 57 |
| 205Tl (STDR) [cps] | 1,087 | 1,087 |
| 205Tl (KEDR) [cps] | 1,117 | 1,117 |
| 208Pb (STDR) [cps] | 1,020 | 557 |
| 208Pb (KEDR) [cps] | 640 | 640 |
| 209Bi (STDR) [cps] | 1,096,732 | 1,096,732 |
| 209Bi (KEDR) [cps] | 1,064,727 | 1,064,727 |
| 238U (STDR) [cps] | 107 | 107 |
| 238U (KEDR) [cps] | 133 | 133 |

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4/16/21

Turner Report Sample Summary

4/15/2021 10:39:44 AM
iCAP RQ ICP-MS



W. H. H. H. H.

Analysis index: 2
Analysis name: Cal Std 1
Analysis started at: 4/15/2021 10:36:17 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 100.894 % | 0.6 % | 108,481 cps | 108,481 cps |
| 9Be (STDR) | 1.000 ppb | 0.7 % | 5,650 cps | 5,650 cps |
| 27Al (STDR) | 1.000 ppb | 1.4 % | 57,691 cps | 57,691 cps |
| 45Sc (STDR) | 101.157 % | 1.9 % | 291,661 cps | 326,054 cps |
| 45Sc (KEDR) | 103.439 % | 1.0 % | 10,660 cps | 10,660 cps |
| 51V (STDR) | 1.000 ppb | 2.3 % | 51,916 cps | 85,124 cps |
| 51V (KEDR) | 1.000 ppb | 0.7 % | 7,210 cps | 7,210 cps |
| 55Mn (STDR) | 1.000 ppb | 1.0 % | 75,957 cps | 75,957 cps |
| 55Mn (KEDR) | 1.000 ppb | 1.9 % | 5,494 cps | 5,494 cps |
| 52Cr (STDR) | 1.000 ppb | 0.9 % | 59,364 cps | 59,533 cps |
| 52Cr (KEDR) | 1.000 ppb | 1.2 % | 11,071 cps | 11,071 cps |
| 59Co (STDR) | 1.000 ppb | 1.4 % | 55,932 cps | 55,932 cps |
| 59Co (KEDR) | 1.000 ppb | 1.3 % | 19,569 cps | 19,569 cps |
| 60Ni (STDR) | 1.000 ppb | 4.8 % | 13,129 cps | 13,129 cps |
| 60Ni (KEDR) | 1.000 ppb | 3.3 % | 5,570 cps | 5,570 cps |
| 63Cu (STDR) | 1.000 ppb | 1.5 % | 33,590 cps | 33,590 cps |
| 63Cu (KEDR) | 1.000 ppb | 1.1 % | 15,696 cps | 15,696 cps |
| 66Zn (STDR) | 1.000 ppb | 5.0 % | 26,969 cps | 26,969 cps |
| 66Zn (KEDR) | 1.000 ppb | 2.6 % | 7,349 cps | 7,349 cps |
| 74Ge (STDR) | 100.753 % | 0.5 % | 590,115 cps | 590,298 cps |
| 74Ge (KEDR) | 100.402 % | 0.6 % | 93,303 cps | 93,303 cps |
| 75As (STDR) | 1.000 ppb | 3.0 % | 8,791 cps | 10,723 cps |
| 75As (KEDR) | 1.000 ppb | 1.9 % | 1,437 cps | 1,437 cps |
| 82Se (STDR) | 1.000 ppb | 17.1 % | 732 cps | 1,168 cps |
| 82Se (KEDR) | 1.000 ppb | 9.6 % | 74 cps | 74 cps |
| 98Mo (STDR) | 1.000 ppb | 2.7 % | 30,311 cps | 30,312 cps |
| 98Mo (KEDR) | 1.000 ppb | 0.6 % | 17,652 cps | 17,652 cps |
| 107Ag (STDR) | 1.000 ppb | 1.6 % | 55,259 cps | 55,259 cps |
| 107Ag (KEDR) | 1.000 ppb | 0.8 % | 39,356 cps | 39,356 cps |
| 111Cd (STDR) | 1.000 ppb | 1.5 % | 14,697 cps | 14,447 cps |
| 111Cd (KEDR) | 1.000 ppb | 2.7 % | 6,927 cps | 6,927 cps |
| 115In (STDR) | 100.427 % | 0.9 % | 860,708 cps | 860,722 cps |
| 115In (KEDR) | 101.955 % | 1.1 % | 198,094 cps | 198,094 cps |
| 121Sb (STDR) | 1.000 ppb | 0.7 % | 49,325 cps | 49,326 cps |
| 121Sb (KEDR) | 1.000 ppb | 0.5 % | 15,273 cps | 15,273 cps |
| 137Ba (STDR) | 1.000 ppb | 2.3 % | 19,841 cps | 19,841 cps |
| 137Ba (KEDR) | 1.000 ppb | 2.0 % | 5,455 cps | 5,455 cps |
| 205Tl (STDR) | 1.000 ppb | 2.3 % | 168,417 cps | 168,417 cps |
| 205Tl (KEDR) | 1.000 ppb | 1.3 % | 176,981 cps | 176,981 cps |
| 208Pb (STDR) | 1.000 ppb | 1.3 % | 233,345 cps | 124,042 cps |
| 208Pb (KEDR) | 1.000 ppb | 0.3 % | 129,182 cps | 129,182 cps |
| 209Bi (STDR) | 101.031 % | 0.9 % | 1,108,038 cps | 1,108,038 cps |
| 209Bi (KEDR) | 102.665 % | 0.6 % | 1,093,101 cps | 1,093,101 cps |
| 238U (STDR) | 1.000 ppb | 0.3 % | 255,319 cps | 255,319 cps |
| 238U (KEDR) | 1.000 ppb | 0.0 % | 289,222 cps | 289,222 cps |

Turner Report Sample Summary

4/15/2021 10:43:11 AM
iCAP RQ ICP-MS



W. C. H.

Analysis index: 3
Analysis name: Cal Std 2
Analysis started at: 4/15/2021 10:39:44 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.733 % | 1.6 % | 107,232 cps | 107,232 cps |
| 9Be (STDR) | 10.003 ppb | 2.2 % | 57,060 cps | 57,060 cps |
| 27Al (STDR) | 9.974 ppb | 0.2 % | 308,156 cps | 308,156 cps |
| 45Sc (STDR) | 99.231 % | 0.5 % | 286,108 cps | 319,175 cps |
| 45Sc (KEDR) | 101.869 % | 1.8 % | 10,499 cps | 10,499 cps |
| 51V (STDR) | 9.994 ppb | 1.1 % | 466,207 cps | 501,490 cps |
| 51V (KEDR) | 9.997 ppb | 1.3 % | 68,715 cps | 68,715 cps |
| 55Mn (STDR) | 9.996 ppb | 0.8 % | 696,311 cps | 696,311 cps |
| 55Mn (KEDR) | 9.993 ppb | 2.2 % | 49,751 cps | 49,751 cps |
| 52Cr (STDR) | 9.995 ppb | 1.1 % | 459,341 cps | 459,465 cps |
| 52Cr (KEDR) | 9.995 ppb | 1.9 % | 102,732 cps | 102,732 cps |
| 59Co (STDR) | 9.997 ppb | 1.2 % | 534,478 cps | 534,478 cps |
| 59Co (KEDR) | 9.999 ppb | 0.8 % | 191,917 cps | 191,917 cps |
| 60Ni (STDR) | 9.996 ppb | 1.6 % | 120,364 cps | 120,364 cps |
| 60Ni (KEDR) | 9.998 ppb | 0.9 % | 52,749 cps | 52,749 cps |
| 63Cu (STDR) | 9.999 ppb | 1.6 % | 309,364 cps | 309,364 cps |
| 63Cu (KEDR) | 10.000 ppb | 0.9 % | 151,836 cps | 151,836 cps |
| 66Zn (STDR) | 9.949 ppb | 0.3 % | 140,319 cps | 140,319 cps |
| 66Zn (KEDR) | 9.944 ppb | 0.6 % | 37,462 cps | 37,462 cps |
| 74Ge (STDR) | 100.306 % | 0.7 % | 587,497 cps | 588,563 cps |
| 74Ge (KEDR) | 99.948 % | 1.3 % | 92,881 cps | 92,881 cps |
| 75As (STDR) | 10.001 ppb | 1.0 % | 96,323 cps | 95,964 cps |
| 75As (KEDR) | 10.001 ppb | 1.2 % | 14,411 cps | 14,411 cps |
| 82Se (STDR) | 10.011 ppb | 1.4 % | 10,961 cps | 11,345 cps |
| 82Se (KEDR) | 10.012 ppb | 6.7 % | 699 cps | 699 cps |
| 98Mo (STDR) | 9.996 ppb | 0.1 % | 287,172 cps | 287,173 cps |
| 98Mo (KEDR) | 9.997 ppb | 1.0 % | 167,805 cps | 167,805 cps |
| 107Ag (STDR) | 9.998 ppb | 1.0 % | 534,526 cps | 534,526 cps |
| 107Ag (KEDR) | 9.998 ppb | 0.1 % | 380,263 cps | 380,263 cps |
| 111Cd (STDR) | 10.004 ppb | 0.9 % | 147,080 cps | 147,128 cps |
| 111Cd (KEDR) | 10.003 ppb | 0.8 % | 70,742 cps | 70,742 cps |
| 115In (STDR) | 98.875 % | 0.7 % | 847,407 cps | 847,424 cps |
| 115In (KEDR) | 100.686 % | 0.7 % | 195,627 cps | 195,627 cps |
| 121Sb (STDR) | 10.001 ppb | 0.5 % | 490,557 cps | 490,557 cps |
| 121Sb (KEDR) | 10.000 ppb | 0.5 % | 150,975 cps | 150,975 cps |
| 137Ba (STDR) | 9.999 ppb | 1.3 % | 191,898 cps | 191,898 cps |
| 137Ba (KEDR) | 10.000 ppb | 1.2 % | 53,618 cps | 53,618 cps |
| 205Tl (STDR) | 9.998 ppb | 1.7 % | 1,626,975 cps | 1,626,975 cps |
| 205Tl (KEDR) | 9.998 ppb | 1.5 % | 1,720,001 cps | 1,720,001 cps |
| 208Pb (STDR) | 9.997 ppb | 0.9 % | 2,227,203 cps | 1,183,628 cps |
| 208Pb (KEDR) | 9.997 ppb | 1.2 % | 1,251,606 cps | 1,251,606 cps |
| 209Bi (STDR) | 99.907 % | 1.1 % | 1,095,707 cps | 1,095,707 cps |
| 209Bi (KEDR) | 102.845 % | 0.7 % | 1,095,015 cps | 1,095,015 cps |
| 238U (STDR) | 9.999 ppb | 3.3 % | 2,497,367 cps | 2,497,367 cps |
| 238U (KEDR) | 9.997 ppb | 1.8 % | 2,815,101 cps | 2,815,101 cps |

Turner Report Sample Summary

4/15/2021 10:46:40 AM
iCAP RQ ICP-MS



W. Ulrich

Analysis index: 4
Analysis name: Cal Std 3
Analysis started at: 4/15/2021 10:43:12 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.442 % | 0.8 % | 106,919 cps | 106,919 cps |
| 9Be (STDR) | 49.978 ppb | 0.9 % | 280,459 cps | 280,459 cps |
| 27Al (STDR) | 49.962 ppb | 0.8 % | 1,416,040 cps | 1,416,040 cps |
| 45Sc (STDR) | 97.073 % | 0.8 % | 279,885 cps | 311,776 cps |
| 45Sc (KEDR) | 98.365 % | 2.0 % | 10,137 cps | 10,137 cps |
| 51V (STDR) | 50.026 ppb | 0.3 % | 2,297,894 cps | 2,341,184 cps |
| 51V (KEDR) | 50.025 ppb | 1.9 % | 336,745 cps | 336,745 cps |
| 55Mn (STDR) | 50.060 ppb | 1.1 % | 3,485,437 cps | 3,485,437 cps |
| 55Mn (KEDR) | 50.036 ppb | 1.4 % | 245,434 cps | 245,434 cps |
| 52Cr (STDR) | 50.073 ppb | 1.0 % | 2,280,101 cps | 2,280,219 cps |
| 52Cr (KEDR) | 50.031 ppb | 1.3 % | 505,104 cps | 505,104 cps |
| 59Co (STDR) | 50.067 ppb | 0.9 % | 2,687,950 cps | 2,687,950 cps |
| 59Co (KEDR) | 50.018 ppb | 1.7 % | 940,640 cps | 940,640 cps |
| 60Ni (STDR) | 50.050 ppb | 0.4 % | 597,807 cps | 597,807 cps |
| 60Ni (KEDR) | 50.033 ppb | 1.0 % | 260,166 cps | 260,166 cps |
| 63Cu (STDR) | 49.999 ppb | 0.6 % | 1,489,220 cps | 1,489,220 cps |
| 63Cu (KEDR) | 49.995 ppb | 0.7 % | 735,024 cps | 735,024 cps |
| 66Zn (STDR) | 49.550 ppb | 0.8 % | 534,375 cps | 534,375 cps |
| 66Zn (KEDR) | 49.546 ppb | 0.6 % | 143,437 cps | 143,437 cps |
| 74Ge (STDR) | 96.689 % | 0.6 % | 566,310 cps | 570,673 cps |
| 74Ge (KEDR) | 97.745 % | 1.0 % | 90,834 cps | 90,834 cps |
| 75As (STDR) | 49.965 ppb | 0.8 % | 459,256 cps | 447,812 cps |
| 75As (KEDR) | 49.984 ppb | 0.4 % | 69,856 cps | 69,856 cps |
| 82Se (STDR) | 49.845 ppb | 1.1 % | 49,925 cps | 50,383 cps |
| 82Se (KEDR) | 49.848 ppb | 1.2 % | 3,116 cps | 3,116 cps |
| 98Mo (STDR) | 50.047 ppb | 1.6 % | 1,431,332 cps | 1,431,335 cps |
| 98Mo (KEDR) | 50.054 ppb | 0.5 % | 842,151 cps | 842,151 cps |
| 107Ag (STDR) | 50.119 ppb | 1.1 % | 2,778,974 cps | 2,778,974 cps |
| 107Ag (KEDR) | 50.086 ppb | 1.3 % | 1,940,409 cps | 1,940,409 cps |
| 111Cd (STDR) | 49.971 ppb | 0.5 % | 706,525 cps | 708,769 cps |
| 111Cd (KEDR) | 49.985 ppb | 1.0 % | 342,245 cps | 342,245 cps |
| 115In (STDR) | 96.823 % | 0.6 % | 829,826 cps | 829,845 cps |
| 115In (KEDR) | 98.173 % | 0.3 % | 190,745 cps | 190,745 cps |
| 121Sb (STDR) | 50.054 ppb | 0.6 % | 2,471,478 cps | 2,471,479 cps |
| 121Sb (KEDR) | 50.015 ppb | 0.6 % | 742,481 cps | 742,481 cps |
| 137Ba (STDR) | 50.033 ppb | 0.3 % | 957,318 cps | 957,318 cps |
| 137Ba (KEDR) | 50.009 ppb | 1.6 % | 263,212 cps | 263,212 cps |
| 205Tl (STDR) | 50.073 ppb | 1.7 % | 8,341,706 cps | 8,341,706 cps |
| 205Tl (KEDR) | 49.952 ppb | 1.0 % | 8,289,340 cps | 8,289,340 cps |
| 208Pb (STDR) | 50.059 ppb | 1.5 % | 11,339,187 cps | 5,988,584 cps |
| 208Pb (KEDR) | 49.960 ppb | 1.7 % | 6,059,906 cps | 6,059,906 cps |
| 209Bi (STDR) | 98.656 % | 0.3 % | 1,081,990 cps | 1,081,990 cps |
| 209Bi (KEDR) | 101.681 % | 1.1 % | 1,082,631 cps | 1,082,631 cps |
| 238U (STDR) | 50.125 ppb | 0.9 % | 13,176,796 cps | 13,176,796 cps |
| 238U (KEDR) | 50.035 ppb | 0.6 % | 14,175,121 cps | 14,175,121 cps |

Turner Report Sample Summary

4/15/2021 10:50:08 AM
iCAP RQ ICP-MS



W. U. U. U. U.

Analysis index: 5
Analysis name: Cal Std 4
Analysis started at: 4/15/2021 10:46:40 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 95.501 % | 0.2 % | 102,682 cps | 102,682 cps |
| 9Be (STDR) | 99.800 ppb | 0.3 % | 533,823 cps | 533,823 cps |
| 27Al (STDR) | 99.916 ppb | 1.2 % | 2,697,173 cps | 2,697,173 cps |
| 45Sc (STDR) | 93.594 % | 0.5 % | 269,854 cps | 300,489 cps |
| 45Sc (KEDR) | 93.631 % | 1.7 % | 9,650 cps | 9,650 cps |
| 51V (STDR) | 100.570 ppb | 0.7 % | 4,547,629 cps | 4,614,215 cps |
| 51V (KEDR) | 99.992 ppb | 1.0 % | 644,387 cps | 644,387 cps |
| 55Mn (STDR) | 99.717 ppb | 0.3 % | 6,609,003 cps | 6,609,003 cps |
| 55Mn (KEDR) | 99.924 ppb | 0.7 % | 469,763 cps | 469,763 cps |
| 52Cr (STDR) | 99.632 ppb | 0.4 % | 4,297,923 cps | 4,298,026 cps |
| 52Cr (KEDR) | 99.781 ppb | 1.1 % | 957,457 cps | 957,457 cps |
| 59Co (STDR) | 99.685 ppb | 0.4 % | 5,086,287 cps | 5,086,287 cps |
| 59Co (KEDR) | 99.713 ppb | 0.6 % | 1,790,350 cps | 1,790,350 cps |
| 60Ni (STDR) | 99.530 ppb | 0.6 % | 1,122,632 cps | 1,122,632 cps |
| 60Ni (KEDR) | 99.531 ppb | 1.1 % | 491,069 cps | 491,069 cps |
| 63Cu (STDR) | 99.406 ppb | 1.9 % | 2,780,916 cps | 2,780,916 cps |
| 63Cu (KEDR) | 99.385 ppb | 1.4 % | 1,382,762 cps | 1,382,762 cps |
| 66Zn (STDR) | 99.530 ppb | 0.4 % | 1,007,319 cps | 1,007,319 cps |
| 66Zn (KEDR) | 99.539 ppb | 0.9 % | 273,616 cps | 273,616 cps |
| 74Ge (STDR) | 92.780 % | 1.2 % | 543,417 cps | 551,610 cps |
| 74Ge (KEDR) | 95.744 % | 0.4 % | 88,974 cps | 88,974 cps |
| 75As (STDR) | 99.745 ppb | 0.7 % | 872,075 cps | 848,314 cps |
| 75As (KEDR) | 99.246 ppb | 0.7 % | 132,019 cps | 132,019 cps |
| 82Se (STDR) | 99.696 ppb | 0.3 % | 95,084 cps | 95,512 cps |
| 82Se (KEDR) | 99.429 ppb | 3.5 % | 5,942 cps | 5,942 cps |
| 98Mo (STDR) | 99.812 ppb | 1.5 % | 2,730,419 cps | 2,730,421 cps |
| 98Mo (KEDR) | 99.359 ppb | 1.2 % | 1,595,045 cps | 1,595,045 cps |
| 107Ag (STDR) | 99.785 ppb | 1.5 % | 5,295,200 cps | 5,295,200 cps |
| 107Ag (KEDR) | 99.280 ppb | 1.5 % | 3,656,556 cps | 3,656,556 cps |
| 111Cd (STDR) | 99.727 ppb | 0.5 % | 1,346,764 cps | 1,352,788 cps |
| 111Cd (KEDR) | 99.464 ppb | 1.2 % | 651,779 cps | 651,779 cps |
| 115In (STDR) | 93.545 % | 1.0 % | 801,730 cps | 801,748 cps |
| 115In (KEDR) | 95.868 % | 1.0 % | 186,267 cps | 186,267 cps |
| 121Sb (STDR) | 100.360 ppb | 0.3 % | 4,858,784 cps | 4,858,785 cps |
| 121Sb (KEDR) | 99.673 ppb | 1.0 % | 1,426,437 cps | 1,426,437 cps |
| 137Ba (STDR) | 99.649 ppb | 0.9 % | 1,822,940 cps | 1,822,940 cps |
| 137Ba (KEDR) | 99.680 ppb | 1.5 % | 505,429 cps | 505,429 cps |
| 205Tl (STDR) | 99.417 ppb | 1.7 % | 15,844,295 cps | 15,844,295 cps |
| 205Tl (KEDR) | 99.898 ppb | 0.5 % | 16,045,003 cps | 16,045,003 cps |
| 208Pb (STDR) | 99.571 ppb | 1.8 % | 21,712,237 cps | 11,427,152 cps |
| 208Pb (KEDR) | 99.730 ppb | 0.7 % | 11,631,177 cps | 11,631,177 cps |
| 209Bi (STDR) | 96.557 % | 0.6 % | 1,058,976 cps | 1,058,976 cps |
| 209Bi (KEDR) | 98.779 % | 0.7 % | 1,051,724 cps | 1,051,724 cps |
| 238U (STDR) | 99.679 ppb | 0.1 % | 25,333,631 cps | 25,333,631 cps |
| 238U (KEDR) | 100.081 ppb | 1.5 % | 27,629,846 cps | 27,629,846 cps |

Turner Report Sample Summary

4/15/2021 10:53:35 AM
iCAP RQ ICP-MS



W
4/16/21

Analysis index: 6
Analysis name: ICB
Analysis started at: 4/15/2021 10:50:09 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 95.443 % | 0.8 % | 102,620 cps | 102,620 cps |
| 9Be (STDR) | 0.006 ppb | 68.4 % | 103 cps | 103 cps |
| 27Al (STDR) | -0.306 ppb | 3.1 % | 11,218 cps | 11,218 cps |
| 45Sc (STDR) | 92.370 % | 0.7 % | 266,324 cps | 295,947 cps |
| 45Sc (KEDR) | 93.833 % | 1.5 % | 9,670 cps | 9,670 cps |
| 51V (STDR) | 0.054 ppb | 22.1 % | 4,127 cps | 19,285 cps |
| 51V (KEDR) | 0.022 ppb | 3.7 % | 206 cps | 206 cps |
| 55Mn (STDR) | 0.009 ppb | 38.6 % | 3,200 cps | 3,200 cps |
| 55Mn (KEDR) | 0.011 ppb | 18.1 % | 163 cps | 163 cps |
| 52Cr (STDR) | -0.018 ppb | 29.5 % | 9,972 cps | 10,064 cps |
| 52Cr (KEDR) | 0.014 ppb | 35.4 % | 303 cps | 303 cps |
| 59Co (STDR) | 0.009 ppb | 6.9 % | 742 cps | 742 cps |
| 59Co (KEDR) | 0.013 ppb | 18.7 % | 262 cps | 262 cps |
| 60Ni (STDR) | 0.005 ppb | 129.4 % | 527 cps | 527 cps |
| 60Ni (KEDR) | 0.017 ppb | 37.6 % | 228 cps | 228 cps |
| 63Cu (STDR) | 0.023 ppb | 25.2 % | 2,825 cps | 2,825 cps |
| 63Cu (KEDR) | 0.014 ppb | 13.1 % | 598 cps | 598 cps |
| 66Zn (STDR) | 0.026 ppb | 136.9 % | 6,127 cps | 6,127 cps |
| 66Zn (KEDR) | 0.015 ppb | 280.6 % | 1,602 cps | 1,602 cps |
| 74Ge (STDR) | 92.487 % | 0.9 % | 541,702 cps | 541,780 cps |
| 74Ge (KEDR) | 91.594 % | 0.7 % | 85,117 cps | 85,117 cps |
| 75As (STDR) | 0.032 ppb | 106.3 % | -492 cps | 1,073 cps |
| 75As (KEDR) | 0.021 ppb | 24.6 % | 33 cps | 33 cps |
| 82Se (STDR) | 0.090 ppb | 25.8 % | -161 cps | 202 cps |
| 82Se (KEDR) | -0.039 ppb | 223.5 % | 10 cps | 10 cps |
| 98Mo (STDR) | 0.122 ppb | 7.6 % | 3,524 cps | 3,526 cps |
| 98Mo (KEDR) | 0.141 ppb | 11.5 % | 2,309 cps | 2,309 cps |
| 107Ag (STDR) | 0.019 ppb | 5.8 % | 1,217 cps | 1,217 cps |
| 107Ag (KEDR) | 0.027 ppb | 17.8 % | 1,103 cps | 1,103 cps |
| 111Cd (STDR) | 0.014 ppb | 30.4 % | 582 cps | 163 cps |
| 111Cd (KEDR) | 0.013 ppb | 4.8 % | 82 cps | 82 cps |
| 115In (STDR) | 92.993 % | 0.6 % | 796,998 cps | 797,002 cps |
| 115In (KEDR) | 93.114 % | 1.3 % | 180,915 cps | 180,915 cps |
| 121Sb (STDR) | 0.014 ppb | 9.9 % | 768 cps | 768 cps |
| 121Sb (KEDR) | 0.020 ppb | 2.5 % | 302 cps | 302 cps |
| 137Ba (STDR) | 0.008 ppb | 14.2 % | 322 cps | 322 cps |
| 137Ba (KEDR) | 0.010 ppb | 11.0 % | 104 cps | 104 cps |
| 205Tl (STDR) | 0.016 ppb | 6.2 % | 3,639 cps | 3,639 cps |
| 205Tl (KEDR) | 0.023 ppb | 6.5 % | 4,609 cps | 4,609 cps |
| 208Pb (STDR) | 0.011 ppb | 9.1 % | 3,347 cps | 1,788 cps |
| 208Pb (KEDR) | 0.015 ppb | 5.0 % | 2,335 cps | 2,335 cps |
| 209Bi (STDR) | 96.156 % | 0.6 % | 1,054,573 cps | 1,054,573 cps |
| 209Bi (KEDR) | 96.269 % | 0.4 % | 1,025,000 cps | 1,025,000 cps |
| 238U (STDR) | 0.013 ppb | 4.3 % | 3,279 cps | 3,279 cps |
| 238U (KEDR) | 0.017 ppb | 7.2 % | 4,653 cps | 4,653 cps |

Turner Report Sample Summary

4/15/2021 10:57:03 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 7
Analysis name: IPC
Analysis started at: 4/15/2021 10:53:35 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 95.831 % | 0.4 % | 103,037 cps | 103,037 cps |
| 9Be (STDR) | 49.141 ppb | 0.6 % | 263,463 cps | 263,463 cps |
| 27Al (STDR) | 49.533 ppb | 0.8 % | 1,339,407 cps | 1,339,407 cps |
| 45Sc (STDR) | 92.323 % | 0.6 % | 266,191 cps | 295,412 cps |
| 45Sc (KEDR) | 93.680 % | 2.0 % | 9,655 cps | 9,655 cps |
| 51V (STDR) | 50.198 ppb | 2.2 % | 2,247,569 cps | 2,289,045 cps |
| 51V (KEDR) | 50.196 ppb | 1.2 % | 322,078 cps | 322,078 cps |
| 55Mn (STDR) | 50.037 ppb | 0.2 % | 3,291,538 cps | 3,291,538 cps |
| 55Mn (KEDR) | 50.621 ppb | 2.4 % | 236,212 cps | 236,212 cps |
| 52Cr (STDR) | 50.312 ppb | 0.9 % | 2,154,939 cps | 2,155,018 cps |
| 52Cr (KEDR) | 50.406 ppb | 1.5 % | 481,210 cps | 481,210 cps |
| 59Co (STDR) | 50.398 ppb | 1.0 % | 2,557,443 cps | 2,557,443 cps |
| 59Co (KEDR) | 50.533 ppb | 0.9 % | 897,577 cps | 897,577 cps |
| 60Ni (STDR) | 50.684 ppb | 0.8 % | 569,091 cps | 569,091 cps |
| 60Ni (KEDR) | 50.606 ppb | 1.2 % | 246,856 cps | 246,856 cps |
| 63Cu (STDR) | 50.540 ppb | 0.9 % | 1,410,308 cps | 1,410,308 cps |
| 63Cu (KEDR) | 50.721 ppb | 1.2 % | 696,083 cps | 696,083 cps |
| 66Zn (STDR) | 49.914 ppb | 0.1 % | 507,330 cps | 507,330 cps |
| 66Zn (KEDR) | 50.367 ppb | 0.4 % | 136,985 cps | 136,985 cps |
| 74Ge (STDR) | 93.070 % | 0.7 % | 545,116 cps | 549,314 cps |
| 74Ge (KEDR) | 93.595 % | 0.4 % | 86,978 cps | 86,978 cps |
| 75As (STDR) | 49.595 ppb | 0.7 % | 434,515 cps | 425,788 cps |
| 75As (KEDR) | 50.757 ppb | 0.9 % | 66,029 cps | 66,029 cps |
| 82Se (STDR) | 49.480 ppb | 1.5 % | 47,135 cps | 47,584 cps |
| 82Se (KEDR) | 50.564 ppb | 4.8 % | 2,970 cps | 2,970 cps |
| 98Mo (STDR) | 50.110 ppb | 0.6 % | 1,368,036 cps | 1,368,038 cps |
| 98Mo (KEDR) | 50.835 ppb | 0.2 % | 805,214 cps | 805,214 cps |
| 107Ag (STDR) | 50.269 ppb | 0.4 % | 2,656,988 cps | 2,656,988 cps |
| 107Ag (KEDR) | 50.905 ppb | 0.5 % | 1,856,197 cps | 1,856,197 cps |
| 111Cd (STDR) | 50.516 ppb | 1.0 % | 679,099 cps | 681,081 cps |
| 111Cd (KEDR) | 50.497 ppb | 0.8 % | 328,089 cps | 328,089 cps |
| 115In (STDR) | 93.019 % | 1.4 % | 797,221 cps | 797,239 cps |
| 115In (KEDR) | 95.192 % | 0.9 % | 184,952 cps | 184,952 cps |
| 121Sb (STDR) | 49.634 ppb | 1.2 % | 2,390,198 cps | 2,390,198 cps |
| 121Sb (KEDR) | 50.492 ppb | 1.8 % | 717,202 cps | 717,202 cps |
| 137Ba (STDR) | 50.628 ppb | 1.7 % | 922,248 cps | 922,248 cps |
| 137Ba (KEDR) | 51.092 ppb | 1.1 % | 256,930 cps | 256,930 cps |
| 205Tl (STDR) | 50.552 ppb | 1.5 % | 8,055,828 cps | 8,055,828 cps |
| 205Tl (KEDR) | 50.821 ppb | 0.3 % | 8,064,296 cps | 8,064,296 cps |
| 208Pb (STDR) | 50.504 ppb | 0.8 % | 11,014,171 cps | 5,833,673 cps |
| 208Pb (KEDR) | 50.676 ppb | 0.6 % | 5,838,193 cps | 5,838,193 cps |
| 209Bi (STDR) | 96.574 % | 1.8 % | 1,059,155 cps | 1,059,155 cps |
| 209Bi (KEDR) | 97.562 % | 0.4 % | 1,038,766 cps | 1,038,766 cps |
| 238U (STDR) | 50.374 ppb | 1.2 % | 12,803,975 cps | 12,803,975 cps |
| 238U (KEDR) | 50.824 ppb | 0.8 % | 13,858,560 cps | 13,858,560 cps |

Turner Report Sample Summary

4/15/2021 11:00:32 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 8
Analysis name: ICV
Analysis started at: 4/15/2021 10:57:03 AM

Kevin

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 93.902 % | 0.4 % | 100,963 cps | 100,963 cps |
| 9Be (STDR) | 46.377 ppb | 1.1 % | 243,779 cps | 243,779 cps |
| 27Al (STDR) | 92.949 ppb | 0.7 % | 2,456,253 cps | 2,456,253 cps |
| 45Sc (STDR) | 91.174 % | 1.1 % | 262,877 cps | 292,081 cps |
| 45Sc (KEDR) | 93.995 % | 1.2 % | 9,687 cps | 9,687 cps |
| 51V (STDR) | 46.776 ppb | 1.7 % | 2,066,041 cps | 2,099,102 cps |
| 51V (KEDR) | 46.180 ppb | 0.7 % | 296,642 cps | 296,642 cps |
| 55Mn (STDR) | 46.675 ppb | 1.3 % | 3,026,968 cps | 3,026,968 cps |
| 55Mn (KEDR) | 46.585 ppb | 0.9 % | 217,305 cps | 217,305 cps |
| 52Cr (STDR) | 46.907 ppb | 1.5 % | 1,982,080 cps | 1,982,151 cps |
| 52Cr (KEDR) | 46.219 ppb | 0.3 % | 441,597 cps | 441,597 cps |
| 59Co (STDR) | 46.985 ppb | 1.9 % | 2,348,515 cps | 2,348,515 cps |
| 59Co (KEDR) | 46.068 ppb | 0.7 % | 816,609 cps | 816,609 cps |
| 60Ni (STDR) | 47.307 ppb | 0.5 % | 523,162 cps | 523,162 cps |
| 60Ni (KEDR) | 46.448 ppb | 0.6 % | 226,040 cps | 226,040 cps |
| 63Cu (STDR) | 47.478 ppb | 0.6 % | 1,304,210 cps | 1,304,210 cps |
| 63Cu (KEDR) | 46.852 ppb | 0.9 % | 640,719 cps | 640,719 cps |
| 66Zn (STDR) | 94.458 ppb | 1.4 % | 939,298 cps | 939,298 cps |
| 66Zn (KEDR) | 93.973 ppb | 1.0 % | 252,997 cps | 252,997 cps |
| 74Ge (STDR) | 91.434 % | 0.9 % | 535,533 cps | 539,490 cps |
| 74Ge (KEDR) | 92.851 % | 1.0 % | 86,286 cps | 86,286 cps |
| 75As (STDR) | 47.051 ppb | 0.8 % | 405,052 cps | 395,798 cps |
| 75As (KEDR) | 47.980 ppb | 1.1 % | 61,917 cps | 61,917 cps |
| 82Se (STDR) | 47.847 ppb | 1.2 % | 44,866 cps | 45,260 cps |
| 82Se (KEDR) | 48.533 ppb | 2.1 % | 2,827 cps | 2,827 cps |
| 98Mo (STDR) | 46.857 ppb | 1.1 % | 1,264,886 cps | 1,264,888 cps |
| 98Mo (KEDR) | 46.625 ppb | 1.8 % | 732,147 cps | 732,147 cps |
| 107Ag (STDR) | 45.986 ppb | 0.7 % | 2,408,921 cps | 2,408,921 cps |
| 107Ag (KEDR) | 45.804 ppb | 0.8 % | 1,655,699 cps | 1,655,699 cps |
| 111Cd (STDR) | 47.211 ppb | 1.0 % | 629,766 cps | 632,517 cps |
| 111Cd (KEDR) | 46.889 ppb | 0.9 % | 301,963 cps | 301,963 cps |
| 115In (STDR) | 92.388 % | 0.4 % | 791,814 cps | 791,840 cps |
| 115In (KEDR) | 94.358 % | 2.4 % | 183,332 cps | 183,332 cps |
| 121Sb (STDR) | 44.970 ↑ | 0.8 | 2,151,462 cps | 2,151,467 cps |
| 121Sb (KEDR) | 47.444 ppb | 2.1 % | 668,097 cps | 668,097 cps |
| 137Ba (STDR) | 47.112 ppb | 0.9 % | 852,979 cps | 852,979 cps |
| 137Ba (KEDR) | 47.526 ppb | 1.8 % | 237,160 cps | 237,160 cps |
| 205Tl (STDR) | 49.505 ppb | 1.4 % | 7,854,886 cps | 7,854,886 cps |
| 205Tl (KEDR) | 49.735 ppb | 1.6 % | 7,861,089 cps | 7,861,089 cps |
| 208Pb (STDR) | 46.627 ppb | 0.4 % | 10,125,160 cps | 5,365,203 cps |
| 208Pb (KEDR) | 46.804 ppb | 1.3 % | 5,371,987 cps | 5,371,987 cps |
| 209Bi (STDR) | 96.154 % | 0.4 % | 1,054,549 cps | 1,054,549 cps |
| 209Bi (KEDR) | 97.210 % | 1.1 % | 1,035,023 cps | 1,035,023 cps |
| 238U (STDR) | 47.994 ppb | 0.3 % | 12,146,874 cps | 12,146,874 cps |
| 238U (KEDR) | 48.477 ppb | 0.7 % | 13,170,431 cps | 13,170,431 cps |

Turner Report Sample Summary

4/15/2021 11:04:02 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 9
Analysis name: ICV
Analysis started at: 4/15/2021 11:00:32 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 94.254 % | 0.9 % | 101,341 cps | 101,341 cps |
| 9Be (STDR) | 46.274 ppb | 0.2 % | 244,012 cps | 244,012 cps |
| 27Al (STDR) | 92.282 ppb | 0.9 % | 2,437,953 cps | 2,437,953 cps |
| 45Sc (STDR) | 90.823 % | 0.8 % | 261,865 cps | 290,661 cps |
| 45Sc (KEDR) | 91.980 % | 1.0 % | 9,479 cps | 9,479 cps |
| 51V (STDR) | 47.228 ppb | 1.9 % | 2,077,911 cps | 2,109,084 cps |
| 51V (KEDR) | 46.875 ppb | 1.7 % | 295,037 cps | 295,037 cps |
| 55Mn (STDR) | 46.407 ppb | 0.8 % | 2,997,577 cps | 2,997,577 cps |
| 55Mn (KEDR) | 48.029 ppb | 0.8 % | 219,721 cps | 219,721 cps |
| 52Cr (STDR) | 46.604 ppb | 2.1 % | 1,961,616 cps | 1,961,684 cps |
| 52Cr (KEDR) | 46.810 ppb | 1.8 % | 438,311 cps | 438,311 cps |
| 59Co (STDR) | 46.660 ppb | 0.8 % | 2,322,871 cps | 2,322,871 cps |
| 59Co (KEDR) | 47.425 ppb | 0.3 % | 825,195 cps | 825,195 cps |
| 60Ni (STDR) | 46.804 ppb | 0.2 % | 515,509 cps | 515,509 cps |
| 60Ni (KEDR) | 47.615 ppb | 0.7 % | 227,506 cps | 227,506 cps |
| 63Cu (STDR) | 46.862 ppb | 1.2 % | 1,282,095 cps | 1,282,095 cps |
| 63Cu (KEDR) | 47.696 ppb | 0.7 % | 640,811 cps | 640,811 cps |
| 66Zn (STDR) | 93.809 ppb | 0.6 % | 929,104 cps | 929,104 cps |
| 66Zn (KEDR) | 94.896 ppb | 0.4 % | 251,149 cps | 251,149 cps |
| 74Ge (STDR) | 91.048 % | 0.4 % | 533,270 cps | 537,145 cps |
| 74Ge (KEDR) | 91.448 % | 0.6 % | 84,982 cps | 84,982 cps |
| 75As (STDR) | 47.214 ppb | 1.2 % | 404,655 cps | 394,078 cps |
| 75As (KEDR) | 48.320 ppb | 0.6 % | 61,432 cps | 61,432 cps |
| 82Se (STDR) | 47.749 ppb | 1.3 % | 44,518 cps | 44,906 cps |
| 82Se (KEDR) | 49.351 ppb | 1.4 % | 2,836 cps | 2,836 cps |
| 98Mo (STDR) | 46.480 ppb | 0.4 % | 1,244,031 cps | 1,244,033 cps |
| 98Mo (KEDR) | 46.850 ppb | 0.6 % | 728,285 cps | 728,285 cps |
| 107Ag (STDR) | 45.919 ppb | 0.9 % | 2,381,131 cps | 2,381,131 cps |
| 107Ag (KEDR) | 45.905 ppb | 0.7 % | 1,645,448 cps | 1,645,448 cps |
| 111Cd (STDR) | 47.151 ppb | 0.7 % | 622,172 cps | 624,768 cps |
| 111Cd (KEDR) | 46.719 ppb | 0.7 % | 298,596 cps | 298,596 cps |
| 115In (STDR) | 91.326 % | 0.9 % | 782,715 cps | 782,741 cps |
| 115In (KEDR) | 93.707 % | 0.4 % | 182,067 cps | 182,067 cps |
| 121Sb (STDR) | 45.328 ppb | 0.6 % | 2,143,795 cps | 2,143,797 cps |
| 121Sb (KEDR) | 47.464 ppb | 0.5 % | 664,201 cps | 664,201 cps |
| 137Ba (STDR) | 47.389 ppb | 1.0 % | 848,397 cps | 848,397 cps |
| 137Ba (KEDR) | 46.822 ppb | 1.3 % | 232,384 cps | 232,384 cps |
| 205Tl (STDR) | 49.367 ppb | 1.6 % | 7,753,710 cps | 7,753,710 cps |
| 205Tl (KEDR) | 49.677 ppb | 0.9 % | 7,838,748 cps | 7,838,748 cps |
| 208Pb (STDR) | 46.526 ppb | 1.0 % | 10,000,843 cps | 5,326,742 cps |
| 208Pb (KEDR) | 46.568 ppb | 0.6 % | 5,336,799 cps | 5,336,799 cps |
| 209Bi (STDR) | 95.187 % | 1.0 % | 1,043,943 cps | 1,043,943 cps |
| 209Bi (KEDR) | 97.060 % | 0.3 % | 1,033,430 cps | 1,033,430 cps |
| 238U (STDR) | 48.254 ppb | 0.5 % | 12,089,641 cps | 12,089,641 cps |
| 238U (KEDR) | 48.211 ppb | 0.9 % | 13,078,894 cps | 13,078,894 cps |

Turner Report Sample Summary

4/15/2021 11:07:28 AM
ICAP RQ ICP-MS



W. W. W. W.

Analysis index: 10
Analysis name: 0.25 CHK STD
Analysis started at: 4/15/2021 11:04:02 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 93.538 % | 1.2 % | 100,572 cps | 100,572 cps |
| 9Be (STDR) | 0.246 ppb | 10.6 % | 1,352 cps | 1,352 cps |
| 27Al (STDR) | -0.105 ppb | 15.0 % | 16,150 cps | 16,150 cps |
| 45Sc (STDR) | 89.580 % | 0.9 % | 258,280 cps | 288,160 cps |
| 45Sc (KEDR) | 91.131 % | 2.7 % | 9,392 cps | 9,392 cps |
| 51V (STDR) | 0.276 ppb | 3.9 % | 13,611 cps | 36,684 cps |
| 51V (KEDR) | 0.274 ppb | 1.4 % | 1,770 cps | 1,770 cps |
| 55Mn (STDR) | 0.232 ppb | 0.2 % | 17,242 cps | 17,242 cps |
| 55Mn (KEDR) | 0.239 ppb | 1.3 % | 1,188 cps | 1,188 cps |
| 52Cr (STDR) | 0.173 ppb | 7.2 % | 17,510 cps | 19,145 cps |
| 52Cr (KEDR) | 0.248 ppb | 2.2 % | 2,464 cps | 2,464 cps |
| 59Co (STDR) | 0.237 ppb | 1.0 % | 11,892 cps | 11,892 cps |
| 59Co (KEDR) | 0.242 ppb | 2.9 % | 4,190 cps | 4,190 cps |
| 60Ni (STDR) | 0.233 ppb | 1.4 % | 2,982 cps | 2,982 cps |
| 60Ni (KEDR) | 0.220 ppb | 9.6 % | 1,183 cps | 1,183 cps |
| 63Cu (STDR) | 0.250 ppb | 3.2 % | 8,826 cps | 8,826 cps |
| 63Cu (KEDR) | 0.238 ppb | 3.7 % | 3,562 cps | 3,562 cps |
| 66Zn (STDR) | 0.186 ppb | 19.0 % | 7,467 cps | 7,467 cps |
| 66Zn (KEDR) | 0.199 ppb | 20.5 % | 2,052 cps | 2,052 cps |
| 74Ge (STDR) | 89.346 % | 1.1 % | 523,307 cps | 523,401 cps |
| 74Ge (KEDR) | 90.494 % | 1.1 % | 84,096 cps | 84,096 cps |
| 75As (STDR) | 0.287 ppb | 8.5 % | 1,674 cps | 3,154 cps |
| 75As (KEDR) | 0.253 ppb | 5.0 % | 324 cps | 324 cps |
| 82Se (STDR) | 0.267 ppb | 20.7 % | 7 cps | 413 cps |
| 82Se (KEDR) | 0.139 ppb | 82.0 % | 20 cps | 20 cps |
| 98Mo (STDR) | 0.337 ppb | 1.8 % | 9,088 cps | 9,088 cps |
| 98Mo (KEDR) | 0.350 ppb | 2.1 % | 5,498 cps | 5,498 cps |
| 107Ag (STDR) | 0.259 ppb | 3.0 % | 13,429 cps | 13,429 cps |
| 107Ag (KEDR) | 0.269 ppb | 1.8 % | 9,673 cps | 9,673 cps |
| 111Cd (STDR) | 0.252 ppb | 1.2 % | 3,664 cps | 3,315 cps |
| 111Cd (KEDR) | 0.245 ppb | 3.5 % | 1,549 cps | 1,549 cps |
| 115In (STDR) | 90.250 % | 1.1 % | 773,489 cps | 773,491 cps |
| 115In (KEDR) | 92.845 % | 1.0 % | 180,393 cps | 180,393 cps |
| 121Sb (STDR) | 0.245 ppb | 3.0 % | 11,519 cps | 11,519 cps |
| 121Sb (KEDR) | 0.251 ppb | 0.9 % | 3,495 cps | 3,495 cps |
| 137Ba (STDR) | 0.237 ppb | 3.5 % | 4,377 cps | 4,377 cps |
| 137Ba (KEDR) | 0.252 ppb | 1.9 % | 1,286 cps | 1,286 cps |
| 205Tl (STDR) | 0.250 ppb | 0.7 % | 40,004 cps | 40,004 cps |
| 205Tl (KEDR) | 0.263 ppb | 0.8 % | 41,705 cps | 41,705 cps |
| 208Pb (STDR) | 0.239 ppb | 0.4 % | 51,994 cps | 27,353 cps |
| 208Pb (KEDR) | 0.256 ppb | 1.2 % | 29,288 cps | 29,288 cps |
| 209Bi (STDR) | 94.523 % | 0.1 % | 1,036,661 cps | 1,036,661 cps |
| 209Bi (KEDR) | 95.012 % | 0.7 % | 1,011,617 cps | 1,011,617 cps |
| 238U (STDR) | 0.235 ppb | 1.5 % | 58,562 cps | 58,562 cps |
| 238U (KEDR) | 0.245 ppb | 0.8 % | 65,308 cps | 65,308 cps |

Turner Report Sample Summary

4/15/2021 11:10:55 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 11
Analysis name: 0.50 CHK STD
Analysis started at: 4/15/2021 11:07:29 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 94.866 % | 1.0 % | 102,000 cps | 102,000 cps |
| 9Be (STDR) | 0.434 ppb | 4.3 % | 2,369 cps | 2,369 cps |
| 27Al (STDR) | 0.309 ppb | 5.4 % | 26,872 cps | 26,872 cps |
| 45Sc (STDR) | 88.418 % | 0.7 % | 254,931 cps | 284,902 cps |
| 45Sc (KEDR) | 90.218 % | 7.3 % | 9,298 cps | 9,298 cps |
| 51V (STDR) | 0.421 ppb | 4.9 % | 19,691 cps | 55,050 cps |
| 51V (KEDR) | 0.451 ppb | 5.9 % | 2,834 cps | 2,834 cps |
| 55Mn (STDR) | 0.417 ppb | 1.4 % | 28,781 cps | 28,781 cps |
| 55Mn (KEDR) | 0.427 ppb | 7.6 % | 2,013 cps | 2,013 cps |
| 52Cr (STDR) | 0.353 ppb | 2.1 % | 24,726 cps | 27,634 cps |
| 52Cr (KEDR) | 0.462 ppb | 7.7 % | 4,382 cps | 4,382 cps |
| 59Co (STDR) | 0.432 ppb | 1.0 % | 21,343 cps | 21,343 cps |
| 59Co (KEDR) | 0.446 ppb | 6.8 % | 7,597 cps | 7,597 cps |
| 60Ni (STDR) | 0.418 ppb | 4.2 % | 4,961 cps | 4,961 cps |
| 60Ni (KEDR) | 0.416 ppb | 7.1 % | 2,077 cps | 2,077 cps |
| 63Cu (STDR) | 0.447 ppb | 2.2 % | 14,081 cps | 14,081 cps |
| 63Cu (KEDR) | 0.452 ppb | 10.1 % | 6,296 cps | 6,296 cps |
| 66Zn (STDR) | 0.106 ppb | 5.7 % | 6,693 cps | 6,693 cps |
| 66Zn (KEDR) | 0.121 ppb | 53.0 % | 1,817 cps | 1,817 cps |
| 74Ge (STDR) | 89.667 % | 1.0 % | 525,186 cps | 525,298 cps |
| 74Ge (KEDR) | 89.108 % | 6.1 % | 82,808 cps | 82,808 cps |
| 75As (STDR) | 0.448 ppb | 1.7 % | 3,043 cps | 4,658 cps |
| 75As (KEDR) | 0.460 ppb | 7.8 % | 574 cps | 574 cps |
| 82Se (STDR) | 0.425 ppb | 12.7 % | 154 cps | 538 cps |
| 82Se (KEDR) | 0.366 ppb | 46.1 % | 33 cps | 33 cps |
| 98Mo (STDR) | 0.462 ppb | 2.3 % | 12,445 cps | 12,446 cps |
| 98Mo (KEDR) | 0.485 ppb | 5.4 % | 7,335 cps | 7,335 cps |
| 107Ag (STDR) | 0.433 ppb | 1.3 % | 22,459 cps | 22,459 cps |
| 107Ag (KEDR) | 0.448 ppb | 7.2 % | 15,420 cps | 15,420 cps |
| 111Cd (STDR) | 0.433 ppb | 3.6 % | 6,054 cps | 5,775 cps |
| 111Cd (KEDR) | 0.460 ppb | 9.7 % | 2,788 cps | 2,788 cps |
| 115In (STDR) | 90.671 % | 1.0 % | 777,095 cps | 777,099 cps |
| 115In (KEDR) | 88.972 % | 6.2 % | 172,867 cps | 172,867 cps |
| 121Sb (STDR) | 0.431 ppb | 1.0 % | 20,311 cps | 20,312 cps |
| 121Sb (KEDR) | 0.465 ppb | 9.0 % | 6,186 cps | 6,186 cps |
| 137Ba (STDR) | 0.442 ppb | 2.9 % | 8,021 cps | 8,021 cps |
| 137Ba (KEDR) | 0.460 ppb | 9.8 % | 2,221 cps | 2,221 cps |
| 205Tl (STDR) | 0.430 ppb | 2.4 % | 67,539 cps | 67,539 cps |
| 205Tl (KEDR) | 0.457 ppb | 7.2 % | 70,520 cps | 70,520 cps |
| 208Pb (STDR) | 0.434 ppb | 1.1 % | 92,906 cps | 49,475 cps |
| 208Pb (KEDR) | 0.467 ppb | 7.3 % | 52,188 cps | 52,188 cps |
| 209Bi (STDR) | 93.755 % | 1.3 % | 1,028,241 cps | 1,028,241 cps |
| 209Bi (KEDR) | 93.958 % | 6.2 % | 1,000,394 cps | 1,000,394 cps |
| 238U (STDR) | 0.418 ppb | 0.6 % | 103,316 cps | 103,316 cps |
| 238U (KEDR) | 0.445 ppb | 7.7 % | 116,493 cps | 116,493 cps |

Turner Report Sample Summary

4/15/2021 11:14:22 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 12
Analysis name: 40 CHK STD
Analysis started at: 4/15/2021 11:10:55 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 92.537 % | 11.7 % | 99,495 cps | 99,495 cps |
| 9Be (STDR) | 36.321 ppb | 19.0 % | 185,341 cps | 185,341 cps |
| 27Al (STDR) | 36.322 ppb | 23.3 % | 938,000 cps | 938,000 cps |
| 45Sc (STDR) | 90.582 % | 19.8 % | 261,170 cps | 289,955 cps |
| 45Sc (KEDR) | 92.741 % | 2.5 % | 9,558 cps | 9,558 cps |
| 51V (STDR) | 35.966 ppb | 25.6 % | 1,522,162 cps | 1,558,111 cps |
| 51V (KEDR) | 35.945 ppb | 0.7 % | 226,464 cps | 226,464 cps |
| 55Mn (STDR) | 36.118 ppb | 23.1 % | 2,247,091 cps | 2,247,091 cps |
| 55Mn (KEDR) | 36.738 ppb | 1.1 % | 167,420 cps | 167,420 cps |
| 52Cr (STDR) | 36.228 ppb | 25.7 % | 1,468,275 cps | 1,468,348 cps |
| 52Cr (KEDR) | 35.856 ppb | 1.1 % | 335,664 cps | 335,664 cps |
| 59Co (STDR) | 36.016 ppb | 23.0 % | 1,723,988 cps | 1,723,988 cps |
| 59Co (KEDR) | 36.462 ppb | 0.9 % | 628,824 cps | 628,824 cps |
| 60Ni (STDR) | 36.949 ppb | 22.5 % | 391,418 cps | 391,418 cps |
| 60Ni (KEDR) | 36.743 ppb | 0.7 % | 173,818 cps | 173,818 cps |
| 63Cu (STDR) | 36.806 ppb | 21.1 % | 968,950 cps | 968,950 cps |
| 63Cu (KEDR) | 36.404 ppb | 0.2 % | 482,492 cps | 482,492 cps |
| 66Zn (STDR) | 35.393 ppb | 21.1 % | 340,249 cps | 340,249 cps |
| 66Zn (KEDR) | 35.112 ppb | 1.5 % | 92,265 cps | 92,265 cps |
| 74Ge (STDR) | 88.825 % | 13.6 % | 520,251 cps | 523,074 cps |
| 74Ge (KEDR) | 88.955 % | 0.1 % | 82,666 cps | 82,666 cps |
| 75As (STDR) | 36.213 ppb | 18.8 % | 297,617 cps | 290,518 cps |
| 75As (KEDR) | 36.893 ppb | 1.2 % | 45,656 cps | 45,656 cps |
| 82Se (STDR) | 35.893 ppb | 20.7 % | 32,101 cps | 32,479 cps |
| 82Se (KEDR) | 37.858 ppb | 1.6 % | 2,130 cps | 2,130 cps |
| 98Mo (STDR) | 36.874 ppb | 23.3 % | 952,628 cps | 952,630 cps |
| 98Mo (KEDR) | 36.661 ppb | 2.1 % | 563,017 cps | 563,017 cps |
| 107Ag (STDR) | 35.575 ppb | 22.0 % | 1,790,524 cps | 1,790,524 cps |
| 107Ag (KEDR) | 36.293 ppb | 1.6 % | 1,292,457 cps | 1,292,457 cps |
| 111Cd (STDR) | 36.814 ppb | 25.1 % | 470,467 cps | 471,668 cps |
| 111Cd (KEDR) | 35.886 ppb | 0.4 % | 228,438 cps | 228,438 cps |
| 115In (STDR) | 91.498 % | 19.1 % | 784,184 cps | 784,188 cps |
| 115In (KEDR) | 93.563 % | 1.0 % | 181,787 cps | 181,787 cps |
| 121Sb (STDR) | 34.781 ppb | 24.5 % | 1,597,007 cps | 1,597,008 cps |
| 121Sb (KEDR) | 36.145 ppb | 1.5 % | 504,195 cps | 504,195 cps |
| 137Ba (STDR) | 36.609 ppb | 24.6 % | 636,586 cps | 636,586 cps |
| 137Ba (KEDR) | 36.723 ppb | 1.5 % | 180,934 cps | 180,934 cps |
| 205Tl (STDR) | 36.045 ppb | 19.4 % | 5,539,321 cps | 5,539,321 cps |
| 205Tl (KEDR) | 36.658 ppb | 0.3 % | 5,643,347 cps | 5,643,347 cps |
| 208Pb (STDR) | 36.062 ppb | 21.1 % | 7,570,165 cps | 4,023,143 cps |
| 208Pb (KEDR) | 36.457 ppb | 0.9 % | 4,073,079 cps | 4,073,079 cps |
| 209Bi (STDR) | 95.181 % | 16.7 % | 1,043,881 cps | 1,043,881 cps |
| 209Bi (KEDR) | 94.590 % | 0.8 % | 1,007,129 cps | 1,007,129 cps |
| 238U (STDR) | 36.238 ppb | 24.0 % | 8,836,117 cps | 8,836,117 cps |
| 238U (KEDR) | 36.615 ppb | 0.7 % | 9,680,569 cps | 9,680,569 cps |

Turner Report Sample Summary

4/15/2021 11:17:49 AM
iCAP RQ ICP-MS



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Analysis index: 13
Analysis name: 2104129-BLK1
Analysis started at: 4/15/2021 11:14:22 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 91.057 % | 0.3 % | 97,904 cps | 97,904 cps |
| 9Be (STDR) | 0.002 ppb | 259.4 % | 75 cps | 75 cps |
| 27Al (STDR) | 0.024 ppb | 31.5 % | 19,066 cps | 19,066 cps |
| 45Sc (STDR) | 87.935 % | 0.5 % | 253,538 cps | 282,159 cps |
| 45Sc (KEDR) | 88.915 % | 13.0 % | 9,164 cps | 9,164 cps |
| 51V (STDR) | 0.042 ppb | 29.3 % | 3,417 cps | 12,728 cps |
| 51V (KEDR) | 0.003 ppb | 50.6 % | 83 cps | 83 cps |
| 55Mn (STDR) | 0.021 ppb | 7.7 % | 3,801 cps | 3,801 cps |
| 55Mn (KEDR) | 0.027 ppb | 25.8 % | 222 cps | 222 cps |
| 52Cr (STDR) | -0.039 ppb | 9.2 % | 8,624 cps | 8,683 cps |
| 52Cr (KEDR) | 0.002 ppb | 83.2 % | 176 cps | 176 cps |
| 59Co (STDR) | 0.003 ppb | 19.9 % | 420 cps | 420 cps |
| 59Co (KEDR) | 0.002 ppb | 21.4 % | 58 cps | 58 cps |
| 60Ni (STDR) | -0.004 ppb | 59.7 % | 412 cps | 412 cps |
| 60Ni (KEDR) | 0.003 ppb | 122.6 % | 151 cps | 151 cps |
| 63Cu (STDR) | 0.014 ppb | 12.3 % | 2,439 cps | 2,439 cps |
| 63Cu (KEDR) | 0.000 ppb | 1,992.7 % | 379 cps | 379 cps |
| 66Zn (STDR) | 0.448 ppb | 1.6 % | 9,806 cps | 9,806 cps |
| 66Zn (KEDR) | 0.489 ppb | 27.8 % | 2,698 cps | 2,698 cps |
| 74Ge (STDR) | 87.501 % | 1.0 % | 512,495 cps | 512,554 cps |
| 74Ge (KEDR) | 87.343 % | 7.7 % | 81,168 cps | 81,168 cps |
| 75As (STDR) | 0.028 ppb | 100.2 % | -494 cps | 653 cps |
| 75As (KEDR) | 0.008 ppb | 69.4 % | 15 cps | 15 cps |
| 82Se (STDR) | 0.003 ppb | 3,494.5 % | -231 cps | 172 cps |
| 82Se (KEDR) | -0.001 ppb | 5,980.6 % | 12 cps | 12 cps |
| 98Mo (STDR) | 0.040 ppb | 3.6 % | 1,236 cps | 1,237 cps |
| 98Mo (KEDR) | 0.049 ppb | 16.0 % | 838 cps | 838 cps |
| 107Ag (STDR) | 0.006 ppb | 12.3 % | 475 cps | 475 cps |
| 107Ag (KEDR) | 0.008 ppb | 17.9 % | 415 cps | 415 cps |
| 111Cd (STDR) | -0.002 ppb | 56.2 % | 355 cps | 20 cps |
| 111Cd (KEDR) | 0.002 ppb | 30.0 % | 11 cps | 11 cps |
| 115In (STDR) | 89.738 % | 1.0 % | 769,101 cps | 769,104 cps |
| 115In (KEDR) | 88.874 % | 9.7 % | 172,677 cps | 172,677 cps |
| 121Sb (STDR) | 0.007 ppb | 17.2 % | 378 cps | 378 cps |
| 121Sb (KEDR) | 0.009 ppb | 9.9 % | 138 cps | 138 cps |
| 137Ba (STDR) | -0.001 ppb | 365.2 % | 155 cps | 155 cps |
| 137Ba (KEDR) | 0.000 ppb | 2,910.1 % | 50 cps | 50 cps |
| 205Tl (STDR) | 0.004 ppb | 5.3 % | 1,673 cps | 1,673 cps |
| 205Tl (KEDR) | 0.005 ppb | 19.4 % | 1,808 cps | 1,808 cps |
| 208Pb (STDR) | 0.003 ppb | 12.9 % | 1,643 cps | 850 cps |
| 208Pb (KEDR) | 0.005 ppb | 8.2 % | 1,133 cps | 1,133 cps |
| 209Bi (STDR) | 92.268 % | 0.4 % | 1,011,937 cps | 1,011,937 cps |
| 209Bi (KEDR) | 91.781 % | 8.5 % | 977,213 cps | 977,213 cps |
| 238U (STDR) | 0.002 ppb | 9.4 % | 638 cps | 638 cps |
| 238U (KEDR) | 0.003 ppb | 12.6 % | 830 cps | 830 cps |

Turner Report Sample Summary

4/15/2021 11:21:17 AM
iCAP RQ ICP-MS



W. W. W. W. W.

Analysis index: 14
Analysis name: 2104129-BS1
Analysis started at: 4/15/2021 11:17:50 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 91.243 % | 2.0 % | 98,104 cps | 98,104 cps |
| 9Be (STDR) | 46.161 ppb | 1.5 % | 235,639 cps | 235,639 cps |
| 27Al (STDR) | 92.717 ppb | 1.5 % | 2,373,795 cps | 2,373,795 cps |
| 45Sc (STDR) | 88.124 % | 0.9 % | 254,084 cps | 282,217 cps |
| 45Sc (KEDR) | 85.281 % | 9.3 % | 8,789 cps | 8,789 cps |
| 51V (STDR) | 44.638 ppb | 0.7 % | 1,906,335 cps | 1,953,687 cps |
| 51V (KEDR) | 49.277 ppb | 12.3 % | 286,692 cps | 286,692 cps |
| 55Mn (STDR) | 45.156 ppb | 0.6 % | 2,831,466 cps | 2,831,466 cps |
| 55Mn (KEDR) | 49.937 ppb | 12.0 % | 211,822 cps | 211,822 cps |
| 52Cr (STDR) | 44.949 ppb | 0.9 % | 1,836,809 cps | 1,836,863 cps |
| 52Cr (KEDR) | 49.805 ppb | 12.0 % | 431,459 cps | 431,459 cps |
| 59Co (STDR) | 45.352 ppb | 0.4 % | 2,192,186 cps | 2,192,186 cps |
| 59Co (KEDR) | 48.519 ppb | 11.7 % | 785,337 cps | 785,337 cps |
| 60Ni (STDR) | 45.638 ppb | 0.6 % | 488,097 cps | 488,097 cps |
| 60Ni (KEDR) | 48.702 ppb | 11.5 % | 216,641 cps | 216,641 cps |
| 63Cu (STDR) | 45.344 ppb | 0.4 % | 1,204,792 cps | 1,204,792 cps |
| 63Cu (KEDR) | 48.749 ppb | 11.3 % | 611,182 cps | 611,182 cps |
| 66Zn (STDR) | 93.865 ppb | 0.7 % | 902,943 cps | 902,943 cps |
| 66Zn (KEDR) | 100.579 ppb | 10.4 % | 248,996 cps | 248,996 cps |
| 74Ge (STDR) | 88.464 % | 0.3 % | 518,141 cps | 521,829 cps |
| 74Ge (KEDR) | 86.575 % | 8.4 % | 80,454 cps | 80,454 cps |
| 75As (STDR) | 45.805 ppb | 1.5 % | 381,479 cps | 372,976 cps |
| 75As (KEDR) | 48.300 ppb | 9.9 % | 57,782 cps | 57,782 cps |
| 82Se (STDR) | 46.023 ppb | 1.7 % | 41,738 cps | 42,128 cps |
| 82Se (KEDR) | 50.956 ppb | 11.1 % | 2,744 cps | 2,744 cps |
| 98Mo (STDR) | 45.814 ppb | 1.0 % | 1,196,214 cps | 1,196,216 cps |
| 98Mo (KEDR) | 48.971 ppb | 12.5 % | 707,045 cps | 707,045 cps |
| 107Ag (STDR) | 45.186 ppb | 0.4 % | 2,289,255 cps | 2,289,255 cps |
| 107Ag (KEDR) | 48.168 ppb | 12.2 % | 1,596,680 cps | 1,596,680 cps |
| 111Cd (STDR) | 46.364 ppb | 0.9 % | 598,145 cps | 599,585 cps |
| 111Cd (KEDR) | 49.286 ppb | 13.1 % | 290,519 cps | 290,519 cps |
| 115In (STDR) | 89.343 % | 0.9 % | 765,712 cps | 765,717 cps |
| 115In (KEDR) | 87.102 % | 11.2 % | 169,234 cps | 169,234 cps |
| 121Sb (STDR) | 43.764 ppb | 0.7 % | 2,024,848 cps | 2,024,849 cps |
| 121Sb (KEDR) | 49.029 ppb | 13.7 % | 631,270 cps | 631,270 cps |
| 137Ba (STDR) | 45.748 ppb | 0.7 % | 801,195 cps | 801,195 cps |
| 137Ba (KEDR) | 49.585 ppb | 12.3 % | 226,689 cps | 226,689 cps |
| 205Tl (STDR) | 45.232 ppb | 1.0 % | 6,948,175 cps | 6,948,175 cps |
| 205Tl (KEDR) | 48.155 ppb | 11.4 % | 7,007,745 cps | 7,007,745 cps |
| 208Pb (STDR) | 45.373 ppb | 1.0 % | 9,537,757 cps | 5,062,127 cps |
| 208Pb (KEDR) | 48.325 ppb | 12.2 % | 5,104,735 cps | 5,104,735 cps |
| 209Bi (STDR) | 93.086 % | 1.0 % | 1,020,902 cps | 1,020,902 cps |
| 209Bi (KEDR) | 90.211 % | 10.2 % | 960,499 cps | 960,499 cps |
| 238U (STDR) | 45.316 ppb | 0.7 % | 11,102,679 cps | 11,102,679 cps |
| 238U (KEDR) | 48.801 ppb | 12.9 % | 12,196,528 cps | 12,196,528 cps |

Turner Report Sample Summary

4/15/2021 11:24:45 AM
iCAP RQ ICP-MS



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Analysis index: 15
Analysis name: 2104129-BSD1
Analysis started at: 4/15/2021 11:21:17 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 91.841 % | 1.4 % | 98,747 cps | 98,747 cps |
| 9Be (STDR) | 44.543 ppb | 0.9 % | 228,397 cps | 228,397 cps |
| 27Al (STDR) | 90.393 ppb | 0.8 % | 2,294,026 cps | 2,294,026 cps |
| 45Sc (STDR) | 86.096 % | 0.3 % | 248,235 cps | 275,968 cps |
| 45Sc (KEDR) | 91.470 % | 2.7 % | 9,427 cps | 9,427 cps |
| 51V (STDR) | 44.172 ppb | 1.8 % | 1,844,489 cps | 1,886,318 cps |
| 51V (KEDR) | 44.102 ppb | 0.9 % | 275,424 cps | 275,424 cps |
| 55Mn (STDR) | 44.399 ppb | 0.1 % | 2,723,638 cps | 2,723,638 cps |
| 55Mn (KEDR) | 44.476 ppb | 1.0 % | 201,586 cps | 201,586 cps |
| 52Cr (STDR) | 44.602 ppb | 1.5 % | 1,782,402 cps | 1,782,452 cps |
| 52Cr (KEDR) | 44.139 ppb | 0.7 % | 409,952 cps | 409,952 cps |
| 59Co (STDR) | 44.847 ppb | 1.6 % | 2,121,756 cps | 2,121,756 cps |
| 59Co (KEDR) | 43.998 ppb | 0.9 % | 757,373 cps | 757,373 cps |
| 60Ni (STDR) | 45.320 ppb | 0.7 % | 474,475 cps | 474,475 cps |
| 60Ni (KEDR) | 44.116 ppb | 0.3 % | 208,467 cps | 208,467 cps |
| 63Cu (STDR) | 44.709 ppb | 1.1 % | 1,163,317 cps | 1,163,317 cps |
| 63Cu (KEDR) | 44.132 ppb | 0.3 % | 585,748 cps | 585,748 cps |
| 66Zn (STDR) | 92.611 ppb | 0.1 % | 872,889 cps | 872,889 cps |
| 66Zn (KEDR) | 92.147 ppb | 0.3 % | 240,679 cps | 240,679 cps |
| 74Ge (STDR) | 86.763 % | 1.5 % | 508,178 cps | 511,750 cps |
| 74Ge (KEDR) | 89.964 % | 0.3 % | 83,603 cps | 83,603 cps |
| 75As (STDR) | 44.762 ppb | 0.4 % | 365,683 cps | 357,281 cps |
| 75As (KEDR) | 45.052 ppb | 0.7 % | 56,356 cps | 56,356 cps |
| 82Se (STDR) | 45.426 ppb | 1.0 % | 40,475 cps | 40,868 cps |
| 82Se (KEDR) | 46.384 ppb | 1.7 % | 2,627 cps | 2,627 cps |
| 98Mo (STDR) | 45.092 ppb | 1.4 % | 1,161,193 cps | 1,161,194 cps |
| 98Mo (KEDR) | 44.525 ppb | 0.5 % | 684,031 cps | 684,031 cps |
| 107Ag (STDR) | 43.726 ppb | 1.3 % | 2,189,339 cps | 2,189,339 cps |
| 107Ag (KEDR) | 44.056 ppb | 1.1 % | 1,563,256 cps | 1,563,256 cps |
| 111Cd (STDR) | 45.279 ppb | 0.7 % | 577,849 cps | 579,599 cps |
| 111Cd (KEDR) | 44.629 ppb | 1.6 % | 282,568 cps | 282,568 cps |
| 115In (STDR) | 88.466 % | 1.2 % | 758,197 cps | 758,203 cps |
| 115In (KEDR) | 92.904 % | 1.0 % | 180,508 cps | 180,508 cps |
| 121Sb (STDR) | 42.589 ppb | 0.2 % | 1,952,329 cps | 1,952,330 cps |
| 121Sb (KEDR) | 44.629 ppb | 0.6 % | 618,789 cps | 618,789 cps |
| 137Ba (STDR) | 44.746 ppb | 0.5 % | 777,571 cps | 777,571 cps |
| 137Ba (KEDR) | 44.679 ppb | 0.3 % | 219,354 cps | 219,354 cps |
| 205Tl (STDR) | 44.742 ppb | 1.6 % | 6,861,654 cps | 6,861,654 cps |
| 205Tl (KEDR) | 44.234 ppb | 1.0 % | 6,857,920 cps | 6,857,920 cps |
| 208Pb (STDR) | 44.242 ppb | 1.4 % | 9,288,331 cps | 4,914,644 cps |
| 208Pb (KEDR) | 44.542 ppb | 1.2 % | 5,013,788 cps | 5,013,788 cps |
| 209Bi (STDR) | 92.974 % | 0.5 % | 1,019,671 cps | 1,019,671 cps |
| 209Bi (KEDR) | 95.327 % | 0.7 % | 1,014,969 cps | 1,014,969 cps |
| 238U (STDR) | 44.756 ppb | 0.4 % | 10,952,776 cps | 10,952,776 cps |
| 238U (KEDR) | 44.573 ppb | 1.0 % | 11,875,209 cps | 11,875,209 cps |

Turner Report Sample Summary

4/15/2021 11:28:13 AM
iCAP RQ ICP-MS



W 4/15/21

Analysis index: 16
Analysis name: 21D0200-01@20
Analysis started at: 4/15/2021 11:24:45 AM

NR, Report from 5x & 1x

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 91.202 % | 0.6 % | 98,060 cps | 98,060 cps |
| 9Be (STDR) | 0.007 ppb | 23.1 % | 102 cps | 102 cps |
| 27Al (STDR) | 0.324 ppb | 8.5 % | 25,919 cps | 25,919 cps |
| 45Sc (STDR) | ✓ 83.152 % | 1.2 % | 239,748 cps | 278,025 cps |
| 45Sc (KEDR) | 88.485 % | 3.2 % | 9,119 cps | 9,119 cps |
| 51V (STDR) | 0.074 ppb | 27.1 % | 4,581 cps | 12,805 cps |
| 51V (KEDR) | 0.042 ppb | 9.9 % | 320 cps | 320 cps |
| 55Mn (STDR) | 6.044 ppb | 0.5 % | 364,784 cps | 364,784 cps |
| 55Mn (KEDR) | 6.026 ppb | 1.3 % | 26,603 cps | 26,603 cps |
| 52Cr (STDR) | -0.021 ppb | 55.8 % | 8,931 cps | 8,988 cps |
| 52Cr (KEDR) | 0.012 ppb | 24.8 % | 263 cps | 263 cps |
| 59Co (STDR) | 0.010 ppb | 4.4 % | 773 cps | 773 cps |
| 59Co (KEDR) | 0.010 ppb | 17.9 % | 188 cps | 188 cps |
| 60Ni (STDR) | 0.024 ppb | 21.7 % | 685 cps | 685 cps |
| 60Ni (KEDR) | 0.012 ppb | 17.8 % | 197 cps | 197 cps |
| 63Cu (STDR) | 0.047 ppb | 6.3 % | 3,224 cps | 3,224 cps |
| 63Cu (KEDR) | -0.002 ppb | 95.2 % | 363 cps | 363 cps |
| 66Zn (STDR) | -0.298 ppb | 1.5 % | 2,682 cps | 2,682 cps |
| 66Zn (KEDR) | -0.303 ppb | 2.7 % | 725 cps | 725 cps |
| 74Ge (STDR) | 86.949 % | 1.1 % | 509,266 cps | 509,326 cps |
| 74Ge (KEDR) | ✓ 87.940 % | 0.7 % | 81,722 cps | 81,722 cps |
| 75As (STDR) | 0.383 ppb | 7.1 % | 2,420 cps | 3,561 cps |
| 75As (KEDR) | 0.395 ppb | 11.8 % | 489 cps | 489 cps |
| 82Se (STDR) | 0.077 ppb | 121.2 % | -163 cps | 178 cps |
| 82Se (KEDR) | -0.092 ppb | 76.2 % | 7 cps | 7 cps |
| 98Mo (STDR) | 0.181 ppb | 3.1 % | 4,831 cps | 4,833 cps |
| 98Mo (KEDR) | 0.186 ppb | 6.7 % | 2,875 cps | 2,875 cps |
| 107Ag (STDR) | 0.006 ppb | 19.8 % | 492 cps | 492 cps |
| 107Ag (KEDR) | 0.008 ppb | 29.7 % | 420 cps | 420 cps |
| 111Cd (STDR) | 0.001 ppb | 340.8 % | 381 cps | 42 cps |
| 111Cd (KEDR) | 0.003 ppb | 29.2 % | 19 cps | 19 cps |
| 115In (STDR) | ✓ 87.507 % | 0.2 % | 749,984 cps | 749,997 cps |
| 115In (KEDR) | 89.351 % | 0.9 % | 173,604 cps | 173,604 cps |
| 121Sb (STDR) | 0.010 ppb | 19.2 % | 543 cps | 543 cps |
| 121Sb (KEDR) | 0.011 ppb | 7.2 % | 169 cps | 169 cps |
| 137Ba (STDR) | 0.813 ppb | 1.9 % | 14,078 cps | 14,078 cps |
| 137Ba (KEDR) | 0.802 ppb | 3.3 % | 3,836 cps | 3,836 cps |
| 205Tl (STDR) | 0.007 ppb | 1.8 % | 1,990 cps | 1,990 cps |
| 205Tl (KEDR) | 0.009 ppb | 9.9 % | 2,329 cps | 2,329 cps |
| 208Pb (STDR) | 0.007 ppb | 3.9 % | 2,270 cps | 1,230 cps |
| 208Pb (KEDR) | 0.008 ppb | 6.1 % | 1,446 cps | 1,446 cps |
| 209Bi (STDR) | ✓ 90.462 % | 1.5 % | 992,121 cps | 992,121 cps |
| 209Bi (KEDR) | 91.537 % | 0.5 % | 974,625 cps | 974,625 cps |
| 238U (STDR) | 0.074 ppb | 1.7 % | 17,808 cps | 17,808 cps |
| 238U (KEDR) | 0.080 ppb | 1.2 % | 20,542 cps | 20,542 cps |

Turner Report Sample Summary

4/15/2021 11:31:42 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 17
Analysis name: 2104129-MS1@20
Analysis started at: 4/15/2021 11:28:14 AM

NR, Rebit from 5x + 1x

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 92.057 % | 0.8 % | 98,979 cps | 98,979 cps |
| 9Be (STDR) | 1.924 ppb | 1.9 % | 9,942 cps | 9,942 cps |
| 27Al (STDR) | 4.009 ppb | 1.5 % | 118,392 cps | 118,392 cps |
| 45Sc (STDR) | ✓ 84.720 % | 0.3 % | 244,268 cps | 283,373 cps |
| 45Sc (KEDR) | 92.239 % | 2.3 % | 9,506 cps | 9,506 cps |
| 51V (STDR) | 2.005 ppb | 2.2 % | 84,393 cps | 93,492 cps |
| 51V (KEDR) | 1.887 ppb | 1.6 % | 11,942 cps | 11,942 cps |
| 55Mn (STDR) | 7.481 ppb | 0.9 % | 458,048 cps | 458,048 cps |
| 55Mn (KEDR) | 7.585 ppb | 2.4 % | 34,730 cps | 34,730 cps |
| 52Cr (STDR) | 1.871 ppb | 1.7 % | 83,611 cps | 83,670 cps |
| 52Cr (KEDR) | 1.870 ppb | 0.4 % | 17,661 cps | 17,661 cps |
| 59Co (STDR) | 1.905 ppb | 1.1 % | 90,191 cps | 90,191 cps |
| 59Co (KEDR) | 1.885 ppb | 2.8 % | 32,704 cps | 32,704 cps |
| 60Ni (STDR) | 1.943 ppb | 2.3 % | 20,734 cps | 20,734 cps |
| 60Ni (KEDR) | 1.847 ppb | 3.0 % | 8,932 cps | 8,932 cps |
| 63Cu (STDR) | 1.735 ppb | 0.7 % | 47,191 cps | 47,191 cps |
| 63Cu (KEDR) | 1.607 ppb | 2.5 % | 21,865 cps | 21,865 cps |
| 66Zn (STDR) | 3.635 ppb | 1.9 % | 39,711 cps | 39,711 cps |
| 66Zn (KEDR) | 3.550 ppb | 2.8 % | 10,818 cps | 10,818 cps |
| 74Ge (STDR) | ✓ 87.808 % | 0.5 % | 514,297 cps | 514,491 cps |
| 74Ge (KEDR) | 90.543 % | 1.2 % | 84,142 cps | 84,142 cps |
| 75As (STDR) | 2.272 ppb | 1.5 % | 18,084 cps | 18,651 cps |
| 75As (KEDR) | 2.258 ppb | 3.7 % | 2,846 cps | 2,846 cps |
| 82Se (STDR) | 1.811 ppb | 4.3 % | 1,404 cps | 1,817 cps |
| 82Se (KEDR) | 1.897 ppb | 1.2 % | 119 cps | 119 cps |
| 98Mo (STDR) | 2.050 ppb | 0.8 % | 53,214 cps | 53,215 cps |
| 98Mo (KEDR) | 2.014 ppb | 1.8 % | 30,775 cps | 30,775 cps |
| 107Ag (STDR) | 1.338 ppb | 1.7 % | 67,275 cps | 67,275 cps |
| 107Ag (KEDR) | 1.406 ppb | 4.4 % | 49,296 cps | 49,296 cps |
| 111Cd (STDR) | 1.925 ppb | 2.0 % | 24,933 cps | 24,714 cps |
| 111Cd (KEDR) | 1.911 ppb | 1.3 % | 11,896 cps | 11,896 cps |
| 115In (STDR) | ✓ 88.386 % | 0.5 % | 757,517 cps | 757,529 cps |
| 115In (KEDR) | 91.113 % | 0.5 % | 177,027 cps | 177,027 cps |
| 121Sb (STDR) | 1.839 ppb | 0.9 % | 84,179 cps | 84,180 cps |
| 121Sb (KEDR) | 1.924 ppb | 2.4 % | 26,175 cps | 26,175 cps |
| 137Ba (STDR) | 2.667 ppb | 1.4 % | 46,230 cps | 46,230 cps |
| 137Ba (KEDR) | 2.667 ppb | 1.6 % | 12,879 cps | 12,879 cps |
| 205Tl (STDR) | 1.917 ppb | 2.0 % | 288,898 cps | 288,898 cps |
| 205Tl (KEDR) | 1.988 ppb | 1.4 % | 302,452 cps | 302,452 cps |
| 208Pb (STDR) | 1.911 ppb | 0.5 % | 393,641 cps | 207,656 cps |
| 208Pb (KEDR) | 2.014 ppb | 0.6 % | 222,244 cps | 222,244 cps |
| 209Bi (STDR) | ✓ 91.013 % | 1.1 % | 998,165 cps | 998,165 cps |
| 209Bi (KEDR) | 93.228 % | 0.6 % | 992,626 cps | 992,626 cps |
| 238U (STDR) | 1.888 ppb | 1.8 % | 452,323 cps | 452,323 cps |
| 238U (KEDR) | 1.983 ppb | 0.8 % | 516,728 cps | 516,728 cps |

Turner Report Sample Summary

4/15/2021 11:35:11 AM
iCAP RQ ICP-MS



W. K. M. 4/14/21

Analysis index: 18
Analysis name: 21D0200-01
Analysis started at: 4/15/2021 11:31:42 AM

Report KED

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | ✓ 102.965 % | 1.3 % | 110,707 cps | 110,707 cps |
| 9Be (STDR) | 0.000 ppb | 686.0 % | 75 cps | 75 cps |
| 27Al (STDR) | 4.865 ppb | 3.3 % | 117,590 cps | 117,590 cps |
| 45Sc (STDR) | ↓ 49.391 | 2.7 | 142,408 cps | 354,144 cps |
| 45Sc (KEDR) | ✓ 88.743 % | 0.8 % | 9,146 cps | 9,146 cps |
| 51V (STDR) | 1.093 ppb | 2.3 % | 31,199 cps | 39,892 cps |
| 51V (KEDR) | 0.653 ppb | 0.2 % | 4,022 cps | 4,022 cps |
| 55Mn (STDR) | 162.129 ppb | 2.0 % | 7,154,115 cps | 7,154,115 cps |
| 55Mn (KEDR) | 117.281 ppb | 0.6 % | 515,944 cps | 515,944 cps |
| 52Cr (STDR) | 0.421 ppb | 5.2 % | 18,081 cps | 18,283 cps |
| 52Cr (KEDR) | 0.175 ppb | 1.3 % | 1,732 cps | 1,732 cps |
| 59Co (STDR) | 0.181 ppb | 2.8 % | 6,890 cps | 6,890 cps |
| 59Co (KEDR) | 0.115 ppb | 8.4 % | 1,948 cps | 1,948 cps |
| 60Ni (STDR) | 0.621 ppb | 3.2 % | 5,500 cps | 5,500 cps |
| 60Ni (KEDR) | 0.171 ppb | 8.3 % | 925 cps | 925 cps |
| 63Cu (STDR) | 1.116 ppb | 0.8 % | 25,970 cps | 25,970 cps |
| 63Cu (KEDR) | 0.223 ppb | 1.7 % | 3,262 cps | 3,262 cps |
| 66Zn (STDR) | 2.122 ppb | 0.2 % | 22,317 cps | 22,317 cps |
| 66Zn (KEDR) | 1.739 ppb | 2.2 % | 5,871 cps | 5,871 cps |
| 74Ge (STDR) | 86.401 % | 0.9 % | 506,055 cps | 506,133 cps |
| 74Ge (KEDR) | ✓ 87.447 % | 0.6 % | 81,264 cps | 81,264 cps |
| 75As (STDR) | 7.250 ppb | 1.1 % | 58,316 cps | 59,312 cps |
| 75As (KEDR) | 7.596 ppb | 1.2 % | 9,228 cps | 9,228 cps |
| 82Se (STDR) | 0.202 ppb | 25.1 % | -50 cps | 425 cps |
| 82Se (KEDR) | 0.232 ppb | 29.8 % | 24 cps | 24 cps |
| 98Mo (STDR) | 2.691 ppb | 0.4 % | 67,294 cps | 67,298 cps |
| 98Mo (KEDR) | 2.672 ppb | 0.5 % | 38,712 cps | 38,712 cps |
| 107Ag (STDR) | 0.048 ppb | 7.2 % | 2,454 cps | 2,454 cps |
| 107Ag (KEDR) | 0.071 ppb | 20.6 % | 2,469 cps | 2,469 cps |
| 111Cd (STDR) | 0.002 ppb | 198.2 % | 385 cps | 82 cps |
| 111Cd (KEDR) | 0.004 ppb | 24.3 % | 23 cps | 23 cps |
| 115In (STDR) | 83.971 % | 1.0 % | 719,678 cps | 719,870 cps |
| 115In (KEDR) | ✓ 85.374 % | 1.4 % | 165,878 cps | 165,878 cps |
| 121Sb (STDR) | 0.126 ppb | 1.7 % | 5,317 cps | 5,318 cps |
| 121Sb (KEDR) | 0.137 ppb | 3.5 % | 1,702 cps | 1,702 cps |
| 137Ba (STDR) | 19.284 ppb | 0.7 % | 269,584 cps | 269,584 cps |
| 137Ba (KEDR) | 19.054 ppb | 0.6 % | 74,311 cps | 74,311 cps |
| 205Tl (STDR) | 0.017 ppb | 20.4 % | 1,345 cps | 1,345 cps |
| 205Tl (KEDR) | 0.014 ppb | 12.7 % | 1,349 cps | 1,349 cps |
| 208Pb (STDR) | 0.280 ppb | 1.1 % | 21,411 cps | 11,557 cps |
| 208Pb (KEDR) | 0.255 ppb | 7.1 % | 11,726 cps | 11,726 cps |
| 209Bi (STDR) | ↓ 32.765 | 2.7 | 359,339 cps | 359,339 cps |
| 209Bi (KEDR) | ✓ 37.734 | 6.1 | 401,766 cps | 401,766 cps |
| 238U (STDR) | 3.843 ppb | 3.2 % | 331,302 cps | 331,302 cps |
| 238U (KEDR) | 3.500 ppb | 5.7 % | 368,320 cps | 368,320 cps |

Turner Report Sample Summary

4/15/2021 11:38:41 AM
iCAP RQ ICP-MS



W. M. K. / n

Analysis index: 19
Analysis name: 2104129-MS1
Analysis started at: 4/15/2021 11:35:11 AM

Report KED

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 103.542 % | 1.4 % | 111,328 cps | 111,328 cps |
| 9Be (STDR) | 46.949 ppb | 1.2 % | 261,791 cps | 261,791 cps |
| 27Al (STDR) | 122.390 ppb | 0.7 % | 2,603,623 cps | 2,603,623 cps |
| 45Sc (STDR) | ↓ 49.702 | 0.8 | 143,302 cps | 354,488 cps |
| 45Sc (KEDR) | ✓ 90.548 % | 1.2 % | 9,332 cps | 9,332 cps |
| 51V (STDR) | 76.743 ppb | 1.5 % | 2,139,865 cps | 2,174,986 cps |
| 51V (KEDR) | 50.310 ppb | 0.9 % | 309,753 cps | 309,753 cps |
| 55Mn (STDR) | 225.768 ppb | 1.4 % | 10,078,966 cps | 10,078,966 cps |
| 55Mn (KEDR) | 162.525 ppb | 2.8 % | 723,847 cps | 723,847 cps |
| 52Cr (STDR) | 72.676 ppb | 0.6 % | 1,979,524 cps | 1,979,724 cps |
| 52Cr (KEDR) | 47.491 ppb | 0.3 % | 434,540 cps | 434,540 cps |
| 59Co (STDR) | 61.286 ppb | 0.7 % | 2,286,260 cps | 2,286,260 cps |
| 59Co (KEDR) | 47.202 ppb | 2.1 % | 796,486 cps | 796,486 cps |
| 60Ni (STDR) | 59.666 ppb | 0.9 % | 501,835 cps | 501,835 cps |
| 60Ni (KEDR) | 46.551 ppb | 1.0 % | 215,480 cps | 215,480 cps |
| 63Cu (STDR) | 51.190 ppb | 2.4 % | 1,130,334 cps | 1,130,334 cps |
| 63Cu (KEDR) | 42.310 ppb | 1.5 % | 548,961 cps | 548,961 cps |
| 66Zn (STDR) | 113.604 ppb | 0.6 % | 955,756 cps | 955,756 cps |
| 66Zn (KEDR) | 99.062 ppb | 1.2 % | 252,291 cps | 252,291 cps |
| 74Ge (STDR) | 87.919 % | 1.1 % | 514,948 cps | 518,808 cps |
| 74Ge (KEDR) | ✓ 87.258 % | 0.6 % | 81,088 cps | 81,088 cps |
| 75As (STDR) | 58.978 ppb | 0.2 % | 487,855 cps | 477,790 cps |
| 75As (KEDR) | 59.912 ppb | 1.4 % | 72,593 cps | 72,593 cps |
| 82Se (STDR) | 49.294 ppb | 0.9 % | 44,067 cps | 44,551 cps |
| 82Se (KEDR) | 51.041 ppb | 0.5 % | 2,774 cps | 2,774 cps |
| 98Mo (STDR) | 53.708 ppb | 0.6 % | 1,358,107 cps | 1,358,109 cps |
| 98Mo (KEDR) | 54.276 ppb | 1.3 % | 783,941 cps | 783,941 cps |
| 107Ag (STDR) | 39.373 ppb | 1.6 % | 1,913,055 cps | 1,913,055 cps |
| 107Ag (KEDR) | 40.278 ppb | 1.9 % | 1,328,328 cps | 1,328,328 cps |
| 111Cd (STDR) | 50.463 ppb | 0.6 % | 621,610 cps | 623,653 cps |
| 111Cd (KEDR) | 50.303 ppb | 0.7 % | 294,486 cps | 294,486 cps |
| 115In (STDR) | 84.944 % | 1.1 % | 728,016 cps | 728,211 cps |
| 115In (KEDR) | ✓ 85.455 % | 0.5 % | 166,035 cps | 166,035 cps |
| 121Sb (STDR) | 52.477 ppb | 2.1 % | 2,210,790 cps | 2,210,791 cps |
| 121Sb (KEDR) | 54.939 ppb | 0.6 % | 672,681 cps | 672,681 cps |
| 137Ba (STDR) | 79.556 ppb | 1.6 % | 1,120,991 cps | 1,120,991 cps |
| 137Ba (KEDR) | 78.682 ppb | 1.5 % | 303,440 cps | 303,440 cps |
| 205Tl (STDR) | 131.409 ppb | 1.6 % | 7,471,285 cps | 7,471,285 cps |
| 205Tl (KEDR) | 125.504 ppb | 2.3 % | 7,402,387 cps | 7,402,387 cps |
| 208Pb (STDR) | 133.589 ppb | 1.4 % | 9,873,502 cps | 5,233,833 cps |
| 208Pb (KEDR) | 125.949 ppb | 2.4 % | 5,145,126 cps | 5,145,126 cps |
| 209Bi (STDR) | ↓ 32.154 | 1.3 | 352,647 cps | 352,647 cps |
| 209Bi (KEDR) | ✓ 34.046 | 1.4 | 362,502 cps | 362,502 cps |
| 238U (STDR) | 141.800 ppb | 1.3 % | 11,999,853 cps | 11,999,853 cps |
| 238U (KEDR) | 133.746 ppb | 2.0 % | 12,724,603 cps | 12,724,603 cps |

Turner Report Sample Summary

4/15/2021 11:46:14 AM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 20
Analysis name: RINSE
Analysis started at: 4/15/2021 11:42:47 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 99.953 % | 0.4 % | 107,469 cps | 107,469 cps |
| 9Be (STDR) | 0.007 ppb | 87.9 % | 113 cps | 113 cps |
| 27Al (STDR) | -0.298 ppb | 6.5 % | 11,881 cps | 11,881 cps |
| 45Sc (STDR) | 95.546 % | 1.1 % | 275,482 cps | 305,384 cps |
| 45Sc (KEDR) | 96.609 % | 2.5 % | 9,956 cps | 9,956 cps |
| 51V (STDR) | 0.048 ppb | 29.4 % | 3,955 cps | 10,326 cps |
| 51V (KEDR) | 0.009 ppb | 38.1 % | 125 cps | 125 cps |
| 55Mn (STDR) | 0.004 ppb | 30.7 % | 2,939 cps | 2,939 cps |
| 55Mn (KEDR) | 0.010 ppb | 32.8 % | 160 cps | 160 cps |
| 52Cr (STDR) | -0.016 ppb | 46.4 % | 10,358 cps | 10,411 cps |
| 52Cr (KEDR) | 0.004 ppb | 21.3 % | 215 cps | 215 cps |
| 59Co (STDR) | 0.001 ppb | 75.7 % | 358 cps | 358 cps |
| 59Co (KEDR) | 0.001 ppb | 59.0 % | 51 cps | 51 cps |
| 60Ni (STDR) | -0.002 ppb | 340.7 % | 467 cps | 467 cps |
| 60Ni (KEDR) | -0.001 ppb | 315.0 % | 144 cps | 144 cps |
| 63Cu (STDR) | 0.079 ppb | 3.7 % | 4,501 cps | 4,501 cps |
| 63Cu (KEDR) | 0.049 ppb | 17.1 % | 1,093 cps | 1,093 cps |
| 66Zn (STDR) | 0.025 ppb | 49.9 % | 6,243 cps | 6,243 cps |
| 66Zn (KEDR) | -0.012 ppb | 335.7 % | 1,566 cps | 1,566 cps |
| 74Ge (STDR) | 94.053 % | 0.3 % | 550,872 cps | 550,947 cps |
| 74Ge (KEDR) | 93.657 % | 1.1 % | 87,035 cps | 87,035 cps |
| 75As (STDR) | 0.019 ppb | 191.8 % | -611 cps | 600 cps |
| 75As (KEDR) | 0.002 ppb | 251.0 % | 9 cps | 9 cps |
| 82Se (STDR) | 0.127 ppb | 37.3 % | -128 cps | 318 cps |
| 82Se (KEDR) | 0.029 ppb | 226.6 % | 14 cps | 14 cps |
| 98Mo (STDR) | 0.034 ppb | 11.8 % | 1,176 cps | 1,177 cps |
| 98Mo (KEDR) | 0.030 ppb | 11.2 % | 591 cps | 591 cps |
| 107Ag (STDR) | 0.007 ppb | 95.6 % | 568 cps | 568 cps |
| 107Ag (KEDR) | 0.008 ppb | 116.5 % | 432 cps | 432 cps |
| 111Cd (STDR) | -0.001 ppb | 263.5 % | 382 cps | 13 cps |
| 111Cd (KEDR) | 0.002 ppb | 34.7 % | 15 cps | 15 cps |
| 115In (STDR) | 95.070 % | 0.6 % | 814,798 cps | 814,803 cps |
| 115In (KEDR) | 94.453 % | 0.6 % | 183,516 cps | 183,516 cps |
| 121Sb (STDR) | 0.003 ppb | 19.8 % | 220 cps | 220 cps |
| 121Sb (KEDR) | 0.002 ppb | 38.5 % | 51 cps | 51 cps |
| 137Ba (STDR) | 0.000 ppb | 544.7 % | 177 cps | 177 cps |
| 137Ba (KEDR) | 0.001 ppb | 150.7 % | 61 cps | 61 cps |
| 205Tl (STDR) | 0.002 ppb | 15.7 % | 1,328 cps | 1,328 cps |
| 205Tl (KEDR) | 0.002 ppb | 14.1 % | 1,401 cps | 1,401 cps |
| 208Pb (STDR) | 0.001 ppb | 18.8 % | 1,262 cps | 658 cps |
| 208Pb (KEDR) | 0.000 ppb | 230.6 % | 671 cps | 671 cps |
| 209Bi (STDR) | 98.495 % | 1.2 % | 1,080,227 cps | 1,080,227 cps |
| 209Bi (KEDR) | 99.696 % | 0.8 % | 1,061,490 cps | 1,061,490 cps |
| 238U (STDR) | 0.002 ppb | 7.8 % | 680 cps | 680 cps |
| 238U (KEDR) | 0.002 ppb | 4.2 % | 767 cps | 767 cps |

Turner Report Sample Summary

4/15/2021 11:49:42 AM
iCAP RQ ICP-MS



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Analysis index: 21
Analysis name: 21D0200-01@5
Analysis started at: 4/15/2021 11:46:14 AM

Handwritten note: KEDR KeD

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 96.987 % | 1.1 % | 104,280 cps | 104,280 cps |
| 9Be (STDR) | 0.008 ppb | 29.1 % | 112 cps | 112 cps |
| 27Al (STDR) | 1.015 ppb | 42.5 % | 43,753 cps | 43,753 cps |
| 45Sc (STDR) | 81.420 % | 0.7 % | 234,752 cps | 295,851 cps |
| 45Sc (KEDR) | 90.742 % | 2.0 % | 9,352 cps | 9,352 cps |
| 51V (STDR) | 0.176 ppb | 1.2 % | 8,585 cps | 14,742 cps |
| 51V (KEDR) | 0.124 ppb | 5.2 % | 831 cps | 831 cps |
| 55Mn (STDR) | 24.071 ppb | 0.7 % | 1,434,821 cps | 1,434,821 cps |
| 55Mn (KEDR) | 23.057 ppb | 0.4 % | 103,678 cps | 103,678 cps |
| 52Cr (STDR) | 0.153 ppb | 3.5 % | 15,501 cps | 15,575 cps |
| 52Cr (KEDR) | 0.149 ppb | 9.5 % | 1,529 cps | 1,529 cps |
| 59Co (STDR) | 0.034 ppb | 10.3 % | 1,880 cps | 1,880 cps |
| 59Co (KEDR) | 0.025 ppb | 3.0 % | 461 cps | 461 cps |
| 60Ni (STDR) | 0.260 ppb | 8.0 % | 3,105 cps | 3,105 cps |
| 60Ni (KEDR) | 0.190 ppb | 5.7 % | 1,031 cps | 1,031 cps |
| 63Cu (STDR) | 0.404 ppb | 1.2 % | 12,448 cps | 12,448 cps |
| 63Cu (KEDR) | 0.235 ppb | 4.1 % | 3,490 cps | 3,490 cps |
| 66Zn (STDR) | 0.227 ppb | 16.8 % | 7,602 cps | 7,602 cps |
| 66Zn (KEDR) | 0.183 ppb | 11.0 % | 1,985 cps | 1,985 cps |
| 74Ge (STDR) | 88.396 % | 1.7 % | 517,737 cps | 517,805 cps |
| 74Ge (KEDR) | 89.100 % | 1.6 % | 82,800 cps | 82,800 cps |
| 75As (STDR) | 1.359 ppb | 4.6 % | 10,592 cps | 11,622 cps |
| 75As (KEDR) | 1.465 ppb | 3.7 % | 1,819 cps | 1,819 cps |
| 82Se (STDR) | 0.113 ppb | 91.6 % | -132 cps | 312 cps |
| 82Se (KEDR) | 0.056 ppb | 347.0 % | 15 cps | 15 cps |
| 98Mo (STDR) | 0.527 ppb | 1.5 % | 13,776 cps | 13,778 cps |
| 98Mo (KEDR) | 0.531 ppb | 1.4 % | 8,008 cps | 8,008 cps |
| 107Ag (STDR) | -0.001 ppb | 69.8 % | 112 cps | 112 cps |
| 107Ag (KEDR) | 0.002 ppb | 225.1 % | 217 cps | 217 cps |
| 111Cd (STDR) | -0.003 ppb | 186.4 % | 334 cps | 25 cps |
| 111Cd (KEDR) | 0.000 ppb | 56.2 % | 3 cps | 3 cps |
| 115In (STDR) | 87.301 % | 0.2 % | 748,217 cps | 748,259 cps |
| 115In (KEDR) | 88.553 % | 0.2 % | 172,054 cps | 172,054 cps |
| 121Sb (STDR) | 0.024 ppb | 10.3 % | 1,128 cps | 1,128 cps |
| 121Sb (KEDR) | 0.026 ppb | 9.6 % | 362 cps | 362 cps |
| 137Ba (STDR) | 3.324 ppb | 1.3 % | 54,261 cps | 54,261 cps |
| 137Ba (KEDR) | 3.332 ppb | 0.5 % | 14,978 cps | 14,978 cps |
| 205Tl (STDR) | 0.001 ppb | 75.0 % | 902 cps | 902 cps |
| 205Tl (KEDR) | 0.001 ppb | 36.9 % | 960 cps | 960 cps |
| 208Pb (STDR) | 0.033 ppb | 0.4 % | 6,166 cps | 3,320 cps |
| 208Pb (KEDR) | 0.035 ppb | 4.6 % | 3,566 cps | 3,566 cps |
| 209Bi (STDR) | 72.621 % | 0.7 % | 796,461 cps | 796,461 cps |
| 209Bi (KEDR) | 74.735 % | 0.3 % | 795,728 cps | 795,728 cps |
| 238U (STDR) | 0.355 ppb | 1.3 % | 68,020 cps | 68,020 cps |
| 238U (KEDR) | 0.358 ppb | 0.3 % | 74,952 cps | 74,952 cps |

Turner Report Sample Summary

4/15/2021 11:53:11 AM
iCAP RQ ICP-MS



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Analysis index: 22
Analysis name: 2104129-MS1@5
Analysis started at: 4/15/2021 11:49:42 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 95.011 % | 0.8 % | 102,155 cps | 102,155 cps |
| 9Be (STDR) | 8.857 ppb | 0.4 % | 46,657 cps | 46,657 cps |
| 27Al (STDR) | 19.007 ppb | 0.3 % | 483,633 cps | 483,633 cps |
| 45Sc (STDR) | 79.001 % | 0.6 % | 227,779 cps | 288,738 cps |
| 45Sc (KEDR) | 88.404 % | 0.8 % | 9,111 cps | 9,111 cps |
| 51V (STDR) | 9.558 ppb | 0.8 % | 373,396 cps | 385,685 cps |
| 51V (KEDR) | 8.989 ppb | 0.6 % | 54,346 cps | 54,346 cps |
| 55Mn (STDR) | 33.701 ppb | 1.2 % | 1,949,260 cps | 1,949,260 cps |
| 55Mn (KEDR) | 32.257 ppb | 2.0 % | 141,513 cps | 141,513 cps |
| 52Cr (STDR) | 9.186 ppb | 0.5 % | 350,718 cps | 350,791 cps |
| 52Cr (KEDR) | 8.720 ppb | 1.3 % | 78,462 cps | 78,462 cps |
| 59Co (STDR) | 9.034 ppb | 0.7 % | 407,375 cps | 407,375 cps |
| 59Co (KEDR) | 8.758 ppb | 1.2 % | 145,977 cps | 145,977 cps |
| 60Ni (STDR) | 9.222 ppb | 1.3 % | 92,548 cps | 92,548 cps |
| 60Ni (KEDR) | 8.665 ppb | 1.8 % | 39,748 cps | 39,748 cps |
| 63Cu (STDR) | 8.089 ppb | 3.0 % | 204,257 cps | 204,257 cps |
| 63Cu (KEDR) | 7.912 ppb | 0.7 % | 102,023 cps | 102,023 cps |
| 66Zn (STDR) | 18.680 ppb | 0.4 % | 175,036 cps | 175,036 cps |
| 66Zn (KEDR) | 18.348 ppb | 1.7 % | 47,612 cps | 47,612 cps |
| 74Ge (STDR) | 85.884 % | 0.8 % | 503,026 cps | 503,701 cps |
| 74Ge (KEDR) | 87.245 % | 2.1 % | 81,077 cps | 81,077 cps |
| 75As (STDR) | 10.381 ppb | 0.8 % | 83,376 cps | 82,753 cps |
| 75As (KEDR) | 10.421 ppb | 1.1 % | 12,635 cps | 12,635 cps |
| 82Se (STDR) | 8.083 ppb | 2.3 % | 6,922 cps | 7,342 cps |
| 82Se (KEDR) | 8.028 ppb | 5.2 % | 448 cps | 448 cps |
| 98Mo (STDR) | 9.612 ppb | 0.6 % | 243,241 cps | 243,242 cps |
| 98Mo (KEDR) | 9.701 ppb | 1.4 % | 141,623 cps | 141,623 cps |
| 107Ag (STDR) | 6.970 ppb | 2.0 % | 341,909 cps | 341,909 cps |
| 107Ag (KEDR) | 7.242 ppb | 2.0 % | 242,290 cps | 242,290 cps |
| 111Cd (STDR) | 9.094 ppb | 1.9 % | 113,768 cps | 113,778 cps |
| 111Cd (KEDR) | 9.154 ppb | 1.2 % | 54,439 cps | 54,439 cps |
| 115In (STDR) | 86.396 % | 1.1 % | 740,455 cps | 740,496 cps |
| 115In (KEDR) | 86.959 % | 0.6 % | 168,957 cps | 168,957 cps |
| 121Sb (STDR) | 8.875 ppb | 1.2 % | 392,003 cps | 392,003 cps |
| 121Sb (KEDR) | 9.302 ppb | 1.0 % | 119,459 cps | 119,459 cps |
| 137Ba (STDR) | 12.861 ppb | 0.3 % | 207,723 cps | 207,723 cps |
| 137Ba (KEDR) | 12.849 ppb | 1.7 % | 56,808 cps | 56,808 cps |
| 205Tl (STDR) | 10.913 ppb | 1.1 % | 1,320,098 cps | 1,320,098 cps |
| 205Tl (KEDR) | 11.159 ppb | 1.2 % | 1,369,552 cps | 1,369,552 cps |
| 208Pb (STDR) | 11.019 ppb | 0.5 % | 1,810,656 cps | 958,911 cps |
| 208Pb (KEDR) | 11.346 ppb | 0.7 % | 1,004,853 cps | 1,004,853 cps |
| 209Bi (STDR) | 72.558 % | 0.6 % | 795,765 cps | 795,765 cps |
| 209Bi (KEDR) | 74.828 % | 0.8 % | 796,716 cps | 796,716 cps |
| 238U (STDR) | 11.182 ppb | 0.8 % | 2,135,578 cps | 2,135,578 cps |
| 238U (KEDR) | 11.385 ppb | 2.7 % | 2,380,845 cps | 2,380,845 cps |

Turner Report Sample Summary

4/15/2021 12:01:03 PM
ICAP RQ ICP-MS



W/16/1n

Analysis index: 23
Analysis name: CCB
Analysis started at: 4/15/2021 11:57:37 AM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 96.367 % | 0.9 % | 103,613 cps | 103,613 cps |
| 9Be (STDR) | 0.002 ppb | 123.4 % | 78 cps | 78 cps |
| 27Al (STDR) | -0.301 ppb | 6.2 % | 11,147 cps | 11,147 cps |
| 45Sc (STDR) | 88.209 % | 0.5 % | 254,329 cps | 282,766 cps |
| 45Sc (KEDR) | 87.376 % | 7.3 % | 9,005 cps | 9,005 cps |
| 51V (STDR) | 0.036 ppb | 44.6 % | 3,191 cps | 8,838 cps |
| 51V (KEDR) | 0.005 ppb | 4.5 % | 93 cps | 93 cps |
| 55Mn (STDR) | -0.001 ppb | 260.5 % | 2,432 cps | 2,432 cps |
| 55Mn (KEDR) | 0.003 ppb | 142.9 % | 118 cps | 118 cps |
| 52Cr (STDR) | -0.021 ppb | 18.7 % | 9,401 cps | 9,449 cps |
| 52Cr (KEDR) | 0.005 ppb | 47.2 % | 196 cps | 196 cps |
| 59Co (STDR) | 0.000 ppb | 82.8 % | 307 cps | 307 cps |
| 59Co (KEDR) | 0.000 ppb | 2,118.4 % | 28 cps | 28 cps |
| 60Ni (STDR) | -0.004 ppb | 34.6 % | 408 cps | 408 cps |
| 60Ni (KEDR) | 0.006 ppb | 60.7 % | 164 cps | 164 cps |
| 63Cu (STDR) | 0.046 ppb | 22.3 % | 3,332 cps | 3,332 cps |
| 63Cu (KEDR) | 0.034 ppb | 8.8 % | 820 cps | 820 cps |
| 66Zn (STDR) | -0.012 ppb | 246.7 % | 5,510 cps | 5,510 cps |
| 66Zn (KEDR) | 0.025 ppb | 116.3 % | 1,537 cps | 1,537 cps |
| 74Ge (STDR) | 88.840 % | 1.0 % | 520,340 cps | 520,402 cps |
| 74Ge (KEDR) | 87.047 % | 3.1 % | 80,892 cps | 80,892 cps |
| 75As (STDR) | 0.008 ppb | 153.4 % | -668 cps | 472 cps |
| 75As (KEDR) | -0.003 ppb | 73.6 % | 3 cps | 3 cps |
| 82Se (STDR) | -0.024 ppb | 248.0 % | -259 cps | 205 cps |
| 82Se (KEDR) | -0.075 ppb | 67.4 % | 8 cps | 8 cps |
| 98Mo (STDR) | 0.010 ppb | 15.5 % | 454 cps | 455 cps |
| 98Mo (KEDR) | 0.010 ppb | 22.9 % | 253 cps | 253 cps |
| 107Ag (STDR) | -0.001 ppb | 28.2 % | 107 cps | 107 cps |
| 107Ag (KEDR) | 0.000 ppb | 11,497.3 % | 133 cps | 133 cps |
| 111Cd (STDR) | -0.001 ppb | 138.2 % | 360 cps | 7 cps |
| 111Cd (KEDR) | 0.000 ppb | 2,398.5 % | 1 cps | 1 cps |
| 115In (STDR) | 88.977 % | 0.3 % | 762,575 cps | 762,579 cps |
| 115In (KEDR) | 87.844 % | 5.2 % | 170,675 cps | 170,675 cps |
| 121Sb (STDR) | 0.001 ppb | 28.4 % | 101 cps | 102 cps |
| 121Sb (KEDR) | 0.000 ppb | 292.4 % | 19 cps | 19 cps |
| 137Ba (STDR) | 0.003 ppb | 90.0 % | 215 cps | 215 cps |
| 137Ba (KEDR) | 0.000 ppb | 89.7 % | 52 cps | 52 cps |
| 205Tl (STDR) | 0.000 ppb | 311.1 % | 983 cps | 983 cps |
| 205Tl (KEDR) | 0.000 ppb | 105.7 % | 982 cps | 982 cps |
| 208Pb (STDR) | 0.000 ppb | 142.7 % | 880 cps | 445 cps |
| 208Pb (KEDR) | -0.001 ppb | 33.9 % | 508 cps | 508 cps |
| 209Bi (STDR) | 93.519 % | 0.3 % | 1,025,649 cps | 1,025,649 cps |
| 209Bi (KEDR) | 91.515 % | 4.5 % | 974,389 cps | 974,389 cps |
| 238U (STDR) | 0.000 ppb | 45.2 % | 198 cps | 198 cps |
| 238U (KEDR) | 0.000 ppb | 49.4 % | 209 cps | 209 cps |

Turner Report Sample Summary

4/15/2021 12:04:34 PM
iCAP RQ ICP-MS



W. W. W.

Analysis index: 24
Analysis name: CCV
Analysis started at: 4/15/2021 12:01:04 PM

Rinse & Repeat

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 93.898 % | 2.0 % | 100,959 cps | 100,959 cps |
| 9Be (STDR) | 45.941 ppb | 2.1 % | 240,459 cps | 240,459 cps |
| 27Al (STDR) | 91.750 ppb | 1.9 % | 2,356,129 cps | 2,356,129 cps |
| 45Sc (STDR) | 86.350 % | 1.4 % | 248,969 cps | 276,513 cps |
| 45Sc (KEDR) | 90.799 % | 0.7 % | 9,358 cps | 9,358 cps |
| 51V (STDR) | 45.033 ppb | 1.0 % | 1,884,980 cps | 1,932,871 cps |
| 51V (KEDR) | 45.582 ppb | 1.0 % | 281,939 cps | 281,939 cps |
| 55Mn (STDR) | 46.650 ppb | 0.7 % | 2,867,598 cps | 2,867,598 cps |
| 55Mn (KEDR) | 46.835 ppb | 1.3 % | 209,910 cps | 209,910 cps |
| 52Cr (STDR) | 45.671 ppb | 1.6 % | 1,829,340 cps | 1,829,380 cps |
| 52Cr (KEDR) | 45.568 ppb | 1.2 % | 418,991 cps | 418,991 cps |
| 59Co (STDR) | 45.858 ppb | 1.4 % | 2,173,694 cps | 2,173,694 cps |
| 59Co (KEDR) | 46.116 ppb | 1.2 % | 783,711 cps | 783,711 cps |
| 60Ni (STDR) | 46.800 ppb | 1.3 % | 490,851 cps | 490,851 cps |
| 60Ni (KEDR) | 46.421 ppb | 0.6 % | 216,458 cps | 216,458 cps |
| 63Cu (STDR) | 49.127 ppb | 0.8 % | 1,280,098 cps | 1,280,098 cps |
| 63Cu (KEDR) | 50.552 ppb | 2.1 % | 661,300 cps | 661,300 cps |
| 66Zn (STDR) | 94.686 ppb | 0.9 % | 893,348 cps | 893,348 cps |
| 66Zn (KEDR) | 93.993 ppb | 0.8 % | 241,655 cps | 241,655 cps |
| 74Ge (STDR) | 86.808 % | 1.9 % | 508,438 cps | 512,118 cps |
| 74Ge (KEDR) | 88.276 % | 1.0 % | 82,034 cps | 82,034 cps |
| 75As (STDR) | 47.119 ppb | 0.9 % | 385,120 cps | 375,513 cps |
| 75As (KEDR) | 48.072 ppb | 0.5 % | 58,978 cps | 58,978 cps |
| 82Se (STDR) | 47.219 ppb | 0.1 % | 42,064 cps | 42,479 cps |
| 82Se (KEDR) | 49.553 ppb | 2.6 % | 2,743 cps | 2,743 cps |
| 98Mo (STDR) | 46.015 ppb | 1.3 % | 1,182,114 cps | 1,182,115 cps |
| 98Mo (KEDR) | 46.936 ppb | 0.6 % | 699,479 cps | 699,479 cps |
| 107Ag (STDR) | 31.298 | 2.8 | 1,561,708 cps | 1,561,708 cps |
| 107Ag (KEDR) | 24.695 | 12.9 | 846,104 cps | 846,104 cps |
| 111Cd (STDR) | 47.354 ppb | 0.8 % | 601,902 cps | 603,921 cps |
| 111Cd (KEDR) | 47.110 ppb | 0.4 % | 287,613 cps | 287,613 cps |
| 115In (STDR) | 88.068 % | 0.6 % | 754,785 cps | 754,810 cps |
| 115In (KEDR) | 89.413 % | 1.2 % | 173,724 cps | 173,724 cps |
| 121Sb (STDR) | 43.033 ppb | 0.4 % | 2,058,834 cps | 2,058,835 cps |
| 121Sb (KEDR) | 44.399 ppb | 0.5 % | 640,134 cps | 640,134 cps |
| 137Ba (STDR) | 39.735 | 0.6 | 808,361 cps | 808,361 cps |
| 137Ba (KEDR) | 37.019 | 2.4 | 226,137 cps | 226,137 cps |
| 205Tl (STDR) | 28.857 | 2.4 | 7,465,664 cps | 7,465,664 cps |
| 205Tl (KEDR) | 23.249 | 6.5 | 7,537,060 cps | 7,537,060 cps |
| 208Pb (STDR) | 26.949 | 3.2 | 9,666,948 cps | 5,141,398 cps |
| 208Pb (KEDR) | 21.506 | 6.8 | 5,150,185 cps | 5,150,185 cps |
| 209Bi (STDR) | 159.600 | 2.3 | 1,750,389 cps | 1,750,389 cps |
| 209Bi (KEDR) | 204.640 | 7.6 | 2,178,854 cps | 2,178,854 cps |
| 238U (STDR) | 26.141 | 2.5 | 10,977,178 cps | 10,977,178 cps |
| 238U (KEDR) | 21.006 | 6.9 | 11,972,750 cps | 11,972,750 cps |

Turner Report Sample Summary

4/15/2021 12:08:05 PM
ICAP RQ ICP-MS



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Analysis index: 25
Analysis name: CCV
Analysis started at: 4/15/2021 12:04:34 PM

Report + Review

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 91.505 % | 1.2 % | 98,386 cps | 98,386 cps |
| 9Be (STDR) | 46.059 ppb | 0.7 % | 235,111 cps | 235,111 cps |
| 27Al (STDR) | 92.740 ppb | 0.9 % | 2,329,726 cps | 2,329,726 cps |
| 45Sc (STDR) | 84.752 % | 0.5 % | 244,362 cps | 271,589 cps |
| 45Sc (KEDR) | 89.189 % | 0.7 % | 9,192 cps | 9,192 cps |
| 51V (STDR) | 45.131 ppb | 1.1 % | 1,850,416 cps | 1,888,145 cps |
| 51V (KEDR) | 45.949 ppb | 0.1 % | 278,824 cps | 278,824 cps |
| 55Mn (STDR) | 46.530 ppb | 1.0 % | 2,797,536 cps | 2,797,536 cps |
| 55Mn (KEDR) | 46.691 ppb | 0.9 % | 205,126 cps | 205,126 cps |
| 52Cr (STDR) | 46.177 ppb | 1.1 % | 1,810,768 cps | 1,810,807 cps |
| 52Cr (KEDR) | 45.885 ppb | 0.4 % | 413,834 cps | 413,834 cps |
| 59Co (STDR) | 47.047 ppb | 0.4 % | 2,177,967 cps | 2,177,967 cps |
| 59Co (KEDR) | 45.993 ppb | 0.3 % | 765,523 cps | 765,523 cps |
| 60Ni (STDR) | 47.117 ppb | 1.7 % | 482,452 cps | 482,452 cps |
| 60Ni (KEDR) | 46.383 ppb | 0.2 % | 211,788 cps | 211,788 cps |
| 63Cu (STDR) | 47.366 ppb | 1.7 % | 1,203,794 cps | 1,203,794 cps |
| 63Cu (KEDR) | 46.812 ppb | 0.3 % | 599,288 cps | 599,288 cps |
| 66Zn (STDR) | 94.833 ppb | 1.0 % | 871,820 cps | 871,820 cps |
| 66Zn (KEDR) | 93.753 ppb | 0.6 % | 235,743 cps | 235,743 cps |
| 74Ge (STDR) | 84.347 % | 0.1 % | 494,023 cps | 497,658 cps |
| 74Ge (KEDR) | 86.187 % | 0.9 % | 80,094 cps | 80,094 cps |
| 75As (STDR) | 47.592 ppb | 1.0 % | 378,093 cps | 366,963 cps |
| 75As (KEDR) | 48.341 ppb | 1.5 % | 57,927 cps | 57,927 cps |
| 82Se (STDR) | 48.640 ppb | 1.2 % | 42,205 cps | 42,601 cps |
| 82Se (KEDR) | 49.909 ppb | 5.1 % | 2,706 cps | 2,706 cps |
| 98Mo (STDR) | 46.439 ppb | 0.5 % | 1,166,957 cps | 1,166,959 cps |
| 98Mo (KEDR) | 46.619 ppb | 1.6 % | 685,218 cps | 685,218 cps |
| 107Ag (STDR) | 41.939 ↓ | 1.5 | 2,051,987 cps | 2,051,987 cps |
| 107Ag (KEDR) | 42.694 ppb | 1.7 % | 1,448,690 cps | 1,448,690 cps |
| 111Cd (STDR) | 47.405 ppb | 0.5 % | 591,519 cps | 593,646 cps |
| 111Cd (KEDR) | 46.581 ppb | 1.1 % | 282,000 cps | 282,000 cps |
| 115In (STDR) | 86.550 % | 0.4 % | 741,777 cps | 741,801 cps |
| 115In (KEDR) | 88.821 % | 2.1 % | 172,574 cps | 172,574 cps |
| 121Sb (STDR) | 44.964 ppb | 0.5 % | 2,035,219 cps | 2,035,223 cps |
| 121Sb (KEDR) | 46.848 ppb | 1.6 % | 629,490 cps | 629,490 cps |
| 137Ba (STDR) | 45.637 ppb | 0.7 % | 801,993 cps | 801,993 cps |
| 137Ba (KEDR) | 45.334 ppb | 2.0 % | 223,513 cps | 223,513 cps |
| 205Tl (STDR) | 43.805 ppb | 0.6 % | 7,445,296 cps | 7,445,296 cps |
| 205Tl (KEDR) | 41.741 ↓ | 2.2 | 7,444,569 cps | 7,444,569 cps |
| 208Pb (STDR) | 41.292 ↓ | 1.1 | 9,642,624 cps | 5,114,050 cps |
| 208Pb (KEDR) | 39.417 ↓ | 2.0 | 5,132,540 cps | 5,132,540 cps |
| 209Bi (STDR) | 103.543 % | 1.0 % | 1,135,591 cps | 1,135,591 cps |
| 209Bi (KEDR) | 110.507 % | 2.7 % | 1,176,596 cps | 1,176,596 cps |
| 238U (STDR) | 40.743 ↓ | 0.3 | 11,104,148 cps | 11,104,148 cps |
| 238U (KEDR) | 38.823 | 1.6 | 11,987,786 cps | 11,987,786 cps |

Turner Report Sample Summary

4/15/2021 12:14:00 PM
iCAP RQ ICP-MS



W. W. W. W.

Analysis index: 26
Analysis name: CCV
Analysis started at: 4/15/2021 12:10:30 PM

| Category | Concentration average | Concentration RSD | Intensity average | Raw Intensity average |
|--------------|-----------------------|-------------------|-------------------|-----------------------|
| 6Li (STDR) | 90.827 % | 0.3 % | 97,657 cps | 97,657 cps |
| 9Be (STDR) | 46.117 ppb | 1.3 % | 233,469 cps | 233,469 cps |
| 27Al (STDR) | 92.166 ppb | 0.2 % | 2,284,254 cps | 2,284,254 cps |
| 45Sc (STDR) | 83.137 % | 0.9 % | 239,704 cps | 265,994 cps |
| 45Sc (KEDR) | 86.842 % | 1.2 % | 8,950 cps | 8,950 cps |
| 51V (STDR) | 45.593 ppb | 1.6 % | 1,832,315 cps | 1,875,129 cps |
| 51V (KEDR) | 46.112 ppb | 1.1 % | 273,121 cps | 273,121 cps |
| 55Mn (STDR) | 46.819 ppb | 1.6 % | 2,758,149 cps | 2,758,149 cps |
| 55Mn (KEDR) | 47.311 ppb | 0.3 % | 203,225 cps | 203,225 cps |
| 52Cr (STDR) | 45.999 ppb | 1.0 % | 1,768,043 cps | 1,768,081 cps |
| 52Cr (KEDR) | 46.363 ppb | 1.6 % | 408,280 cps | 408,280 cps |
| 59Co (STDR) | 46.945 ppb | 0.5 % | 2,128,568 cps | 2,128,568 cps |
| 59Co (KEDR) | 46.541 ppb | 0.5 % | 758,632 cps | 758,632 cps |
| 60Ni (STDR) | 47.282 ppb | 0.7 % | 474,127 cps | 474,127 cps |
| 60Ni (KEDR) | 46.751 ppb | 1.2 % | 209,136 cps | 209,136 cps |
| 63Cu (STDR) | 47.002 ppb | 0.9 % | 1,169,444 cps | 1,169,444 cps |
| 63Cu (KEDR) | 46.943 ppb | 1.4 % | 589,491 cps | 589,491 cps |
| 66Zn (STDR) | 95.000 ppb | 1.2 % | 854,691 cps | 854,691 cps |
| 66Zn (KEDR) | 94.633 ppb | 0.3 % | 233,708 cps | 233,708 cps |
| 74Ge (STDR) | 82.474 % | 0.1 % | 483,053 cps | 486,675 cps |
| 74Ge (KEDR) | 84.946 % | 0.3 % | 78,940 cps | 78,940 cps |
| 75As (STDR) | 47.503 ppb | 1.0 % | 368,942 cps | 361,724 cps |
| 75As (KEDR) | 47.631 ppb | 0.5 % | 56,259 cps | 56,259 cps |
| 82Se (STDR) | 47.880 ppb | 0.9 % | 40,567 cps | 40,937 cps |
| 82Se (KEDR) | 46.696 ppb | 2.0 % | 2,497 cps | 2,497 cps |
| 98Mo (STDR) | 47.133 ppb | 0.9 % | 1,153,735 cps | 1,153,737 cps |
| 98Mo (KEDR) | 46.636 ppb | 1.1 % | 676,324 cps | 676,324 cps |
| 107Ag (STDR) | 43.843 ppb | 0.7 % | 2,086,802 cps | 2,086,802 cps |
| 107Ag (KEDR) | 44.665 ppb | 0.8 % | 1,495,890 cps | 1,495,890 cps |
| 111Cd (STDR) | 48.065 ppb | 0.3 % | 583,064 cps | 585,261 cps |
| 111Cd (KEDR) | 47.068 ppb | 0.3 % | 281,279 cps | 281,279 cps |
| 115In (STDR) | 84.091 % | 0.7 % | 720,704 cps | 720,728 cps |
| 115In (KEDR) | 87.680 % | 1.0 % | 170,357 cps | 170,357 cps |
| 121Sb (STDR) | 45.858 ppb | 0.9 % | 2,004,496 cps | 2,004,498 cps |
| 121Sb (KEDR) | 48.045 ppb | 0.3 % | 631,377 cps | 631,377 cps |
| 137Ba (STDR) | 47.204 ppb | 1.0 % | 788,714 cps | 788,714 cps |
| 137Ba (KEDR) | 46.695 ppb | 0.2 % | 219,708 cps | 219,708 cps |
| 205Tl (STDR) | 47.880 ppb | 2.1 % | 7,297,673 cps | 7,297,673 cps |
| 205Tl (KEDR) | 47.286 ppb | 1.8 % | 7,348,061 cps | 7,348,061 cps |
| 208Pb (STDR) | 45.457 ppb | 1.4 % | 9,498,325 cps | 5,051,866 cps |
| 208Pb (KEDR) | 44.733 ppb | 1.6 % | 5,056,518 cps | 5,056,518 cps |
| 209Bi (STDR) | 92.583 % | 1.0 % | 1,015,384 cps | 1,015,384 cps |
| 209Bi (KEDR) | 95.809 % | 2.2 % | 1,020,101 cps | 1,020,101 cps |
| 238U (STDR) | 44.609 ppb | 2.3 % | 10,869,492 cps | 10,869,492 cps |
| 238U (KEDR) | 44.612 ppb | 0.5 % | 11,945,797 cps | 11,945,797 cps |

Analytical Standard Record

Turner Laboratories, Inc.

2101339

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ Cal Standard #1 | Expires: 02/14/2022 |
| Standard Type: Calibration Standard | Prepared: 04/08/2021 |
| Solvent: 2% HNO3 & 0.5% HCL | Prepared By: Crystal Ramirez |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 04/08/2021 19:09 by CR |

All analytes at 1 ppb
 Made up as a 10x dilution of ICP MS iCAP RQ Cal Standard #2 (2101340)

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.001 | ug/mL |
| Antimony | 7440-36-0 | 0.001 | ug/mL |
| Arsenic | 7440-38-2 | 0.001 | ug/mL |
| Barium | 7440-39-3 | 0.001 | ug/mL |
| Beryllium | 7440-41-7 | 0.001 | ug/mL |
| Cadmium | 7440-43-9 | 0.001 | ug/mL |
| Chromium | 7440-47-3 | 0.001 | ug/mL |
| Cobalt | 7440-48-4 | 0.001 | ug/mL |
| Aluminum | 7429-90-5 | 0.001 | ug/mL |
| Lead | 7439-92-1 | 0.001 | ug/mL |
| Zinc | 7440-66-6 | 0.001 | ug/mL |
| Molybdenum | 7439-98-7 | 0.001 | ug/mL |
| Nickel | 7440-02-0 | 0.001 | ug/mL |
| Selenium | 7782-49-2 | 0.001 | ug/mL |
| Silver | 7440-22-4 | 0.001 | ug/mL |
| Thallium | 7440-28-0 | 0.001 | ug/mL |
| Uranium | 7440-61-1 | 0.001 | ug/mL |
| Vanadium | 7440-62-2 | 0.001 | ug/mL |
| Copper | 7440-50-8 | 0.001 | ug/mL |

Lot #: 10117268-2
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.005 |

Analytical Standard Record

Turner Laboratories, Inc.

2101340

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ Cal Standard #2 | Expires: 02/14/2022 |
| Standard Type: Calibration Standard | Prepared: 04/08/2021 |
| Solvent: 2% HNO3 & 0.5% HCL | Prepared By: Crystal Ramirez |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 04/08/2021 19:09 by CR |

All analytes at 10 ppb
 Made up as a 10x dilution of ICP MS iCAP RQ Cal Standard #4 (2101342)

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.01 | ug/mL |
| Antimony | 7440-36-0 | 0.01 | ug/mL |
| Arsenic | 7440-38-2 | 0.01 | ug/mL |
| Barium | 7440-39-3 | 0.01 | ug/mL |
| Beryllium | 7440-41-7 | 0.01 | ug/mL |
| Cadmium | 7440-43-9 | 0.01 | ug/mL |
| Chromium | 7440-47-3 | 0.01 | ug/mL |
| Cobalt | 7440-48-4 | 0.01 | ug/mL |
| Aluminum | 7429-90-5 | 0.01 | ug/mL |
| Lead | 7439-92-1 | 0.01 | ug/mL |
| Zinc | 7440-66-6 | 0.01 | ug/mL |
| Molybdenum | 7439-98-7 | 0.01 | ug/mL |
| Nickel | 7440-02-0 | 0.01 | ug/mL |
| Selenium | 7782-49-2 | 0.01 | ug/mL |
| Silver | 7440-22-4 | 0.01 | ug/mL |
| Thallium | 7440-28-0 | 0.01 | ug/mL |
| Uranium | 7440-61-1 | 0.01 | ug/mL |
| Vanadium | 7440-62-2 | 0.01 | ug/mL |
| Copper | 7440-50-8 | 0.01 | ug/mL |

Lot #: 10117268-2
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.05 |

Analytical Standard Record

Turner Laboratories, Inc.

2101341

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ Cal Standard #3 | Expires: 02/14/2022 |
| Standard Type: Calibration Standard | Prepared: 04/08/2021 |
| Solvent: 2% HNO3 & 0.5% HCL | Prepared By: Crystal Ramirez |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 04/08/2021 19:07 by CR |

All analytes at 50 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.05 | ug/mL |
| Antimony | 7440-36-0 | 0.05 | ug/mL |
| Arsenic | 7440-38-2 | 0.05 | ug/mL |
| Barium | 7440-39-3 | 0.05 | ug/mL |
| Beryllium | 7440-41-7 | 0.05 | ug/mL |
| Cadmium | 7440-43-9 | 0.05 | ug/mL |
| Chromium | 7440-47-3 | 0.05 | ug/mL |
| Cobalt | 7440-48-4 | 0.05 | ug/mL |
| Aluminum | 7429-90-5 | 0.05 | ug/mL |
| Lead | 7439-92-1 | 0.05 | ug/mL |
| Zinc | 7440-66-6 | 0.05 | ug/mL |
| Molybdenum | 7439-98-7 | 0.05 | ug/mL |
| Nickel | 7440-02-0 | 0.05 | ug/mL |
| Selenium | 7782-49-2 | 0.05 | ug/mL |
| Silver | 7440-22-4 | 0.05 | ug/mL |
| Thallium | 7440-28-0 | 0.05 | ug/mL |
| Uranium | 7440-61-1 | 0.05 | ug/mL |
| Vanadium | 7440-62-2 | 0.05 | ug/mL |
| Copper | 7440-50-8 | 0.05 | ug/mL |

Lot #: 10117268-2

Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.25 |

Analytical Standard Record

Turner Laboratories, Inc.

2101342

Description: ICP MS iCAP RQ Cal Standard #4
 Standard Type: Calibration Standard
 Solvent: 2% HNO3 & 0.5% HCL
 Final Volume (mls): 100
 Vials: 1

Expires: 02/14/2022
 Prepared: 04/08/2021
 Prepared By: Crystal Ramirez
 Department: ICP/MS
 Last Edit: 04/08/2021 19:08 by CR

All analytes at 100 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.1 | ug/mL |
| Antimony | 7440-36-0 | 0.1 | ug/mL |
| Arsenic | 7440-38-2 | 0.1 | ug/mL |
| Barium | 7440-39-3 | 0.1 | ug/mL |
| Beryllium | 7440-41-7 | 0.1 | ug/mL |
| Cadmium | 7440-43-9 | 0.1 | ug/mL |
| Chromium | 7440-47-3 | 0.1 | ug/mL |
| Cobalt | 7440-48-4 | 0.1 | ug/mL |
| Aluminum | 7429-90-5 | 0.1 | ug/mL |
| Lead | 7439-92-1 | 0.1 | ug/mL |
| Zinc | 7440-66-6 | 0.1 | ug/mL |
| Molybdenum | 7439-98-7 | 0.1 | ug/mL |
| Nickel | 7440-02-0 | 0.1 | ug/mL |
| Selenium | 7782-49-2 | 0.1 | ug/mL |
| Silver | 7440-22-4 | 0.1 | ug/mL |
| Thallium | 7440-28-0 | 0.1 | ug/mL |
| Uranium | 7440-61-1 | 0.1 | ug/mL |
| Vanadium | 7440-62-2 | 0.1 | ug/mL |
| Copper | 7440-50-8 | 0.1 | ug/mL |

Lot #: 10117268-2

Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101110

Description: ICP MS iCAP RQ Cal Standard #1 (1% HNO3) Expires: 02/14/2022
Standard Type: Calibration Standard Prepared: 03/25/2021
Solvent: 1% HNO3 Prepared By: Marissa Huff
Final Volume (mls): 100 Department: ICP/MS
Vials: 1 Last Edit: 03/25/2021 12:07 by MH

All analytes at 1 ppb
Made up as a 10x dilution of ICP MS iCAP RQ Cal Standard #2 (2101109)

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.001 | ug/mL |
| Antimony | 7440-36-0 | 0.001 | ug/mL |
| Arsenic | 7440-38-2 | 0.001 | ug/mL |
| Barium | 7440-39-3 | 0.001 | ug/mL |
| Beryllium | 7440-41-7 | 0.001 | ug/mL |
| Cadmium | 7440-43-9 | 0.001 | ug/mL |
| Chromium | 7440-47-3 | 0.001 | ug/mL |
| Cobalt | 7440-48-4 | 0.001 | ug/mL |
| Aluminum | 7429-90-5 | 0.001 | ug/mL |
| Lead | 7439-92-1 | 0.001 | ug/mL |
| Zinc | 7440-66-6 | 0.001 | ug/mL |
| Molybdenum | 7439-98-7 | 0.001 | ug/mL |
| Nickel | 7440-02-0 | 0.001 | ug/mL |
| Selenium | 7782-49-2 | 0.001 | ug/mL |
| Silver | 7440-22-4 | 0.001 | ug/mL |
| Thallium | 7440-28-0 | 0.001 | ug/mL |
| Uranium | 7440-61-1 | 0.001 | ug/mL |
| Vanadium | 7440-62-2 | 0.001 | ug/mL |
| Copper | 7440-50-8 | 0.001 | ug/mL |

Lot #: 10117268-2

Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.005 |

Analytical Standard Record

Turner Laboratories, Inc.

2101109

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ Cal Standard #2 (1% HNO3) | Expires: 02/14/2022 |
| Standard Type: Calibration Standard | Prepared: 03/25/2021 |
| Solvent: 1% HNO3 | Prepared By: Marissa Huff |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 03/25/2021 12:07 by MH |

All analytes at 10 ppb
 Made up as a 10x dilution of ICP MS iCAP RQ Cal Standard #4 (2101107)

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.01 | ug/mL |
| Antimony | 7440-36-0 | 0.01 | ug/mL |
| Arsenic | 7440-38-2 | 0.01 | ug/mL |
| Barium | 7440-39-3 | 0.01 | ug/mL |
| Beryllium | 7440-41-7 | 0.01 | ug/mL |
| Cadmium | 7440-43-9 | 0.01 | ug/mL |
| Chromium | 7440-47-3 | 0.01 | ug/mL |
| Cobalt | 7440-48-4 | 0.01 | ug/mL |
| Aluminum | 7429-90-5 | 0.01 | ug/mL |
| Lead | 7439-92-1 | 0.01 | ug/mL |
| Zinc | 7440-66-6 | 0.01 | ug/mL |
| Molybdenum | 7439-98-7 | 0.01 | ug/mL |
| Nickel | 7440-02-0 | 0.01 | ug/mL |
| Selenium | 7782-49-2 | 0.01 | ug/mL |
| Silver | 7440-22-4 | 0.01 | ug/mL |
| Thallium | 7440-28-0 | 0.01 | ug/mL |
| Uranium | 7440-61-1 | 0.01 | ug/mL |
| Vanadium | 7440-62-2 | 0.01 | ug/mL |
| Copper | 7440-50-8 | 0.01 | ug/mL |

Lot #: 10117268-2
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.05 |

Analytical Standard Record

Turner Laboratories, Inc.

2101118

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ Cal Standard #3 (1% HNO3) | Expires: 02/14/2022 |
| Standard Type: Calibration Standard | Prepared: 03/25/2021 |
| Solvent: 1% HNO3 | Prepared By: Marissa Huff |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 03/25/2021 14:57 by MH |

All analytes at 50 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.05 | ug/mL |
| Antimony | 7440-36-0 | 0.05 | ug/mL |
| Arsenic | 7440-38-2 | 0.05 | ug/mL |
| Barium | 7440-39-3 | 0.05 | ug/mL |
| Beryllium | 7440-41-7 | 0.05 | ug/mL |
| Cadmium | 7440-43-9 | 0.05 | ug/mL |
| Chromium | 7440-47-3 | 0.05 | ug/mL |
| Cobalt | 7440-48-4 | 0.05 | ug/mL |
| Aluminum | 7429-90-5 | 0.05 | ug/mL |
| Lead | 7439-92-1 | 0.05 | ug/mL |
| Zinc | 7440-66-6 | 0.05 | ug/mL |
| Molybdenum | 7439-98-7 | 0.05 | ug/mL |
| Nickel | 7440-02-0 | 0.05 | ug/mL |
| Selenium | 7782-49-2 | 0.05 | ug/mL |
| Silver | 7440-22-4 | 0.05 | ug/mL |
| Thallium | 7440-28-0 | 0.05 | ug/mL |
| Uranium | 7440-61-1 | 0.05 | ug/mL |
| Vanadium | 7440-62-2 | 0.05 | ug/mL |
| Copper | 7440-50-8 | 0.05 | ug/mL |

Lot #: 10117268-2
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.25 |

Analytical Standard Record

Turner Laboratories, Inc.

2101107

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | ICP MS iCAP RQ Cal Standard #4 (1% HNO3) | Expires: | 02/14/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/25/2021 |
| Solvent: | 1% HNO3 | Prepared By: | Marissa Huff |
| Final Volume (mls): | 100 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 03/25/2021 12:05 by MH |

All analytes at 100 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.1 | ug/mL |
| Antimony | 7440-36-0 | 0.1 | ug/mL |
| Arsenic | 7440-38-2 | 0.1 | ug/mL |
| Barium | 7440-39-3 | 0.1 | ug/mL |
| Beryllium | 7440-41-7 | 0.1 | ug/mL |
| Cadmium | 7440-43-9 | 0.1 | ug/mL |
| Chromium | 7440-47-3 | 0.1 | ug/mL |
| Cobalt | 7440-48-4 | 0.1 | ug/mL |
| Aluminum | 7429-90-5 | 0.1 | ug/mL |
| Lead | 7439-92-1 | 0.1 | ug/mL |
| Zinc | 7440-66-6 | 0.1 | ug/mL |
| Molybdenum | 7439-98-7 | 0.1 | ug/mL |
| Nickel | 7440-02-0 | 0.1 | ug/mL |
| Selenium | 7782-49-2 | 0.1 | ug/mL |
| Silver | 7440-22-4 | 0.1 | ug/mL |
| Thallium | 7440-28-0 | 0.1 | ug/mL |
| Uranium | 7440-61-1 | 0.1 | ug/mL |
| Vanadium | 7440-62-2 | 0.1 | ug/mL |
| Copper | 7440-50-8 | 0.1 | ug/mL |

Lot #: 10117268-2

Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2100805

| | | | |
|---------------------|-----------------------------------|--------------|------------------------|
| Description: | ICP MS iCAP RQ PQL Check Standard | Expires: | 02/14/2022 |
| Standard Type: | Other | Prepared: | 03/04/2021 |
| Solvent: | 2% HNO3 & 0.5% HCL | Prepared By: | Crystal Ramirez |
| Final Volume (mls): | 50 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 03/04/2021 10:28 by CR |

10 PPB Check Standard Solution

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.01 | ug/mL |
| Antimony | 7440-36-0 | 0.01 | ug/mL |
| Arsenic | 7440-38-2 | 0.01 | ug/mL |
| Barium | 7440-39-3 | 0.01 | ug/mL |
| Beryllium | 7440-41-7 | 0.01 | ug/mL |
| Cadmium | 7440-43-9 | 0.01 | ug/mL |
| Chromium | 7440-47-3 | 0.01 | ug/mL |
| Cobalt | 7440-48-4 | 0.01 | ug/mL |
| Aluminum | 7429-90-5 | 0.01 | ug/mL |
| Lead | 7439-92-1 | 0.01 | ug/mL |
| Zinc | 7440-66-6 | 0.01 | ug/mL |
| Molybdenum | 7439-98-7 | 0.01 | ug/mL |
| Nickel | 7440-02-0 | 0.01 | ug/mL |
| Selenium | 7782-49-2 | 0.01 | ug/mL |
| Silver | 7440-22-4 | 0.01 | ug/mL |
| Thallium | 7440-28-0 | 0.01 | ug/mL |
| Uranium | 7440-61-1 | 0.01 | ug/mL |
| Vanadium | 7440-62-2 | 0.01 | ug/mL |
| Copper | 7440-50-8 | 0.01 | ug/mL |

Lot #: n/a
Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2003633 | ICP MS Calibration Stock Std QCS | 08/21/2020 | ** Vendor ** | 02/14/2022 | 08/21/2020 15:11 by CR | 0.025 |

Analytical Standard Record

Turner Laboratories, Inc.

2003633

| | | | |
|---------------------|----------------------------------|--------------|------------------------|
| Description: | ICP MS Calibration Stock Std QCS | Expires: | 02/14/2022 |
| Standard Type: | Calibration Standard | Prepared: | 08/21/2020 |
| Solvent: | 5% HNO3 + Tr Tart. Acid | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 08/21/2020 15:11 by CR |

20 ppm of Al,As,Be,Cd,Co,Cr,Cu,Mn,Mo,Ni,Pb,Sb,Th,Tl,U,V,Zn,Ba,Ag,Se
P/N 4400-200710AM01

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 20 | ug/mL |
| Antimony | 7440-36-0 | 20 | ug/mL |
| Arsenic | 7440-38-2 | 20 | ug/mL |
| Barium | 7440-39-3 | 20 | ug/mL |
| Beryllium | 7440-41-7 | 20 | ug/mL |
| Cadmium | 7440-43-9 | 20 | ug/mL |
| Chromium | 7440-47-3 | 20 | ug/mL |
| Cobalt | 7440-48-4 | 20 | ug/mL |
| Aluminum | 7429-90-5 | 20 | ug/mL |
| Lead | 7439-92-1 | 20 | ug/mL |
| Zinc | 7440-66-6 | 20 | ug/mL |
| Molybdenum | 7439-98-7 | 20 | ug/mL |
| Nickel | 7440-02-0 | 20 | ug/mL |
| Selenium | 7782-49-2 | 20 | ug/mL |
| Silver | 7440-22-4 | 20 | ug/mL |
| Thallium | 7440-28-0 | 20 | ug/mL |
| Uranium | 7440-61-1 | 20 | ug/mL |
| Vanadium | 7440-62-2 | 20 | ug/mL |
| Copper | 7440-50-8 | 20 | ug/mL |

Lot #: 10117268-2
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101442

| | |
|---|-----------------------------------|
| Description: ICP MS iCAP RQ ICV (50 ppb, 1% HNO3) | Expires: 06/30/2021 |
| Standard Type: Other | Prepared: 04/15/2021 |
| Solvent: 1% HNO3 | Prepared By: Crystal Ramirez |
| Final Volume (mls): 100 | Department: ICP/MS |
| Vials: 1 | Last Edit: 04/15/2021 14:07 by CR |

All analytes at 50 ppb except Al and Zn at 100 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.05 | ug/mL |
| Antimony | 7440-36-0 | 0.05 | ug/mL |
| Arsenic | 7440-38-2 | 0.05 | ug/mL |
| Barium | 7440-39-3 | 0.05 | ug/mL |
| Beryllium | 7440-41-7 | 0.05 | ug/mL |
| Cadmium | 7440-43-9 | 0.05 | ug/mL |
| Chromium | 7440-47-3 | 0.05 | ug/mL |
| Cobalt | 7440-48-4 | 0.05 | ug/mL |
| Aluminum | 7429-90-5 | 0.1 | ug/mL |
| Lead | 7439-92-1 | 0.05 | ug/mL |
| Zinc | 7440-66-6 | 0.1 | ug/mL |
| Molybdenum | 7439-98-7 | 0.05 | ug/mL |
| Nickel | 7440-02-0 | 0.05 | ug/mL |
| Selenium | 7782-49-2 | 0.05 | ug/mL |
| Silver | 7440-22-4 | 0.05 | ug/mL |
| Thallium | 7440-28-0 | 0.05 | ug/mL |
| Uranium | 7440-61-1 | 0.05 | ug/mL |
| Vanadium | 7440-62-2 | 0.05 | ug/mL |
| Copper | 7440-50-8 | 0.05 | ug/mL |

Lot #: CL51-013CRY1
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|------------------------------|------------|-----------------|------------|------------------------|-------|
| 1905526 | ICP MS Calibration Stock Std | 12/31/2019 | ** Vendor ** | 06/30/2021 | 08/06/2020 08:26 by MH | 0.25 |
| 2003736 | ICP MS Standard C | 08/31/2020 | Crystal Ramirez | 12/31/2021 | 01/19/2021 11:43 by MH | 0.2 |

Analytical Standard Record

Turner Laboratories, Inc.

2101402

Description: ICP MS iCAP RQ ICV (50 ppb)
 Standard Type: Other
 Solvent: 2% HNO3 & 0.5% HCL
 Final Volume (mls): 100
 Vials: 1

Expires: 06/30/2021
 Prepared: 04/13/2021
 Prepared By: Crystal Ramirez
 Department: ICP/MS
 Last Edit: 04/13/2021 16:19 by CR

All analytes at 50 ppb except Al and Zn at 100 ppb

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 0.05 | ug/mL |
| Antimony | 7440-36-0 | 0.05 | ug/mL |
| Arsenic | 7440-38-2 | 0.05 | ug/mL |
| Barium | 7440-39-3 | 0.05 | ug/mL |
| Beryllium | 7440-41-7 | 0.05 | ug/mL |
| Cadmium | 7440-43-9 | 0.05 | ug/mL |
| Chromium | 7440-47-3 | 0.05 | ug/mL |
| Cobalt | 7440-48-4 | 0.05 | ug/mL |
| Aluminum | 7429-90-5 | 0.1 | ug/mL |
| Lead | 7439-92-1 | 0.05 | ug/mL |
| Zinc | 7440-66-6 | 0.1 | ug/mL |
| Molybdenum | 7439-98-7 | 0.05 | ug/mL |
| Nickel | 7440-02-0 | 0.05 | ug/mL |
| Selenium | 7782-49-2 | 0.05 | ug/mL |
| Silver | 7440-22-4 | 0.05 | ug/mL |
| Thallium | 7440-28-0 | 0.05 | ug/mL |
| Uranium | 7440-61-1 | 0.05 | ug/mL |
| Vanadium | 7440-62-2 | 0.05 | ug/mL |
| Copper | 7440-50-8 | 0.05 | ug/mL |

Lot #: CL51-013CRY1
 Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|------------------------------|------------|-----------------|------------|------------------------|-------|
| 1905526 | ICP MS Calibration Stock Std | 12/31/2019 | ** Vendor ** | 06/30/2021 | 08/06/2020 08:26 by MH | 0.25 |
| 2003736 | ICP MS Standard C | 08/31/2020 | Crystal Ramirez | 12/31/2021 | 01/19/2021 11:43 by MH | 0.2 |

Analytical Standard Record

Turner Laboratories, Inc.

1905526

| | | | |
|---------------------|------------------------------|--------------|------------------------|
| Description: | ICP MS Calibration Stock Std | Expires: | 06/30/2021 |
| Standard Type: | Calibration Standard | Prepared: | 12/31/2019 |
| Solvent: | 5% HNO3 + Tr Tart. Acid | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 125 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 08/06/2020 08:26 by MH |

20 ppm of Al,As,Be,Cd,Co,Cr,Cu,Mn,Mo,Ni,Pb,Sb,Th,Tl,U,V,Zn,Ba,Ag,Se
P/N N9303816

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 20 | ug/mL |
| Antimony | 7440-36-0 | 20 | ug/mL |
| Arsenic | 7440-38-2 | 20 | ug/mL |
| Barium | 7440-39-3 | 20 | ug/mL |
| Beryllium | 7440-41-7 | 20 | ug/mL |
| Cadmium | 7440-43-9 | 20 | ug/mL |
| Chromium | 7440-47-3 | 20 | ug/mL |
| Cobalt | 7440-48-4 | 20 | ug/mL |
| Aluminum | 7429-90-5 | 20 | ug/mL |
| Lead | 7439-92-1 | 20 | ug/mL |
| Zinc | 7440-66-6 | 20 | ug/mL |
| Molybdenum | 7439-98-7 | 20 | ug/mL |
| Nickel | 7440-02-0 | 20 | ug/mL |
| Selenium | 7782-49-2 | 20 | ug/mL |
| Silver | 7440-22-4 | 20 | ug/mL |
| Thallium | 7440-28-0 | 20 | ug/mL |
| Uranium | 7440-61-1 | 20 | ug/mL |
| Vanadium | 7440-62-2 | 20 | ug/mL |
| Copper | 7440-50-8 | 20 | ug/mL |

Lot #: CL51-013CRY1
Vendor: PERKIN ELMER

Analytical Standard Record

Turner Laboratories, Inc.

2003736

| | | | |
|---------------------|-------------------|--------------|------------------------|
| Description: | ICP MS Standard C | Expires: | 12/31/2021 |
| Standard Type: | Analyte Spike | Prepared: | 08/31/2020 |
| Solvent: | 2% HNO3 | Prepared By: | Crystal Ramirez |
| Final Volume (mls): | 50 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 01/19/2021 11:43 by MH |

Al and Zn at 25 ppm

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Zinc | 7440-66-6 | 25 | ug/mL |
| Aluminum | 7429-90-5 | 25 | ug/mL |

Lot #: 2005805/2007052

Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------|------------|--------------|------------|------------------------|-------|
| 2002709 | ICP 1000 ppm Aluminum Std | 06/24/2020 | ** Vendor ** | 12/31/2021 | 06/24/2020 14:34 by MH | 1.25 |
| 2003305 | ICP 1000 ppm Zinc Standard | 07/30/2020 | ** Vendor ** | 01/31/2022 | 01/19/2021 11:43 by MH | 1.25 |

Analytical Standard Record

Turner Laboratories, Inc.

2002709

| | | | |
|---------------------|---------------------------|--------------|------------------------|
| Description: | ICP 1000 ppm Aluminum Std | Expires: | 12/31/2021 |
| Standard Type: | Calibration Standard | Prepared: | 06/24/2020 |
| Solvent: | 2% HNO3 | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | ICP |
| Vials: | 1 | Last Edit: | 06/24/2020 14:34 by MH |

1000 ppm Aluminum Std
P/N S1-Al-1000xVol

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Aluminum | 7429-90-5 | 1000 | ug/mL |

Lot #: 2005805-100
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2003305

| | | | |
|---------------------|----------------------------|--------------|------------------------|
| Description: | ICP 1000 ppm Zinc Standard | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 07/30/2020 |
| Solvent: | 2% HNO3 | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | ICP |
| Vials: | 1 | Last Edit: | 01/19/2021 11:43 by MH |

P/N S1-Zn-1000xVol

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Zinc | 7440-66-6 | 1000 | ug/mL |

Lot #: 2007052-100
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2101403

Description: ICP MS 25 PPB Inline Internal Standard Lithium 6 Expires: 02/27/2022
Standard Type: Internal Standard Prepared: 04/13/2021
Solvent: 2% HNO3 & 0.5 HCL Prepared By: Crystal Ramirez
Final Volume (mls):200 Department: ICP/MS
Vials: 1 Last Edit: 04/13/2021 17:54 by CR

25 PPB Li,Sc,Bi,In,Tb,Y,Rh ,50 PPM Ge, Note: Li 6

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Yttrium | | 0.025 | ug/mL |
| Terbium | | 0.025 | ug/mL |
| Scandium | | 0.025 | ug/mL |
| Rhodium | | 0.025 | ug/mL |
| Lithium | 7439-93-2 | 0.025 | ug/mL |
| Indium | | 0.025 | ug/mL |
| Germanium | | 0.125 | ug/mL |
| Bismuth | 7440-69-9 | 0.025 | ug/mL |

Lot #: 10068904-6

Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|------------------------------------|------------|--------------|------------|------------------------|-------|
| 2003823 | ICP MS Internal Standard Lithium 6 | 09/02/2020 | ** Vendor ** | 02/27/2022 | 09/02/2020 15:25 by CR | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101443

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | ICP MS 25ppb Inline Int Std Li 6 (1% HNO3) | Expires: | 02/27/2022 |
| Standard Type: | Internal Standard | Prepared: | 04/15/2021 |
| Solvent: | 1% HNO3 | Prepared By: | Crystal Ramirez |
| Final Volume (mls): | 200 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 04/15/2021 14:08 by CR |

25 PPB Li,Sc,Bi,In,Tb,Y,Rh ,50 PPM Ge, Note: Li 6

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Yttrium | | 0.025 | ug/mL |
| Terbium | | 0.025 | ug/mL |
| Scandium | | 0.025 | ug/mL |
| Rhodium | | 0.025 | ug/mL |
| Lithium | 7439-93-2 | 0.025 | ug/mL |
| Indium | | 0.025 | ug/mL |
| Germanium | | 0.125 | ug/mL |
| Bismuth | 7440-69-9 | 0.025 | ug/mL |

Lot #: 10068904-6

Vendor: CPI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|------------------------------------|------------|--------------|------------|------------------------|-------|
| 2003823 | ICP MS Internal Standard Lithium 6 | 09/02/2020 | ** Vendor ** | 02/27/2022 | 09/02/2020 15:25 by CR | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2003823

| | | | |
|---------------------|------------------------------------|--------------|------------------------|
| Description: | ICP MS Internal Standard Lithium 6 | Expires: | 02/27/2022 |
| Standard Type: | Internal Standard | Prepared: | 09/02/2020 |
| Solvent: | 2% HNO3 + tr HCl | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 250 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 09/02/2020 15:25 by CR |

10 ppm Li,Sc,Bi,In,Tb,Y,Rh, 50 ppm Ge
Note: Li 6
P/N 4400-101019RH01

| Analyte | CAS Number | Concentration | Units |
|-----------|------------|---------------|-------|
| Yttrium | | 10 | ug/mL |
| Terbium | | 10 | ug/mL |
| Scandium | | 10 | ug/mL |
| Rhodium | | 10 | ug/mL |
| Lithium | 7439-93-2 | 10 | ug/mL |
| Indium | | 10 | ug/mL |
| Germanium | | 50 | ug/mL |
| Bismuth | 7440-69-9 | 10 | ug/mL |

Lot #: 10068904-6
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2100198

Description: ICP MS Cal Stock w/ Al & Zn (Virtual)
 Standard Type: Analyte Spike
 Solvent: 1% HNO3 + Trace HF
 Final Volume (mls): 1
 Vials: 1

Expires: 01/18/2022
 Prepared: 01/18/2021
 Prepared By: Marissa Huff
 Department: ICP/MS
 Last Edit: 04/02/2021 11:22 by CR

20 ppm of Al,As,Be,Cd,Co,Cr,Cu,Mn,Mo,Ni,Pb,Sb,Th,Tl,U,V,Zn,Ba,Ag,Se (2003633) Plus added Al and Zn from Std # 2003736
*# originally had STD 1205526
 corrected to the one being used on 4/2/21*

| Analyte | CAS Number | Concentration | Units |
|------------|------------|---------------|-------|
| Manganese | 7439-96-5 | 20 | ug/mL |
| Antimony | 7440-36-0 | 20 | ug/mL |
| Arsenic | 7440-38-2 | 20 | ug/mL |
| Barium | 7440-39-3 | 20 | ug/mL |
| Beryllium | 7440-41-7 | 20 | ug/mL |
| Cadmium | 7440-43-9 | 20 | ug/mL |
| Chromium | 7440-47-3 | 20 | ug/mL |
| Cobalt | 7440-48-4 | 20 | ug/mL |
| Aluminum | 7429-90-5 | 40 | ug/mL |
| Lead | 7439-92-1 | 20 | ug/mL |
| Zinc | 7440-66-6 | 40 | ug/mL |
| Molybdenum | 7439-98-7 | 20 | ug/mL |
| Nickel | 7440-02-0 | 20 | ug/mL |
| Selenium | 7782-49-2 | 20 | ug/mL |
| Silver | 7440-22-4 | 20 | ug/mL |
| Thallium | 7440-28-0 | 20 | ug/mL |
| Uranium | 7440-61-1 | 20 | ug/mL |
| Vanadium | 7440-62-2 | 20 | ug/mL |
| Copper | 7440-50-8 | 20 | ug/mL |

Lot #: N/A
 Vendor: PERKIN ELMER

Analytical Standard Record

Turner Laboratories, Inc.

2003291

| | | | |
|---------------------|-------------------------------------|--------------|-------------------------|
| Description: | 1:1 Ultrex HCl for 200.8 digestions | Expires: | 07/30/2021 |
| Standard Type: | Reagent | Prepared: | 07/30/2020 |
| Solvent: | 1:1 HCl | Prepared By: | Ron DiCenzo |
| Final Volume (mls): | 50 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 07/30/2020 10:09 by RAD |

1:1 HCl for 200.8 (ELAN) digestions Dilution of 2000589

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: SHBI1117
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2003512

| | | | |
|---------------------|---|--------------|-------------------------|
| Description: | 1:1 Trace Metal Grade HNO3 for 200.8 digestions | Expires: | 08/13/2021 |
| Standard Type: | Reagent | Prepared: | 08/13/2020 |
| Solvent: | 1:1 HNO3 | Prepared By: | Ron DiCenzo |
| Final Volume (mls): | 50 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 08/13/2020 11:11 by RAD |

1 to 1 Omnitrace Ultra Nitric Acid for 200.8 (ELAN) digestions Dilution of 2002386

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 1118120
Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

2100676

| | | | |
|---------------------|-------------|--------------|------------------------|
| Description: | Nitric Acid | Expires: | 07/09/2022 |
| Standard Type: | Reagent | Prepared: | 02/23/2021 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | ICP/MS |
| Vials: | 2 | Last Edit: | 02/23/2021 10:33 by CR |

TraceMetal Grade
P/N A509-P500

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 1120060
Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

2003878

| | | | |
|---------------------|---------------------------------|--------------|------------------------|
| Description: | ICP MS Omnitrace Ultra Pure HCL | Expires: | 09/04/2025 |
| Standard Type: | Reagent | Prepared: | 09/04/2020 |
| Solvent: | HCl | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | ICP/MS |
| Vials: | 1 | Last Edit: | 09/04/2020 14:13 by MH |

Ultra pure HCl for ICP-MS -- P/N 339253-500ML

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | ug/mL |

Lot #: SHBL1117
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2003408

| | | | |
|---------------------|-------------------------|--------------|------------------------|
| Description: | Nitric Acid Trace Metal | Expires: | 08/06/2021 |
| Standard Type: | Reagent | Prepared: | 08/06/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | ICP |
| Vials: | 4 | Last Edit: | 08/06/2020 08:06 by JG |

Received in lab 4) 2.5 L
P/N N-2802

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: H2719
Vendor: ACP

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT LEVEL IV

Work Order No.

21D0200-01
2104174-MS1
2104174-MSD1
2104175-MS1
2104175-MSD1

Dissolved & Total Mercury EPA 245.1

Analysis Date – April 14, 2021

| Section | Page |
|---------------------------------------|-------------|
| Prep Batch | 218 |
| Sequence log (04/14/2021) | 220 |
| Analytical data (04/14/2021) | 221 |
| Standard log entries and traceability | 232 |

Date Prepared: 04/14/2021 10:05:00AM

Prep Batch: 2104174

Prep Code: E 245.1_DISS

Technician: LB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (mL) | Spike 1 Added /uL | Final Vol (mL) | Spike 2 Added /uL | Final Vol (mL) | Comments |
|---|-------------------------------|-------------------|----|---------------------|-------------------|----------------|-------------------|----------------|--------------------------|
| 2104174-BLK Blank | Blank | Drinking Water | | 50 | / | / | | 50 | |
| 2104174-BS1 LCS | LCS | Drinking Water | | 50 | 2100889/250 | / | | 50 | |
| 2104174-BSD LCS Dup | LCS Dup | Drinking Water | | 50 | 2100889/250 | / | | 50 | |
| 2104174-MS1 Matrix Spike [21D0342-01] | Matrix Spike [21D0342-01] | Drinking Water | | 50 | 2100889/250 | / | | 50 | |
| 2104174-MSD Matrix Spike Dup [21D0342-01] | Matrix Spike Dup [21D0342-01] | Drinking Water | | 50 | 2100889/250 | / | | 50 | |
| 21D0148-02 BW-1-20210405 | BW-1-20210405 | Drinking Water | | 50 | | | | 50 | Report samples/MB to MDL |
| 21D0148-07 TW-542020-20210405 | TW-542020-20210405 | Drinking Water | | 50 | | | | 50 | Report samples/MB to MDL |
| 21D0185-01 Tribal Herd DW62 Well Id 263 | Tribal Herd DW62 Well Id 263 | Drinking Water | | 50 | | | | 50 | |
| 21D0200-01 MW-9-20210407 | MW-9-20210407 | Drinking Water | | 50 | | | | 50 | Report samples/MB to MDL |
| 21D0248-01 PLS | PLS | Non-Potable Water | | 50 | | | | 50 | |
| 21D0248-02 RAFF | RAFF | Non-Potable Water | | 50 | | | | 50 | |
| 21D0250-01 Durham | Durham | Drinking Water | | 50 | | | | 50 | |
| 21D0250-02 Hill | Hill | Drinking Water | | 50 | | | | 50 | |
| 21D0250-03 Saddle | Saddle | Drinking Water | | 50 | | | | 50 | |
| 21D0342-01 Range Well E1 Well Id #606 | Range Well E1 Well Id #606 | Drinking Water | | 50 | | | | 50 | |

Digested per 245.1

| Number | Reagent Name |
|---------|--|
| 2005234 | Sulfuric Acid |
| 2100577 | Potassium Persulfate Solution for digestions |
| 2100816 | Nitric Acid Trace Metal |
| 2101145 | Hydroxylamine Sulfate/NaCl Solution |
| 2101394 | Potassium Permanganate Solution |

| Spike ID | Spike Name |
|----------|--|
| 2100889 | Mercury Calib./CS/LCSD/MS/MSD Standard |
| | 1000ppb |

| Number | Surrogate Name |
|--------|----------------|
| | |

Analysis: Mercury, Dissolved

Date Prepared: 04/14/2021 10:05:00AM

Prep Batch: 2104175

Prep Code: E 245.1

Technician: LB

| Sample ID | Sample ID and Source Sample | Matrix | pH | Initial Volume (mL) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (mL) | Comments |
|---|--------------------------------|-------------------|----|---------------------------|-------------------|-------------------|----------------------|--------------------------|
| 2104175-BLK Blank | | Drinking Water | | 50 | / | / | 50 | |
| 2104175-BS1 LCS | | Drinking Water | | 50 | 2100889/250 | / | 50 | |
| 2104175-BSD LCS Dup | | Drinking Water | | 50 | 2100889/250 | / | 50 | |
| 2104175-MRL MRL Check | | Drinking Water | | 50 | 2100889/50 | / | 50 | |
| 2104175-MS1 Matrix Spike [21D0307-01] | | Drinking Water | | 50 | 2100889/250 | / | 50 | |
| 2104175-MS2 Matrix Spike [21D0307-01] | | Drinking Water | | 50 | 2100889/250 | / | 50 | |
| 2104175-MSD Matrix Spike Dup [21D0307-01] | | Drinking Water | | 50 | 2100889/250 | / | 50 | |
| 21D0007-01 | Location 8 Composite | Non-Potable Water | | 50 | | | 50 | |
| 21D0007-03 | Location 9 Composite | Non-Potable Water | | 50 | | | 50 | |
| 21D0115-01 | Discharge | Non-Potable Water | | 50 | | | 50 | |
| 21D0148-02 | BW-1-20210405 | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0148-07 | TW-542020-20210405 | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 50 | | | 50 | Report samples/MB to MDL |
| 21D0217-01 | 500 S 3rd Ave | Drinking Water | | 50 | | | 50 | |
| 21D0256-01 | Effluent | Non-Potable Water | | 50 | | | 50 | |
| 21D0275-01 | Handsink | Drinking Water | | 50 | | | 50 | |
| 21D0307-01 | POC #1 | Drinking Water | | 50 | | | 50 | |

Digested per 245.1

| Number | Reagent Name |
|---------|--|
| 2005234 | Sulfuric Acid |
| 2100577 | Potassium Persulfate Solution for digestions |
| 2100816 | Nitric Acid Trace Metal |
| 2101145 | Hydroxylamine Sulfate/NaCl Solution |
| 2101394 | Potassium Permanganate Solution |

| Spike ID | Spike Name |
|----------|--|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard |
| | 1000ppb |

| Number | Surrogate Name |
|--------|----------------|
| | |

Analysis: Mercury, Total

Analytical Sequence

Method : Hg Main Method

| Seq. | Loc. | Sample ID |
|------|------|------------------|
| 1 | 1 | Blank |
| 2 | 2 | 0.1 PPB 2101234 |
| 3 | 3 | 1.0 PPB 2101235 |
| 4 | 4 | 2.0 PPB 2101236 |
| 5 | 5 | 5.0 PPB 2101237 |
| 6 | 6 | 10.0 PPB 2101238 |
| 7 | 1 | ICB |
| 8 | 7 | ICV 2101240 |
| 9 | 8 | QCS 2101239 |
| 10 | 9 | 2104175-MRL1 |
| 11 | 10 | 2104175-BLK1 |
| 12 | 11 | 2104175-BS1 |
| 13 | 12 | 2104175-BSD1 |
| 14 | 13 | 21D0307-01 |
| 15 | 14 | 2104175-MS1 |
| 16 | 15 | 2104175-MSD1 |
| 17 | 16 | 21D0007-01 |
| 18 | 17 | 21D0007-03 |
| 19 | 18 | 21D0115-01 |
| 20 | 19 | 21D0148-02 |
| 21 | 20 | 21D0148-07 |
| 22 | 21 | 21D0200-01 |
| 23 | 22 | 21D0217-01 |
| 24 | 23 | 21D0256-01 |
| 25 | 24 | 21D0275-01 |
| 26 | 7 | CCV 2100938 |
| 27 | 1 | CCB |
| 28 | 25 | 2104174-BLK1 |
| 29 | 26 | 2104174-BS1 |
| 30 | 27 | 2104174-BSD1 |
| 31 | 28 | 21D0342-01 |
| 32 | 29 | 2104174-MS1 |
| 33 | 30 | 2104174-MSD1 |
| 34 | 31 | 21D0148-02 |
| 35 | 32 | 21D0148-07 |
| 36 | 33 | 21D0185-01 |
| 37 | 34 | 21D0200-01 |
| 38 | 35 | 21D0248-01 |
| 39 | 36 | 21D0248-02 |
| 40 | 37 | 21D0250-01 |
| 41 | 38 | 21D0250-02 |
| 42 | 39 | 21D0250-03 |
| 43 | 7 | CCV 2100938 |
| 44 | 1 | CCB |

LSB
4/14/21

4/14/2021

Analysis Begun

Logged In Analyst: HGA

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: AS-91

Sample Information File: C:\data-AA\HGA\Sample Information\210414_1.sif

Batch ID:

Results Data Set: 210414_1

Results Library: C:\data-AA\HGA\Results\Results.mdb

Handwritten signature and date: 4/14/21

Method Loaded

Method Name: Hg Main Method

Method Last Saved: 4/2/2021 1:36:26 PM

Method Description: Hg Main Method

Sequence No.: 45

Autosampler Location:

Sample ID: Manual FIAS Cycle

Date Collected: 4/14/2021 2:29:10 PM

Analyst:

Data Type: Original

Replicate Data: Manual FIAS Cycle

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | | | 0.0002 | -0.0003 | 0.0002 | 14:30:03 | Yes |

Analysis Begun

Logged In Analyst: HGA

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: AS-91

Sample Information File: C:\data-AA\HGA\Sample Information\210414_1.sif

Batch ID:

Results Data Set: 210414_1

Results Library: C:\data-AA\HGA\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 1

Sample ID: Blank

Date Collected: 4/14/2021 2:30:59 PM

Analyst:

Data Type: Original

Replicate Data: Blank

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | | [0.00] | 0.0004 | 0.0006 | 0.0004 | 14:31:57 | Yes |
| 2 | | [0.00] | 0.0003 | 0.0005 | 0.0003 | 14:32:30 | Yes |

Mean: [0.00] 0.0003

SD: 0.00 0.0000

%RSD: 0.00 11.52

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: 0.1 PPB 2101234

Date Collected: 4/14/2021 2:33:27 PM

Analyst:

Data Type: Original

Replicate Data: 0.1 PPB 2101234

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | | [0.1] | 0.0002 | 0.0009 | 0.0006 | 14:34:27 | Yes |
| 2 | | [0.1] | 0.0004 | 0.0023 | 0.0008 | 14:35:00 | Yes |
| 3 | | [0.1] | 0.0003 | 0.0009 | 0.0007 | 14:35:33 | Yes |

Mean: [0.1] 0.0003

SD: 0.0 0.0001

%RSD: 0.0 27.50

Standard number 1 applied. [0.1]

Correlation Coef.: 1.000000 Slope: 0.00321 Intercept: 0.00000

Sequence No.: 3 Autosampler Location: 3
Sample ID: 1.0 PPB 2101235 Date Collected: 4/14/2021 2:35:58 PM
Analyst: Data Type: Original

Replicate Data: 1.0 PPB 2101235

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Includes mean, SD, and %RSD values.

Handwritten signature and date: 4/14/21

Standard number 2 applied. [1.0]
Correlation Coef.: 0.999991 Slope: 0.00307 Intercept: 0.00001

Sequence No.: 4 Autosampler Location: 4
Sample ID: 2.0 PPB 2101236 Date Collected: 4/14/2021 2:38:44 PM
Analyst: Data Type: Original

Replicate Data: 2.0 PPB 2101236

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Includes mean, SD, and %RSD values.

Standard number 3 applied. [2.0]
Correlation Coef.: 0.998267 Slope: 0.00344 Intercept: -0.00008

Sequence No.: 5 Autosampler Location: 5
Sample ID: 5.0 PPB 2101237 Date Collected: 4/14/2021 2:41:31 PM
Analyst: Data Type: Original

Replicate Data: 5.0 PPB 2101237

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Includes mean, SD, and %RSD values.

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999278 Slope: 0.00371 Intercept: -0.00025

Sequence No.: 6 Autosampler Location: 6
Sample ID: 10.0 PPB 2101238 Date Collected: 4/14/2021 2:44:20 PM
Analyst: Data Type: Original

Replicate Data: 10.0 PPB 2101238

Table with 8 columns: Repl #, SampleConc ug/L, StndConc ug/L, BlnkCorr Signal, Peak Area, Peak Height, Time, Peak Stored. Includes mean, SD, and %RSD values.

Standard number 5 applied. [10.0]

Correlation Coef.: 0.999799 Slope: 0.00378 Intercept: -0.00033

Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

| ID | Mean Signal (Abs) | Entered Conc. ug/L | Calculated Conc. ug/L | Standard Deviation | %RSD |
|------------------|-------------------|--------------------|-----------------------|--------------------|------|
| Blank | 0.0000 | 0 | 0.088 | 0.00 | 11.5 |
| 0.1 PPB 2101234 | 0.0003 | 0.1 | 0.173 | 0.00 | 27.5 |
| 1.0 PPB 2101235 | 0.0031 | 1.0 | 0.903 | 0.00 | 2.0 |
| 2.0 PPB 2101236 | 0.0069 | 2.0 | 1.923 | 0.00 | 2.0 |
| 5.0 PPB 2101237 | 0.0185 | 5.0 | 4.978 | 0.00 | 1.0 |
| 10.0 PPB 2101238 | 0.0376 | 10.0 | 10.036 | 0.00 | 0.4 |

Correlation Coef.: 0.999799 Slope: 0.00378 Intercept: -0.00033

Handwritten signature

Sequence No.: 7

Autosampler Location: 1

Sample ID: ICB

Date Collected: 4/14/2021 2:47:10 PM

Analyst:

Data Type: Original

Replicate Data: ICB

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.095 | 0.095 | 0.0000 | -0.0001 | 0.0004 | 14:48:08 | Yes |
| 2 | 0.096 | 0.096 | 0.0000 | -0.0004 | 0.0004 | 14:48:41 | Yes |
| 3 | 0.067 | 0.067 | -0.0001 | 0.0001 | 0.0003 | 14:49:14 | Yes |
| Mean: | 0.086 | 0.086 | -0.0000 | | | | |
| SD: | 0.017 | 0.017 | 0.0001 | | | | |
| %RSD: | 19.49 | 19.49 | 839.97 | | | | |

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 8

Autosampler Location: 7

Sample ID: ICV 2101240

Date Collected: 4/14/2021 2:49:38 PM

Analyst:

Data Type: Original

Replicate Data: ICV 2101240

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 6.982 | 6.982 | 0.0261 | 0.0703 | 0.0264 | 14:50:39 | Yes |
| 2 | 7.001 | 7.001 | 0.0261 | 0.0718 | 0.0265 | 14:51:12 | Yes |
| 3 | 7.017 | 7.017 | 0.0262 | 0.0720 | 0.0265 | 14:51:45 | Yes |
| Mean: | 7.000 | 7.000 | 0.0261 | | | | |
| SD: | 0.017 | 0.017 | 0.0001 | | | | |
| %RSD: | 0.250 | 0.250 | 0.25 | | | | |

QC value less than the lower limit for Hg 253.7 Recovery = 93.33%

Analysis Begun

Logged In Analyst: HGA

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: AS-91

Sample Information File: C:\data-AA\HGA\Sample Information\210414_1.sif

Batch ID:

Results Data Set: 210414_1

Results Library: C:\data-AA\HGA\Results\Results.mdb

Sequence No.: 8

Autosampler Location: 7

Sample ID: ICV 2101240

Date Collected: 4/14/2021 3:14:00 PM

Analyst:

Data Type: Original

Replicate Data: ICV 2101240

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 7.763 | 7.763 | 0.0290 | 0.0788 | 0.0294 | 15:15:01 | Yes |

2 7.696 7.696 0.0287 0.0789 0.0291 15:15:34 Yes
 3 7.615 7.615 0.0284 0.0766 0.0288 15:16:07 Yes
 Mean: 7.691 7.691 0.0287
 SD: 0.074 0.074 0.0003
 %RSD: 0.962 0.962 0.97

QC value within limits for Hg 253.7 Recovery = 102.55%

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: QCS 2101239
 Analyst:

Autosampler Location: 8
 Date Collected: 4/14/2021 3:16:50 PM
 Data Type: Original

Replicate Data: QCS 2101239

| Repl # | SampleConc ug/L | StdConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|--------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 7.648 | 7.648 | 0.0286 | 0.0772 | 0.0289 | 15:17:51 | Yes |
| 2 | 7.546 | 7.546 | 0.0282 | 0.0759 | 0.0285 | 15:18:24 | Yes |
| 3 | 7.644 | 7.644 | 0.0286 | 0.0763 | 0.0289 | 15:18:58 | Yes |
| Mean: | 7.612 | 7.612 | 0.0284 | | | | |
| SD: | 0.057 | 0.057 | 0.0002 | | | | |
| %RSD: | 0.754 | 0.754 | 0.76 | | | | |

QC value within limits for Hg 253.7 Recovery = 101.50%

All analyte(s) passed QC.
User canceled analysis.

Handwritten signature and date: 4/14/21

Analysis Begun

Logged In Analyst: HGA
 Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
 Autosampler Model: AS-91

Sample Information File: C:\data-AA\HGA\Sample Information\210414_1.sif

Batch ID:

Results Data Set: 210414_1

Results Library: C:\data-AA\HGA\Results\Results.mdb

Sequence No.: 10
 Sample ID: 2104175-MRL1
 Analyst: LB

Autosampler Location: 9
 Date Collected: 4/14/2021 3:19:35 PM
 Data Type: Original

Replicate Data: 2104175-MRL1

| Repl # | SampleConc ug/L | StdConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|--------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 1.241 | 1.241 | 0.0044 | 0.0120 | 0.0047 | 15:20:33 | Yes |
| 2 | 1.233 | 1.233 | 0.0043 | 0.0120 | 0.0047 | 15:21:06 | Yes |
| 3 | 1.169 | 1.169 | 0.0041 | 0.0115 | 0.0044 | 15:21:39 | Yes |
| Mean: | 1.214 | 1.214 | 0.0043 | | | | |
| SD: | 0.039 | 0.039 | 0.0001 | | | | |
| %RSD: | 3.231 | 3.231 | 3.48 | | | | |

Sequence No.: 11
 Sample ID: 2104175-BLK1
 Analyst: LB

Autosampler Location: 10
 Date Collected: 4/14/2021 3:22:18 PM
 Data Type: Original

Replicate Data: 2104175-BLK1

| Repl # | SampleConc ug/L | StdConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|--------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.106 | 0.106 | 0.0001 | -0.0003 | 0.0004 | 15:23:16 | Yes |
| 2 | 0.149 | 0.149 | 0.0002 | -0.0005 | 0.0006 | 15:23:49 | Yes |
| 3 | 0.191 | 0.191 | 0.0004 | 0.0004 | 0.0007 | 15:24:22 | Yes |
| Mean: | 0.149 | 0.149 | 0.0002 | | | | |
| SD: | 0.042 | 0.042 | 0.0002 | | | | |
| %RSD: | 28.53 | 28.53 | 70.28 | | | | |

Sequence No.: 12

Autosampler Location: 11

Sample ID: 2104175-BS1
Analyst: LB

Date Collected: 4/14/2021 3:24:46 PM
Data Type: Original

Replicate Data: 2104175-BS1

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 5.430 | 5.430 | 0.0202 | 0.0524 | 0.0205 | 15:25:45 | Yes |
| 2 | 5.513 | 5.513 | 0.0205 | 0.0538 | 0.0209 | 15:26:18 | Yes |
| 3 | 5.473 | 5.473 | 0.0203 | 0.0544 | 0.0207 | 15:26:51 | Yes |

Matrix Recovery Check: 2104175-BS1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|----------|----------------|----------------|-----------|-------|--------------|
| Hg 253.7 | 5.149 | 5.472 | 0.042 | ug/L | 106.5 |
| Mean: | 5.472 | 5.472 | 0.0203 | | |
| SD: | 0.042 | 0.042 | 0.0002 | | |
| %RSD: | 0.765 | 0.765 | 0.78 | | |

Handwritten signature

Sequence No.: 13
Sample ID: 2104175-BSD1
Analyst: LB

Autosampler Location: 12
Date Collected: 4/14/2021 3:27:31 PM
Data Type: Original

Replicate Data: 2104175-BSD1

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 5.370 | 5.370 | 0.0200 | 0.0537 | 0.0203 | 15:28:31 | Yes |
| 2 | 5.558 | 5.558 | 0.0207 | 0.0544 | 0.0210 | 15:29:04 | Yes |
| 3 | 5.552 | 5.552 | 0.0206 | 0.0552 | 0.0210 | 15:29:37 | Yes |

Duplicate Check: 2104175-BSD1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|----------|----------------|----------------|-----------|-------|----------------|
| Hg 253.7 | 5.472 | 5.493 | 0.107 | ug/L | 0.4 |
| Mean: | 5.493 | 5.493 | 0.0204 | | |
| SD: | 0.107 | 0.107 | 0.0004 | | |
| %RSD: | 1.948 | 1.948 | 1.98 | | |

Sequence No.: 14
Sample ID: 21D0307-01
Analyst: LB

Autosampler Location: 13
Date Collected: 4/14/2021 3:30:17 PM
Data Type: Original

Replicate Data: 21D0307-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.154 | 0.154 | 0.0002 | 0.0010 | 0.0006 | 15:31:16 | Yes |
| 2 | 0.126 | 0.126 | 0.0001 | 0.0003 | 0.0005 | 15:31:49 | Yes |
| 3 | 0.150 | 0.150 | 0.0002 | -0.0000 | 0.0006 | 15:32:22 | Yes |
| Mean: | 0.143 | 0.143 | 0.0002 | | | | |
| SD: | 0.015 | 0.015 | 0.0001 | | | | |

Sequence No.: 15
Sample ID: 2104175-MS1
Analyst: LB

Autosampler Location: 14
Date Collected: 4/14/2021 3:32:47 PM
Data Type: Original

Replicate Data: 2104175-MS1

| Repl # | SampleConc ug/L | StndConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|----------------|-----------|-------------|----------|-------------|
| 1 | 5.371 | 5.371 | 0.0200 | 0.0518 | 0.0203 | 15:33:46 | Yes |
| 2 | 5.334 | 5.334 | 0.0198 | 0.0522 | 0.0202 | 15:34:19 | Yes |
| 3 | 5.316 | 5.316 | 0.0198 | 0.0524 | 0.0201 | 15:34:52 | Yes |

Matrix Recovery Check: 2104175-MS1

| | | | | | | | |
|-------|-------|-------|--------|--------|--------|----------|-----|
| 2 | 0.163 | 0.163 | 0.0003 | 0.0014 | 0.0006 | 15:44:56 | Yes |
| 3 | 0.175 | 0.175 | 0.0003 | 0.0009 | 0.0007 | 15:45:29 | Yes |
| Mean: | 0.139 | 0.139 | 0.0002 | | | | |
| SD: | 0.053 | 0.053 | 0.0002 | | | | |
| %RSD: | 37.86 | 37.86 | 103.91 | | | | |

Sequence No.: 20
 Sample ID: 21D0148-02
 Analyst: LB

Autosampler Location: 19
 Date Collected: 4/14/2021 3:45:54 PM
 Data Type: Original

Replicate Data: 21D0148-02

| Repl # | Sample Conc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|------------------|--------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.206 | 0.206 | 0.0004 | 0.0004 | 0.0008 | 15:46:55 | Yes |
| 2 | 0.158 | 0.158 | 0.0003 | 0.0019 | 0.0006 | 15:47:28 | Yes |
| 3 | 0.101 | 0.101 | 0.0000 | -0.0007 | 0.0004 | 15:48:01 | Yes |
| Mean: | 0.155 | 0.155 | 0.0003 | | | | |
| SD: | 0.053 | 0.053 | 0.0002 | | | | |
| %RSD: | 33.94 | 33.94 | 78.97 | | | | |

Handwritten signature

Sequence No.: 21
 Sample ID: 21D0148-07
 Analyst: LB

Autosampler Location: 20
 Date Collected: 4/14/2021 3:48:27 PM
 Data Type: Original

Replicate Data: 21D0148-07

| Repl # | Sample Conc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|------------------|--------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.120 | 0.120 | 0.0001 | 0.0001 | 0.0005 | 15:49:27 | Yes |
| 2 | 0.168 | 0.168 | 0.0003 | 0.0004 | 0.0007 | 15:50:01 | Yes |
| 3 | 0.074 | 0.074 | -0.0001 | -0.0005 | 0.0003 | 15:50:34 | Yes |
| Mean: | 0.121 | 0.121 | 0.0001 | | | | |
| SD: | 0.047 | 0.047 | 0.0002 | | | | |
| %RSD: | 39.23 | 39.23 | 146.04 | | | | |

Sequence No.: 22
 Sample ID: 21D0200-01
 Analyst: LB

Autosampler Location: 21
 Date Collected: 4/14/2021 3:51:00 PM
 Data Type: Original

Replicate Data: 21D0200-01

| Repl # | Sample Conc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|------------------|--------------|----------------|-----------|-------------|----------|-------------|
| 2 | 0.519 | 0.519 | 0.0016 | 0.0044 | 0.0020 | 15:52:34 | Yes |
| 3 | 0.554 | 0.554 | 0.0018 | 0.0054 | 0.0021 | 15:53:07 | Yes |
| Mean: | 0.539 | 0.539 | 0.0017 | | | | |
| SD: | 0.018 | 0.018 | 0.0001 | | | | |
| %RSD: | 3.351 | 3.351 | 4.01 | | | | |

Sequence No.: 23
 Sample ID: 21D0217-01
 Analyst: LB

Autosampler Location: 22
 Date Collected: 4/14/2021 3:53:49 PM
 Data Type: Original

Replicate Data: 21D0217-01

| Repl # | Sample Conc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|------------------|--------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.080 | 0.080 | -0.0000 | -0.0000 | 0.0003 | 15:54:51 | Yes |
| 2 | 0.111 | 0.111 | 0.0001 | -0.0002 | 0.0004 | 15:55:24 | Yes |
| 3 | 0.079 | 0.079 | -0.0000 | -0.0004 | 0.0003 | 15:55:57 | Yes |
| Mean: | 0.090 | 0.090 | 0.0000 | | | | |
| SD: | 0.018 | 0.018 | 0.0001 | | | | |
| %RSD: | 20.06 | 20.06 | 978.79 | | | | |

Sequence No.: 24

Autosampler Location: 23

Sample ID: 21D0256-01
Analyst: LB

Date Collected: 4/14/2021 3:56:24 PM
Data Type: Original

Replicate Data: 21D0256-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.145 | 0.145 | 0.0002 | 0.0002 | 0.0006 | 15:57:26 | Yes |
| 2 | 0.115 | 0.115 | 0.0001 | -0.0004 | 0.0004 | 15:57:59 | Yes |
| 3 | 0.147 | 0.147 | 0.0002 | 0.0002 | 0.0006 | 15:58:32 | Yes |
| Mean: | 0.136 | 0.136 | 0.0002 | | | | |
| SD: | 0.018 | 0.018 | 0.0001 | | | | |
| %RSD: | 13.40 | 13.40 | 38.26 | | | | |

Handwritten signature and date: 4/14/21

Sequence No.: 25
Sample ID: 21D0275-01
Analyst: LB

Autosampler Location: 24
Date Collected: 4/14/2021 3:58:59 PM
Data Type: Original

Replicate Data: 21D0275-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.147 | 0.147 | 0.0002 | 0.0005 | 0.0006 | 15:59:57 | Yes |
| 2 | 0.183 | 0.183 | 0.0004 | 0.0015 | 0.0007 | 16:00:30 | Yes |
| 3 | 0.196 | 0.196 | 0.0004 | 0.0007 | 0.0008 | 16:01:03 | Yes |
| Mean: | 0.175 | 0.175 | 0.0003 | | | | |
| SD: | 0.025 | 0.025 | 0.0001 | | | | |
| %RSD: | 14.28 | 14.28 | 28.76 | | | | |

Sequence No.: 26
Sample ID: CCV 2100938
Analyst:

Autosampler Location: 7
Date Collected: 4/14/2021 4:01:26 PM
Data Type: Original

Replicate Data: CCV 2100938

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 7.932 | 7.932 | 0.0296 | 0.0773 | 0.0300 | 16:02:27 | Yes |
| 2 | 7.964 | 7.964 | 0.0298 | 0.0783 | 0.0301 | 16:03:00 | Yes |
| 3 | 7.927 | 7.927 | 0.0296 | 0.0771 | 0.0300 | 16:03:33 | Yes |
| Mean: | 7.941 | 7.941 | 0.0297 | | | | |
| SD: | 0.020 | 0.020 | 0.0001 | | | | |
| %RSD: | 0.251 | 0.251 | 0.25 | | | | |

All analyte(s) passed QC.

Sequence No.: 27
Sample ID: CCB
Analyst:

Autosampler Location: 1
Date Collected: 4/14/2021 4:04:15 PM
Data Type: Original

Replicate Data: CCB

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.150 | 0.150 | 0.0002 | 0.0003 | 0.0006 | 16:05:14 | Yes |
| 2 | 0.139 | 0.139 | 0.0002 | 0.0006 | 0.0005 | 16:05:47 | Yes |
| 3 | 0.130 | 0.130 | 0.0002 | 0.0005 | 0.0005 | 16:06:20 | Yes |
| Mean: | 0.140 | 0.140 | 0.0002 | | | | |
| SD: | 0.010 | 0.010 | 0.0000 | | | | |
| %RSD: | 7.280 | 7.280 | 19.72 | | | | |

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 28
Sample ID: 2104174-BLK1
Analyst: LB

Autosampler Location: 25
Date Collected: 4/14/2021 4:06:44 PM
Data Type: Original

Replicate Data: 2104174-BLK1

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.154 | 0.154 | 0.0002 | -0.0005 | 0.0006 | 16:07:41 | Yes |
| 2 | 0.115 | 0.115 | 0.0001 | 0.0004 | 0.0004 | 16:08:15 | Yes |
| 3 | 0.120 | 0.120 | 0.0001 | -0.0002 | 0.0005 | 16:08:48 | Yes |
| Mean: | 0.129 | <u>0.129</u> | 0.0002 | | | | |
| SD: | 0.021 | 0.021 | 0.0001 | | | | |
| %RSD: | 16.52 | 16.52 | 51.91 | | | | |

Sequence No.: 29

Autosampler Location: 26

Sample ID: 2104174-BS1

Date Collected: 4/14/2021 4:09:11 PM

Analyst: LB

Data Type: Original

Replicate Data: 2104174-BS1

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 5.442 | 5.442 | 0.0202 | 0.0552 | 0.0206 | 16:10:09 | Yes |
| 2 | 5.496 | 5.496 | 0.0204 | 0.0529 | 0.0208 | 16:10:42 | Yes |
| 3 | 5.421 | 5.421 | 0.0202 | 0.0535 | 0.0205 | 16:11:15 | Yes |

W
4/14/21

Matrix Recovery Check: 2104174-BS1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Recovery (%) |
|----------|----------------|----------------|-----------|-------|--------------|
| Hg 253.7 | 5.129 | 5.453 | 0.039 | ug/L | 106.5 |
| Mean: | 5.453 | | 0.0203 | | |
| SD: | 0.039 | | 0.0001 | | |
| %RSD: | 0.708 | | 0.72 | | |

Sequence No.: 30

Autosampler Location: 27

Sample ID: 2104174-BSD1

Date Collected: 4/14/2021 4:11:55 PM

Analyst: LB

Data Type: Original

Replicate Data: 2104174-BSD1

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 5.562 | 5.562 | 0.0207 | 0.0556 | 0.0210 | 16:12:54 | Yes |
| 2 | 5.450 | 5.450 | 0.0203 | 0.0537 | 0.0206 | 16:13:27 | Yes |
| 3 | 5.494 | 5.494 | 0.0204 | 0.0537 | 0.0208 | 16:14:00 | Yes |

Duplicate Check: 2104174-BSD1

| Analyte | Expected Conc. | Measured Conc. | Std. Dev. | Units | Difference (%) |
|----------|----------------|----------------|-----------|-------|----------------|
| Hg 253.7 | 5.453 | 5.502 | 0.056 | ug/L | 0.9 |
| Mean: | 5.502 | | 0.0205 | | |
| SD: | 0.056 | | 0.0002 | | |
| %RSD: | 1.021 | | 1.04 | | |

Sequence No.: 31

Autosampler Location: 28

Sample ID: 21D0342-01

Date Collected: 4/14/2021 4:14:41 PM

Analyst: LB

Data Type: Original

Replicate Data: 21D0342-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.076 | 0.076 | -0.0000 | -0.0006 | 0.0003 | 16:15:39 | Yes |
| 2 | 0.136 | 0.136 | 0.0002 | 0.0013 | 0.0005 | 16:16:13 | Yes |
| 3 | 0.162 | 0.162 | 0.0003 | 0.0002 | 0.0006 | 16:16:46 | Yes |
| Mean: | <u>0.125</u> | 0.125 | 0.0001 | | | | |
| SD: | 0.044 | 0.044 | 0.0002 | | | | |
| %RSD: | 35.38 | 35.38 | 120.93 | | | | |

Sequence No.: 32

Autosampler Location: 29

%RSD: 34.34 34.34 93.58

Sequence No.: 36
Sample ID: 21D0185-01
Analyst: LB

Autosampler Location: 33
Date Collected: 4/14/2021 4:27:43 PM
Data Type: Original

Handwritten signature and date: 4/14/21

Replicate Data: 21D0185-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.093 | 0.093 | 0.0000 | -0.0007 | 0.0004 | 16:28:43 | Yes |
| 2 | 0.145 | 0.145 | 0.0002 | 0.0006 | 0.0006 | 16:29:16 | Yes |
| 3 | 0.128 | 0.128 | 0.0001 | 0.0005 | 0.0005 | 16:29:49 | Yes |
| Mean: | 0.103 | 0.103 | 0.0001 | | | | |
| SD: | 0.026 | 0.026 | 0.0001 | | | | |
| %RSD: | 21.48 | 21.48 | 77.69 | | | | |

Sequence No.: 37
Sample ID: 21D0200-01
Analyst: LB

Autosampler Location: 34
Date Collected: 4/14/2021 4:30:14 PM
Data Type: Original

Replicate Data: 21D0200-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.087 | 0.087 | -0.0000 | 0.0006 | 0.0003 | 16:31:14 | Yes |
| 2 | 0.115 | 0.115 | 0.0001 | 0.0007 | 0.0005 | 16:31:48 | Yes |
| 3 | 0.107 | 0.107 | 0.0001 | -0.0000 | 0.0004 | 16:32:21 | Yes |
| Mean: | 0.103 | 0.103 | 0.0001 | | | | |
| SD: | 0.014 | 0.014 | 0.0001 | | | | |
| %RSD: | 13.94 | 13.94 | 96.51 | | | | |

Sequence No.: 38
Sample ID: 21D0248-01
Analyst: LB

Autosampler Location: 35
Date Collected: 4/14/2021 4:32:46 PM
Data Type: Original

Replicate Data: 21D0248-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.100 | 0.100 | 0.0000 | 0.0004 | 0.0004 | 16:33:46 | Yes |
| 2 | 0.096 | 0.096 | 0.0000 | -0.0005 | 0.0004 | 16:34:19 | Yes |
| 3 | 0.136 | 0.136 | 0.0002 | -0.0001 | 0.0005 | 16:34:52 | Yes |
| Mean: | 0.111 | 0.111 | 0.0001 | | | | |
| SD: | 0.022 | 0.022 | 0.0001 | | | | |
| %RSD: | 19.96 | 19.96 | 97.43 | | | | |

Sequence No.: 39
Sample ID: 21D0248-02
Analyst: LB

Autosampler Location: 36
Date Collected: 4/14/2021 4:35:18 PM
Data Type: Original

Replicate Data: 21D0248-02

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 1.640 | 1.640 | 0.0059 | 0.0165 | 0.0062 | 16:36:19 | Yes |
| 2 | 1.644 | 1.644 | 0.0059 | 0.0167 | 0.0062 | 16:36:52 | Yes |
| 3 | 1.662 | 1.662 | 0.0059 | 0.0168 | 0.0063 | 16:37:25 | Yes |
| Mean: | 1.649 | 1.649 | 0.0059 | | | | |
| SD: | 0.012 | 0.012 | 0.0000 | | | | |
| %RSD: | 0.712 | 0.712 | 0.75 | | | | |

Sequence No.: 40
Sample ID: 21D0250-01
Analyst: LB

Autosampler Location: 37
Date Collected: 4/14/2021 4:38:07 PM
Data Type: Original

Replicate Data: 21D0250-01

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 1.137 | 1.137 | 0.0040 | 0.0109 | 0.0043 | 16:39:08 | Yes |
| 2 | 1.113 | 1.113 | 0.0039 | 0.0116 | 0.0042 | 16:39:41 | Yes |
| 3 | 1.080 | 1.080 | 0.0037 | 0.0096 | 0.0041 | 16:40:14 | Yes |
| Mean: | 1.110 | 1.110 | 0.0039 | | | | |
| SD: | 0.029 | 0.029 | 0.0001 | | | | |
| %RSD: | 2.586 | 2.586 | 2.81 | | | | |

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4/14/21

Sequence No.: 41

Autosampler Location: 38

Sample ID: 21D0250-02

Date Collected: 4/14/2021 4:40:57 PM

Replicate Data: 21D0250-02

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.326 | 0.326 | 0.0009 | 0.0027 | 0.0012 | 16:41:58 | Yes |
| 2 | 0.357 | 0.357 | 0.0010 | 0.0035 | 0.0014 | 16:42:31 | Yes |
| 3 | 0.321 | 0.321 | 0.0009 | 0.0022 | 0.0012 | 16:43:04 | Yes |
| Mean: | 0.335 | 0.335 | 0.0009 | | | | |
| SD: | 0.020 | 0.020 | 0.0001 | | | | |
| %RSD: | 5.930 | 5.930 | 8.05 | | | | |

Sequence No.: 42

Autosampler Location: 39

Sample ID: 21D0250-03

Date Collected: 4/14/2021 4:43:46 PM

Analyst: LB

Data Type: Original

Replicate Data: 21D0250-03

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.092 | 0.092 | 0.0000 | 0.0006 | 0.0004 | 16:44:48 | Yes |
| 2 | 0.139 | 0.139 | 0.0002 | 0.0008 | 0.0005 | 16:45:21 | Yes |
| 3 | 0.132 | 0.132 | 0.0002 | 0.0015 | 0.0005 | 16:45:54 | Yes |
| Mean: | 0.121 | 0.121 | 0.0001 | | | | |
| SD: | 0.025 | 0.025 | 0.0001 | | | | |
| %RSD: | 20.72 | 20.72 | 76.36 | | | | |

Sequence No.: 43

Autosampler Location: 7

Sample ID: CCV 2100938

Date Collected: 4/14/2021 4:46:21 PM

Analyst:

Data Type: Original

Replicate Data: CCV 2100938

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 8.059 | 8.059 | 0.0301 | 0.0790 | 0.0305 | 16:47:22 | Yes |
| 2 | 0.706 | 0.706 | 0.0023 | 0.0052 | 0.0027 | 16:47:55 | Yes |
| 3 | 0.118 | 0.118 | 0.0001 | 0.0008 | 0.0005 | 16:48:28 | Yes |
| Mean: | 2.961 | 2.961 | 0.0109 | | | | |
| SD: | 4.425 | 4.425 | 0.0167 | | | | |
| %RSD: | 149.4 | 149.4 | 154.02 | | | | |

QC value less than the lower limit for Hg 253.7 Recovery = 39.48%

Failed. Retry. ↓

Sequence No.: 44

Autosampler Location: 7

Sample ID: CCV 2100938

Date Collected: 4/14/2021 4:49:11 PM

Analyst:

Data Type: Original

Replicate Data: CCV 2100938

| Repl # | SampleConc ug/L | StndConc ug/L | BlnkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|---------------|-----------------|-----------|-------------|----------|-------------|
| 1 | 0.104 | 0.104 | 0.0001 | -0.0003 | 0.0004 | 16:50:12 | Yes |
| 2 | 0.132 | 0.132 | 0.0002 | -0.0001 | 0.0005 | 16:50:45 | Yes |
| 3 | 0.073 | 0.073 | -0.0001 | -0.0005 | 0.0003 | 16:51:18 | Yes |

Mean: 0.103 0.103 0.0001
 SD: 0.029 0.029 0.0001
 RSD: 28.43 28.43 199.69

QC value less than the lower limit for Hg 253.7 Recovery = 1.37%
 QC Failed. Stop the analysis.

=====
 Analysis Begun

Logged In Analyst: HGA Technique: AA FIMS-MHS
 Spectrometer Model: FIMS-100, S/N B050-9550 Autosampler Model: AS-91

Sample Information File: C:\data-AA\HGA\Sample Information\210414_1.sif
 Batch ID:
 Results Data Set: 210414_1
 Results Library: C:\data-AA\HGA\Results\Results.mdb

Handwritten signature
 4/14/21

=====
 Sequence No.: 44 Autosampler Location: 7
 Sample ID: CCV 2100938 Date Collected: 4/14/2021 4:51:40 PM
 Analyst: Data Type: Original

=====
 Replicate Data: CCV 2100938

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|----------|-------------|
| 1 | 7.636 | 7.636 | 0.0285 | 0.0752 | 0.0289 | 16:52:42 | Yes |
| 2 | 7.624 | 7.624 | 0.0285 | 0.0756 | 0.0288 | 16:53:15 | Yes |
| 3 | 7.420 | 7.420 | 0.0277 | 0.0702 | 0.0281 | 16:53:48 | Yes |
| Mean: | 7.560 | 7.560 | 0.0282 | | | | |
| SD: | 0.121 | 0.121 | 0.0005 | | | | |
| RSD: | 1.602 | 1.602 | 1.62 | | | | |

QC value within limits for Hg 253.7 Recovery = 100.80%
 All analyte(s) passed QC.

=====
 Sequence No.: 45 Autosampler Location: 1
 Sample ID: CCB Date Collected: 4/14/2021 4:54:30 PM
 Analyst: Data Type: Original

=====
 Replicate Data: CCB

| Repl # | SampleConc ug/L | StdConc ug/L | BlkCorr Signal | Peak Area | Peak Height | Time | Peak Stored |
|--------|-----------------|--------------|----------------|-----------|-------------|----------|-------------|
| 1 | 0.040 | 0.040 | -0.0002 | -0.0009 | 0.0002 | 16:55:29 | Yes |
| 2 | 0.087 | 0.087 | -0.0000 | 0.0002 | 0.0003 | 16:56:02 | Yes |
| 3 | 0.093 | 0.093 | 0.0000 | -0.0001 | 0.0004 | 16:56:35 | Yes |
| Mean: | 0.074 | 0.074 | -0.0001 | | | | |
| SD: | 0.029 | 0.029 | 0.0001 | | | | |
| RSD: | 39.76 | 39.76 | 199.97 | | | | |

QC value within limits for Hg 253.7 Recovery = Not calculated
 1 analyte(s) passed QC.

Analytical Standard Record

Turner Laboratories, Inc.

2100889

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Mercury Calib/LCS/LCSD/MS/MSD Standard 1000ppb | Expires: | 01/31/2022 |
| Standard Type: | Analyte Spike | Prepared: | 03/10/2021 |
| Solvent: | 2% HNO3 | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/15/2021 17:30 by LB |

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 1 | ug/mL |

Lot #: 1009904-127

Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-----------------------------|------------|--------------|------------|------------------------|-------|
| 2003039 | Mercury Stock Std. 1000 ppm | 07/16/2020 | ** Vendor ** | 01/31/2022 | 10/06/2020 10:38 by MH | 0.1 |

Analytical Standard Record

Turner Laboratories, Inc.

2003039

Description: Mercury Stock Std. 1000 ppm
Standard Type: Calibration Standard
Solvent: 2% HNO3
Final Volume (mls): 100
Vials: 1

Expires: 01/31/2022
Prepared: 07/16/2020
Prepared By: ** Vendor **
Department: Hg
Last Edit: 10/06/2020 10:38 by MH

P/N S2-Hg-1000xVol

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 1000 | ug/mL |

Lot #: 1009904-127
Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2100933

| | | | |
|---------------------|----------------------|--------------|-------------------------|
| Description: | Hg - Cal #2 | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/15/2021 17:30, by LB |

Prepared as specified in EPA 245.1 section 11.2.2 / Turner SOP METALS-9

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.001 | ug/mL |

Lot #: 1009904-127

Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|---------------|------------|------------------------|-------|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard | 03/10/2021 | Lilian Bodley | 01/31/2022 | 03/15/2021 17:30 by LB | 0.1 |

Analytical Standard Record

Turner Laboratories, Inc.

2100934

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | Hg - Cal #3 | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | .1 | Last Edit: | 03/15/2021 17:30 by LB |

Prepared as specified in EPA 245.1 section 11.2.2 / Turner SOP METALS-9

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.002 | ug/mL |

Lot #: 1009904-127

Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|---------------|------------|------------------------|-------|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard | 03/10/2021 | Lilian Bodley | 01/31/2022 | 03/15/2021 17:30 by LB | 0.2 |

Analytical Standard Record

Turner Laboratories, Inc.

2100935

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | Hg - Cal #4 | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/15/2021 17:30 by LB |

Prepared as specified in EPA 245.1 section 11.2.2 / Turner SOP METALS-9

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.005 | ug/mL |

Lot #: 1009904-127
Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|---------------|------------|------------------------|-------|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard | 03/10/2021 | Lilian Bodley | 01/31/2022 | 03/15/2021 17:30 by LB | 0.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2100936

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | Hg - Cal #5 | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/15/2021 17:30 by LB |

Prepared as specified in EPA 245.1 section 11.2.2 / Turner SOP METALS-9

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.01 | ug/mL |

Lot #: 1009904-127
Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|---------------|------------|------------------------|-------|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard | 03/10/2021 | Lilian Bodley | 01/31/2022 | 03/15/2021 17:30 by LB | 1 |

Analytical Standard Record

Turner Laboratories, Inc.

2100937

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | Hg - QCS | Expires: | 12/31/2021 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/12/2021 13:46 by LB |

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.0075 | ug/mL |

Lot #: 1831123
Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---------------------------------------|------------|--------------|------------|------------------------|-------|
| 2003015 | Mercury Working QCS Standard 1000 ppb | 07/15/2020 | Marissa Huff | 12/31/2021 | 08/04/2020 10:24 by MH | 0.75 |

Analytical Standard Record

Turner Laboratories, Inc.

2003015

| | | | |
|---------------------|---------------------------------------|--------------|------------------------|
| Description: | Mercury Working QCS Standard 1000 ppb | Expires: | 12/31/2021 |
| Standard Type: | Analyte Spike | Prepared: | 07/15/2020 |
| Solvent: | 2% HNO3 | Prepared By: | Marissa Huff |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 08/04/2020 10:24 by MH |

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 1 | ug/mL |

Lot #: 2005640-100
 Vendor: ESI

| Parent Standards used in this standard: | | | | | | |
|---|---------------------------------|------------|--------------|------------|------------------------|-------|
| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
| 2002710 | Mercury Stock Std. 1000 ppm QCS | 06/24/2020 | ** Vendor ** | 12/31/2021 | 08/04/2020 10:24 by MH | 0.1 |

Analytical Standard Record

Turner Laboratories, Inc.

2002710

Description: Mercury Stock Std. 1000 ppm QCS
Standard Type: Calibration Standard
Solvent: 2% HNO3
Final Volume (mls): 100
Vials: 1
Expires: 12/31/2021
Prepared: 06/24/2020
Prepared By: ** Vendor **
Department: Hg
Last Edit: 08/04/2020 10:24 by MH

P/N S1-Hg-1000xVol

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 1000 | ug/mL |

Lot#: 2005640-100

Vendor: ESI

Analytical Standard Record

Turner Laboratories, Inc.

2100938

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | Hg - ICV/CCV | Expires: | 01/31/2022 |
| Standard Type: | Calibration Standard | Prepared: | 03/12/2021 |
| Solvent: | DI Water | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 100 | Department: | Hg |
| Vials: | 1 | Last Edit: | 03/15/2021 17:30 by LB |

Prepared as specified in EPA 245.1 section 11.2.2 // Turner SOP METALS-9

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Mercury | 7439-97-6 | 0.0075 | ug/mL |

Lot #: 1009904-127
Vendor: ESI

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|---------------|------------|------------------------|-------|
| 2100889 | Mercury Calib/LCS/LCSD/MS/MSD Standard | 03/10/2021 | Lilian Bodley | 01/31/2022 | 03/15/2021 17:30 by LB | 0.75 |

Analytical Standard Record

Turner Laboratories, Inc.

2005234

| | | | |
|---------------------|---------------|--------------|------------------------|
| Description: | Sulfuric Acid | Expires: | 12/16/2021 |
| Standard Type: | Reagent | Prepared: | 12/16/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | Hg |
| Vials: | 4 | Last Edit: | 12/21/2020 14:36 by LB |

Rcvd in lab: 4) 2.5 Liters
P/N SX1247-2
93-98% OmniTrace

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot# 60150
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2100577

Description: Potassium Persulfate Solution for digestions
Standard Type: Reagent
Solvent: H2O
Final Volume (mls): 1000
Vials: 1

Expires: 02/16/2022
Prepared: 02/16/2021
Prepared By: Lilian Bodley
Department: Hg
Last Edit: 02/16/2021 09:38 by LB

50 g Potassium Persulfate (1902481) in 1000 mL DI water

Analyte

CAS Number

Concentration

Units

NA

Lot #: 1904012510

Vendor: GFS

Analytical Standard Record

Turner Laboratories, Inc.

1902481

| | | | |
|---------------------|-------------------------------|--------------|------------------------|
| Description: | Potassium Persulfate Crystals | Expires: | 12/28/2023 |
| Standard Type: | Reagent | Prepared: | 06/17/2019 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | Hg |
| Vials: | 2 | Last Edit: | 05/18/2020 14:21 by MH |

Potassium Persulfate for Hg analysis - item #557
Exp. extended to 1/25/23 - 5 years from recd date (See C of A)
5/18/2020- expiration changed to 12/28/2023 per C of A, rec dat and open date changed to reflect dates written on container

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot#: 1904012520
Vendor: GFS

Analytical Standard Record

Turner Laboratories, Inc.

2100816

Description: Nitric Acid Trace Metal
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 2500
Vials: 4

Expires: 09/30/2025
Prepared: 03/05/2021
Prepared By: Lilian Bodley
Department: ICP
Last Edit: 04/13/2021 10:04 by LB

Received in lab 4) 2.5 L
P/N A200C-212

Analyte

CAS Number

Concentration

Units

ug/mL

Lot#: 198276
Vendor: ACP

Analytical Standard Record

Turner Laboratories, Inc.

2101394

| | | | |
|---------------------|---------------------------------|--------------|------------------------|
| Description: | Potassium Permanganate Solution | Expires: | 04/07/2022 |
| Standard Type: | Reagent | Prepared: | 04/07/2021 |
| Solvent: | H2O | Prepared By: | Lilian Bodley |
| Final Volume (mls): | 1000 | Department: | Hg |
| Vials: | 1 | Last Edit: | 04/13/2021 09:58 by LB |

50g of KMnO4 (50 g of 2003355) in 1000 ml D.I. for Hg digestion

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: H337-20
Vendor: LAB CHEM

Analytical Standard Record

Turner Laboratories, Inc.

2003355

Description: Potassium Permanganate Crystals
Standard Type: Reagent
Solvent: n/a
Final Volume (mls): 1
Vials: 1

Expires: 08/03/2025
Prepared: 08/04/2020
Prepared By: ** Vendor **
Department: Hg
Last Edit: 08/04/2020 10:26 by MH

Cat # LC198501

No expiration date on C of A - 5 yr retest date

Analyte

CAS Number

Concentration

Units

ug/g

Lot # K147-16

Vendor: LAB.CHEM

Analytical Standard Record

Turner Laboratories, Inc.

2101145

Description: Hydroxylamine Sulfate/NaCl Solution
Standard Type: Reagent
Solvent: H2O
Final Volume (mls): 1000
Vials: 1

Expires: 03/29/2022
Prepared: 03/29/2021
Prepared By: Lilian Bodley
Department: Hg
Last Edit: 03/29/2021 12:42 by LB

120g H.A. Sulfate (2000891), 120g NaCl (2004332) to 1000 mL in DI for Hg digestion

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot#: N/A
Vendor: J.T. Baker

Analytical Standard Record

Turner Laboratories, Inc.

2004332

| | | | |
|---------------------|-----------------|--------------|------------------------|
| Description: | Sodium Chloride | Expires: | 01/14/2024 |
| Standard Type: | Reagent | Prepared: | 10/09/2020 |
| Solvent: | - | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 10/09/2020 09:55 by BJ |

Cat# BDH9286 - 2.5KG
Retest: 10/9/2025

Analyte

CAS Number Concentration Units

NA

Lot #: 2E0456080
Vendor: VWR

Analytical Standard Record

Turner Laboratories, Inc.

2000891

Description: Hydroxylamine Sulfate Crystals
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 500
Vials: 2

Expires: 08/11/2026
Prepared: 03/02/2020
Prepared By: ** Vendor **
Department: Hg
Last Edit: 06/25/2020 15:20 by MH

Hydroxylamine sulfate for mercury digestion
Cat # N646-07
retest on 8/11/2026

Analyte

CAS Number

Concentration

Units

ug/mL

Lot #: 0000239233

Vendor: J.T. Baker

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01

2104093-MS1

2104093-MSD1

Anions

EPA 300.0

Analysis Date – April 5 & 7, 2021

| <u>Section</u> | | <u>Page</u> |
|---------------------------------------|--------------|-------------|
| Prep batch | | 252 |
| Sequence log | (04/05/2021) | 253 |
| Analytical data | (04/05/2021) | 254 |
| Sequence log | (04/07/2021) | 285 |
| Analytical data | (04/07/2021) | 286 |
| Standard log entries and traceability | | 311 |

Date Prepared: 04/07/2021 9:00:00AM

Prep Batch: 2104093 Prep Code: IC PREP

Technician: JG

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|--------------|-------------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|---------------------------------|
| 2104093-BLK | Blank | Non-Potable Water | | 5 | / | / | 5 | |
| 2104093-BS1 | LCS | Non-Potable Water | | 5 | 2101270/250 | / | 5 | |
| 2104093-BSD | LCS Dup | Non-Potable Water | | 5 | 2101270/250 | / | 5 | |
| 2104093-MRL | MRL Check | Non-Potable Water | | 5 | 2101271/100 | / | 5 | |
| 2104093-MS1 | Matrix Spike [21D0185-01] | Non-Potable Water | | 0.25 | 2101270/250 | / | | [Spk] 0.25ml->5ml; 5ml->5ml; Sp |
| 2104093-MSD | Matrix Spike Dup [21D0185-01] | Non-Potable Water | | 0.25 | 2101270/250 | / | | [Spk] 0.25ml->5ml; 5ml->5ml; Sp |
| 21D0115-01 | Discharge | Non-Potable Water | | 5 | | | 5 | |
| 21D0115-01RD | Discharge | Non-Potable Water | | 5 | | | 5 | Added 4/12/2021 by JG |
| 21D0175-02 | Eff Comp | Non-Potable Water | | 5 | | | 5 | |
| 21D0185-01 | Tribal Herd DW62 Well Id 263 | Drinking Water | | 5 | | | 5 | Added for BatchQC In: 2104093 |
| 21D0185-01F | Tribal Herd DW62 Well Id 263 | Drinking Water | | 5 | | | 5 | Added 4/12/2021 by JG |
| 21D0186-01 | AVRW0105 | Drinking Water | | 5 | | | 5 | |
| 21D0186-01FA | VRW0105 | Drinking Water | | 5 | | | 5 | Added 4/12/2021 by JG |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 5 | | | 5 | Report samples/MB to MDL |
| 21D0200-01F | MW-9-20210407 | Drinking Water | | 5 | | | 5 | Report samples/MB to MDL |
| 21D0201-02 | Holding Pond | Non-Potable Water | | 5 | | | 5 | |

| Number | Reagent Name | Spike ID | Spike Name |
|--------|--------------|----------|---|
| | | 2101270 | IC Spike/High Intermediate Standard |
| | | 2101271 | IC Spike/Low Intermediate Standard Solution |

| Number | Surrogate Name |
|--------|----------------|
| | |

Analysis: Nitrite by Ion Chromatography

Sequence Overview

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4/17/2021

Aquion_AS_DV
Sequence Details

| | | | |
|--------------------|---|-------------|-------------------|
| Sequence Name: | 040521 | | |
| Directory: | Instrument Data\Aquion_AS_DV\Instrument Data\2021 | | |
| Data Vault: | ChromeleonLocal | Created On: | 15/Jul/2020 09:48 |
| No. of Injections: | 52 | Updated On: | 06/Apr/2021 12:55 |

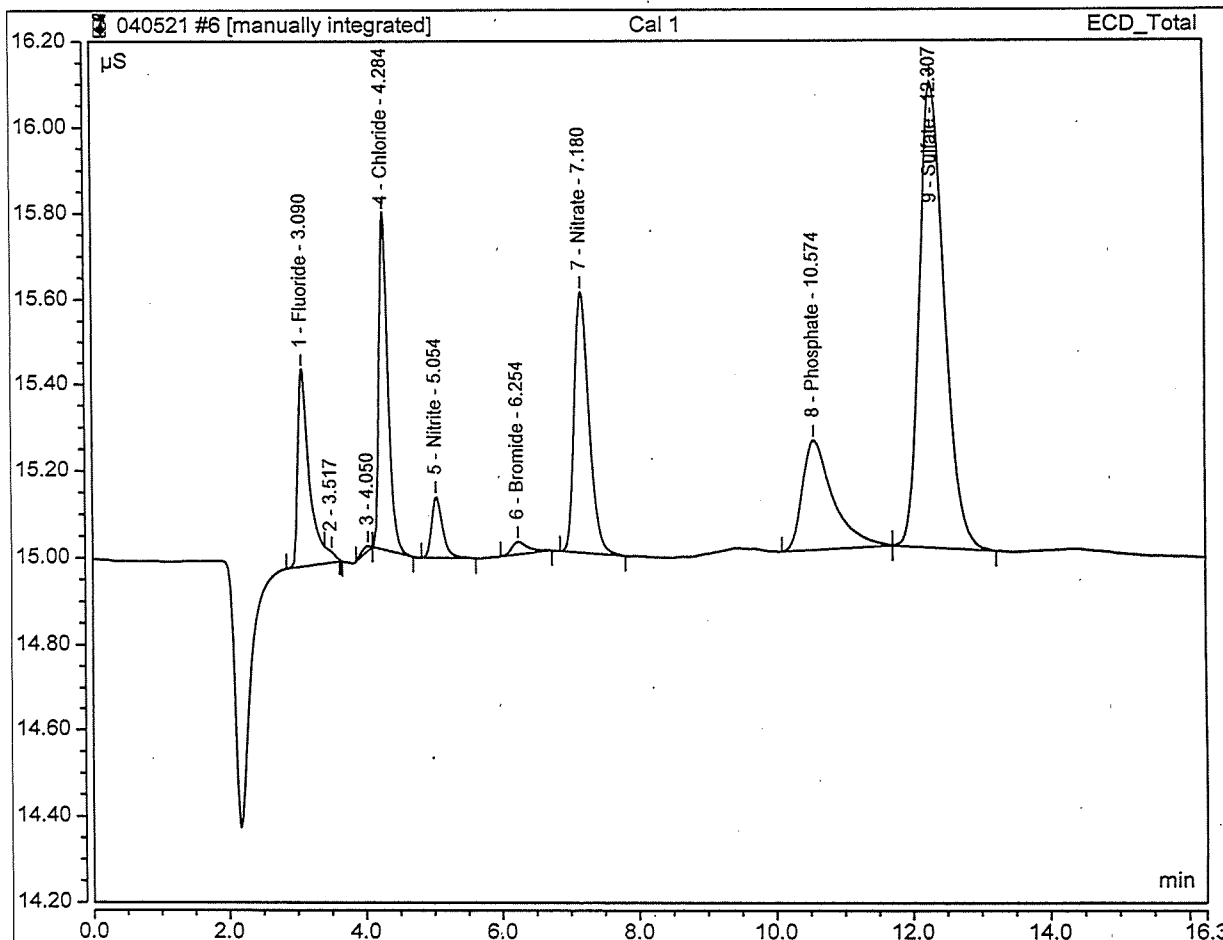
| No. | Injection Name | Type | Inject Time | Status | Comment |
|-----|--------------------|----------------------|-------------------|----------|-----------------------------|
| 1 | CONC ELUENT | Unknown | 05/Apr/2021 10:57 | Finished | |
| 2 | RINSE | Unknown | 05/Apr/2021 11:16 | Finished | |
| 3 | RINSE | Unknown | 05/Apr/2021 11:35 | Finished | |
| 4 | RINSE | Unknown | 05/Apr/2021 11:54 | Finished | |
| 5 | RINSE | Unknown | 05/Apr/2021 12:13 | Finished | |
| 6 | Cal 1 | Calibration Standard | 05/Apr/2021 12:32 | Finished | 2101265 |
| 7 | Cal 2 | Calibration Standard | 05/Apr/2021 12:52 | Finished | 2101266 |
| 8 | Cal 3 | Calibration Standard | 05/Apr/2021 13:11 | Finished | 2101267 |
| 9 | Cal 4 | Calibration Standard | 05/Apr/2021 13:30 | Finished | 2101268 |
| 10 | QCS | Unknown | 05/Apr/2021 13:49 | Finished | 2101269 |
| 11 | CCV | Unknown | 05/Apr/2021 14:08 | Finished | 2101274 |
| 12 | CCB | Unknown | 05/Apr/2021 14:27 | Finished | |
| 13 | 2104041-MRL1 | Unknown | 05/Apr/2021 14:46 | Finished | 2101275 |
| 14 | 2104041-BLK1 | Unknown | 05/Apr/2021 15:05 | Finished | |
| 15 | 2104041-BS1 | Unknown | 05/Apr/2021 15:24 | Finished | 2101270 |
| 16 | 2104041-BSD1 | Unknown | 05/Apr/2021 15:44 | Finished | 2101270 |
| 17 | 2104042-BLK1 | Unknown | 05/Apr/2021 17:03 | Finished | (SOLIDS) |
| 18 | 2104042-BS1 | Unknown | 05/Apr/2021 17:22 | Finished | 2101270 |
| 19 | 2104042-BSD1 | Unknown | 05/Apr/2021 17:41 | Finished | 2101270 |
| 20 | SOLIDS MDL STUDY 4 | Unknown | 05/Apr/2021 18:00 | Finished | 2101276 |
| 21 | SOLIDS MDL STUDY 5 | Unknown | 05/Apr/2021 18:19 | Finished | 2101276 |
| 22 | SOLIDS MDL STUDY 6 | Unknown | 05/Apr/2021 18:38 | Finished | 2101276 |
| 23 | 21C0618-01 | Unknown | 05/Apr/2021 18:58 | Finished | CL, SO4 |
| 24 | 21C0738-01 | Unknown | 05/Apr/2021 19:17 | Finished | CL, SO4 |
| 25 | 21C0738-02 | Unknown | 05/Apr/2021 19:36 | Finished | CL, SO4 |
| 26 | 21C0738-03 | Unknown | 05/Apr/2021 19:55 | Finished | CL, SO4 |
| 27 | 21D0013-01 | Unknown | 05/Apr/2021 20:14 | Finished | CL, SO4 |
| 28 | 21D0026-01 | Unknown | 05/Apr/2021 20:33 | Finished | CL, SO4 |
| 29 | 21D0026-02 | Unknown | 05/Apr/2021 20:52 | Finished | CL, SO4 |
| 30 | 21D0026-03 | Unknown | 05/Apr/2021 21:11 | Finished | CL, SO4 |
| 31 | 21D0026-04 | Unknown | 05/Apr/2021 21:30 | Finished | CL, SO4 |
| 32 | 2104042-MS1 | Unknown | 05/Apr/2021 21:50 | Finished | 21C0738-03 CL, SO4, 2101270 |
| 33 | 2104042-MSD1 | Unknown | 05/Apr/2021 22:09 | Finished | 21C0738-03 CL, SO4, 2101270 |
| 34 | CONC ELUENT | Unknown | 05/Apr/2021 22:28 | Finished | |
| 35 | RINSE | Unknown | 05/Apr/2021 22:47 | Finished | |
| 36 | CCV | Unknown | 05/Apr/2021 23:06 | Finished | 2101270 |
| 37 | CCB | Unknown | 05/Apr/2021 23:25 | Finished | |
| 38 | 21D0049-02 | Unknown | 05/Apr/2021 23:44 | Finished | NO3 |
| 39 | 21D0053-01 | Unknown | 06/Apr/2021 00:03 | Finished | NO2, NO3 |
| 40 | 21D0092-17 | Unknown | 06/Apr/2021 00:22 | Finished | CL, SO4 |
| 41 | 21C0750-01RE1@100 | Unknown | 06/Apr/2021 00:41 | Finished | (2104002) SO4 |
| 42 | 21D0018-01RE1@10 | Unknown | 06/Apr/2021 01:01 | Finished | (2104023) SO4 |
| 43 | 21C0685-03RE1@200 | Unknown | 06/Apr/2021 01:20 | Finished | (2103347) F, CL, NO2, NO3 |
| 44 | 21D0019-01RE1@10 | Unknown | 06/Apr/2021 01:39 | Finished | (2104023) CL, SO4 |
| 45 | 21D0032-01RE1@500 | Unknown | 06/Apr/2021 01:58 | Finished | (2104023) F, CL, NO3, SO4 |
| 46 | 21D0032-01RE2@1000 | Unknown | 06/Apr/2021 02:17 | Finished | (2104023) F, CL, NO3, SO4 |
| 47 | 21D0035-01RE2@5 | Unknown | 06/Apr/2021 02:36 | Finished | (2104023) CL |
| 48 | CONC ELUENT | Unknown | 06/Apr/2021 02:55 | Finished | |
| 49 | RINSE | Unknown | 06/Apr/2021 03:14 | Finished | |
| 50 | CCV | Unknown | 06/Apr/2021 03:33 | Finished | 2101270 |
| 51 | CCB | Unknown | 06/Apr/2021 03:53 | Finished | |
| 52 | SHUTDOWN | Unknown | 06/Apr/2021 04:12 | Finished | |

Ja 4-6-21

W. M. J. H.

6 Cal 1
 2101265

| | | | |
|-------------------|----------------------|-----------------|--------|
| Sample Name | Cal 1 | Inj. Vol. | 25.00 |
| Injection Type | Calibration Standard | Dilution Factor | 1.0000 |
| Instrument Method | Anions_Method | Operator | JG |
| Inj. Date / Time | 05-Apr-2021 / 12:32 | Run Time | 16:25 |

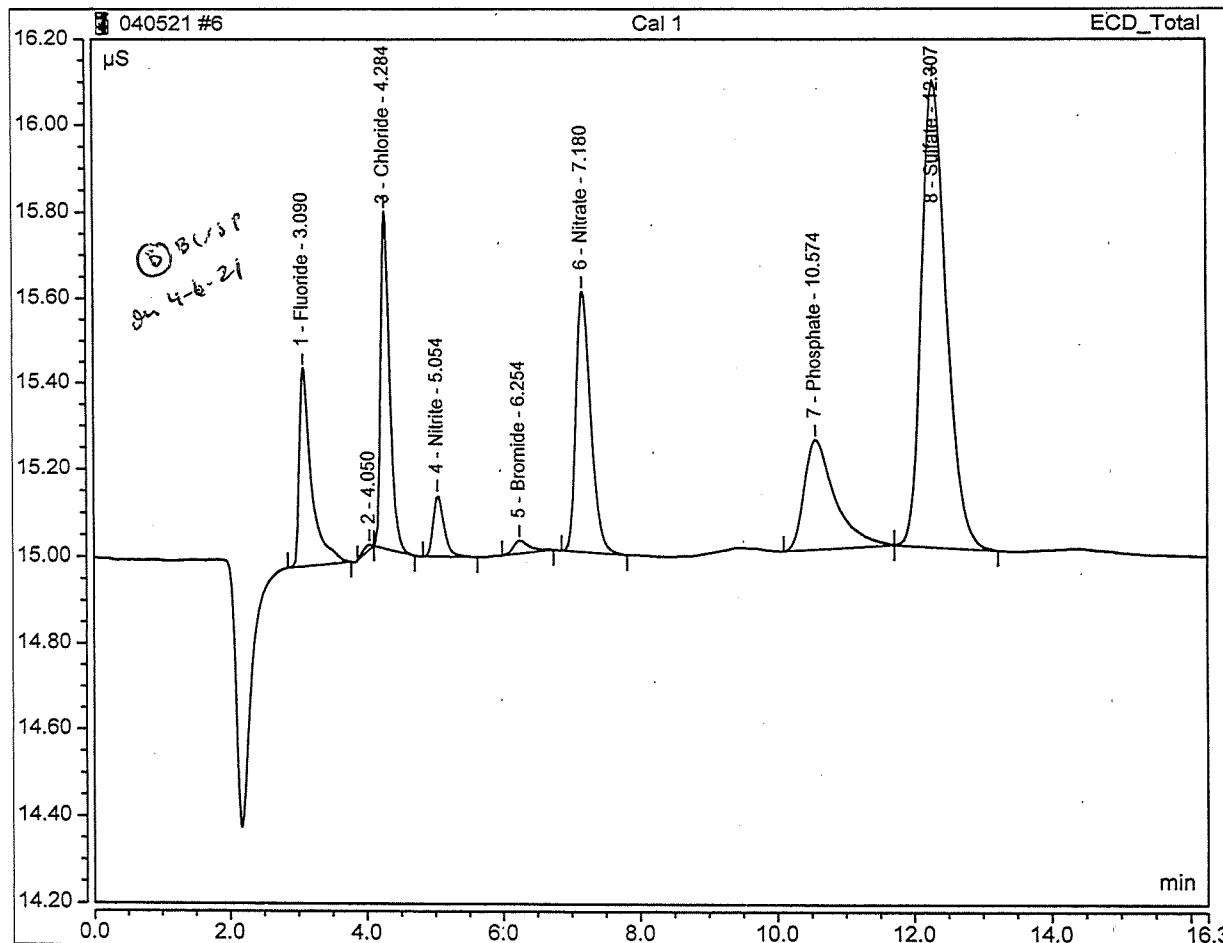


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.091 | 0.456 | 0.5287 |
| 4 | 4.28 | Chloride | BMB | 0.118 | 0.783 | 1.3353 |
| 5 | 5.05 | Nitrite | BMB | 0.026 | 0.141 | 0.1290 |
| 6 | 6.25 | Bromide | BMB | 0.008 | 0.030 | 0.1135 |
| 7 | 7.18 | Nitrate | BMB | 0.150 | 0.605 | 0.6194 |
| 8 | 10.57 | Phosphate | BMB | 0.131 | 0.252 | 0.4422 |
| 9 | 12.31 | Sulfate | BMB | 0.455 | 1.081 | 5.5713 |
| TOTAL: | | | | 0.98 | 3.35 | 8.74 |

W. H. H.

6 Cal 1
 2101265

| | | | |
|-------------------|----------------------|-----------------|--------|
| Sample Name | Cal 1 | Inj. Vol: | 25:00 |
| Injection Type | Calibration Standard | Dilution Factor | 1.0000 |
| Instrument Method | Anions Method | Operator | JG |
| Inj. Date/Time | 05-Apr-2021 / 12:32 | Run Time | 16:25 |

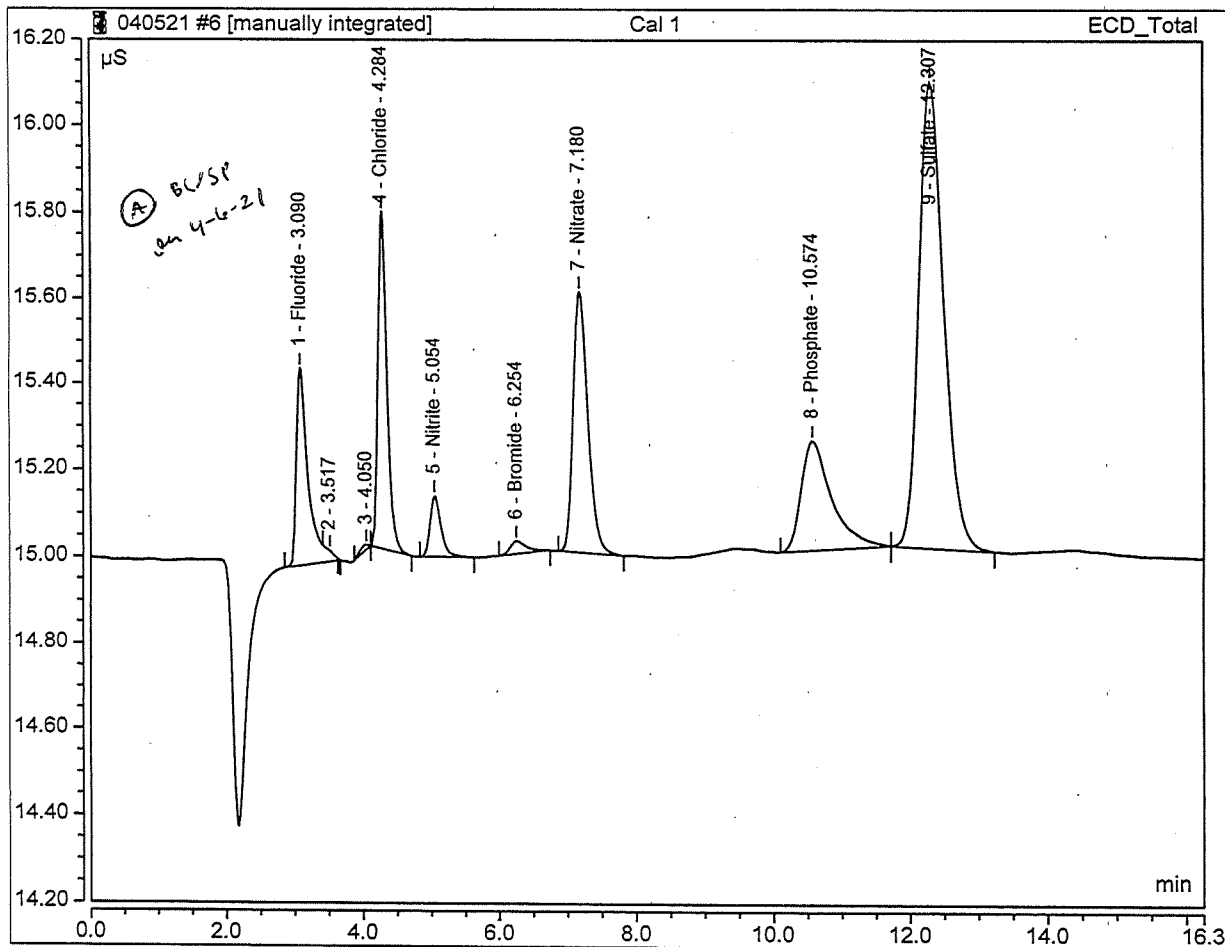


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.093 | 0.457 | 0.5317 |
| 3 | 4.28 | Chloride | BMB | 0.118 | 0.783 | 1.3353 |
| 4 | 5.05 | Nitrite | BMB | 0.026 | 0.141 | 0.1290 |
| 5 | 6.25 | Bromide | BMB | 0.008 | 0.030 | 0.1135 |
| 6 | 7.18 | Nitrate | BMB | 0.150 | 0.605 | 0.6194 |
| 7 | 10.57 | Phosphate | BMB | 0.131 | 0.252 | 0.4422 |
| 8 | 12.31 | Sulfate | BMB | 0.455 | 1.081 | 5.5713 |
| TOTAL: | | | | 0.98 | 3.35 | 8.74 |

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6 Cal 1
 2101265

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 1 | Inj. Vol.: | 25.00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 12:32 | Run Time: | 16:25 |

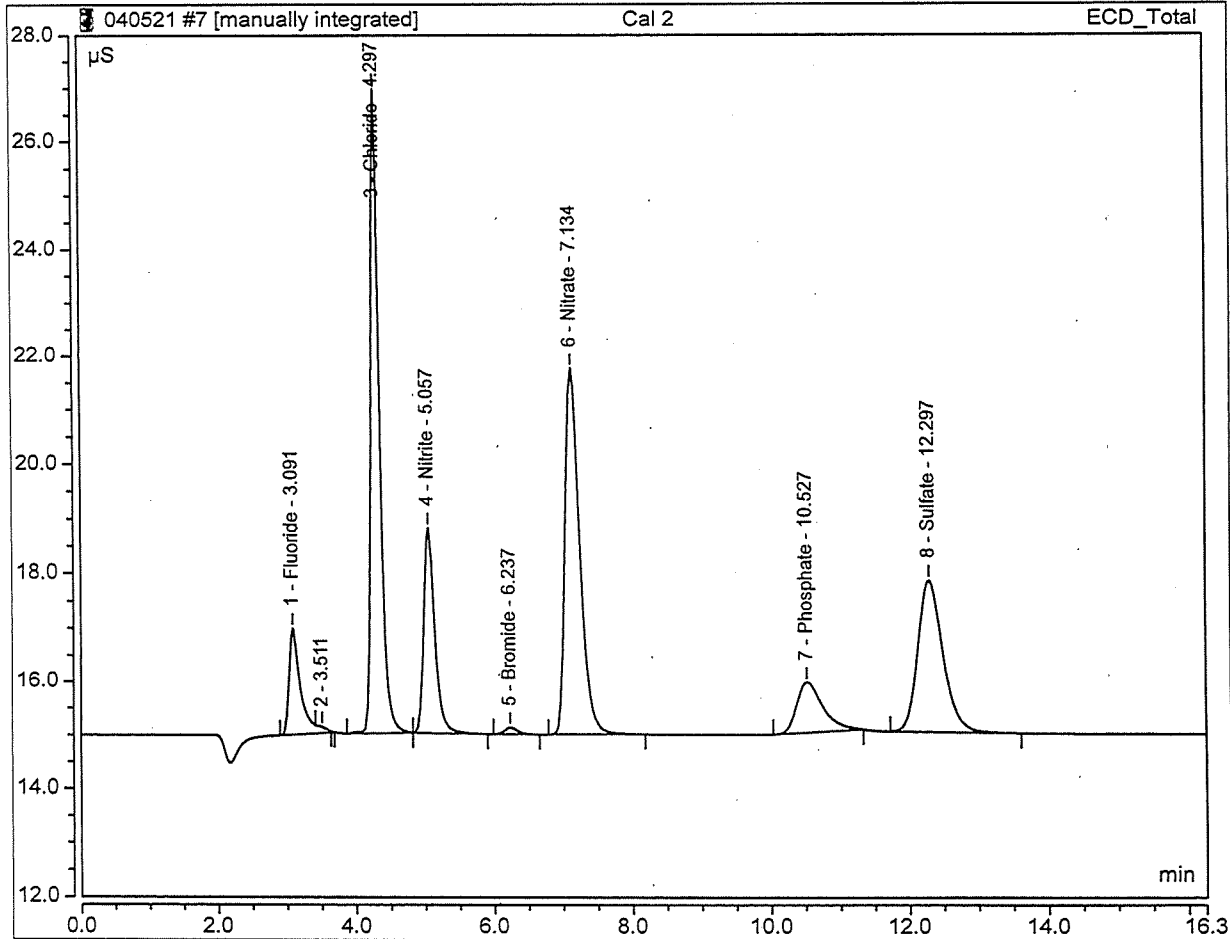


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.091 | 0.456 | 0.5287 |
| 4 | 4.28 | Chloride | BMB | 0.118 | 0.783 | 1.3353 |
| 5 | 5.05 | Nitrite | BMB | 0.026 | 0.141 | 0.1290 |
| 6 | 6.25 | Bromide | BMB | 0.008 | 0.030 | 0.1135 |
| 7 | 7.18 | Nitrate | BMB | 0.150 | 0.605 | 0.6194 |
| 8 | 10.57 | Phosphate | BMB | 0.131 | 0.252 | 0.4422 |
| 9 | 12.31 | Sulfate | BMB | 0.455 | 1.081 | 5.5713 |
| TOTAL: | | | | 0.98 | 3.35 | 8.74 |

W. Smith

7 Cal 2
 2101266

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 2 | Inj. Vol.: | 25:00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 12:52 | Run Time: | 16:25 |

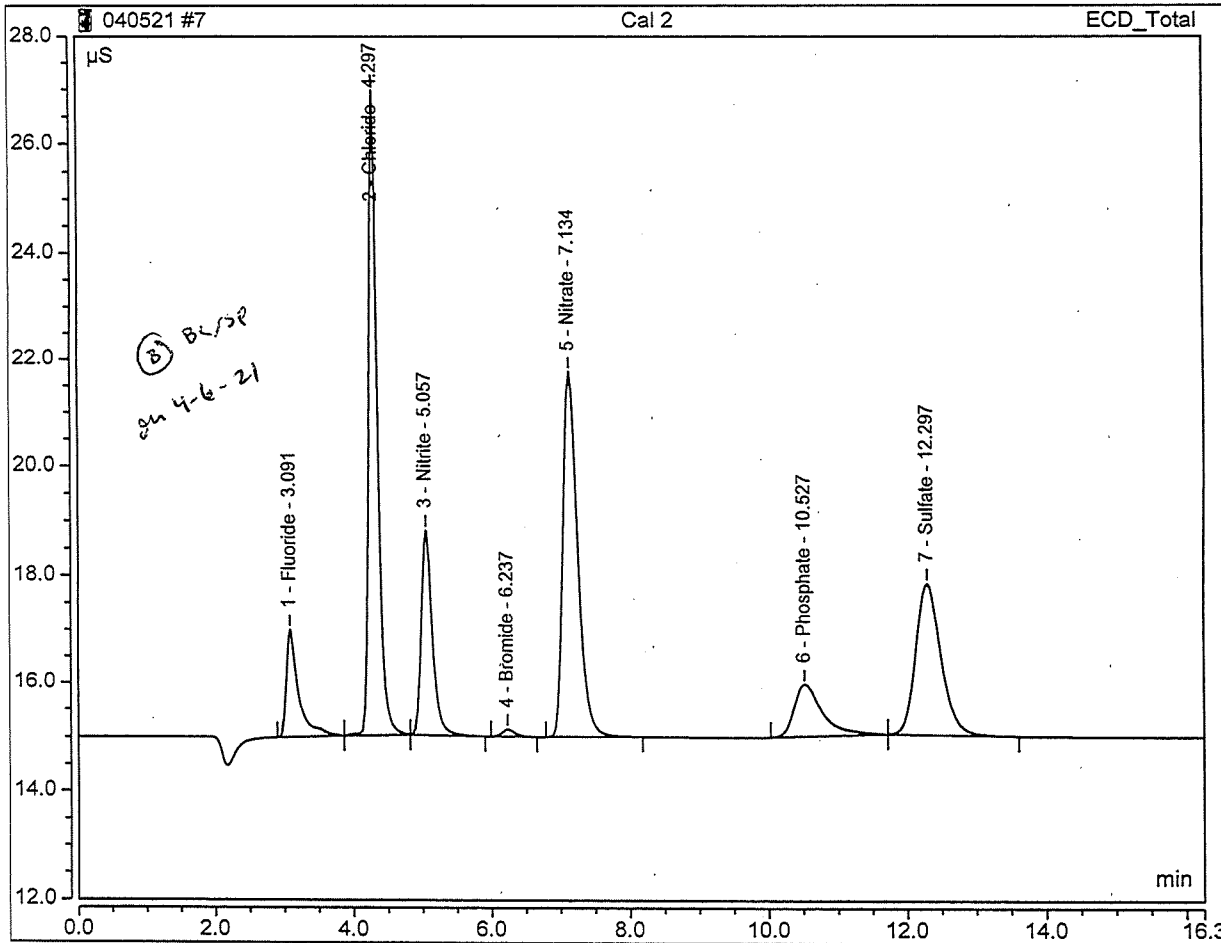


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.380 | 1.992 | 1.9379 |
| 3 | 4.30 | Chloride | BMB | 1.749 | 11.975 | 11.9598 |
| 4 | 5.06 | Nitrite | BMB | 0.700 | 3.797 | 2.4517 |
| 5 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4766 |
| 6 | 7.13 | Nitrate | BMB | 1.672 | 6.766 | 4.8133 |
| 7 | 10.53 | Phosphate | BMB* | 0.410 | 0.947 | 2.5668 |
| 8 | 12.30 | Sulfate | BMB | 1.181 | 2.813 | 12.3460 |
| TOTAL: | | | | 6.12 | 28.42 | 36.55 |

W. J. M.

7 Cal 2
 2101266

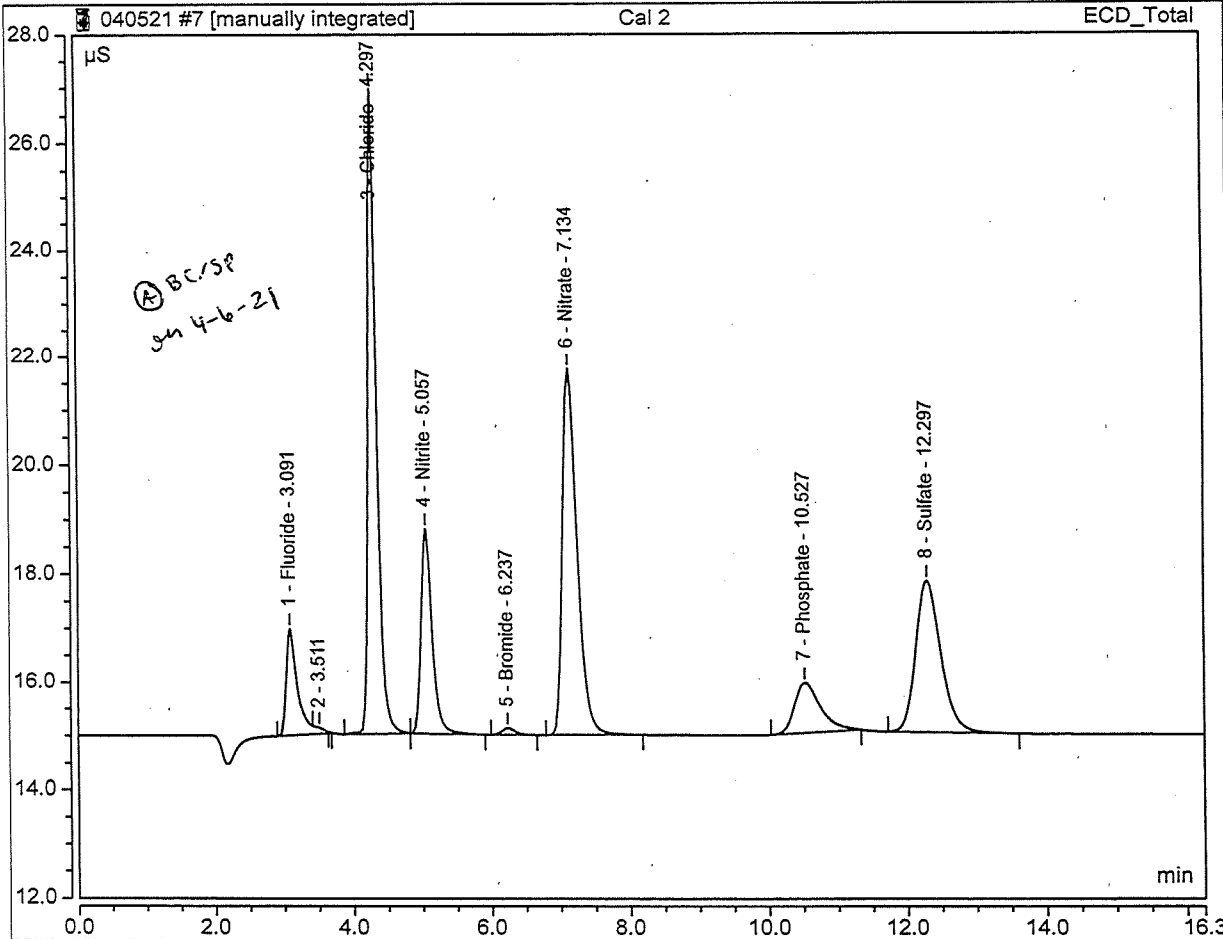
| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 2 | Inj. Vol: | 25:00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 / 12:52 | Run Time: | 16:25 |



| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.398 | 2.000 | 2.0008 |
| 2 | 4.30 | Chloride | BMB | 1.749 | 11.975 | 11.9598 |
| 3 | 5.06 | Nitrite | BMB | 0.700 | 3.797 | 2.4517 |
| 4 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4766 |
| 5 | 7.13 | Nitrate | BMB | 1.672 | 6.766 | 4.8133 |
| 6 | 10.53 | Phosphate | BMB | 0.448 | 0.965 | 2.7806 |
| 7 | 12.30 | Sulfate | BMB | 1.181 | 2.813 | 12.3460 |
| TOTAL: | | | | 6.17 | 28.44 | 36.83 |

7 Cal 2
 2101266

| | | | |
|-------------------|----------------------|------------------|--------|
| Sample Name | Cal 2 | Inj. Vol: | 25.00 |
| Injection Type | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 12:52 | Run Time: | 16:25 |

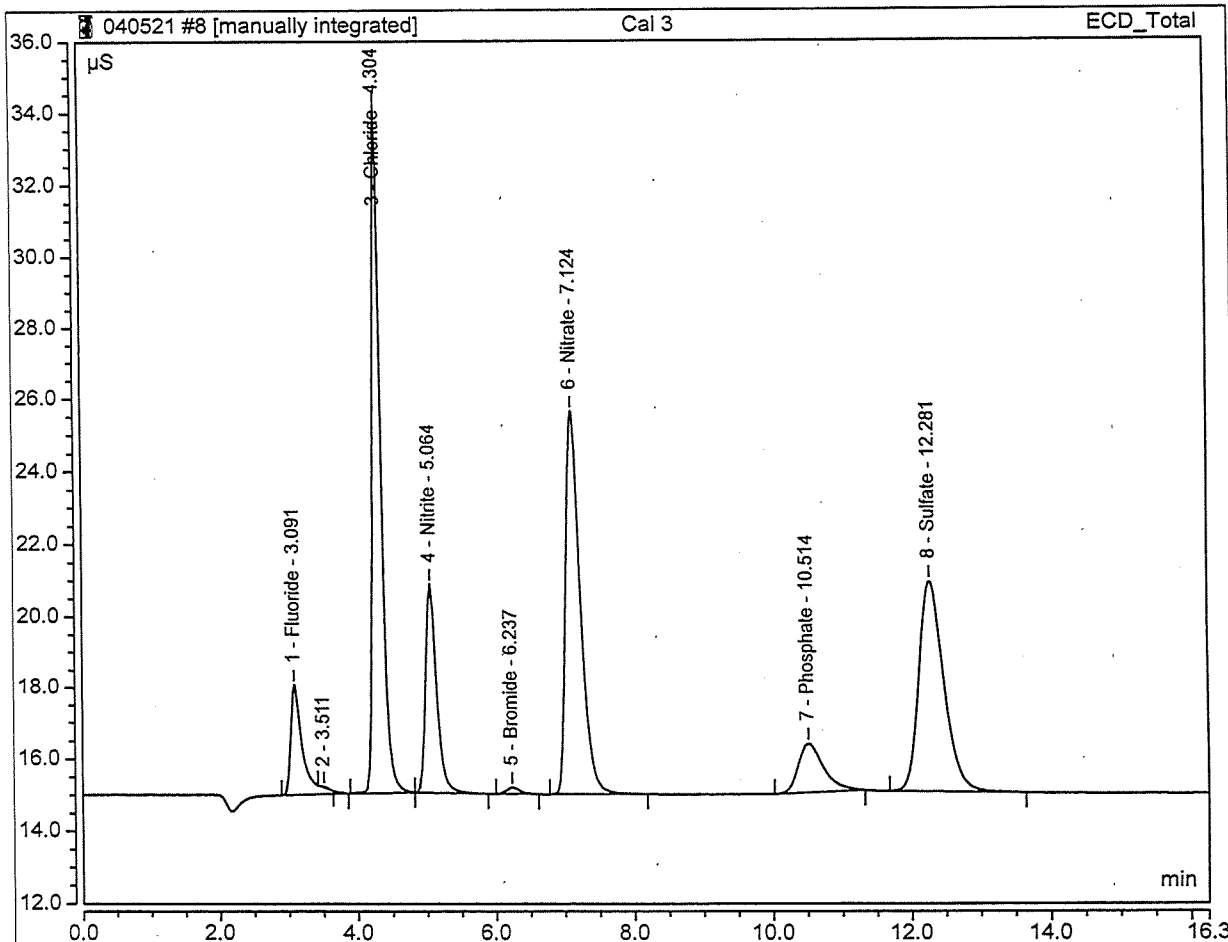


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S} \cdot \text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-------------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.380 | 1.992 | 1.9379 |
| 3 | 4.30 | Chloride | BMB | 1.749 | 11.975 | 11.9598 |
| 4 | 5.06 | Nitrite | BMB | 0.700 | 3.797 | 2.4517 |
| 5 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4766 |
| 6 | 7.13 | Nitrate | BMB | 1.672 | 6.766 | 4.8133 |
| 7 | 10.53 | Phosphate | BMB* | 0.410 | 0.947 | 2.5668 |
| 8 | 12.30 | Sulfate | BMB | 1.181 | 2.813 | 12.3460 |
| TOTAL: | | | | 6.12 | 28.42 | 36.55 |

W. J. G.

8 Cal 3
 2101267

| | | | |
|-------------------|----------------------|-----------------|--------|
| Sample Name | Cal 3 | Inj. Vol. | 25:00 |
| Injection Type | Calibration Standard | Dilution Factor | 1.0000 |
| Instrument Method | Anions_Method | Operator | JG |
| Inj. Date / Time | 05-Apr-2021 / 13:11 | Run Time | 16:25 |

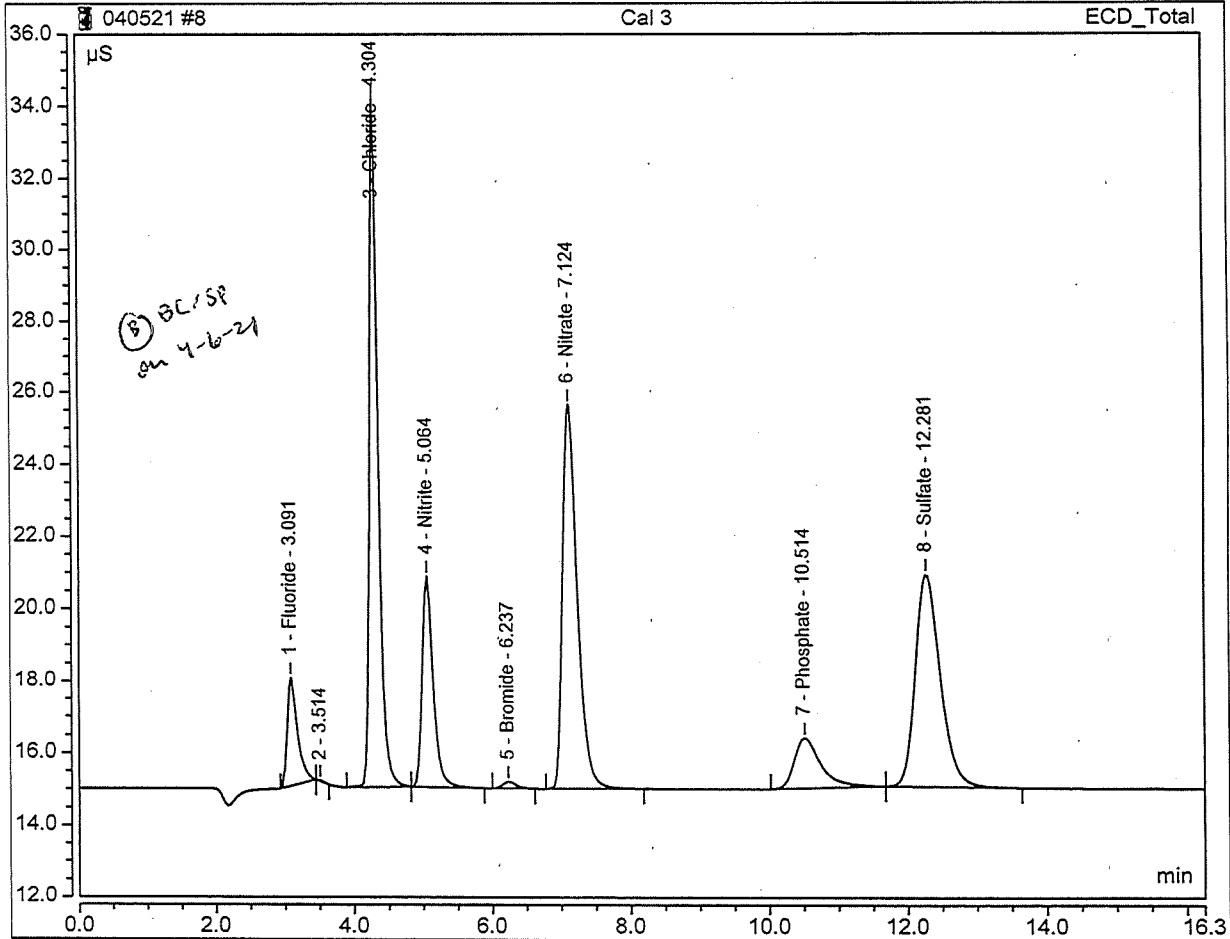


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.604 | 3.084 | 3.0238 |
| 3 | 4.30 | Chloride | BMB | 2.760 | 19.172 | 18.5429 |
| 4 | 5.06 | Nitrite | BMB | 1.072 | 5.842 | 3.7328 |
| 5 | 6.24 | Bromide | BMB | 0.040 | 0.190 | 0.7483 |
| 6 | 7.12 | Nitrate | BMB | 2.618 | 10.640 | 7.4197 |
| 7 | 10.51 | Phosphate | BMB* | 0.575 | 1.364 | 3.8246 |
| 8 | 12.28 | Sulfate | BMB | 2.453 | 5.890 | 24.2027 |
| TOTAL: | | | | 10.12 | 46.18 | 61.49 |

[Handwritten signature]

8 Cal 3
 2101267

| | | | |
|-------------------|----------------------|-----------------|--------|
| Sample Name | Cal 3 | Inj. Vol. | 25.00 |
| Injection Type | Calibration Standard | Dilution Factor | 1.0000 |
| Instrument Method | Anions Method | Operator | JG |
| Inj. Date / Time | 05-Apr-2021 / 13:11 | Run Time | 16:25 |

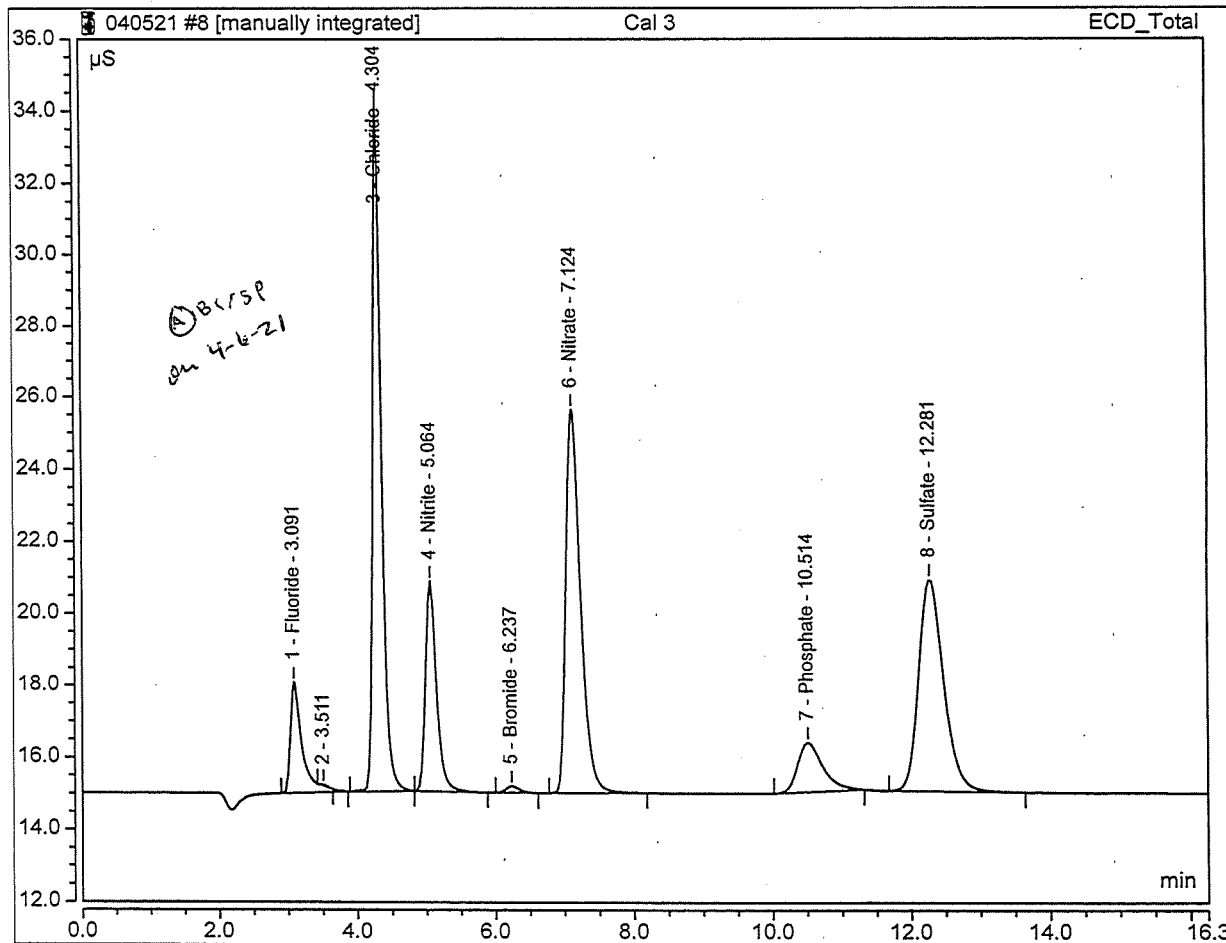


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.508 | 3.012 | 2.6871 |
| 3 | 4.30 | Chloride | BMB | 2.760 | 19.172 | 18.5429 |
| 4 | 5.06 | Nitrite | BMB | 1.072 | 5.842 | 3.7328 |
| 5 | 6.24 | Bromide | BMB | 0.040 | 0.190 | 0.7483 |
| 6 | 7.12 | Nitrate | BMB | 2.618 | 10.640 | 7.4197 |
| 7 | 10.51 | Phosphate | BMB | 0.614 | 1.382 | 4.0232 |
| 8 | 12.28 | Sulfate | BMB | 2.453 | 5.890 | 24.2027 |
| TOTAL: | | | | 10.06 | 46.13 | 61.36 |

W. J. G.

8 Cal 3
 2101267

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 3 | Inj. Vol: | 25.00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 13:11 | Run Time: | 16.25 |

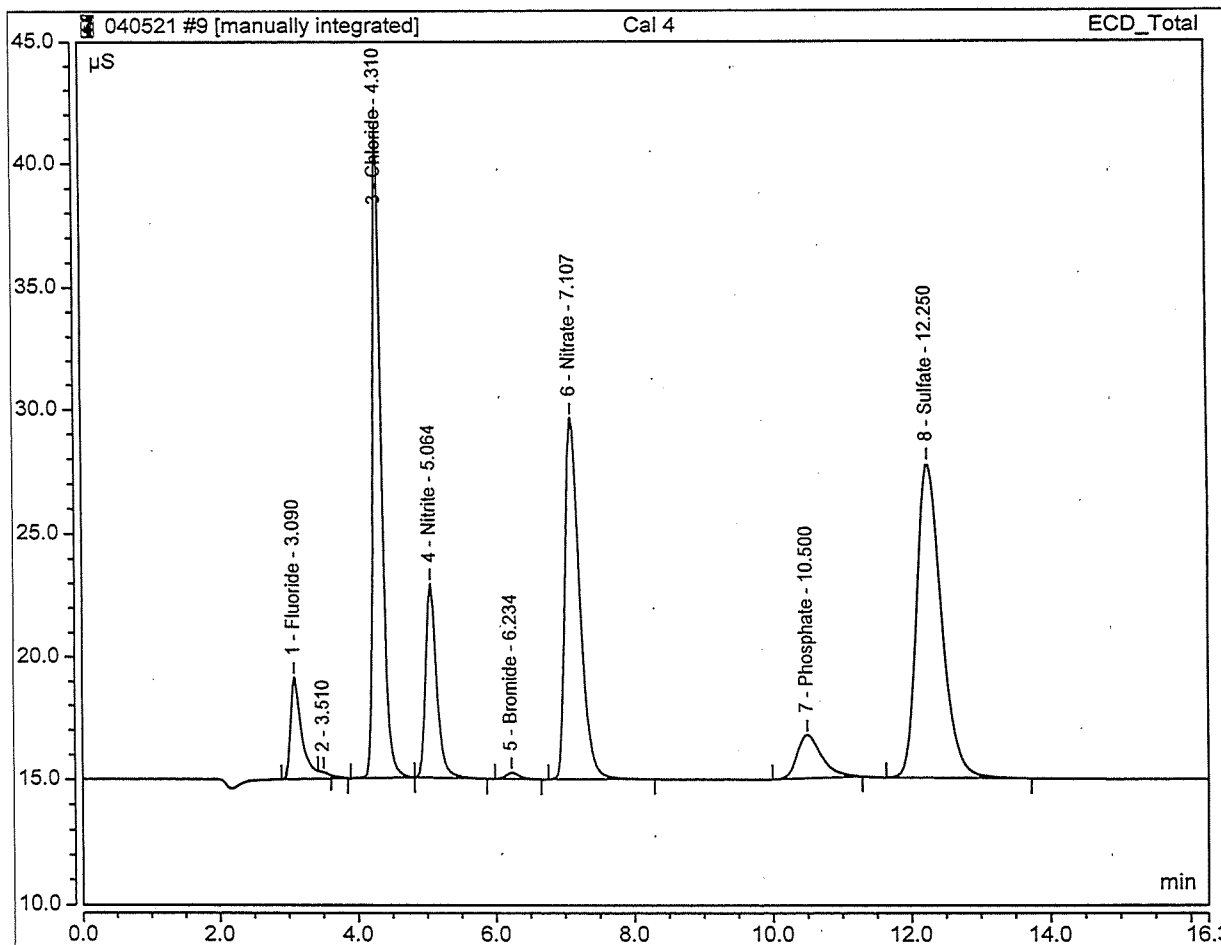


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.604 | 3.084 | 3.0238 |
| 3 | 4.30 | Chloride | BMB | 2.760 | 19.172 | 18.5429 |
| 4 | 5.06 | Nitrite | BMB | 1.072 | 5.842 | 3.7328 |
| 5 | 6.24 | Bromide | BMB | 0.040 | 0.190 | 0.7483 |
| 6 | 7.12 | Nitrate | BMB | 2.618 | 10.640 | 7.4197 |
| 7 | 10.51 | Phosphate | BMB* | 0.575 | 1.364 | 3.8246 |
| 8 | 12.28 | Sulfate | BMB | 2.453 | 5.890 | 24.2027 |
| TOTAL: | | | | 10.12 | 46.18 | 61.49 |

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9 Cal 4
 2101268

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 4 | Inj. Vol.: | 25.00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 / 13:30 | Run Time: | 16:25 |

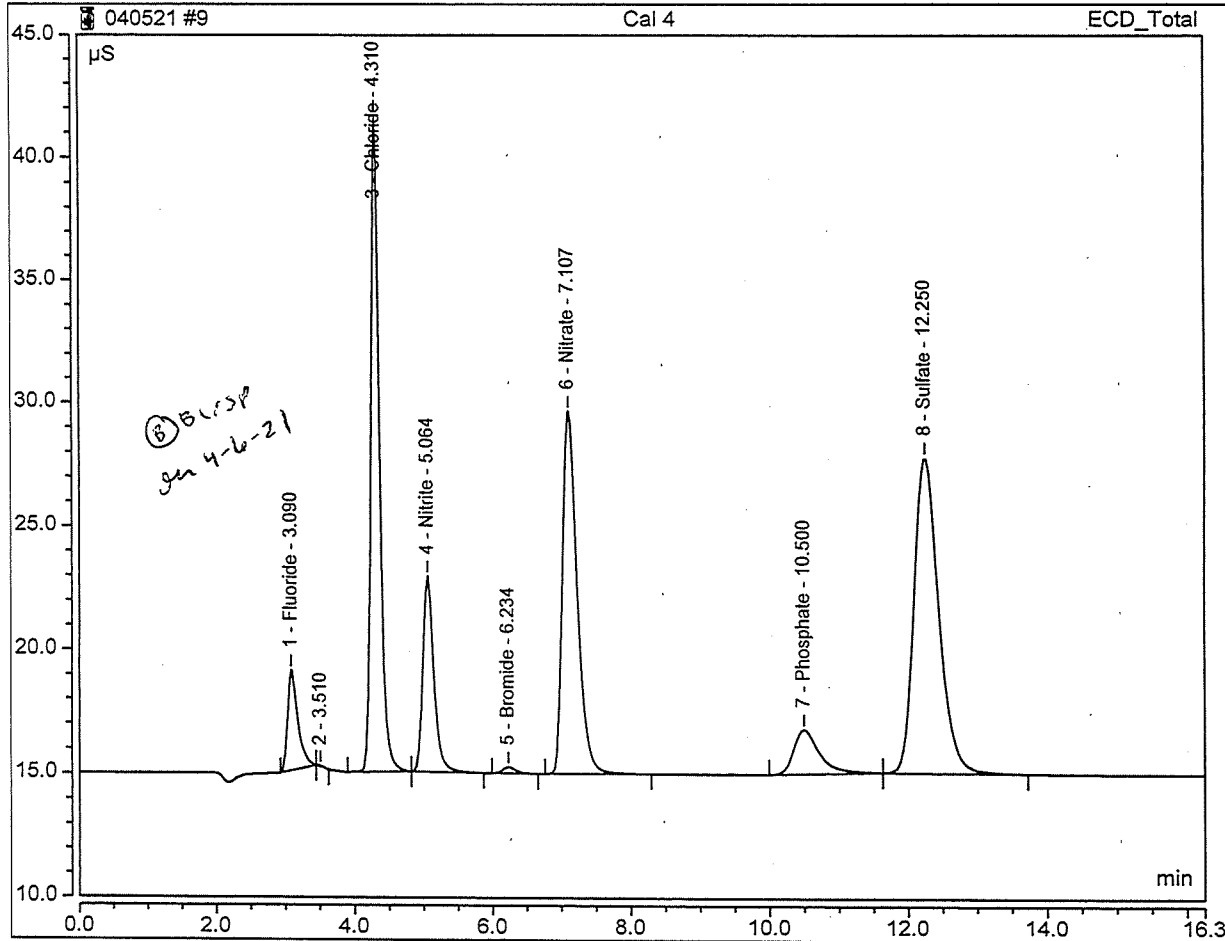


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.807 | 4.163 | 4.0096 |
| 3 | 4.31 | Chloride | BMB | 3.815 | 26.633 | 25.4120 |
| 4 | 5.06 | Nitrite | BMB | 1.451 | 7.913 | 5.0364 |
| 5 | 6.23 | Bromide | BMB | 0.053 | 0.252 | 1.0116 |
| 6 | 7.11 | Nitrate | BMB | 3.608 | 14.671 | 10.1476 |
| 7 | 10.50 | Phosphate | BMB* | 0.719 | 1.748 | 4.9164 |
| 8 | 12.25 | Sulfate | BMB | 5.259 | 12.759 | 50.3800 |
| TOTAL: | | | | 15.71 | 68.14 | 100.91 |

Handwritten signature

9 Cal 4
 2101268

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 4 | Inj. Vol.: | 25.00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 13:30 | Run Time: | 16:25 |

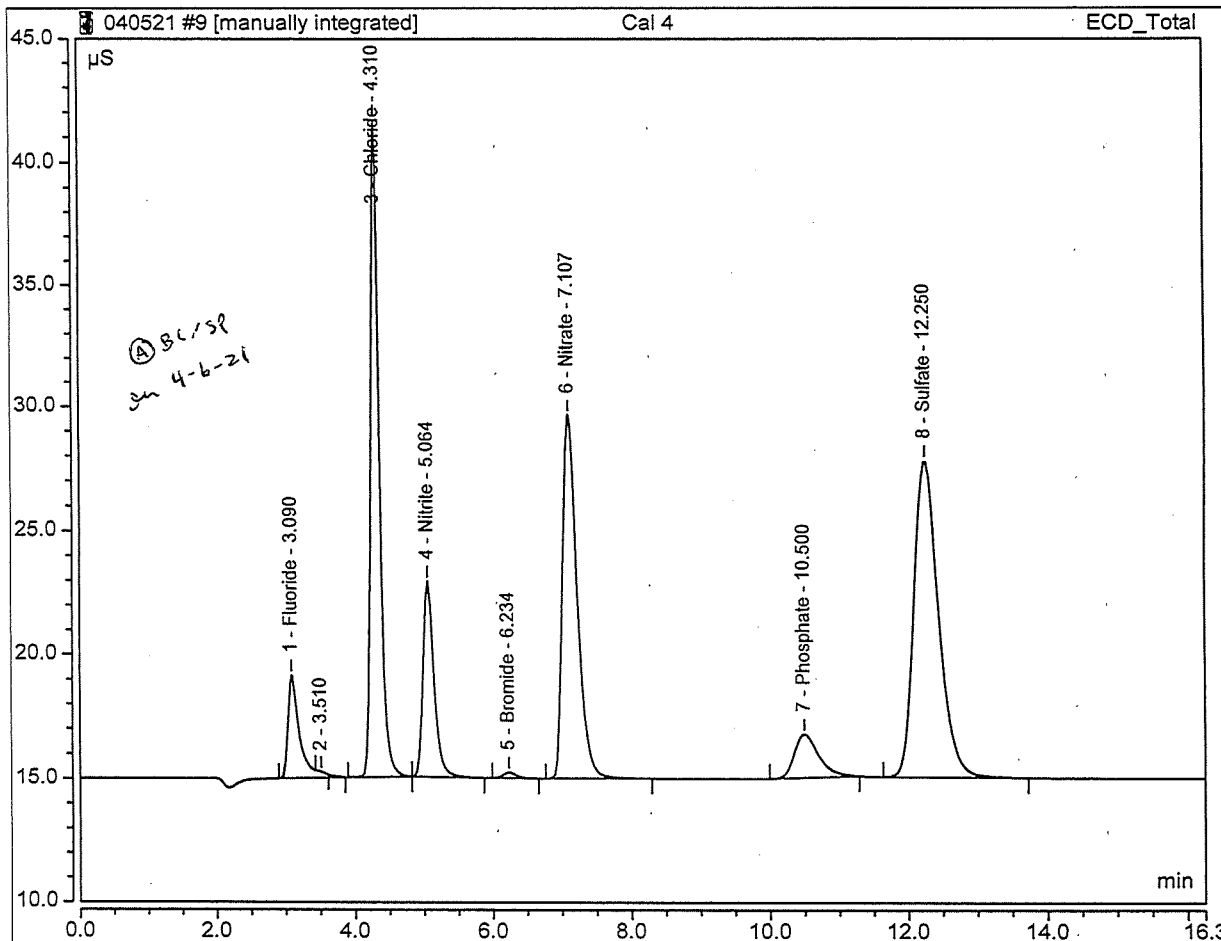


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.682 | 4.070 | 3.7597 |
| 3 | 4.31 | Chloride | BMB | 3.815 | 26.633 | 25.4120 |
| 4 | 5.06 | Nitrite | BMB | 1.451 | 7.913 | 5.0364 |
| 5 | 6.23 | Bromide | BMB | 0.053 | 0.252 | 1.0116 |
| 6 | 7.11 | Nitrate | BMB | 3.608 | 14.671 | 10.1476 |
| 7 | 10.50 | Phosphate | BMB | 0.764 | 1.770 | 5.0381 |
| 8 | 12.25 | Sulfate | BMB | 5.259 | 12.759 | 50.3800 |
| TOTAL: | | | | 15.63 | 68.07 | 100.79 |

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9 Cal 4
 2101268

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | Cal 4 | Inj. Vol: | 25.00 |
| Injection Type: | Calibration Standard | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 13:30 | Run Time: | 16.25 |



| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.807 | 4.163 | 4.0096 |
| 3 | 4.31 | Chloride | BMB | 3.815 | 26.633 | 25.4120 |
| 4 | 5.06 | Nitrite | BMB | 1.451 | 7.913 | 5.0364 |
| 5 | 6.23 | Bromide | BMB | 0.053 | 0.252 | 1.0116 |
| 6 | 7.11 | Nitrate | BMB | 3.608 | 14.671 | 10.1476 |
| 7 | 10.50 | Phosphate | BMB* | 0.719 | 1.748 | 4.9164 |
| 8 | 12.25 | Sulfate | BMB | 5.259 | 12.759 | 50.3800 |
| TOTAL: | | | | 15.71 | 68.14 | 100.91 |

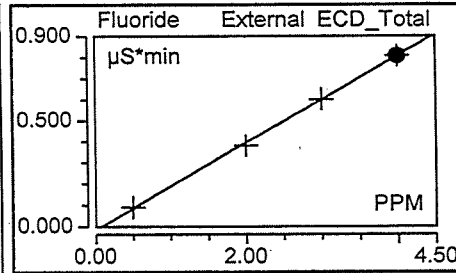
W 4/7/21

Calibration Batch Report

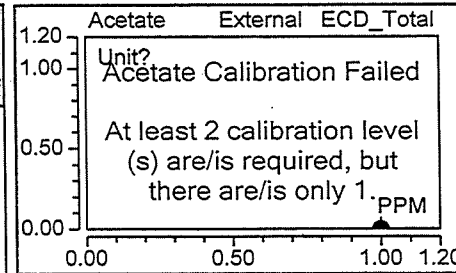
| | |
|-------------------------------------|-------------------------|
| Sequence: 040521 | Injection Volume: 25.00 |
| Instrument Method: Anions_Method | Operator: IC |
| Inj. Date/Time: 05-Apr-2021 / 13:30 | Run Time: 16.250333 |

| Calibration Summary | | | | | | | |
|---------------------|-----------|---------------|---------|-------------|------------|------------|--------------|
| Peak Name | Eval.Type | Cal.Type | Points | Offset (C0) | Slope (C1) | Curve (C2) | Coeff.Det. % |
| Fluoride | Area | in, WithOffse | 4.000 ✓ | -0.018 | 0.206 | 0.000 | 99.9204 ✓ |
| Chloride | Area | in, WithOffse | 4.000 ✓ | -0.087 | 0.154 | 0.000 | 99.8042 ✓ |
| Nitrite | Area | in, WithOffse | 4.000 ✓ | -0.012 | 0.290 | 0.000 | 99.9635 ✓ |
| Bromide | Area | in, WithOffse | 4.000 ✓ | 0.003 | 0.049 | 0.000 | 99.8043 ✓ |
| Nitrate | Area | in, WithOffse | 4.000 ✓ | -0.075 | 0.363 | 0.000 | 99.8432 ✓ |
| Phosphate | Area | in, WithOffse | 4.000 ✓ | 0.073 | 0.131 | 0.000 | 99.8160 ✓ |
| Sulfate | Area | in, WithOffse | 4.000 ✓ | -0.142 | 0.107 | 0.000 | 99.9033 ✓ |
| AVERAGE: | | | | -0.0370 | 0.1858 | 0.0000 | 99.8650 |

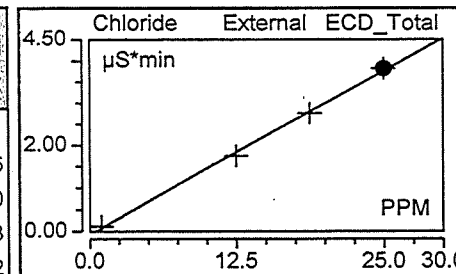
| Injection Name | Ret. Time min | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|----------------|----------------|-----------------------------------|----------------------|----------------|
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Fluoride 3.090 | Fluoride 0.0906 | Fluoride 0.456 | Fluoride 0.529 |
| Cal 2 | 3.091 | 0.3804 | 1.992 | 1.938 |
| Cal 3 | 3.091 | 0.6038 | 3.084 | 3.024 |
| Cal 4 | 3.090 | 0.8066 | 4.163 | 4.010 |
| Average | 3.091 | | | |
| Rel. Std. Dev. | 0.006 % | | | |



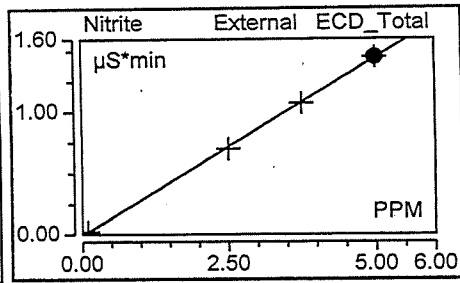
| Injection Name | Ret. Time min | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|----------------|---------------|-----------------------------------|----------------------|--------------|
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Acetate n.a. | Acetate n.a. | Acetate n.a. | Acetate n.a. |
| Cal 2 | n.a. | n.a. | n.a. | n.a. |
| Cal 3 | n.a. | n.a. | n.a. | n.a. |
| Cal 4 | n.a. | n.a. | n.a. | n.a. |
| Average | #DIV/0! | | | |
| Rel. Std. Dev. | #DIV/0! | | | |



| Injection Name | Ret. Time min | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|----------------|----------------|-----------------------------------|----------------------|----------------|
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Chloride 4.284 | Chloride 0.1177 | Chloride 0.783 | Chloride 1.335 |
| Cal 2 | 4.297 | 1.7491 | 11.975 | 11.960 |
| Cal 3 | 4.304 | 2.7599 | 19.172 | 18.543 |
| Cal 4 | 4.310 | 3.8146 | 26.633 | 25.412 |
| Average | 4.299 | | | |
| Rel. Std. Dev. | 0.266 % | | | |

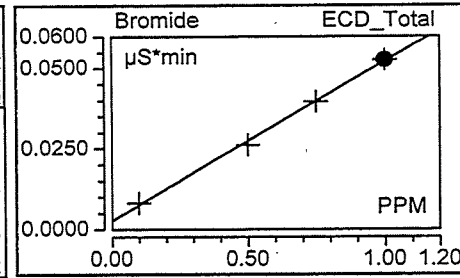


| Injection Name | Ret. Time | Area | Height | Amount |
|----------------|------------------|------------------------------|------------------|------------------|
| | min | $\mu\text{S}\cdot\text{min}$ | μS | PPM |
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Nitrite 5.054 | Nitrite 0.0259 | Nitrite 0.141 | Nitrite 0.129 |
| Cal 2 | 5.057 | 0.7002 | 3.797 | 2.452 |
| Cal 3 | 5.064 | 1.0721 | 5.842 | 3.733 |
| Cal 4 | 5.064 | 1.4505 | 7.913 | 5.036 |
| Average | 5.060 | | | |
| Rel. Std. Dev. | 0.100 % | | | |

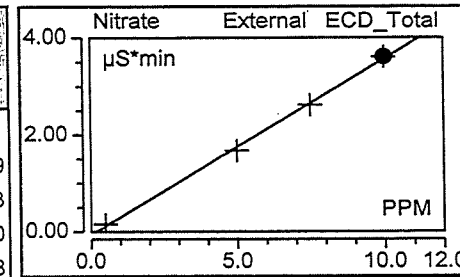


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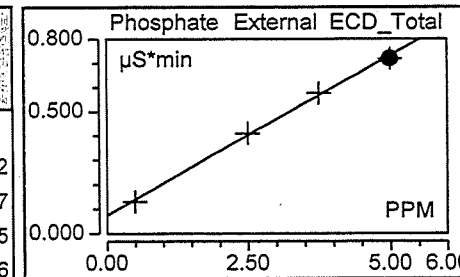
| Injection Name | Ret. Time | Area | Height | Amount |
|----------------|------------------|------------------------------|------------------|------------------|
| | min | $\mu\text{S}\cdot\text{min}$ | μS | PPM |
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Bromide 6.254 | Bromide 0.0082 | Bromide 0.030 | Bromide 0.113 |
| Cal 2 | 6.237 | 0.0262 | 0.126 | 0.477 |
| Cal 3 | 6.237 | 0.0396 | 0.190 | 0.748 |
| Cal 4 | 6.234 | 0.0526 | 0.252 | 1.012 |
| Average | 6.241 | | | |
| Rel. Std. Dev. | 0.143 % | | | |



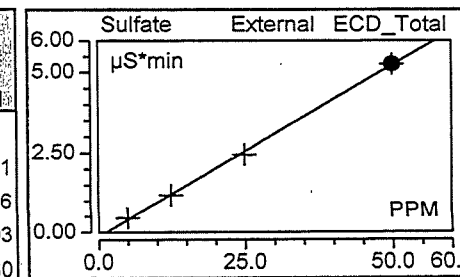
| Injection Name | Ret. Time | Area | Height | Amount |
|----------------|------------------|------------------------------|------------------|------------------|
| | min | $\mu\text{S}\cdot\text{min}$ | μS | PPM |
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Nitrate 7.180 | Nitrate 0.1501 | Nitrate 0.605 | Nitrate 0.619 |
| Cal 2 | 7.134 | 1.6720 | 6.766 | 4.813 |
| Cal 3 | 7.124 | 2.6179 | 10.640 | 7.420 |
| Cal 4 | 7.107 | 3.6078 | 14.671 | 10.148 |
| Average | 7.136 | | | |
| Rel. Std. Dev. | 0.440 % | | | |



| Injection Name | Ret. Time | Area | Height | Amount |
|----------------|---------------------|------------------------------|--------------------|--------------------|
| | min | $\mu\text{S}\cdot\text{min}$ | μS | PPM |
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Phosphate 10.574 | Phosphate 0.1308 | Phosphate 0.252 | Phosphate 0.442 |
| Cal 2 | 10.527 | 0.4101 | 0.947 | 2.567 |
| Cal 3 | 10.514 | 0.5755 | 1.364 | 3.825 |
| Cal 4 | 10.500 | 0.7190 | 1.748 | 4.916 |
| Average | 10.529 | | | |
| Rel. Std. Dev. | 0.303 % | | | |

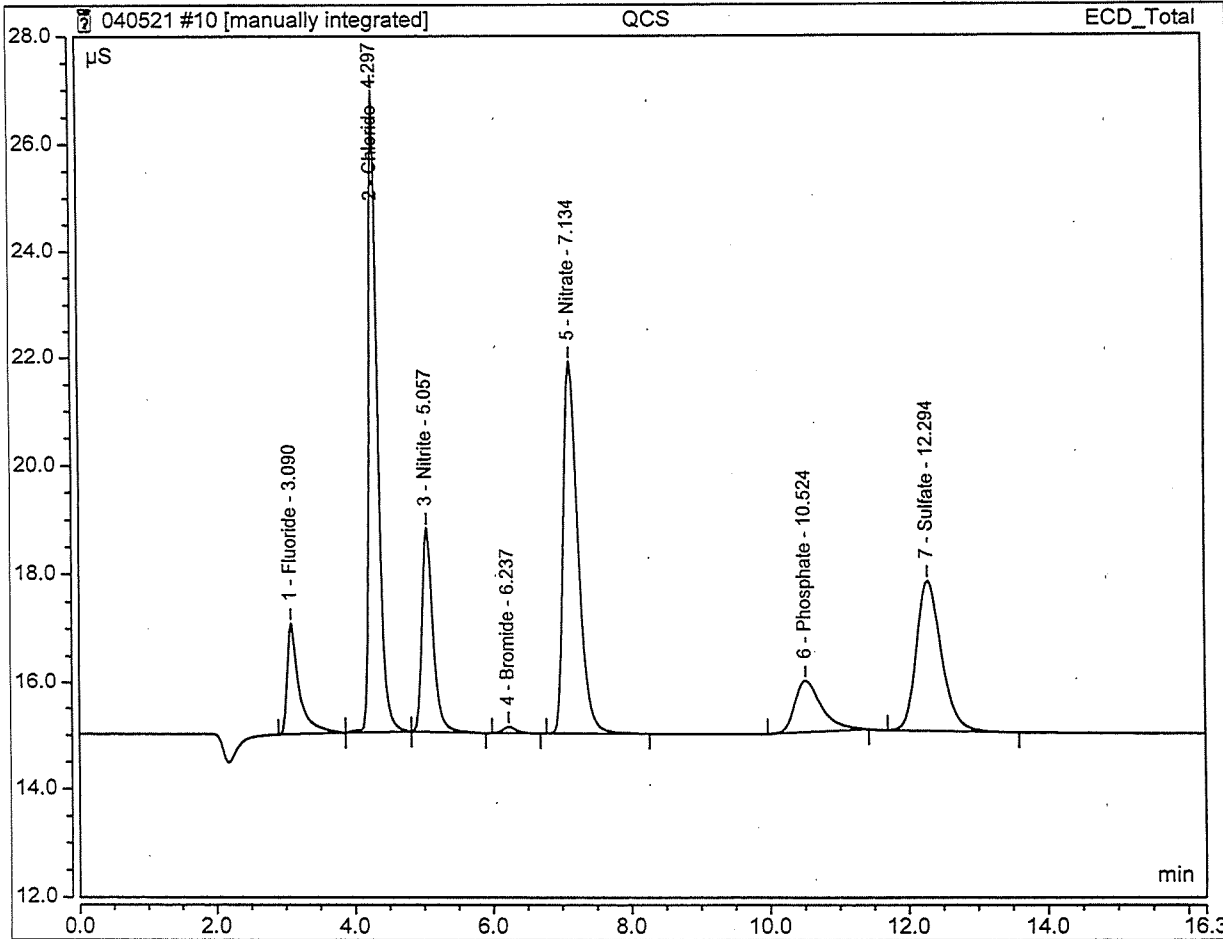


| Injection Name | Ret. Time | Area | Height | Amount |
|----------------|-------------------|------------------------------|------------------|------------------|
| | min | $\mu\text{S}\cdot\text{min}$ | μS | PPM |
| | ECD_Total | ECD_Total | ECD_Total | ECD_Total |
| Cal 1 | Sulfate 12.307 | Sulfate 0.4549 | Sulfate 1.081 | Sulfate 5.571 |
| Cal 2 | 12.297 | 1.1813 | 2.813 | 12.346 |
| Cal 3 | 12.281 | 2.4525 | 5.890 | 24.203 |
| Cal 4 | 12.250 | 5.2592 | 12.759 | 50.380 |
| Average | 12.284 | | | |
| Rel. Std. Dev. | 0.202 % | | | |



10 QCS
 2101269

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | QCS | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 13:49 | Run Time: | 16:25 |

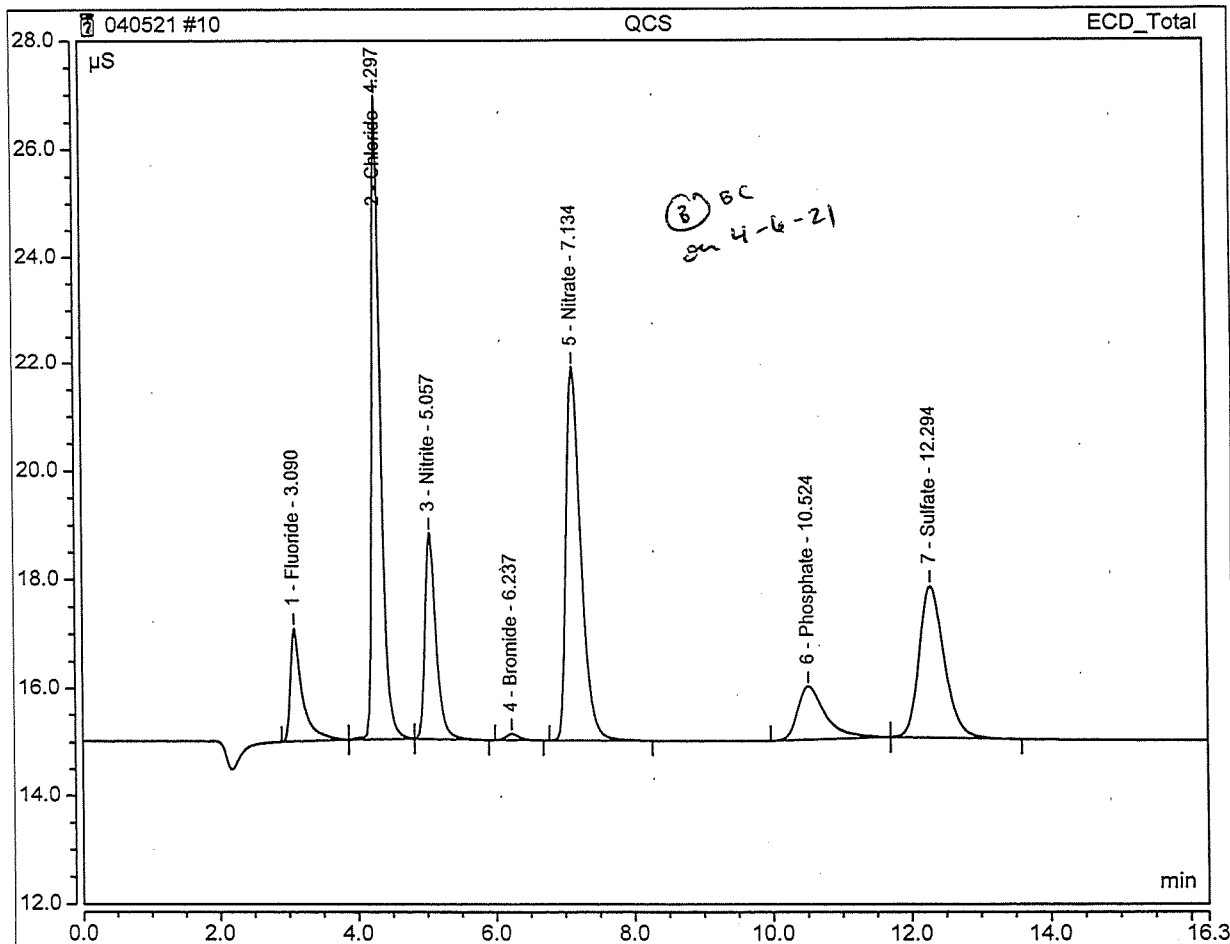


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.413 | 2.089 | 2.0939 ✓ |
| 2 | 4.30 | Chloride | BMB | 1.745 | 11.947 | 11.9343 ✓ |
| 3 | 5.06 | Nitrite | BMB | 0.701 | 3.799 | 2.4538 ✓ |
| 4 | 6.24 | Bromide | BMB | 0.025 | 0.119 | 0.4539 ✓ |
| 5 | 7.13 | Nitrate | BMB | 1.708 | 6.900 | 4.9122 ✓ |
| 6 | 10.52 | Phosphate | BMB* | 0.434 | 0.984 | 2.7482 ✓ |
| 7 | 12.29 | Sulfate | BMB | 1.177 | 2.805 | 12.3102 ✓ |
| TOTAL: | | | | 6.20 | 28.64 | 36.91 |

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10 QCS
 2101269

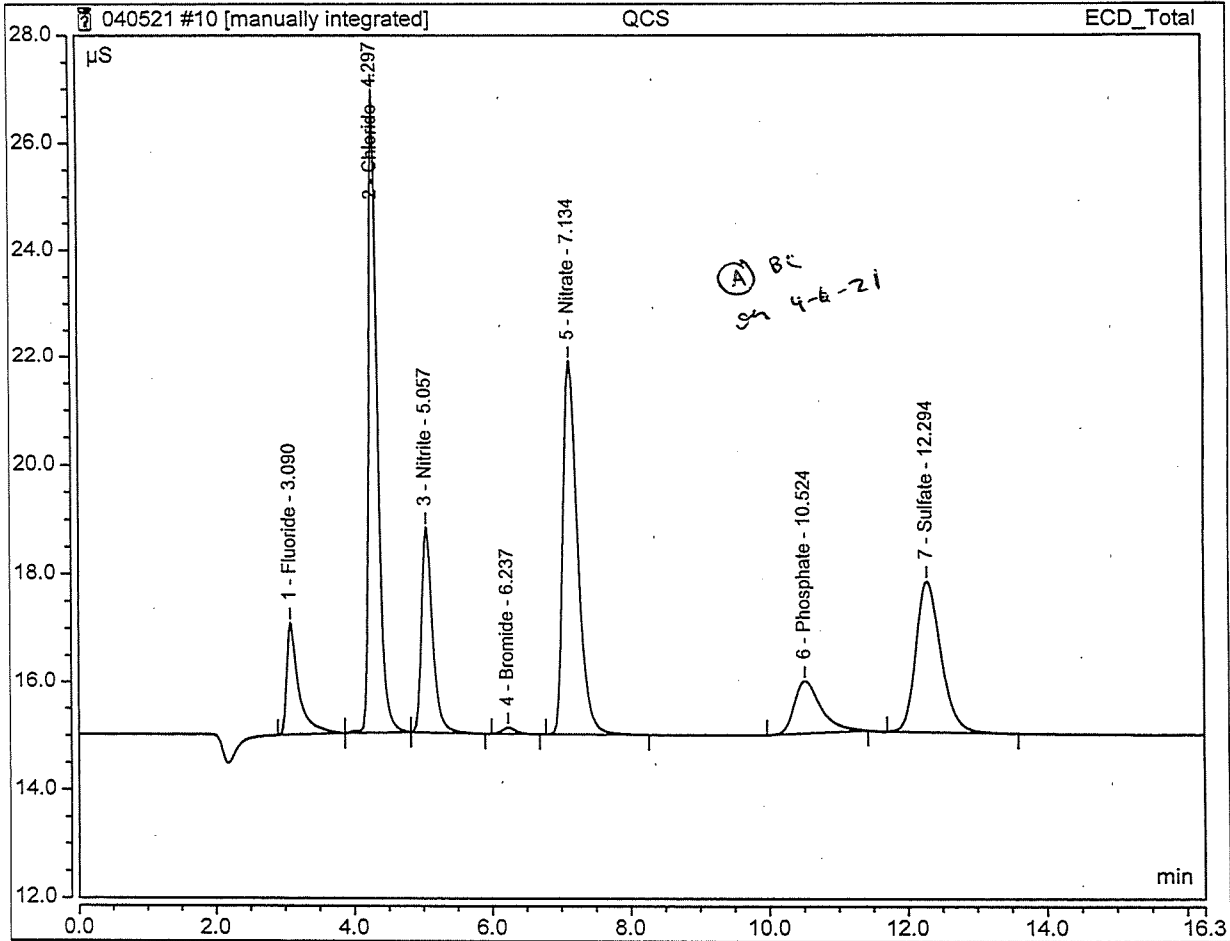
| | | | |
|--------------------|-------------------|------------------|--------|
| Sample Name: | QCS | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 13:49 | Run Time: | 16.25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.413 | 2.089 | 2.0939 |
| 2 | 4.30 | Chloride | BMB | 1.745 | 11.947 | 11.9343 |
| 3 | 5.06 | Nitrite | BMB | 0.701 | 3.799 | 2.4538 |
| 4 | 6.24 | Bromide | BMB | 0.025 | 0.119 | 0.4539 |
| 5 | 7.13 | Nitrate | BMB | 1.708 | 6.900 | 4.9122 |
| 6 | 10.52 | Phosphate | BMB | 0.458 | 0.995 | 2.9293 |
| 7 | 12.29 | Sulfate | BMB | 1.177 | 2.805 | 12.3102 |
| TOTAL: | | | | 6.23 | 28.65 | 37.09 |

W. J. G.

| | | | |
|--------------------|---------------------|------------------|--------|
| 10 QCS 2101269 | | | |
| Sample Name: | QCS | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions - Method | Operator: | JG |
| Inj. Date./Time: | 05-Apr-2021 / 13:49 | Run Time: | 16:25 |

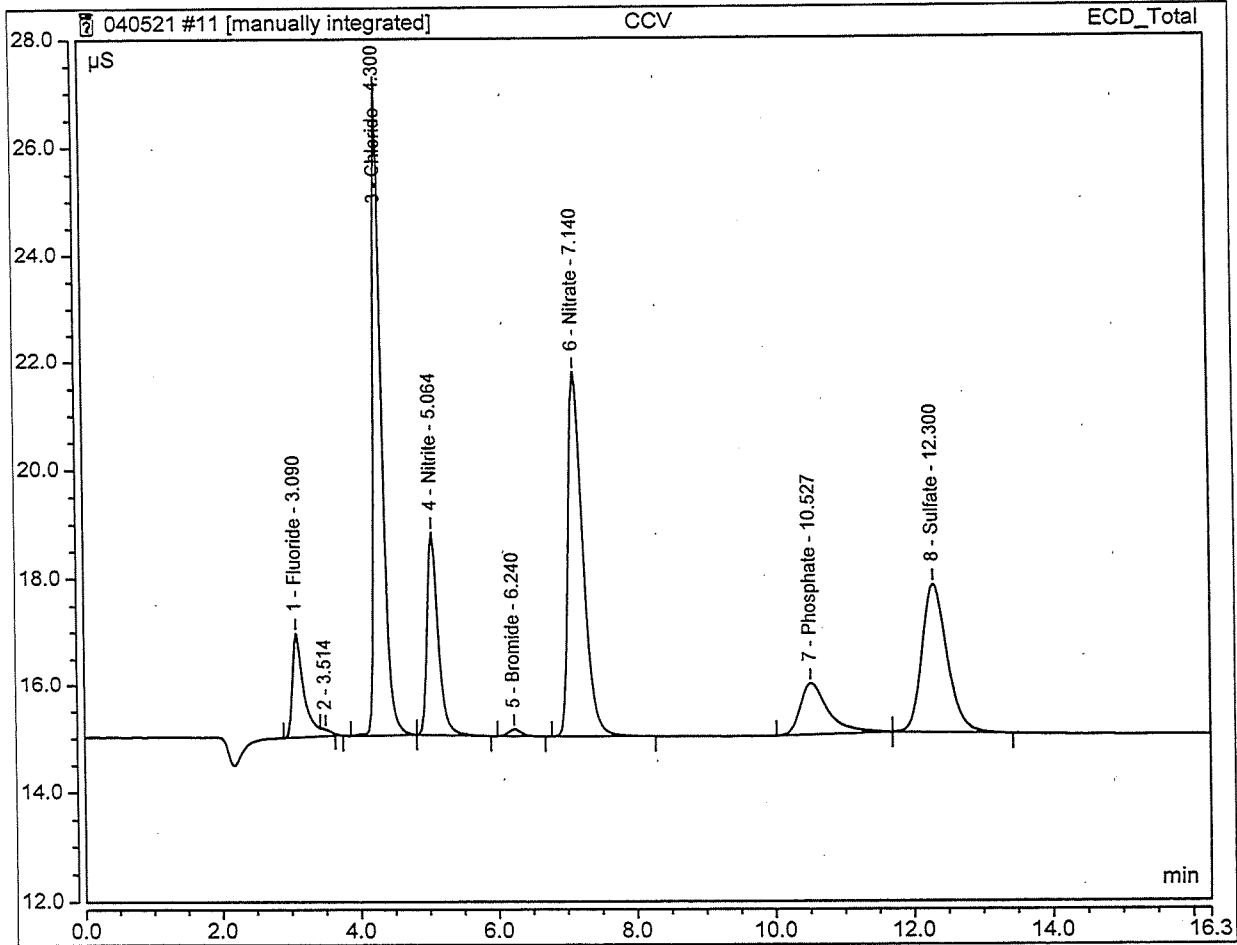


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.413 | 2.089 | 2.0939 |
| 2 | 4.30 | Chloride | BMB | 1.745 | 11.947 | 11.9343 |
| 3 | 5.06 | Nitrite | BMB | 0.701 | 3.799 | 2.4538 |
| 4 | 6.24 | Bromide | BMB | 0.025 | 0.119 | 0.4539 |
| 5 | 7.13 | Nitrate | BMB | 1.708 | 6.900 | 4.9122 |
| 6 | 10.52 | Phosphate | BMB* | 0.434 | 0.984 | 2.7482 |
| 7 | 12.29 | Sulfate | BMB | 1.177 | 2.805 | 12.3102 |
| TOTAL: | | | | 6.20 | 28.64 | 36.91 |

W. J. G.

11 CCV
 2101274

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 14:08 | Run-Time: | 16:25 |

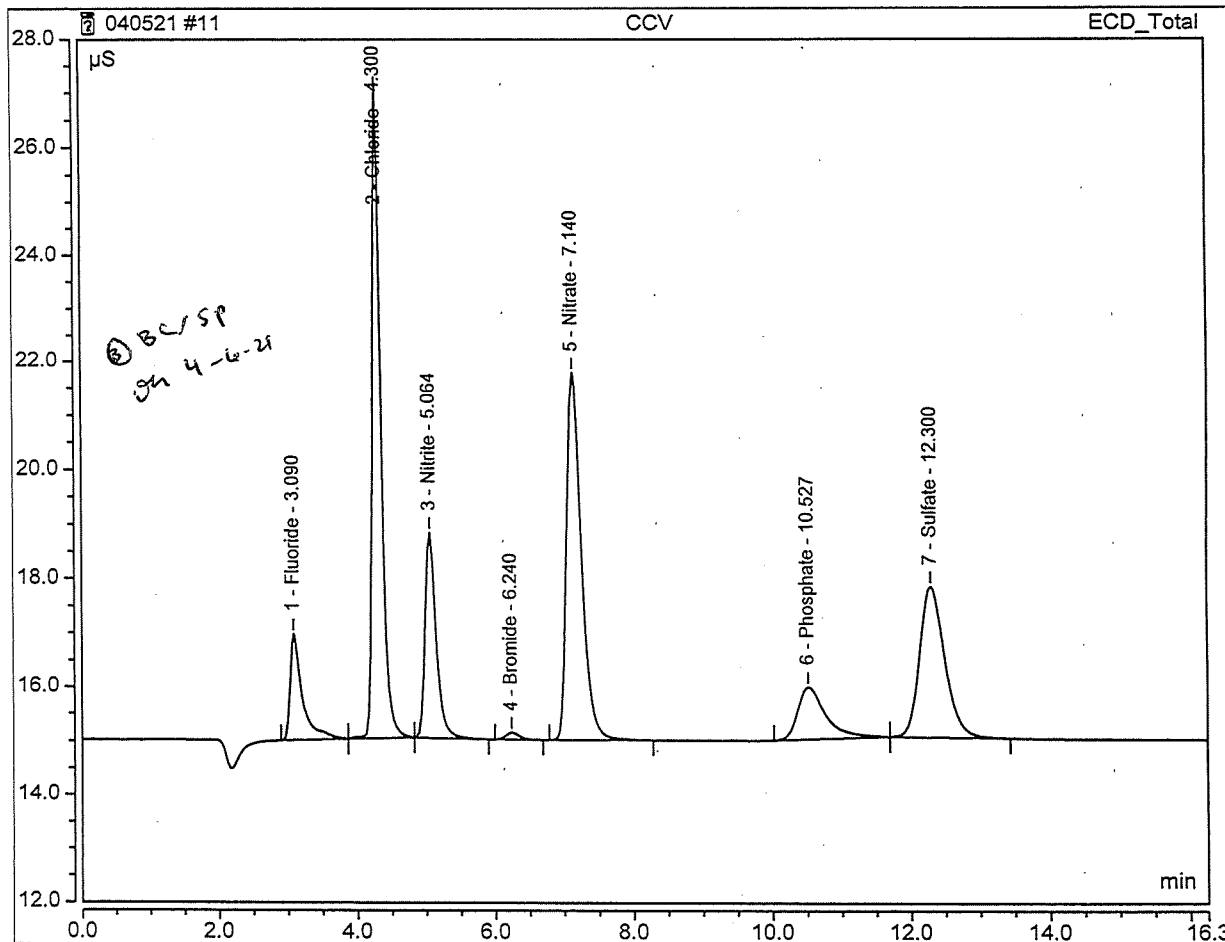


| No. | Time min | Peak Name | Peak Type | Area µS·min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.384 | 1.972 | 1.9566 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.752 | 11.988 | 11.9791 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.702 | 3.798 | 2.4595 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.027 | 0.127 | 0.4880 ✓ |
| 6 | 7.14 | Nitrate | BMB | 1.678 | 6.776 | 4.8293 ✓ |
| 7 | 10.53 | Phosphate | BMB | 0.446 | 0.972 | 2.8372 ✓ |
| 8 | 12.30 | Sulfate | BMB | 1.173 | 2.799 | 12.2710 ✓ |
| TOTAL: | | | | 6.16 | 28.43 | 36.82 |

11 CCV
 2101274

W 4/7/21

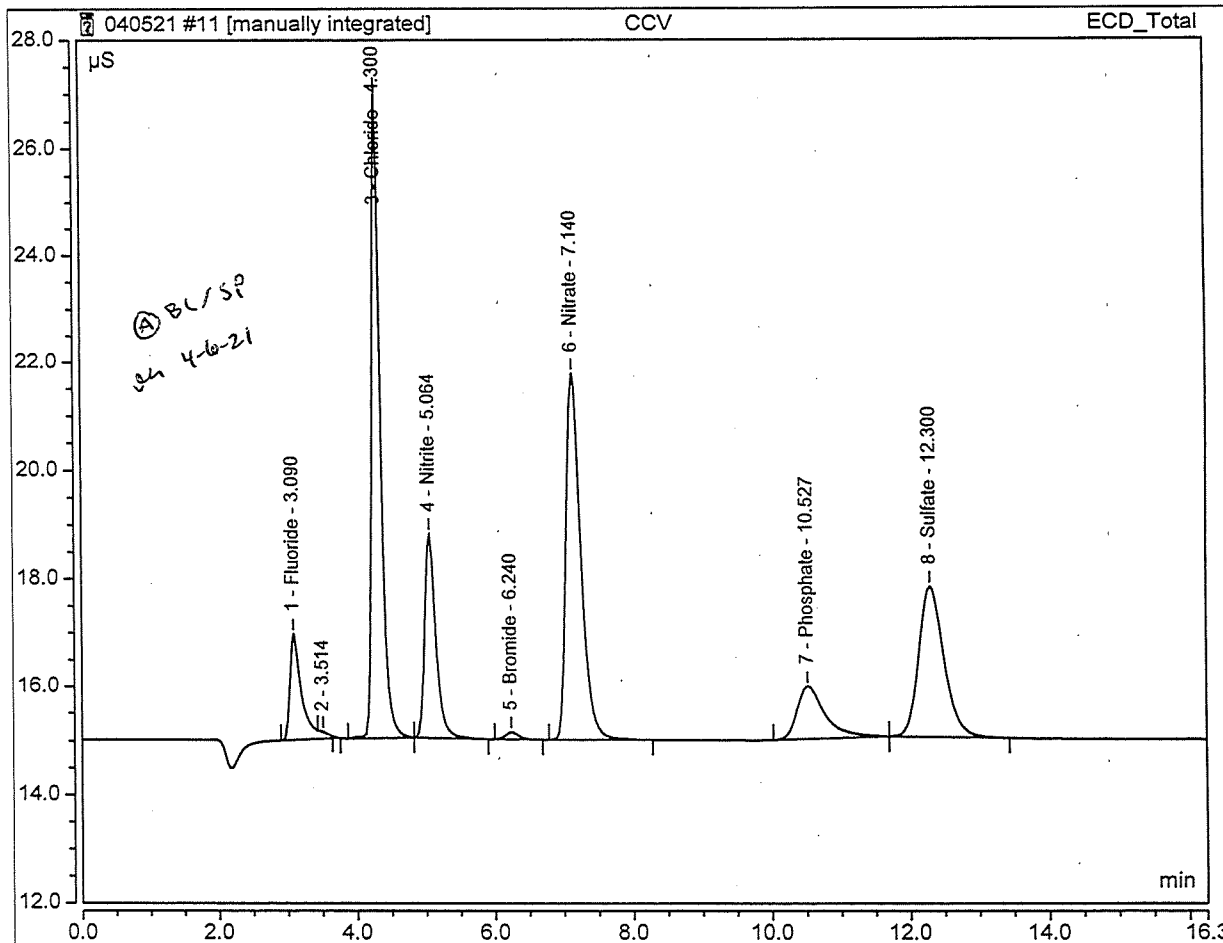
| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 14:08 | Run Time: | 16.25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.394 | 1.976 | 2.0049 |
| 2 | 4.30 | Chloride | BMB | 1.752 | 11.988 | 11.9791 |
| 3 | 5.06 | Nitrite | BMB | 0.702 | 3.798 | 2.4595 |
| 4 | 6.24 | Bromide | BMB | 0.027 | 0.127 | 0.4880 |
| 5 | 7.14 | Nitrate | BMB | 1.678 | 6.776 | 4.8293 |
| 6 | 10.53 | Phosphate | BMB | 0.446 | 0.972 | 2.8372 |
| 7 | 12.30 | Sulfate | BMB | 1.173 | 2.799 | 12.2710 |
| TOTAL: | | | | 6.17 | 28.44 | 36.87 |

11 CCV
 2101274

| | | | |
|-------------------|-------------------|-----------------|--------|
| Sample Name | CCV | Inj. Vol. | 25.00 |
| Injection Type | Unknown | Dilution Factor | 1.0000 |
| Instrument Method | Anions_Method | Operator | JG |
| Inj. Date / Time | 05-Apr-2021 14:08 | Run Time | 16:25 |

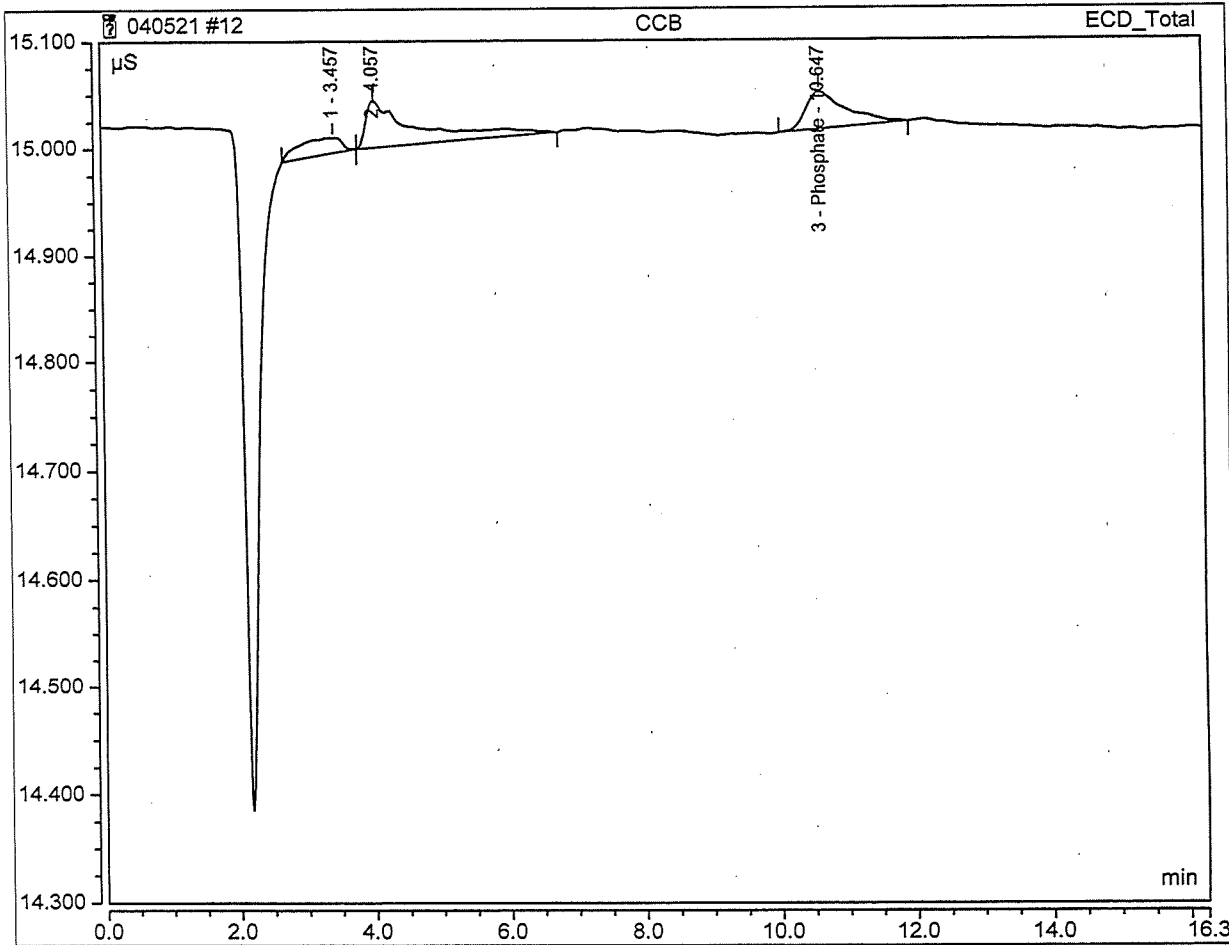


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.384 | 1.972 | 1.9566 |
| 3 | 4.30 | Chloride | BMB | 1.752 | 11.988 | 11.9791 |
| 4 | 5.06 | Nitrite | BMB | 0.702 | 3.798 | 2.4595 |
| 5 | 6.24 | Bromide | BMB | 0.027 | 0.127 | 0.4880 |
| 6 | 7.14 | Nitrate | BMB | 1.678 | 6.776 | 4.8293 |
| 7 | 10.53 | Phosphate | BMB | 0.446 | 0.972 | 2.8372 |
| 8 | 12.30 | Sulfate | BMB | 1.173 | 2.799 | 12.2710 |
| TOTAL: | | | | 6.16 | 28.43 | 36.82 |

12 CCB

W 4/7/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCB | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 1:14:27 | Run Time: | 16:25 |



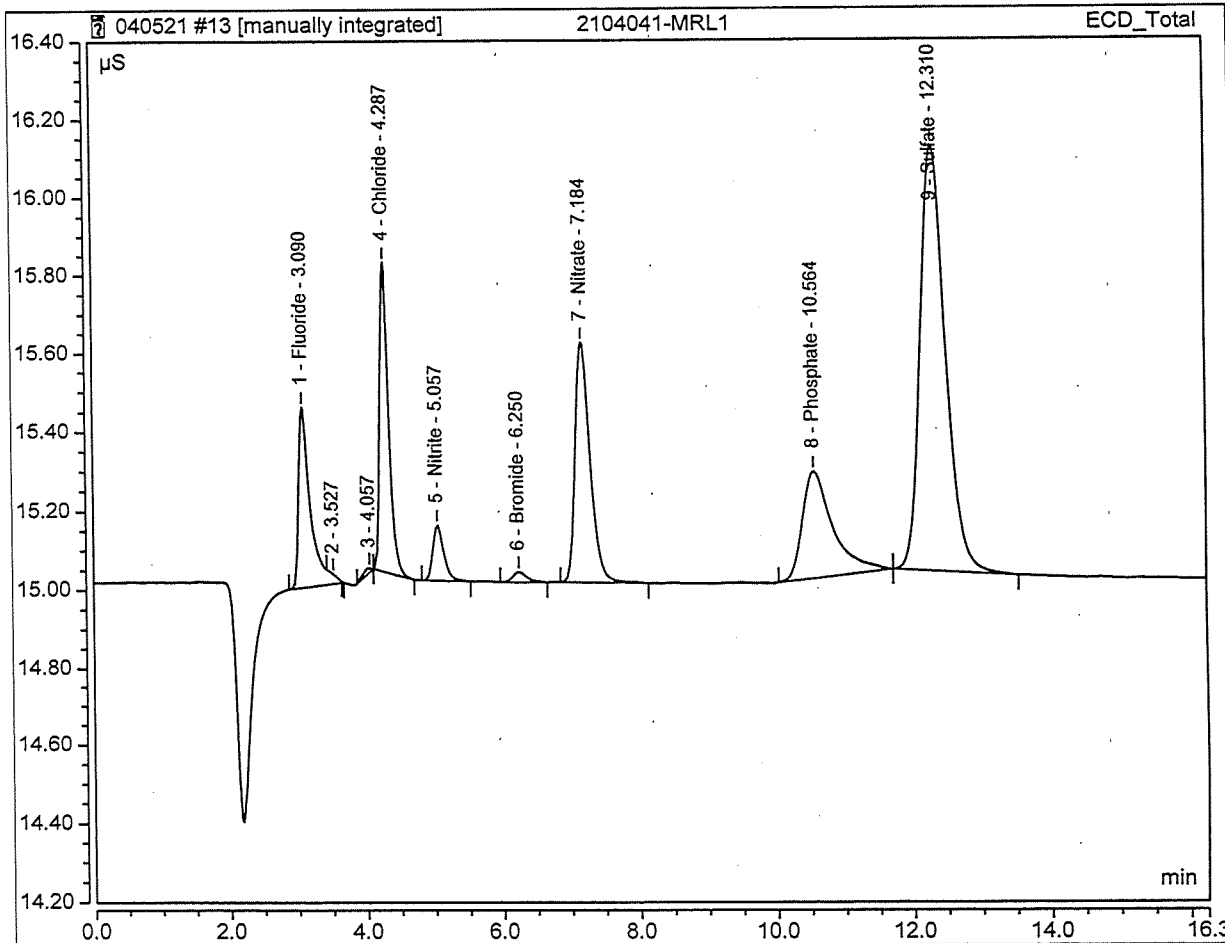
| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 3 | 10.65 | Phosphate | BMB | 0.024 | 0.035 | n.a. |
| TOTAL: | | | | 0.02 | 0.03 | 0.00 |

2nd L
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Handwritten signature

13 2104041-MRL1
 2101275

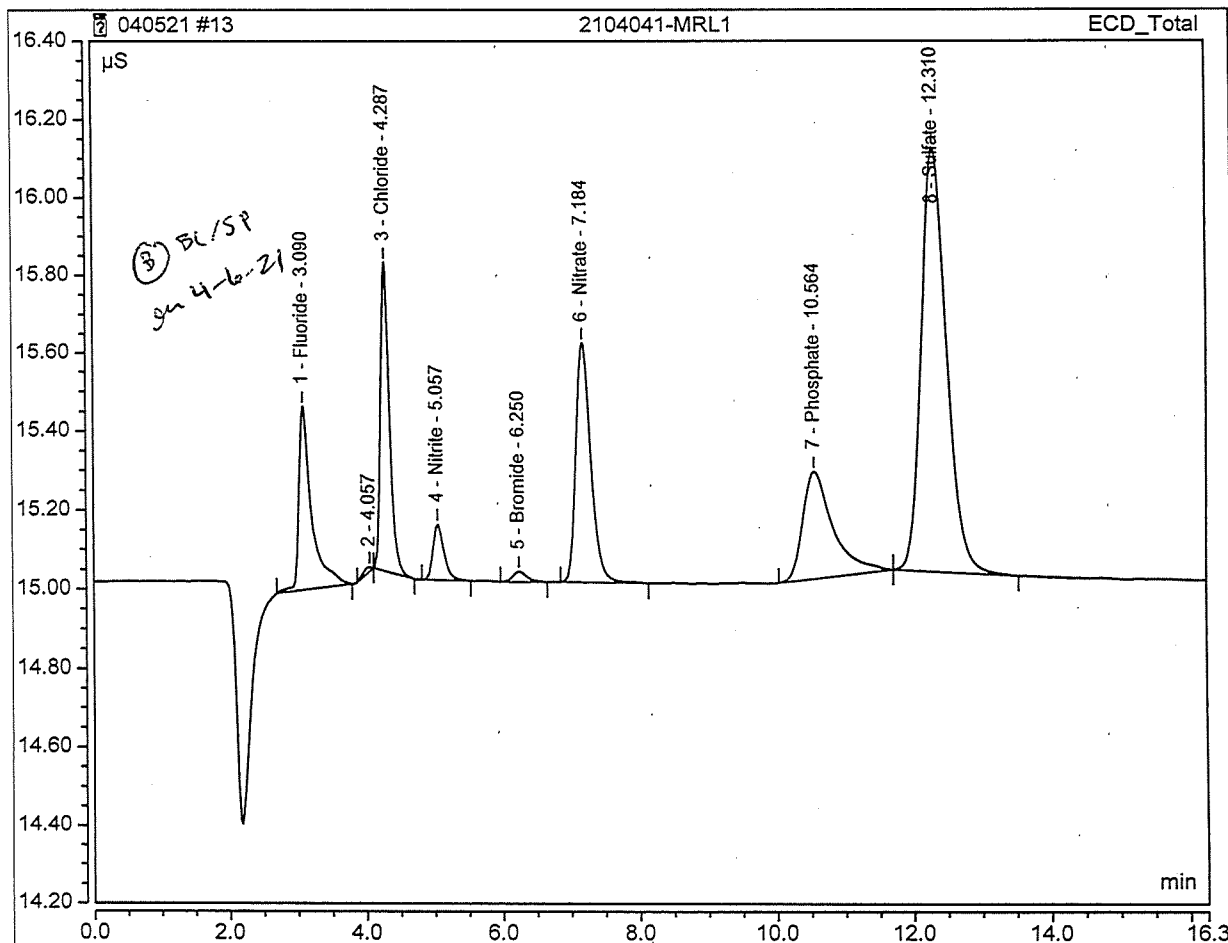
| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-MRL1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 / 14:46 | Run Time: | 16:25 |



| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.091 | 0.457 | 0.5329 ✓ |
| 4 | 4.29 | Chloride | BMB | 0.118 | 0.787 | 1.3361 ✓ |
| 5 | 5.06 | Nitrite | BMB | 0.026 | 0.142 | 0.1296 ✓ |
| 6 | 6.25 | Bromide | BMB | 0.006 | 0.027 | 0.0722 ✓ |
| 7 | 7.18 | Nitrate | BMB | 0.153 | 0.609 | 0.6285 ✓ |
| 8 | 10.56 | Phosphate | BMB | 0.140 | 0.272 | 0.5131 ✓ |
| 9 | 12.31 | Sulfate | BMB | 0.461 | 1.086 | 5.6270 ✓ |
| TOTAL: | | | | 1.00 | 3.38 | 8.84 |

13 2104041-MRL1
 2101275

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-MRL1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 14:46 | Run Time: | 16.25 |

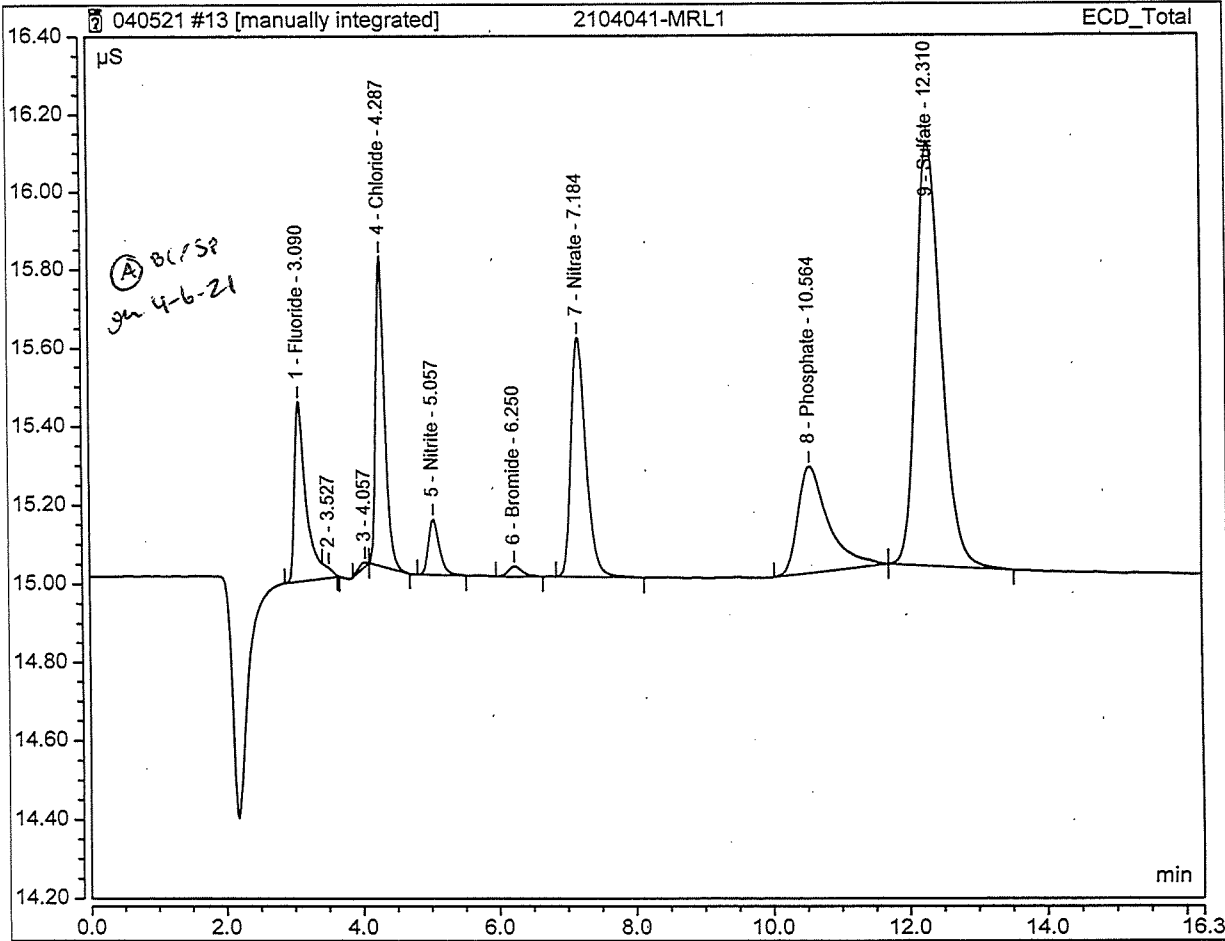


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S} \cdot \text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-------------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.100 | 0.465 | 0.5741 |
| 3 | 4.29 | Chloride | BMB | 0.118 | 0.787 | 1.3361 |
| 4 | 5.06 | Nitrite | BMB | 0.026 | 0.142 | 0.1296 |
| 5 | 6.25 | Bromide | BMB | 0.006 | 0.027 | 0.0722 |
| 6 | 7.18 | Nitrate | BMB | 0.153 | 0.609 | 0.6285 |
| 7 | 10.56 | Phosphate | BMB | 0.140 | 0.272 | 0.5131 |
| 8 | 12.31 | Sulfate | BMB | 0.461 | 1.086 | 5.6270 |
| TOTAL: | | | | 1.00 | 3.39 | 8.88 |

13 2104041-MRL1
 2101275

W. J. M.

| | | | |
|--------------------|-------------------|------------------|--------|
| Sample Name: | 2104041-MRL1 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 05-Apr-2021 14:46 | Run Time: | 16:25 |

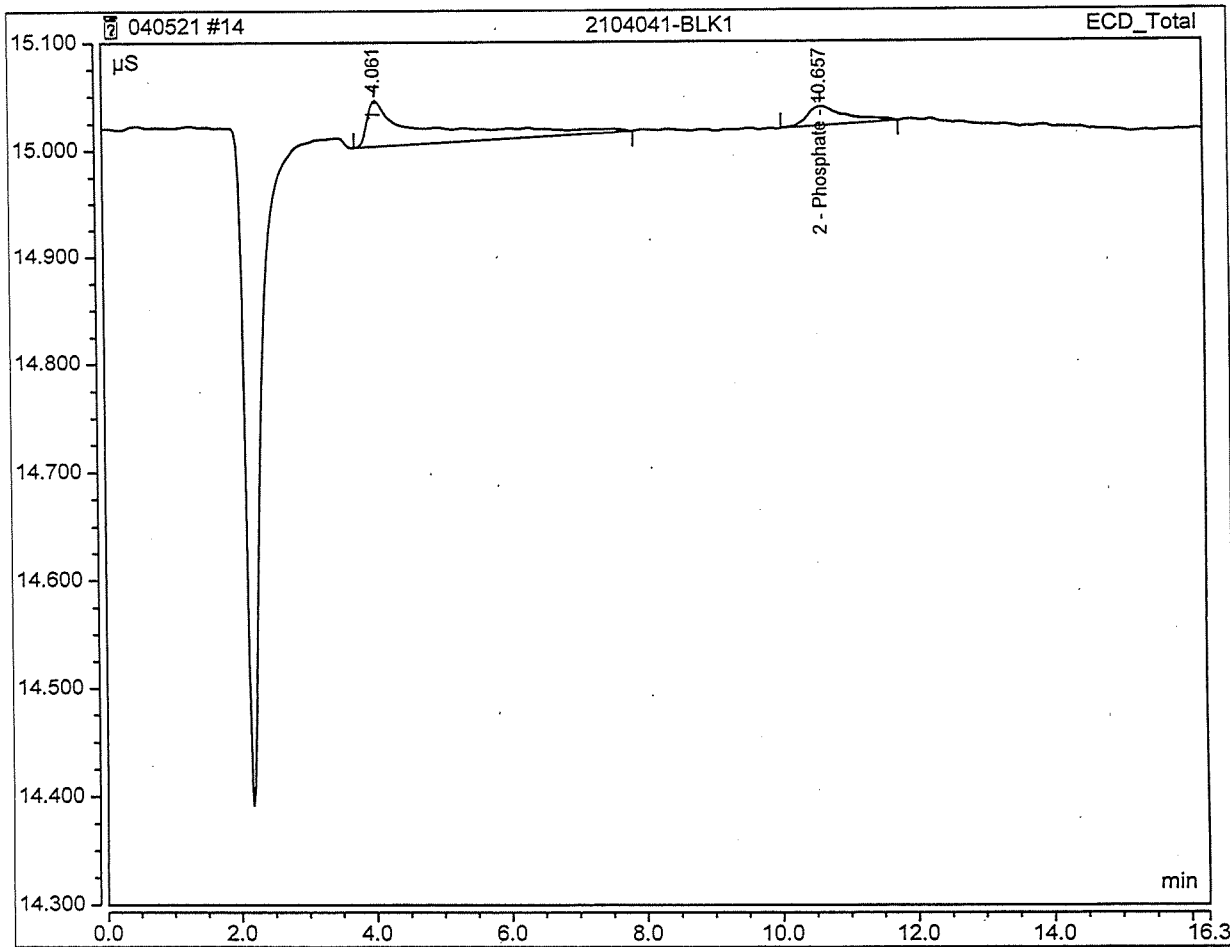


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.091 | 0.457 | 0.5329 |
| 4 | 4.29 | Chloride | BMB | 0.118 | 0.787 | 1.3361 |
| 5 | 5.06 | Nitrite | BMB | 0.026 | 0.142 | 0.1296 |
| 6 | 6.25 | Bromide | BMB | 0.006 | 0.027 | 0.0722 |
| 7 | 7.18 | Nitrate | BMB | 0.153 | 0.609 | 0.6285 |
| 8 | 10.56 | Phosphate | BMB | 0.140 | 0.272 | 0.5131 |
| 9 | 12.31 | Sulfate | BMB | 0.461 | 1.086 | 5.6270 |
| TOTAL: | | | | 1.00 | 3.38 | 8.84 |

14 2104041-BLK1

Wright

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BLK1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 15:05 | Run Time: | 16.25 |



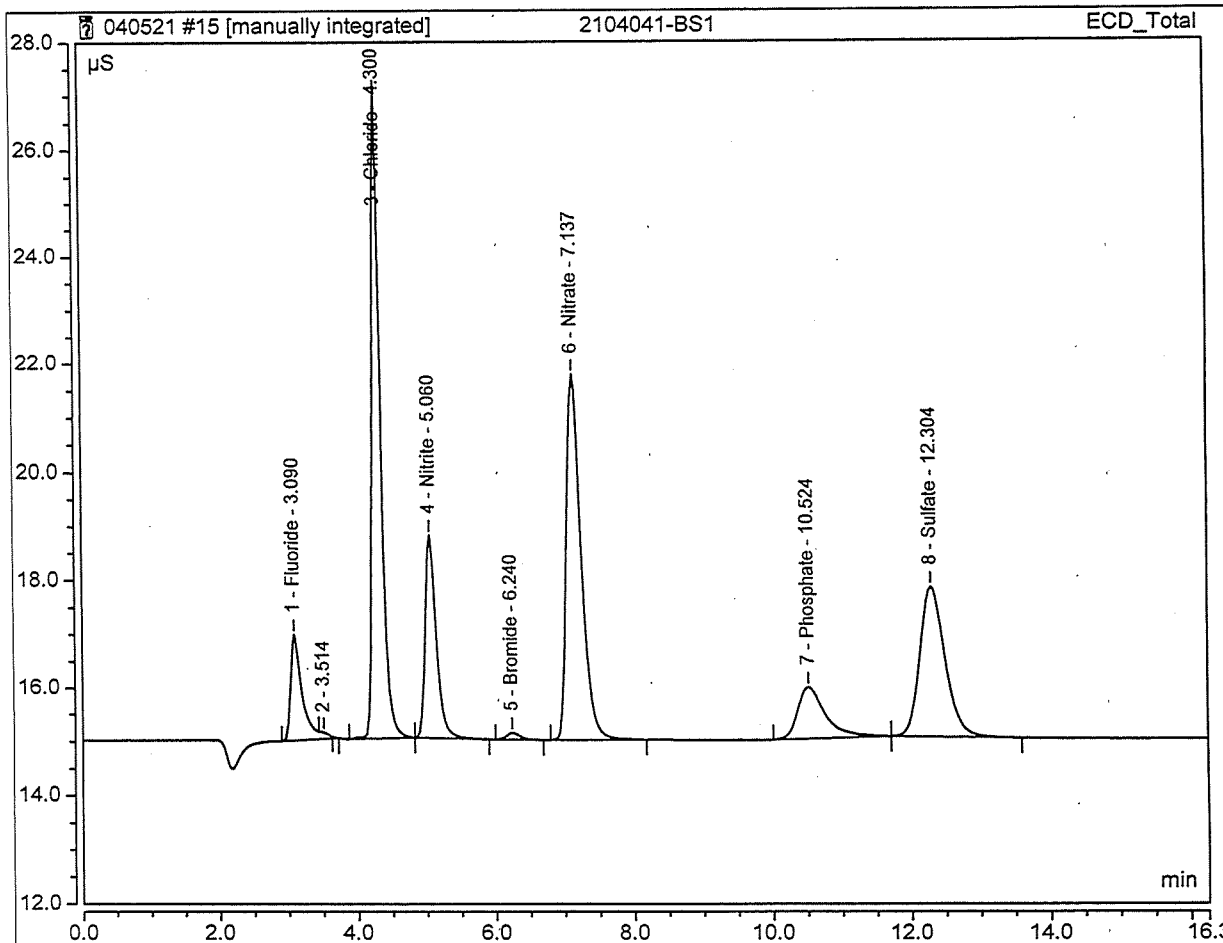
| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 2 | 10.66 | Phosphate | BMB | 0.012 | 0.018 | n.a. |
| TOTAL: | | | | 0.01 | 0.02 | 0.00 |

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15 2104041-BS1
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BS1 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 15:24 | Run Time: | 16:25 |

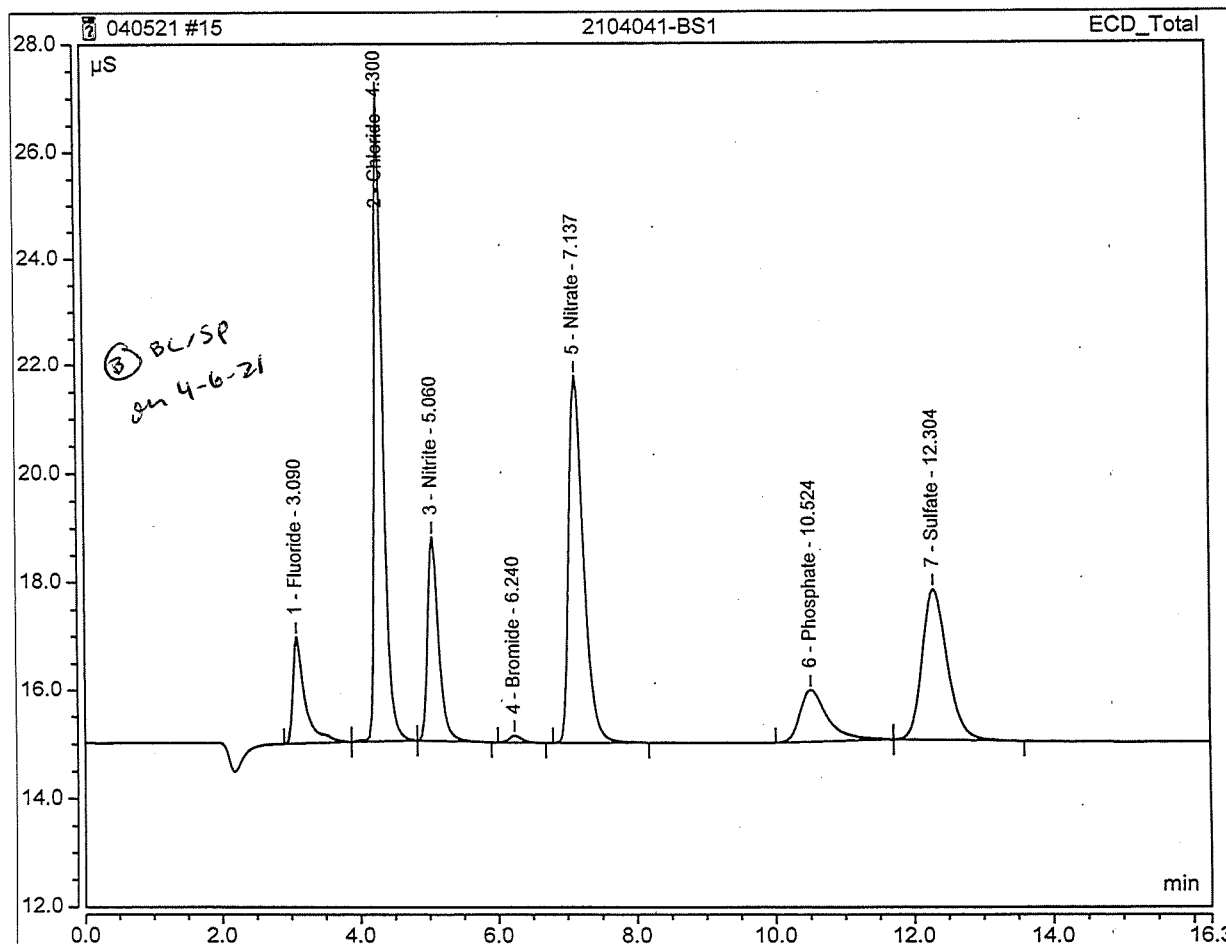


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.382 | 1.977 | 1.9432 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.751 | 11.978 | 11.9692 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.699 | 3.787 | 2.4488 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.027 | 0.128 | 0.4940 ✓ |
| 6 | 7.14 | Nitrate | BMB | 1.677 | 6.774 | 4.8274 ✓ |
| 7 | 10.52 | Phosphate | BMB | 0.443 | 0.965 | 2.8148 ✓ |
| 8 | 12.30 | Sulfate | BMB | 1.178 | 2.799 | 12.3120 ✓ |
| TOTAL: | | | | 6.16 | 28.41 | 36.81 |

15 2104041-BS1
 2101270

Handwritten signature

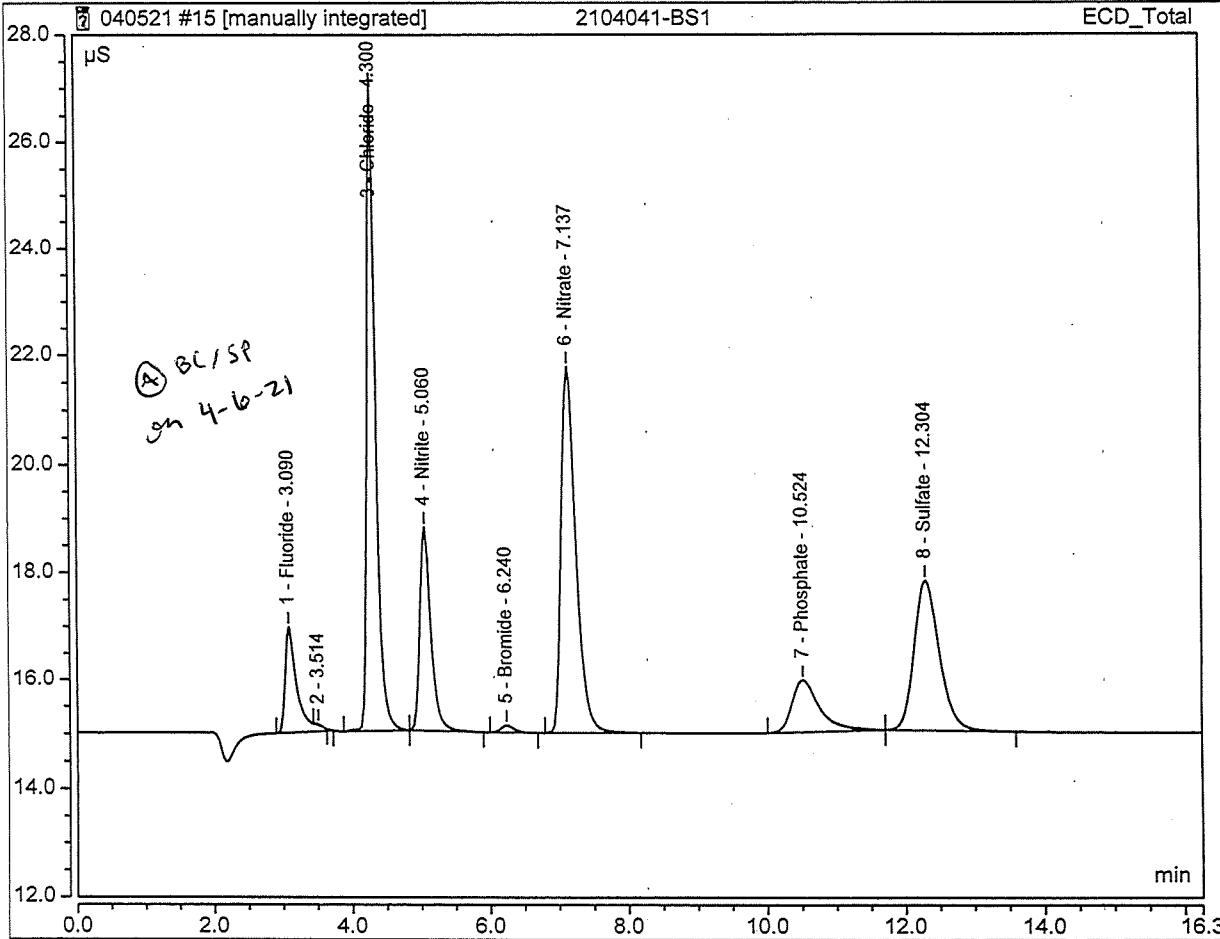
| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BS1 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 15:24 | Run Time: | 16:25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.396 | 1.983 | 2.0130 |
| 2 | 4.30 | Chloride | BMB | 1.751 | 11.978 | 11.9692 |
| 3 | 5.06 | Nitrite | BMB | 0.699 | 3.787 | 2.4488 |
| 4 | 6.24 | Bromide | BMB | 0.027 | 0.128 | 0.4940 |
| 5 | 7.14 | Nitrate | BMB | 1.677 | 6.774 | 4.8274 |
| 6 | 10.52 | Phosphate | BMB | 0.443 | 0.965 | 2.8148 |
| 7 | 12.30 | Sulfate | BMB | 1.178 | 2.799 | 12.3120 |
| TOTAL: | | | | 6.17 | 28.41 | 36.88 |

15 2104041-BS1
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BS1 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 15:24 | Run Time: | 16:25 |

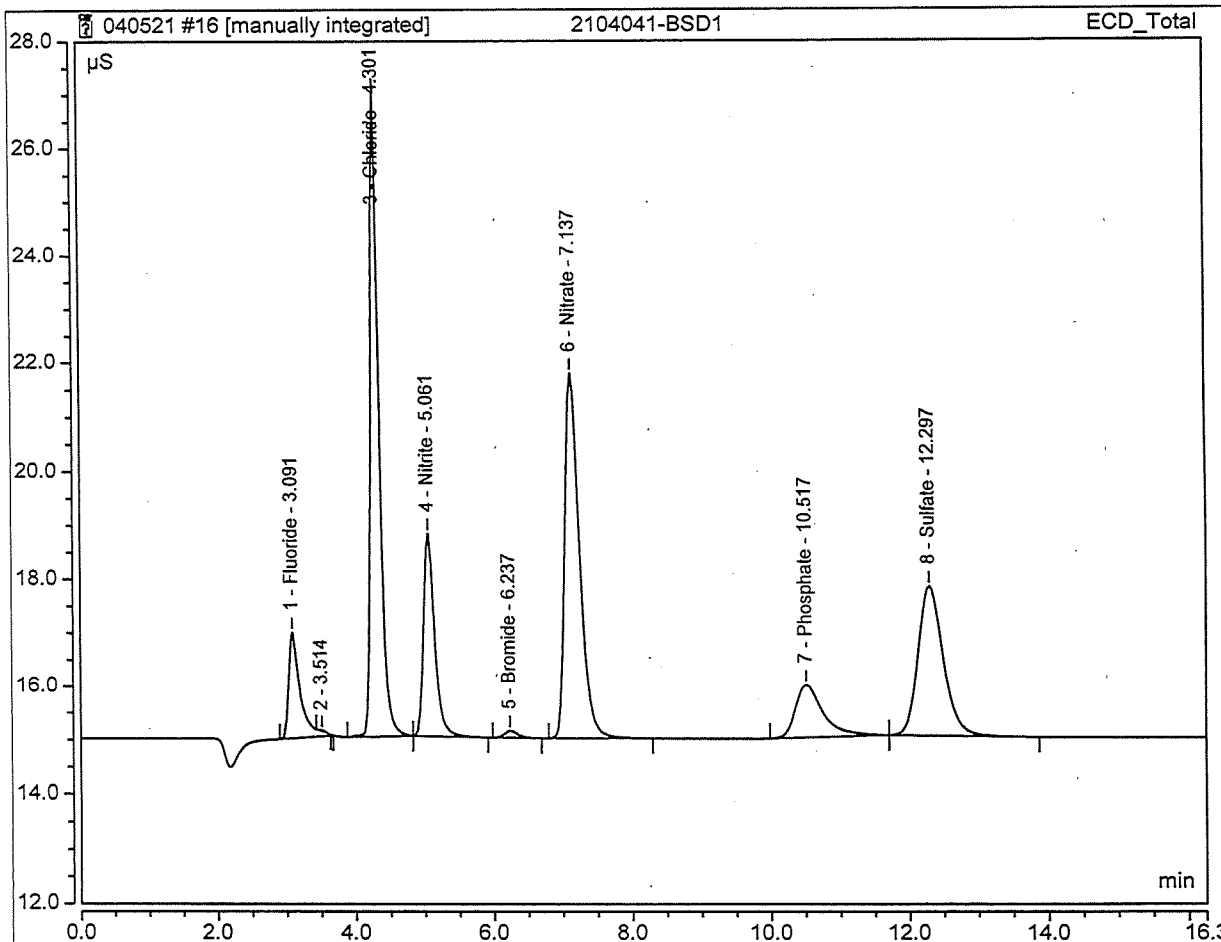


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.382 | 1.977 | 1.9432 |
| 3 | 4.30 | Chloride | BMB | 1.751 | 11.978 | 11.9692 |
| 4 | 5.06 | Nitrite | BMB | 0.699 | 3.787 | 2.4488 |
| 5 | 6.24 | Bromide | BMB | 0.027 | 0.128 | 0.4940 |
| 6 | 7.14 | Nitrate | BMB | 1.677 | 6.774 | 4.8274 |
| 7 | 10.52 | Phosphate | BMB | 0.443 | 0.965 | 2.8148 |
| 8 | 12.30 | Sulfate | BMB | 1.178 | 2.799 | 12.3120 |
| TOTAL: | | | | 6.16 | 28.41 | 36.81 |

Handwritten signature and date: JG 4/7/21

16 2104041-BSD1
 2101270

| | | | |
|-------------------|---------------------|-----------------|--------|
| Sample Name | 2104041-BSD1 | Inj. Vol. | 25.00 |
| Injection Type | Unknown | Dilution Factor | 1.0000 |
| Instrument Method | Anions_Method | Operator | JG |
| Inj. Date / Time | 05-Apr-2021 / 15:44 | Run Time | 16:25 |

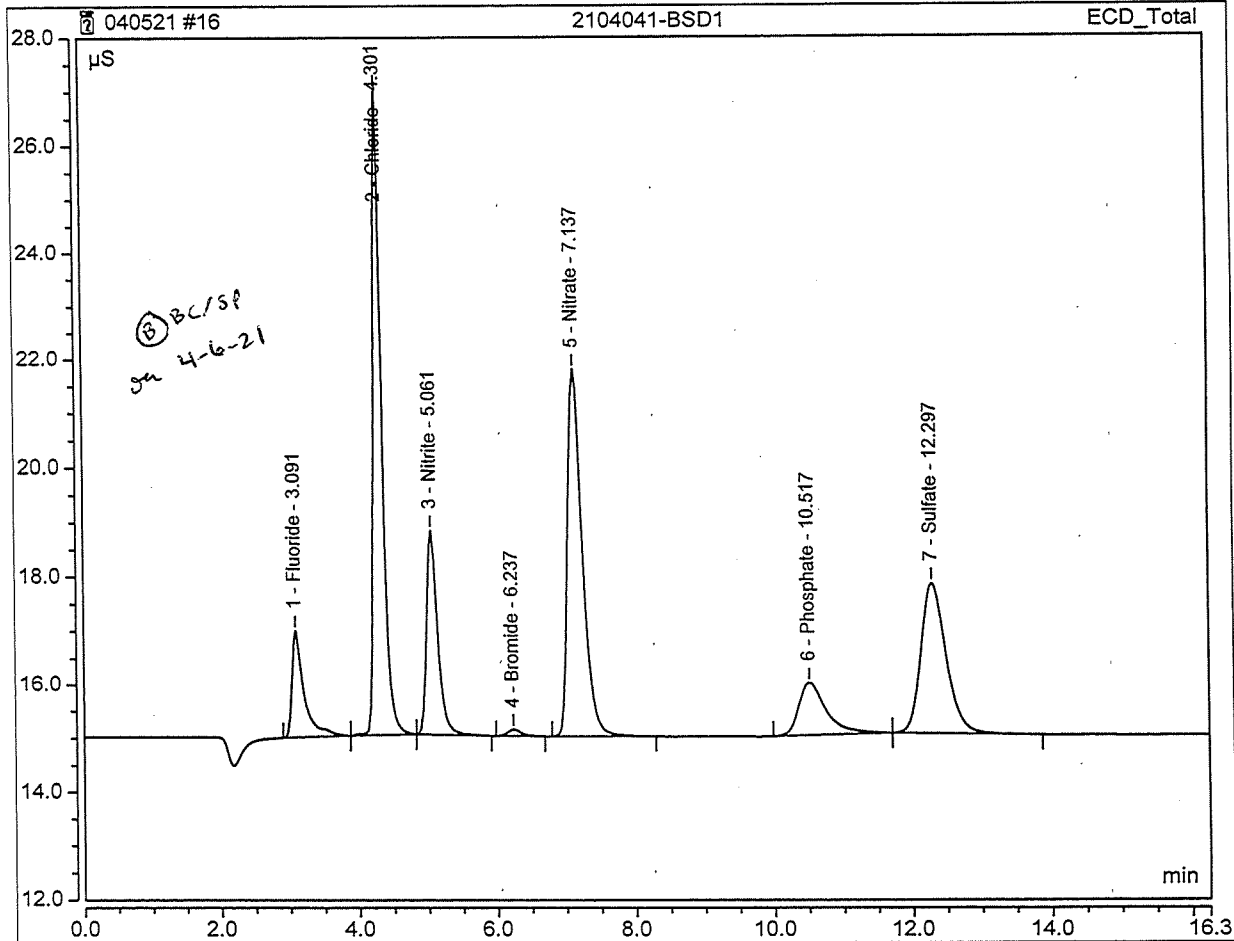


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.377 | 1.988 | 1.9224 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.752 | 11.985 | 11.9770 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.701 | 3.792 | 2.4543 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4796 ✓ |
| 6 | 7.14 | Nitrate | BMB | 1.679 | 6.781 | 4.8324 ✓ |
| 7 | 10.52 | Phosphate | BMB | 0.452 | 0.986 | 2.8824 ✓ |
| 8 | 12.30 | Sulfate | BMB | 1.180 | 2.803 | 12.3317 ✓ |
| TOTAL: | | | | 6.17 | 28.46 | 36.88 |

16 2104041-BSD1
 2101270

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 4/7/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BSD1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 1:15:44 | Run Time: | 16:25 |

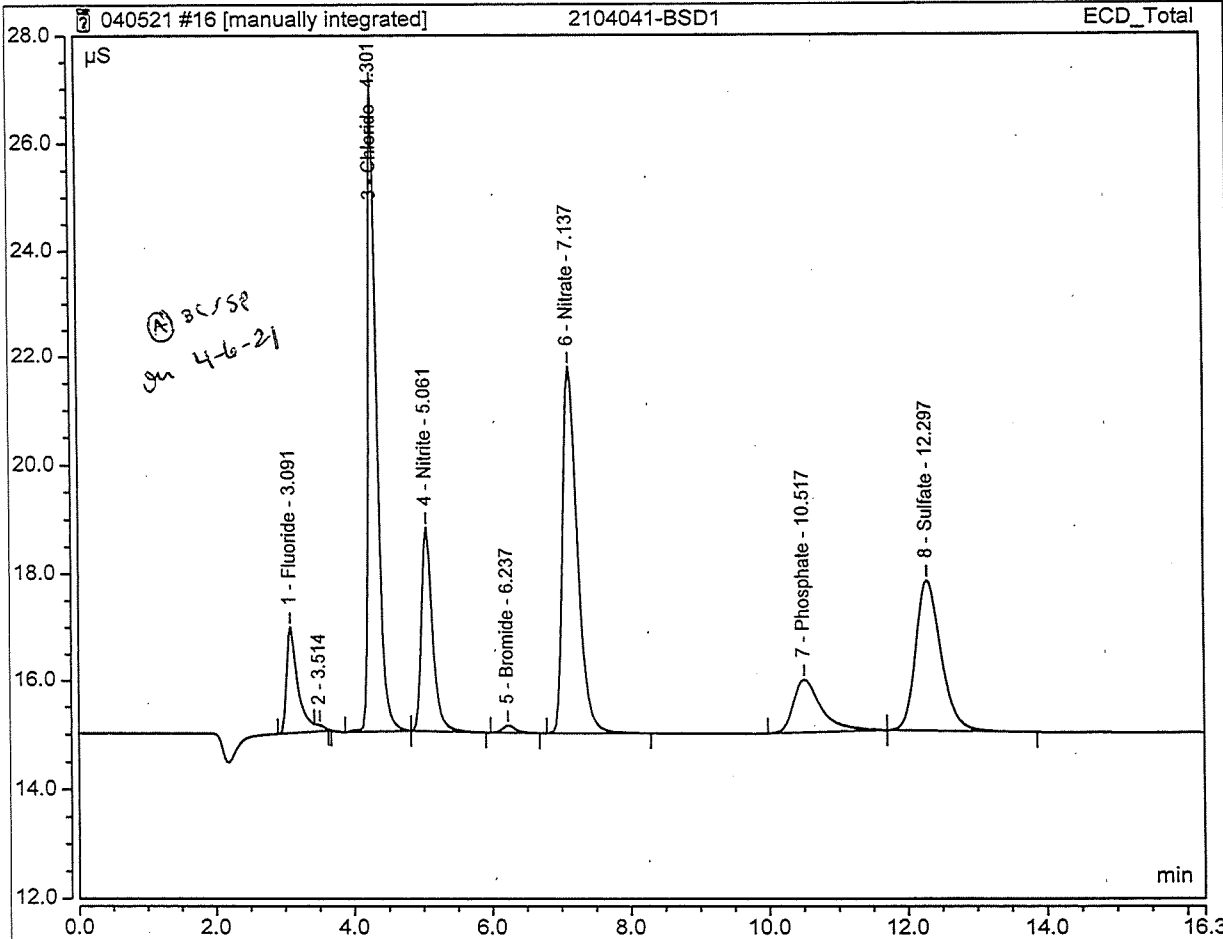


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.398 | 1.997 | 2.0218 |
| 2 | 4.30 | Chloride | BMB | 1.752 | 11.985 | 11.9770 |
| 3 | 5.06 | Nitrite | BMB | 0.701 | 3.792 | 2.4543 |
| 4 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4796 |
| 5 | 7.14 | Nitrate | BMB | 1.679 | 6.781 | 4.8324 |
| 6 | 10.52 | Phosphate | BMB | 0.452 | 0.986 | 2.8824 |
| 7 | 12.30 | Sulfate | BMB | 1.180 | 2.803 | 12.3317 |
| TOTAL: | | | | 6.19 | 28.47 | 36.98 |

16 2104041-BSD1
 2101270

Handwritten signature
 4/6/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104041-BSD1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 05-Apr-2021 / 15:44 | Run Time: | 16:25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.377 | 1.988 | 1.9224 |
| 3 | 4.30 | Chloride | BMB | 1.752 | 11.985 | 11.9770 |
| 4 | 5.06 | Nitrite | BMB | 0.701 | 3.792 | 2.4543 |
| 5 | 6.24 | Bromide | BMB | 0.026 | 0.126 | 0.4796 |
| 6 | 7.14 | Nitrate | BMB | 1.679 | 6.781 | 4.8324 |
| 7 | 10.52 | Phosphate | BMB | 0.452 | 0.986 | 2.8824 |
| 8 | 12.30 | Sulfate | BMB | 1.180 | 2.803 | 12.3317 |
| TOTAL: | | | | 6.17 | 28.46 | 36.88 |

Sequence Overview

M. J. Johnson

Aquion_AS_DV
Sequence Details

| | | | |
|--------------------|---|-------------|-------------------|
| Sequence Name: | 040721 | | |
| Directory: | Instrument Data\Aquion_AS_DV\Instrument Data\2021 | | |
| Data Vault: | ChromeleonLocal | Created On: | 15/Jul/2020 09:48 |
| No. of Injections: | 45 | Updated On: | 09/Apr/2021 14:12 |

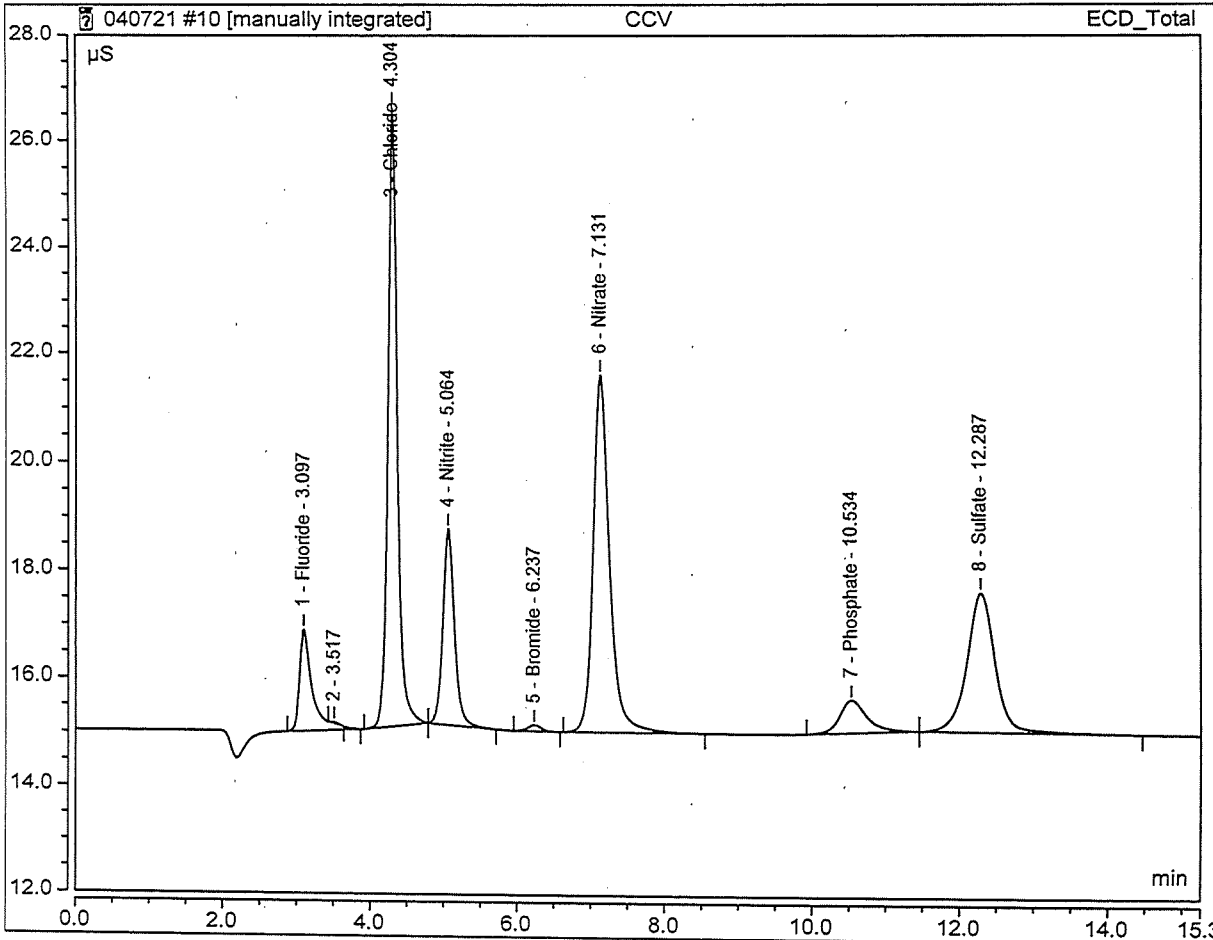
| No. | Injection Name | Type | Inject Time | Status | Comment |
|-----|---------------------|----------------------|-------------------|----------|--|
| 1 | CONC ELUENT | Unknown | 07/Apr/2021 09:34 | Finished | |
| 2 | RINSE | Unknown | 07/Apr/2021 09:52 | Finished | |
| 3 | RINSE | Unknown | 07/Apr/2021 10:10 | Finished | |
| 4 | RINSE | Unknown | 07/Apr/2021 10:28 | Finished | |
| 5 | RINSE | Unknown | 07/Apr/2021 10:46 | Finished | |
| 6 | Cal 1 | Calibration Standard | 05/Apr/2021 12:32 | Finished | 2101265 |
| 7 | Cal 2 | Calibration Standard | 05/Apr/2021 12:52 | Finished | 2101266 |
| 8 | Cal 3 | Calibration Standard | 05/Apr/2021 13:11 | Finished | 2101267 |
| 9 | Cal 4 | Calibration Standard | 05/Apr/2021 13:30 | Finished | 2101268 |
| 10 | CCV ↓ B | Unknown | 07/Apr/2021 11:04 | Finished | 2101329 |
| 11 | CCB | Unknown | 07/Apr/2021 11:23 | Finished | |
| 12 | 2104093-MRL1 | Unknown | 07/Apr/2021 11:41 | Finished | 2101330 |
| 13 | 2104093-BLK1 | Unknown | 07/Apr/2021 11:59 | Finished | |
| 14 | 2104093-BS1 ↓ B | Unknown | 07/Apr/2021 12:17 | Finished | 2101270 |
| 15 | 2104093-BSD1 ↓ B | Unknown | 07/Apr/2021 12:35 | Finished | 2101270 |
| 16 | 21D0126-01RE1@10 | Unknown | 07/Apr/2021 17:02 | Finished | (2104066) CL, SO4 |
| 17 | 21D0146-01RE1@5 | Unknown | 07/Apr/2021 17:20 | Finished | (2104066) SO4 |
| 18 | 21D0148-05RE2@100 | Unknown | 07/Apr/2021 17:38 | Finished | (2104066) SO4 |
| 19 | 21D0148-06RE2@100 | Unknown | 07/Apr/2021 17:56 | Finished | (2104066) SO4 |
| 20 | 21D0152-01RE1@5 | Unknown | 07/Apr/2021 18:14 | Finished | (2104066) SO4 |
| 21 | 21D0038-01RE1@1000 | Unknown | 07/Apr/2021 18:32 | Finished | (2104092) SO4 |
| 22 | 21D0175-02 | Unknown | 07/Apr/2021 18:50 | Finished | NO2, NO3 |
| 23 | 21D0185-01 | Unknown | 07/Apr/2021 19:08 | Finished | F, CL, NO2, NO3, SO4 |
| 24 | 21D0186-01 | Unknown | 07/Apr/2021 19:27 | Finished | F, CL, BR, NO3, SO4 |
| 25 | 21D0038-04RE1@50 | Unknown | 07/Apr/2021 19:45 | Finished | (2104092) SO4 |
| 26 | CONC ELUENT | Unknown | 07/Apr/2021 20:03 | Finished | |
| 27 | RINSE | Unknown | 07/Apr/2021 20:21 | Finished | |
| 28 | CCV ↓ B | Unknown | 07/Apr/2021 20:39 | Finished | 2101270 |
| 29 | CCB | Unknown | 07/Apr/2021 20:57 | Finished | |
| 30 | 21D0115-01 | Unknown | 07/Apr/2021 21:15 | Finished | F, CL, NO2, NO3, SO4 |
| 31 | 21D0200-01 | Unknown | 07/Apr/2021 21:33 | Finished | F, CL, NO2, NO3, SO4 |
| 32 | 21D0200-01RE1@10 | Unknown | 07/Apr/2021 21:51 | Finished | (2104093) SO4 |
| 33 | 21D0200-01RE2@100 | Unknown | 07/Apr/2021 22:10 | Finished | NR |
| 34 | 21D0201-02 | Unknown | 07/Apr/2021 22:28 | Finished | NO2, NO3 |
| 35 | 2103447-MS4 2103347 | Unknown | 07/Apr/2021 22:46 | Finished | 21C0685-03@500 F, CL, NO2, NO3, 21012 |
| 36 | 2103447-MSD4 | Unknown | 07/Apr/2021 23:04 | Finished | 21C0685-03@500 F, CL, NO2, NO3, 21012 |
| 37 | 2104066-MS1 | Unknown | 07/Apr/2021 23:22 | Finished | 21D0009-01 NO2, NO3 2101270 |
| 38 | 2104066-MSD1 | Unknown | 07/Apr/2021 23:40 | Finished | 21D0009-01 NO2, NO3 2101270 |
| 39 | 2104066-MS2 | Unknown | 07/Apr/2021 23:58 | Finished | 21D0148-02 F, CL, NO2, NO3, SO4, 21012 |
| 40 | 2104066-MSD2 | Unknown | 08/Apr/2021 00:16 | Finished | 21D0148-02 F, CL, NO2, NO3, SO4, 21012 |
| 41 | CONC ELUENT | Unknown | 08/Apr/2021 00:34 | Finished | |
| 42 | RINSE | Unknown | 08/Apr/2021 00:53 | Finished | |
| 43 | CCV | Unknown | 08/Apr/2021 01:11 | Finished | 2101270 |
| 44 | CCB | Unknown | 08/Apr/2021 01:29 | Finished | |
| 45 | SHUTDOWN | Unknown | 08/Apr/2021 01:48 | Finished | |

Jan 4-9-21

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10 CCV
 2101329

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 11:04 | Run Time: | 15:25 |

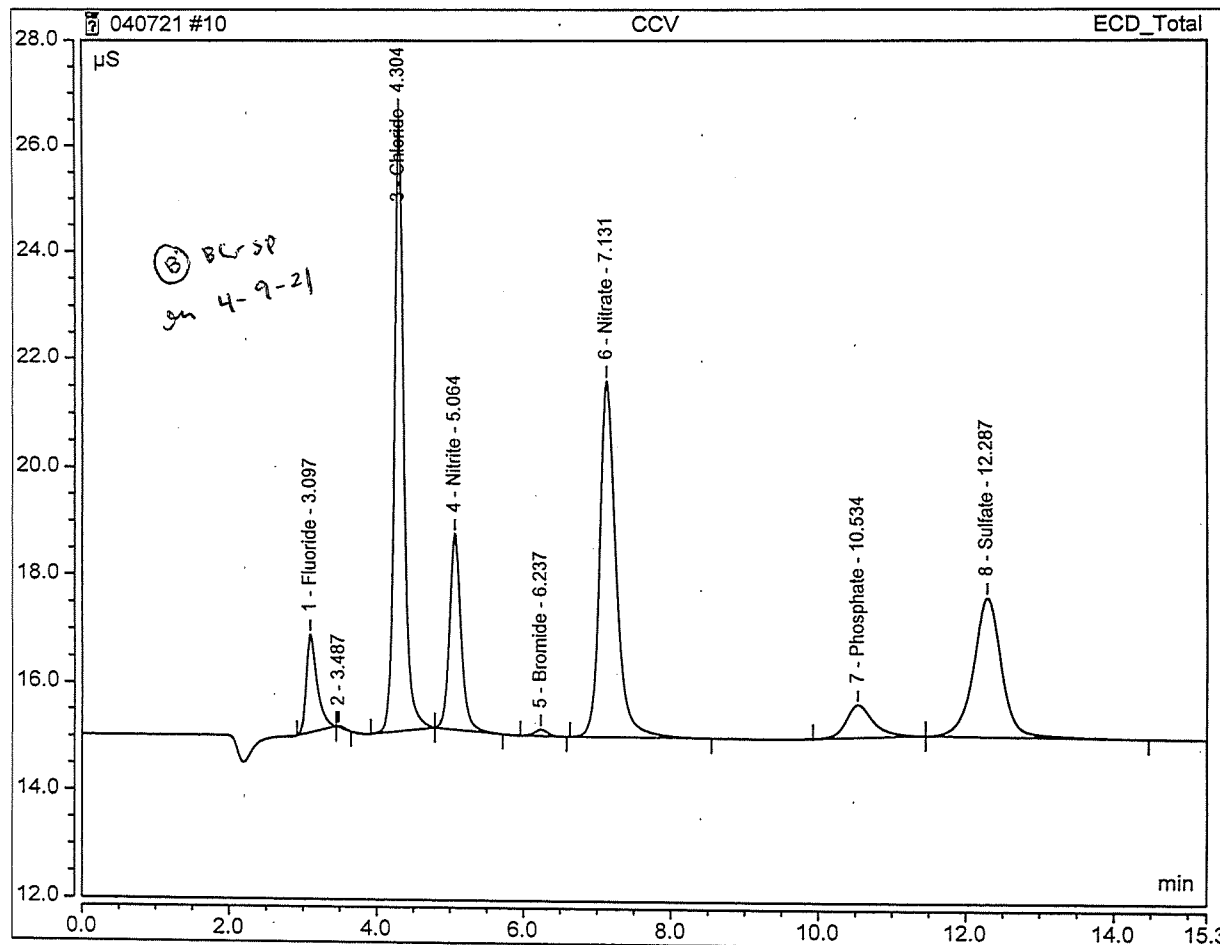


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.377 | 1.884 | 1.9197 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.692 | 11.498 | 11.5896 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.636 | 2.2978 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.115 | 0.4139 ✓ |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.595 | 4.8806 ✓ |
| 7 | 10.53 | Phosphate | BMB | 0.264 | 0.612 | 1.4586 ✓ |
| 8 | 12.29 | Sulfate | BMB | 1.148 | 2.584 | 12.0343 ✓ |
| TOTAL: | | | | 5.86 | 26.92 | 34.59 |

WJL

10 CCV
 2101329

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 11:04 | Run Time: | 15.25 |

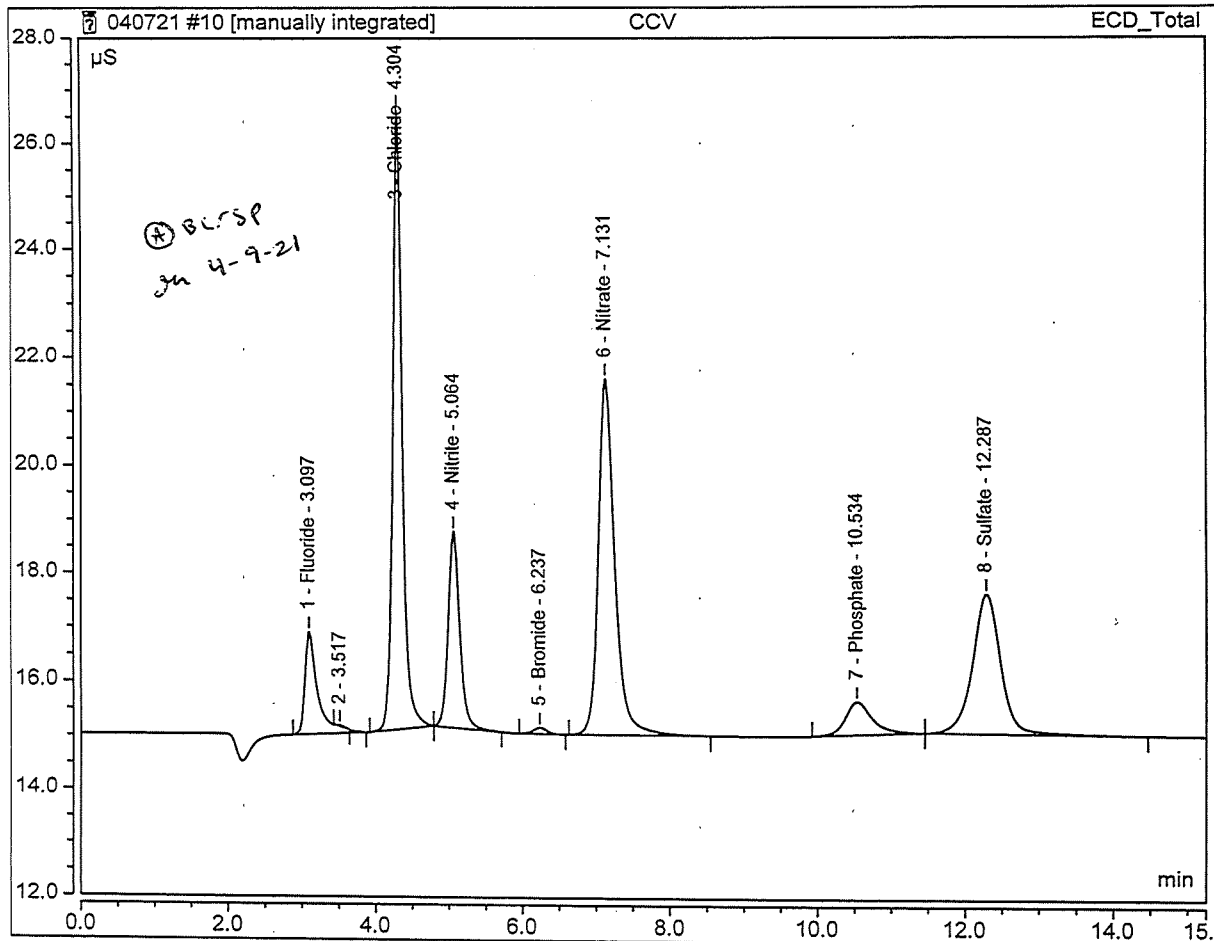


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.10 | Fluoride | BMB | 0.307 | 1.828 | 1.5806 |
| 3 | 4.30 | Chloride | BMB | 1.692 | 11.498 | 11.5896 |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.636 | 2.2978 |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.115 | 0.4139 |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.595 | 4.8806 |
| 7 | 10.53 | Phosphate | BMB | 0.264 | 0.612 | 1.4586 |
| 8 | 12.29 | Sulfate | BMB | 1.148 | 2.584 | 12.0343 |
| TOTAL: | | | | 5.79 | 26.87 | 34.26 |

W. J. M.

10 CCV
 2101329

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25:00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 / 11:04 | Run Time: | 15:25 |

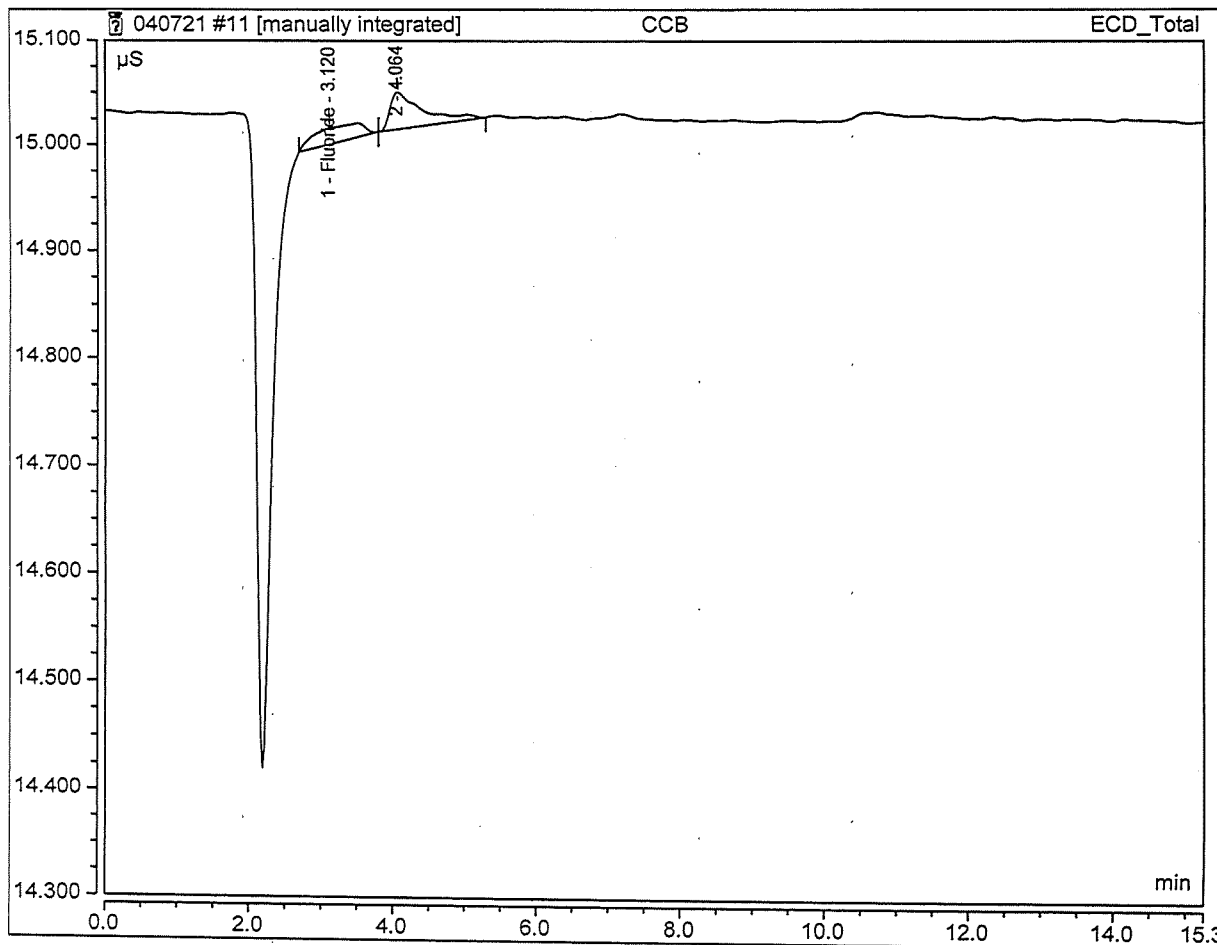


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount RPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.377 | 1.884 | 1.9197 |
| 3 | 4.30 | Chloride | BMB | 1.692 | 11.498 | 11.5896 |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.636 | 2.2978 |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.115 | 0.4139 |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.595 | 4.8806 |
| 7 | 10.53 | Phosphate | BMB | 0.264 | 0.612 | 1.4586 |
| 8 | 12.29 | Sulfate | BMB | 1.148 | 2.584 | 12.0343 |
| TOTAL: | | | | 5.86 | 26.92 | 34.59 |

Handwritten signature

11 CCB

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCB | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 / 11:23 | Run Time: | 15:25 |



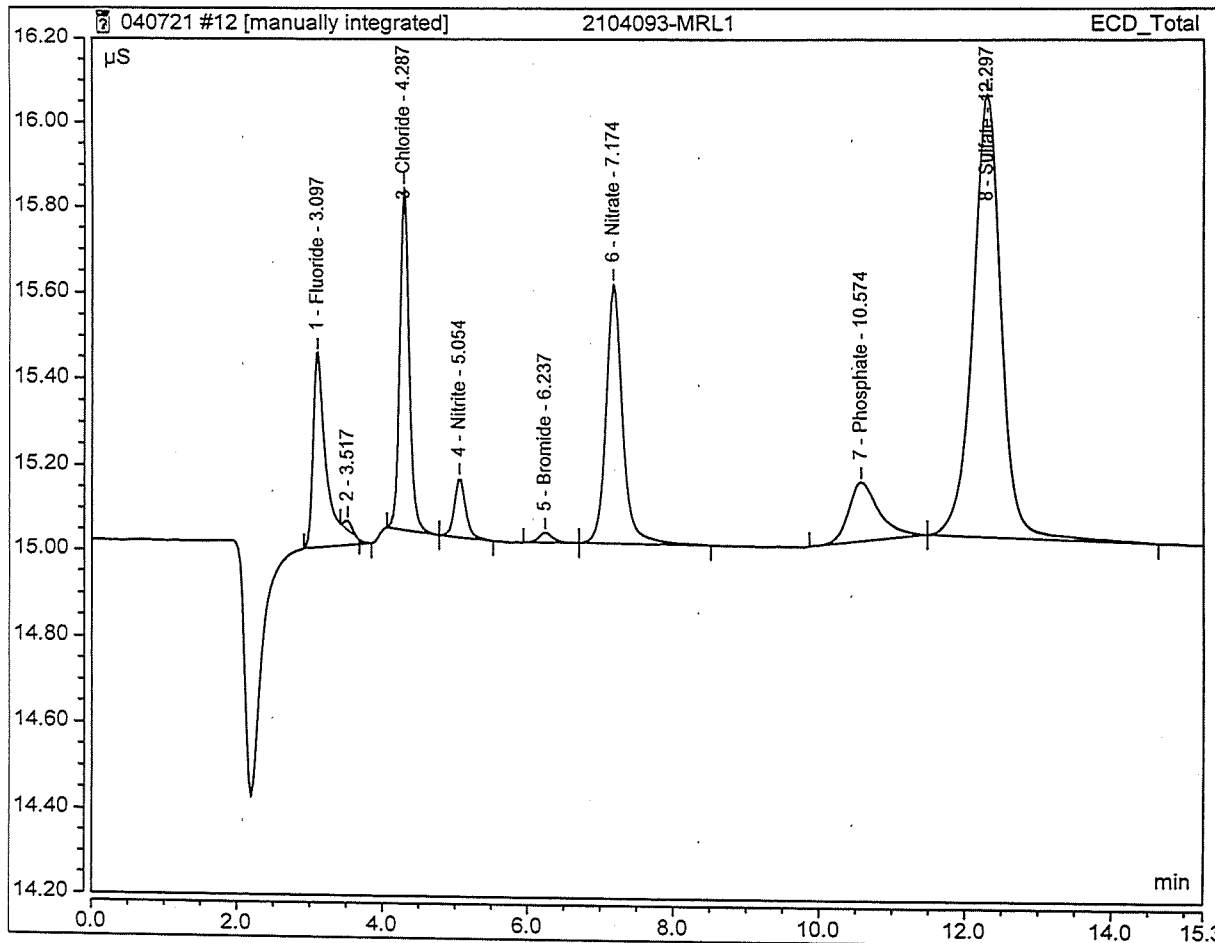
| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|-----|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.12 | Fluoride | BMB | 0.012 | 0.016 | 0.1466 |
| | | TOTAL: | | 0.01 | 0.02 | 0.15 |

Handwritten notes:
 EMP
 ↓

12 2104093-MRL1
 2101330

WJG
 4/11/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-MRL1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 11:41 | Run Time: | 15:25 |

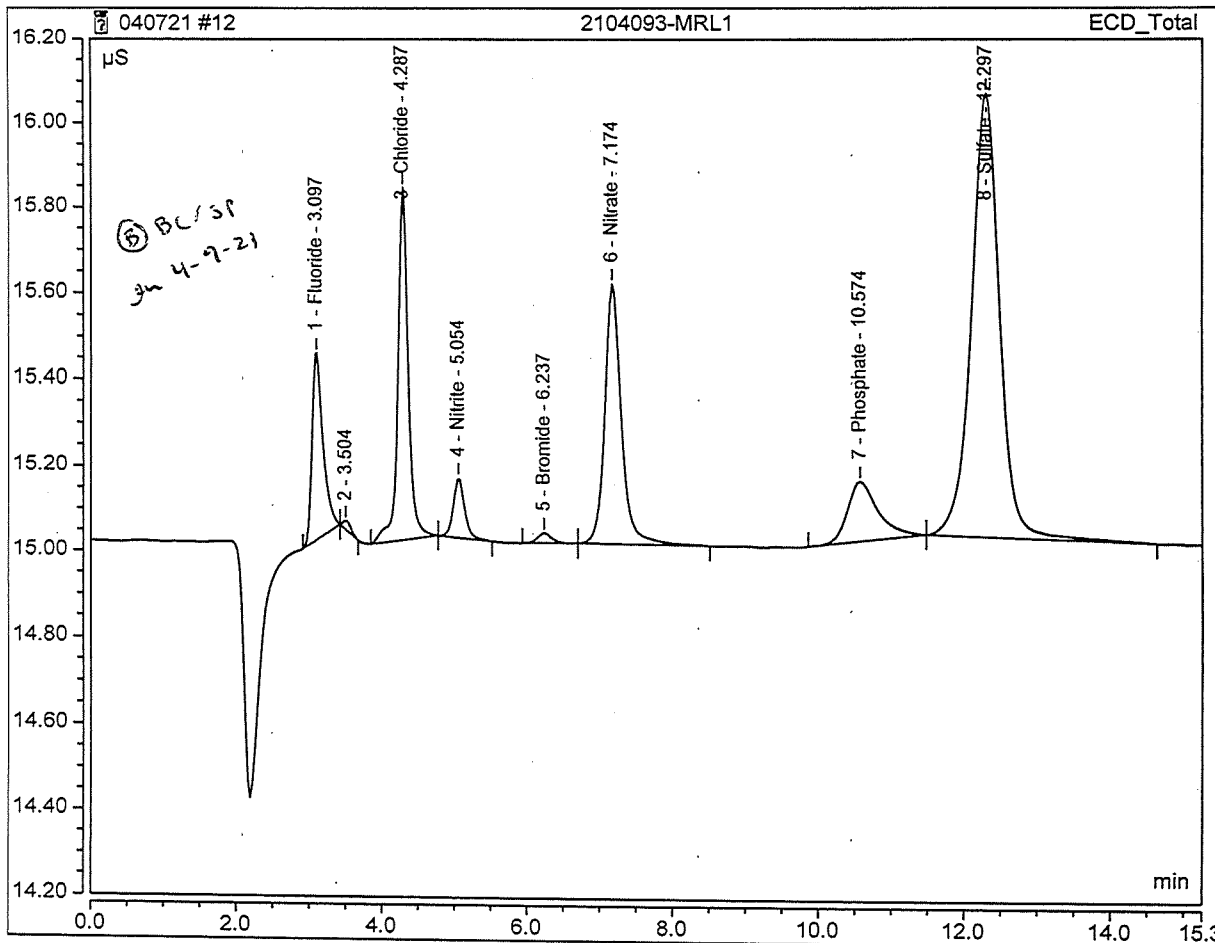


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.097 | 0.455 | 0.5580 ✓ |
| 3 | 4.29 | Chloride | BMB* | 0.118 | 0.795 | 1.3388 ✓ |
| 4 | 5.05 | Nitrite | BMB | 0.025 | 0.140 | 0.1269 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.005 | 0.024 | 0.0526 ✓ |
| 6 | 7.17 | Nitrate | BMB | 0.160 | 0.602 | 0.6461 ✓ |
| 7 | 10.57 | Phosphate | BMB | 0.068 | 0.140 | n.a. |
| 8 | 12.30 | Sulfate | BMB | 0.459 | 1.027 | 5.6103 ✓ |
| TOTAL: | | | | 0.93 | 3.18 | 8.33 |

12 2104093-MRL1
 2101330

WJL
 4/11/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-MRL1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 / 11:41 | Run Time: | 15:25 |

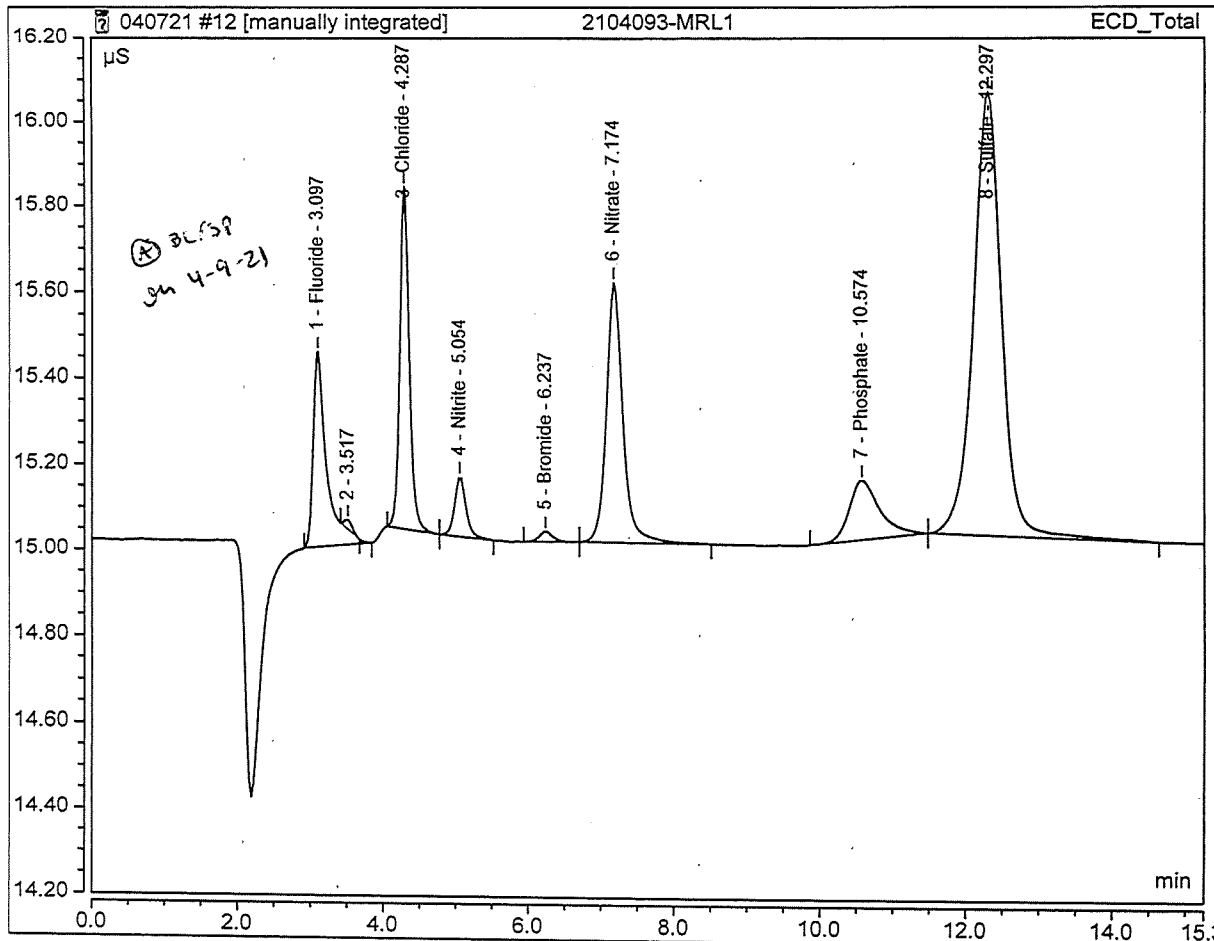


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB | 0.075 | 0.436 | 0.4526 |
| 3 | 4.29 | Chloride | BMB | 0.134 | 0.819 | 1.4429 |
| 4 | 5.05 | Nitrite | BMB | 0.025 | 0.140 | 0.1269 |
| 5 | 6.24 | Bromide | BMB | 0.005 | 0.024 | 0.0526 |
| 6 | 7.17 | Nitrate | BMB | 0.160 | 0.602 | 0.6461 |
| 7 | 10.57 | Phosphate | BMB | 0.068 | 0.140 | n.a. |
| 8 | 12.30 | Sulfate | BMB | 0.459 | 1.027 | 5.6103 |
| TOTAL: | | | | 0.93 | 3.19 | 8.33 |

12 2104093-MRL1
 2101330

W 4/12/21

| | | | |
|-------------------|---------------------|-----------------|--------|
| Sample Name | 2104093-MRL1 | Inj. Vol. | 25:00 |
| Injection Type | Unknown | Dilution Factor | 1.0000 |
| Instrument Method | Anions Method | Operator | JG |
| Inj. Date / Time | 07-Apr-2021 / 11:41 | Run Time | 15:25 |

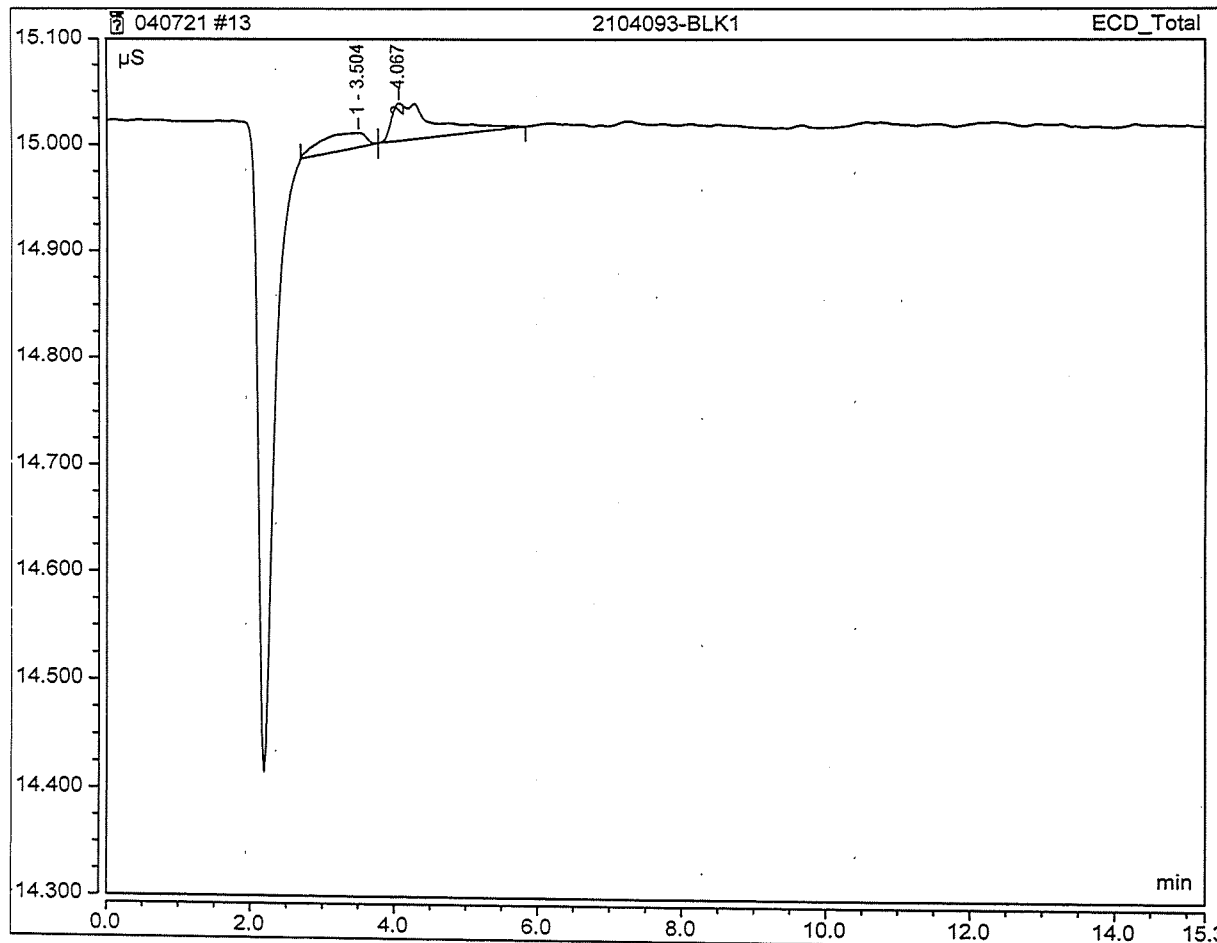


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.097 | 0.455 | 0.5580 |
| 3 | 4.29 | Chloride | BMB* | 0.118 | 0.795 | 1.3388 |
| 4 | 5.05 | Nitrite | BMB | 0.025 | 0.140 | 0.1269 |
| 5 | 6.24 | Bromide | BMB | 0.005 | 0.024 | 0.0526 |
| 6 | 7.17 | Nitrate | BMB | 0.160 | 0.602 | 0.6461 |
| 7 | 10.57 | Phosphate | BMB | 0.068 | 0.140 | n.a. |
| 8 | 12.30 | Sulfate | BMB | 0.459 | 1.027 | 5.6103 |
| TOTAL: | | | | 0.93 | 3.18 | 8.33 |

WJG/12/21

13 2104093-BLK1

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-BLK1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 11:59 | Run Time: | 15:25 |



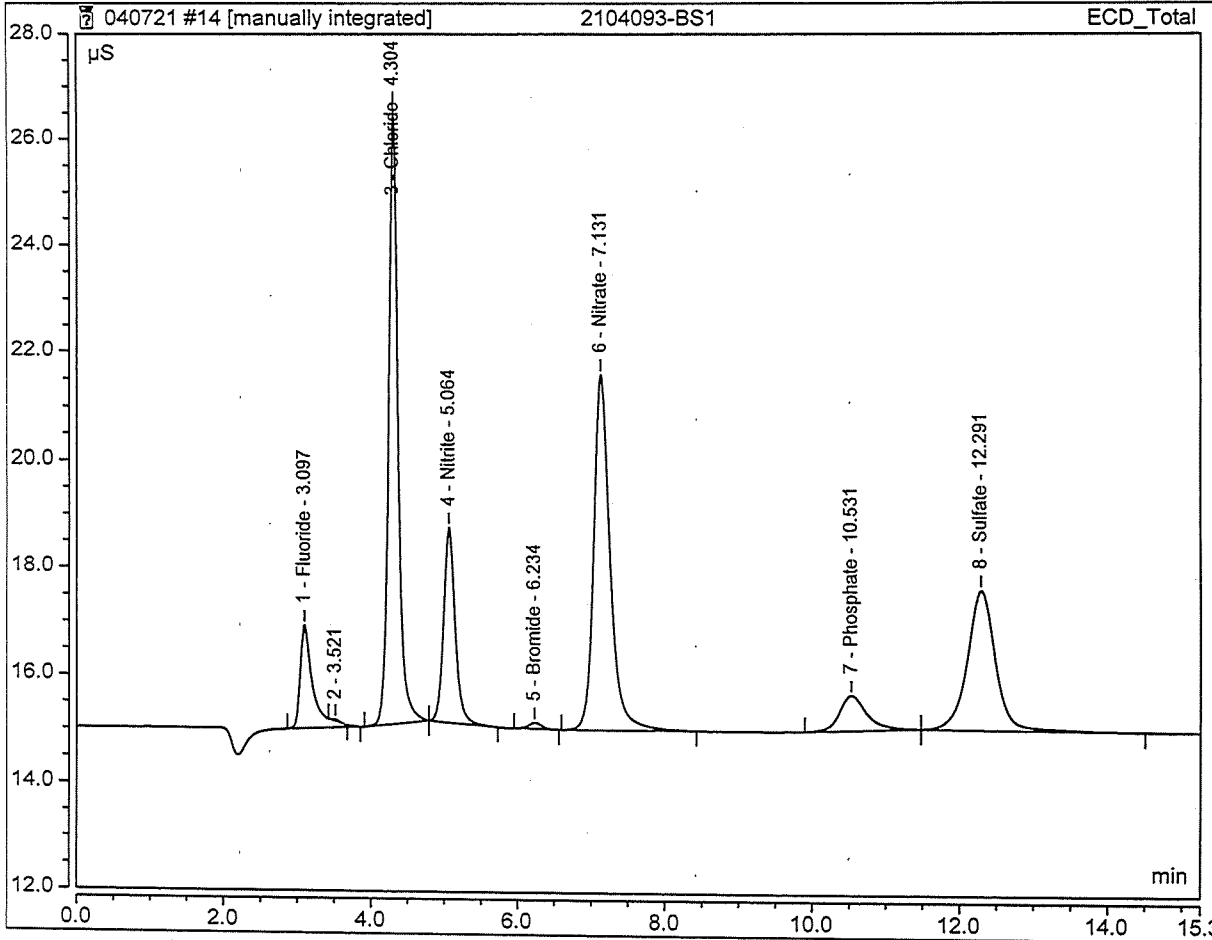
| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount |
|-----|----------|-----------|-----------|-----------------------------------|----------------------|--------|
| | | TOTAL: | | 0.00 | 0.00 | 0.00 |

END

14 2104093-BS1
 2101270

WJG/12

| | | | |
|--------------------|-------------------|------------------|--------|
| Sample Name: | 2104093-BS1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 12:17 | Run Time: | 15:25 |

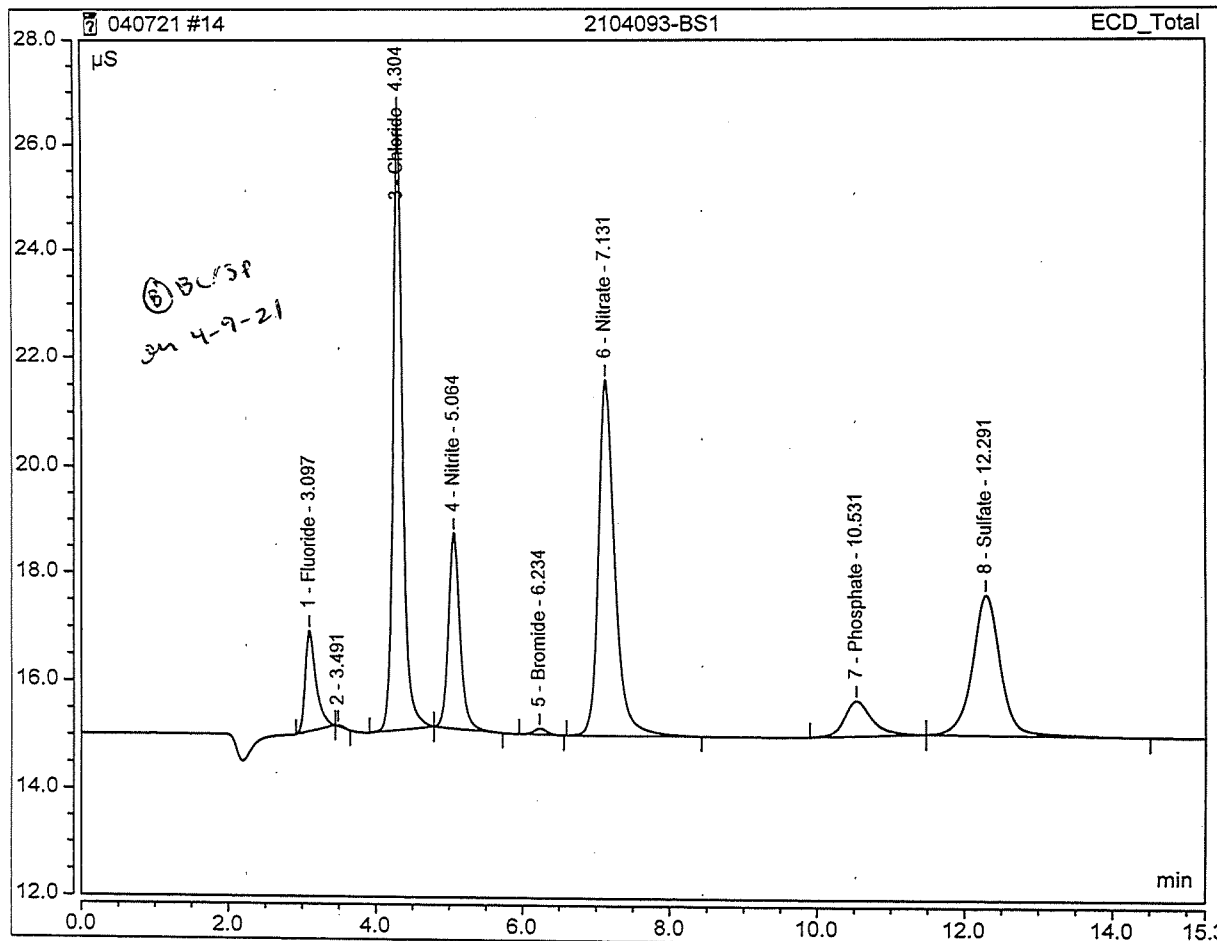


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.381 | 1.923 | 1.9422 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.693 | 11.494 | 11.5970 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.655 | 3.633 | 2.2965 ✓ |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.116 | 0.4158 ✓ |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.601 | 4.8807 ✓ |
| 7 | 10.53 | Phosphate | BMB | 0.284 | 0.658 | 1.6106 ✓ |
| 8 | 12.29 | Sulfate | BMB | 1.153 | 2.595 | 12.0803 ✓ |
| TOTAL: | | | | 5.89 | 27.02 | 34.82 |

Handwritten signature

14 2104093-BS1
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-BS1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 12:17 | Run Time: | 15:25 |

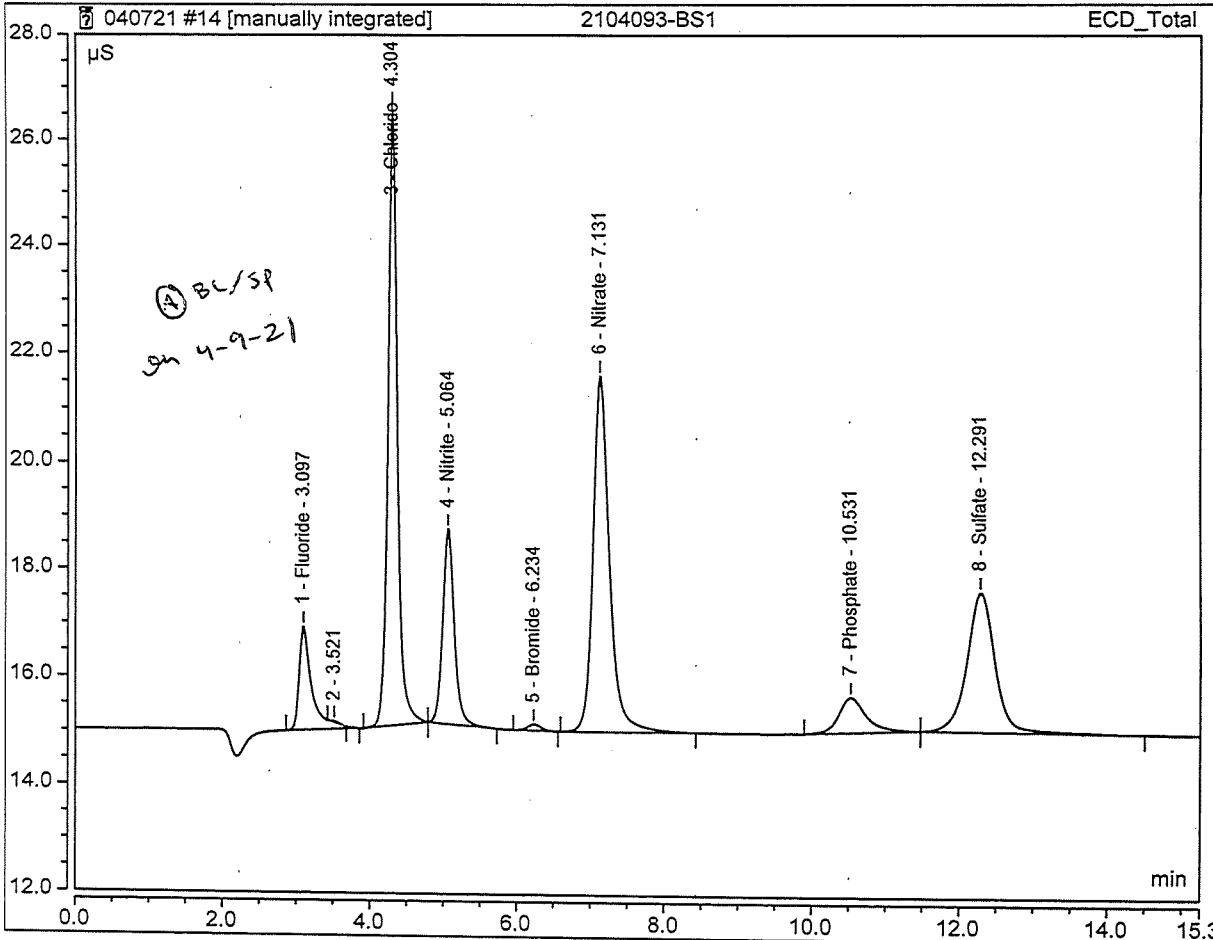


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.10 | Fluoride | BMB | 0.313 | 1.867 | 1.6092 |
| 3 | 4.30 | Chloride | BMB | 1.693 | 11.494 | 11.5970 |
| 4 | 5.06 | Nitrite | BMB | 0.655 | 3.633 | 2.2965 |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.116 | 0.4158 |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.601 | 4.8807 |
| 7 | 10.53 | Phosphate | BMB | 0.284 | 0.658 | 1.6106 |
| 8 | 12.29 | Sulfate | BMB | 1.153 | 2.595 | 12.0803 |
| TOTAL: | | | | 5.82 | 26.96 | 34.49 |

W 4/12/21

14 2104093-BS1
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-BS1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions - Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 12:17 | Run Time: | 15:25 |

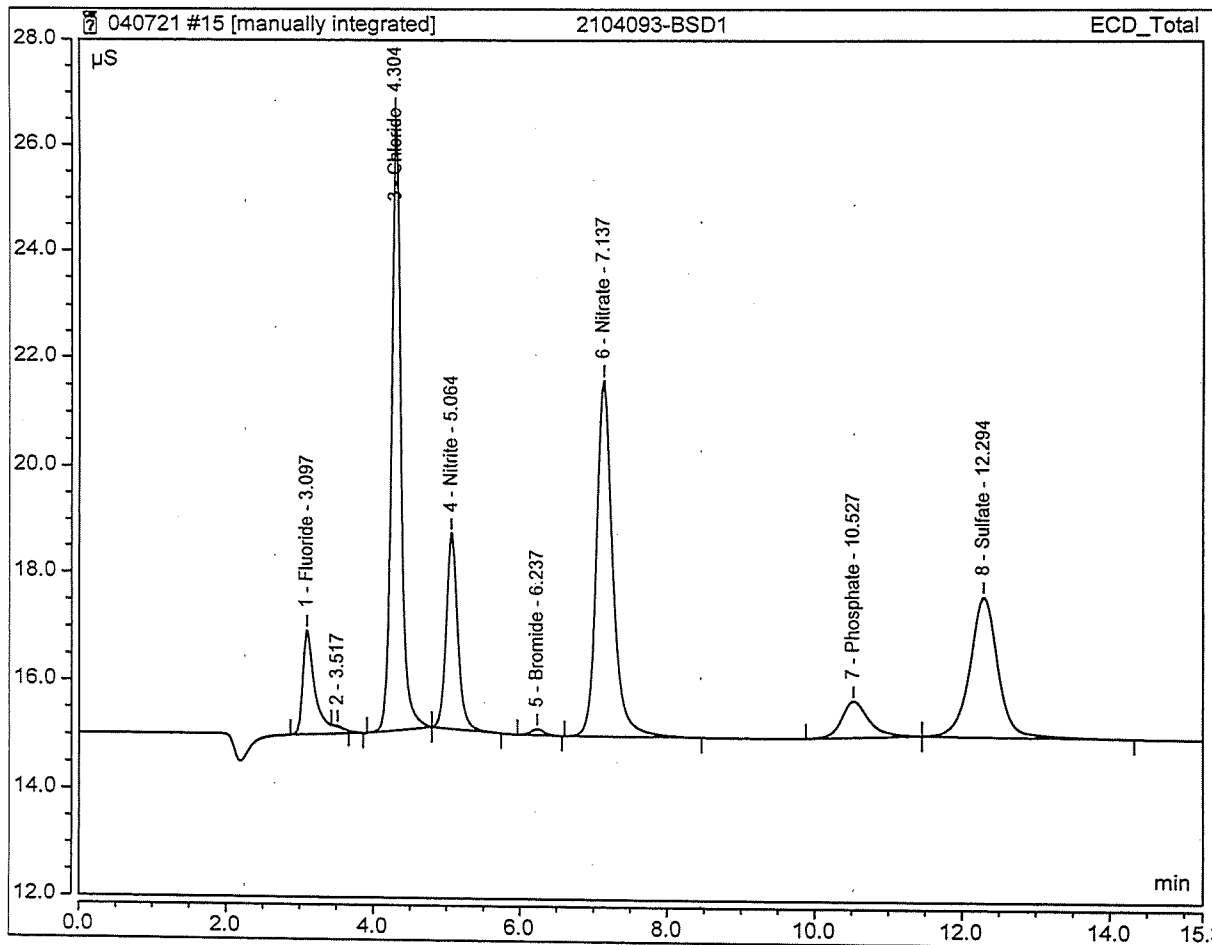


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.381 | 1.923 | 1.9422 |
| 3 | 4.30 | Chloride | BMB | 1.693 | 11.494 | 11.5970 |
| 4 | 5.06 | Nitrite | BMB | 0.655 | 3.633 | 2.2965 |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.116 | 0.4158 |
| 6 | 7.13 | Nitrate | BMB | 1.696 | 6.601 | 4.8807 |
| 7 | 10.53 | Phosphate | BMB | 0.284 | 0.658 | 1.6106 |
| 8 | 12.29 | Sulfate | BMB | 1.153 | 2.595 | 12.0803 |
| TOTAL: | | | | 5.89 | 27.02 | 34.82 |

M. Johnson

15 2104093-BSD1
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-BSD1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 12:35 | Run Time: | 15:25 |

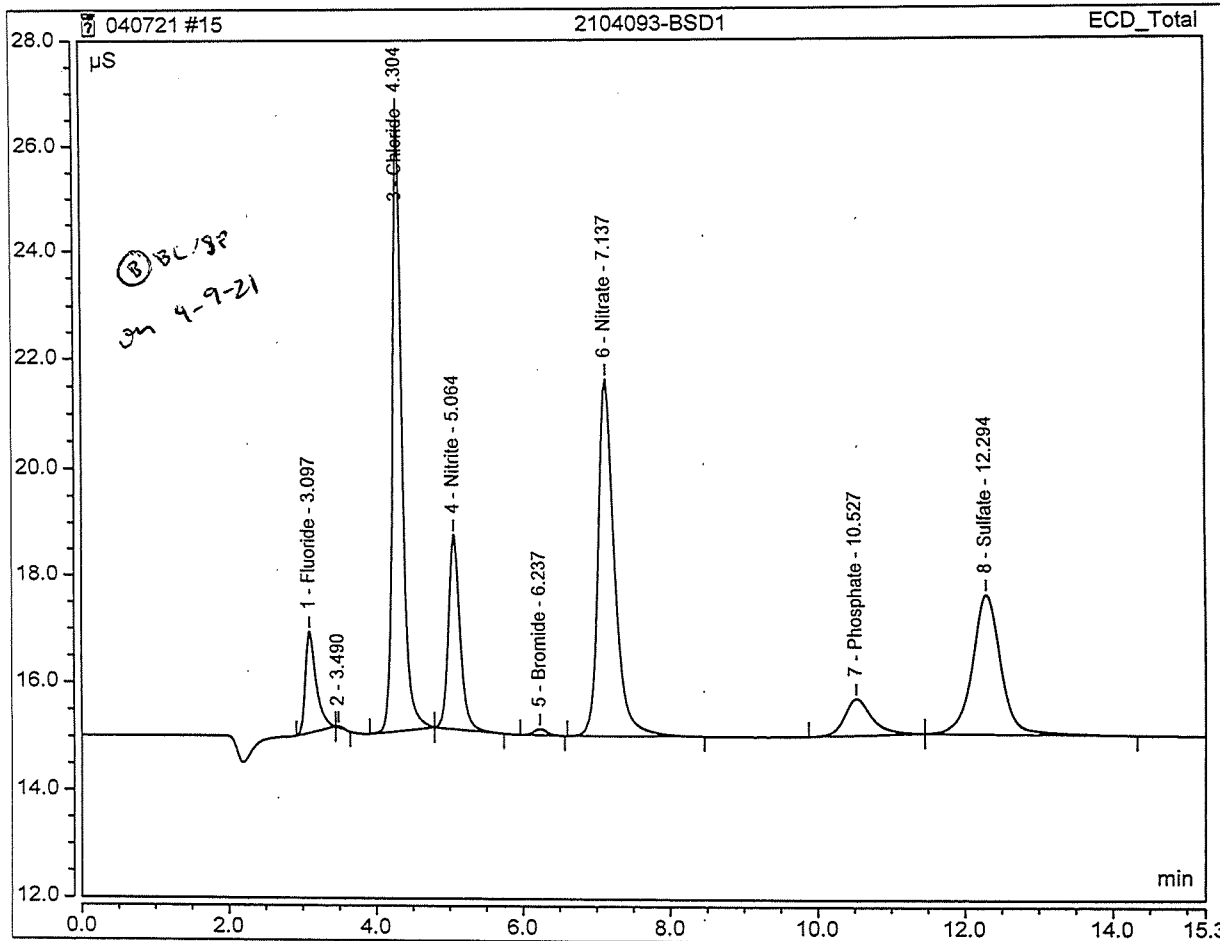


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.381 | 1.933 | 1.9416 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.696 | 11.507 | 11.6109 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.639 | 2.2979 ✓ |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.117 | 0.4166 ✓ |
| 6 | 7.14 | Nitrate | BMB | 1.698 | 6.610 | 4.8857 ✓ |
| 7 | 10.53 | Phosphate | BMB | 0.292 | 0.676 | 1.6671 ✓ |
| 8 | 12.29 | Sulfate | BMB | 1.150 | 2.591 | 12.0523 ✓ |
| TOTAL: | | | | 5.90 | 27.07 | 34.87 |

15 2104093-BSD1
 2101270

M
4/12/21

| | | | |
|--------------------|-------------------|------------------|--------|
| Sample Name: | 2104093-BSD1 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 12:35 | Run Time: | 15:25 |

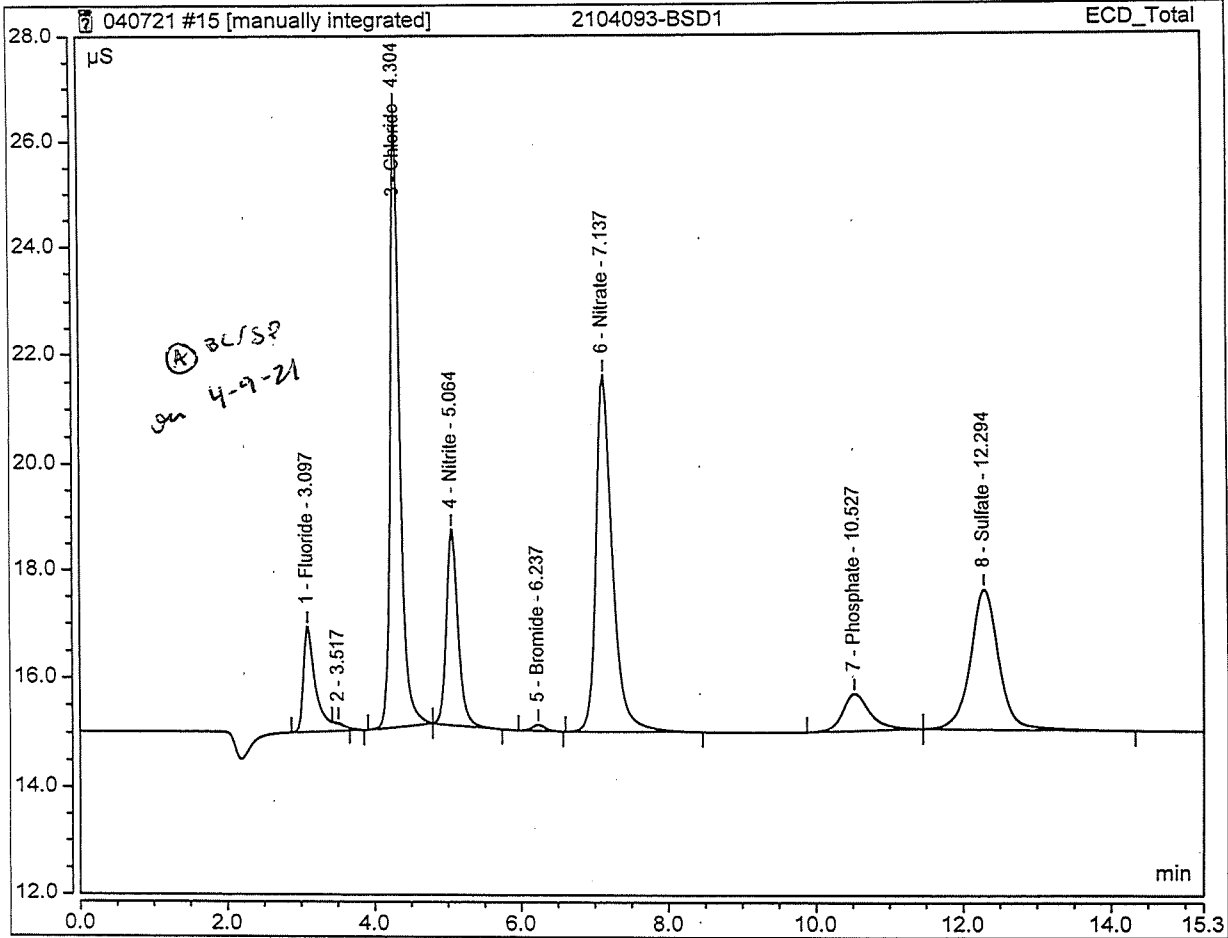


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.10 | Fluoride | BMB | 0.313 | 1.878 | 1.6116 |
| 3 | 4.30 | Chloride | BMB | 1.696 | 11.507 | 11.6109 |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.639 | 2.2979 |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.117 | 0.4166 |
| 6 | 7.14 | Nitrate | BMB | 1.698 | 6.610 | 4.8857 |
| 7 | 10.53 | Phosphate | BMB | 0.292 | 0.676 | 1.6671 |
| 8 | 12.29 | Sulfate | BMB | 1.150 | 2.591 | 12.0523 |
| TOTAL: | | | | 5.83 | 27.02 | 34.54 |

15 2104093-BSD1
 2101270

Handwritten: 4/12/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 2104093-BSD1 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions - Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 12:35 | Run Time: | 15:25 |

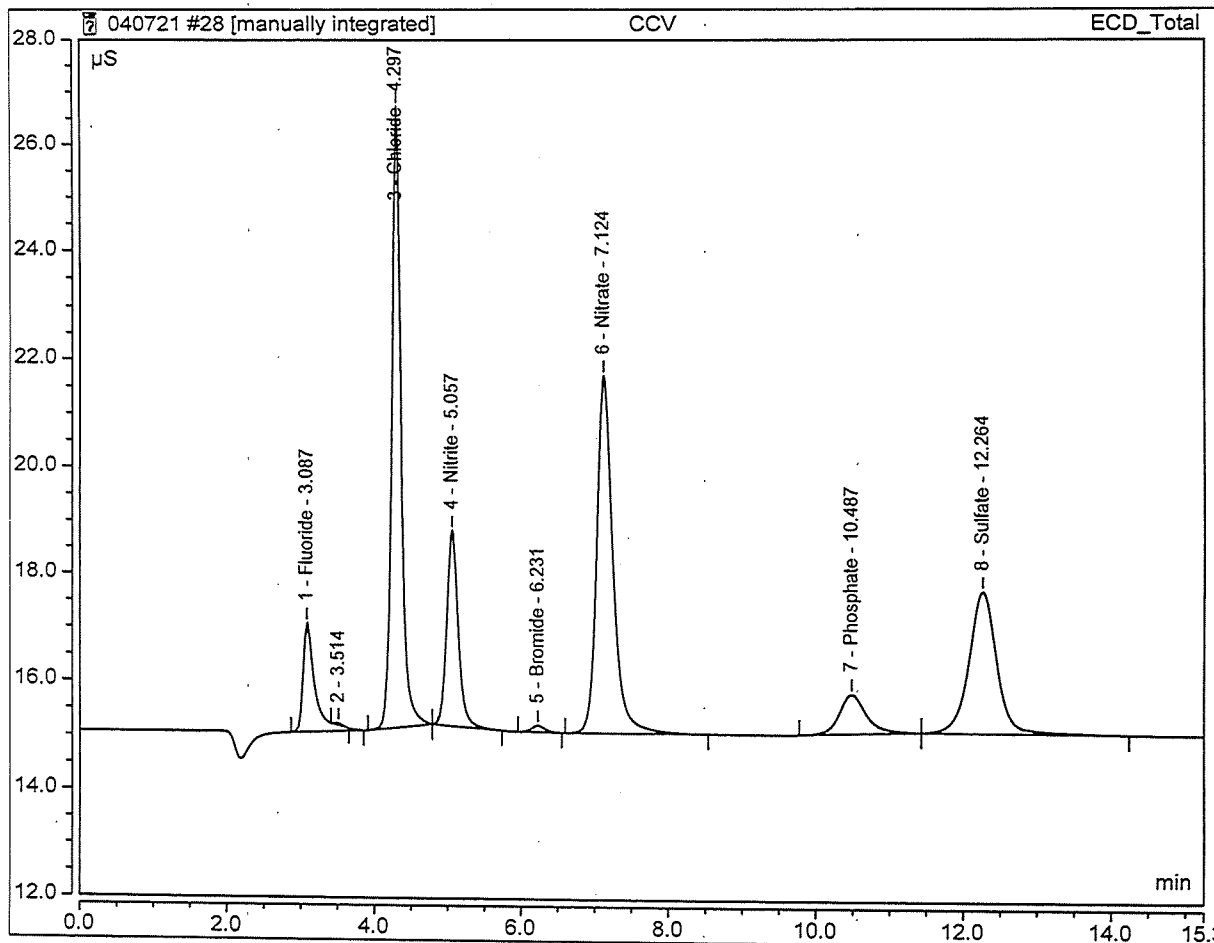


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.10 | Fluoride | BMB* | 0.381 | 1.933 | 1.9416 |
| 3 | 4.30 | Chloride | BMB | 1.696 | 11.507 | 11.6109 |
| 4 | 5.06 | Nitrite | BMB | 0.656 | 3.639 | 2.2979 |
| 5 | 6.24 | Bromide | BMB | 0.023 | 0.117 | 0.4166 |
| 6 | 7.14 | Nitrate | BMB | 1.698 | 6.610 | 4.8857 |
| 7 | 10.53 | Phosphate | BMB | 0.292 | 0.676 | 1.6671 |
| 8 | 12.29 | Sulfate | BMB | 1.150 | 2.591 | 12.0523 |
| TOTAL: | | | | 5.90 | 27.07 | 34.87 |

28 CCV
 2101270

WJG/jm

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions - Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 20:39 | Run Time: | 15.25 |

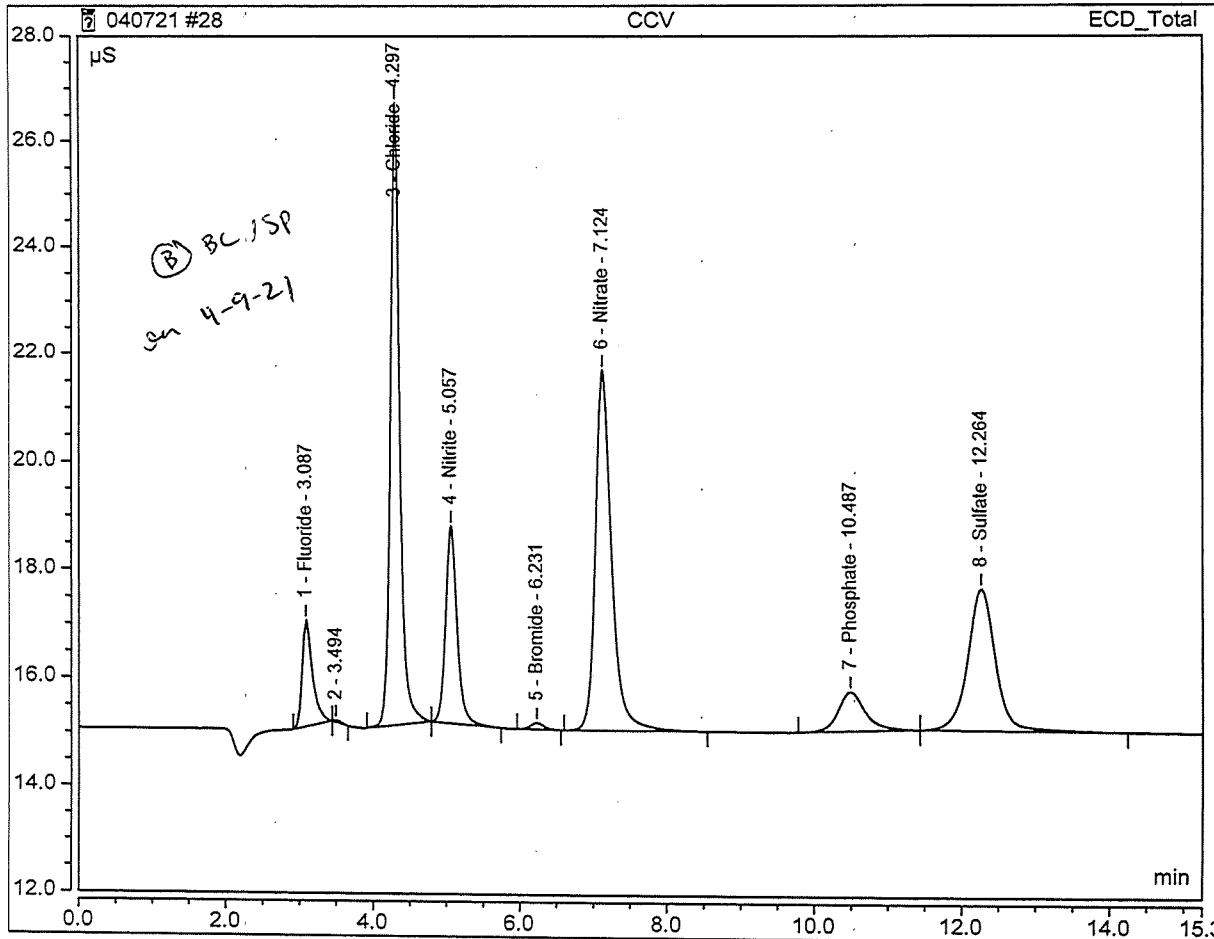


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.376 | 2.011 | 1.9144 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.689 | 11.600 | 11.5704 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.653 | 3.647 | 2.2896 ✓ |
| 5 | 6.23 | Bromide | BMB | 0.024 | 0.120 | 0.4357 ✓ |
| 6 | 7.12 | Nitrate | BMB | 1.692 | 6.658 | 4.8687 ✓ |
| 7 | 10.49 | Phosphate | BMB | 0.310 | 0.728 | 1.8041 ✓ |
| 8 | 12.26 | Sulfate | BMB | 1.146 | 2.621 | 12.0197 ✓ |
| TOTAL: | | | | 5.89 | 27.38 | 34.90 |

28 CCV
 2101270

WY/12/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 07-Apr-2021 / 20:39 | Run Time: | 15:25 |

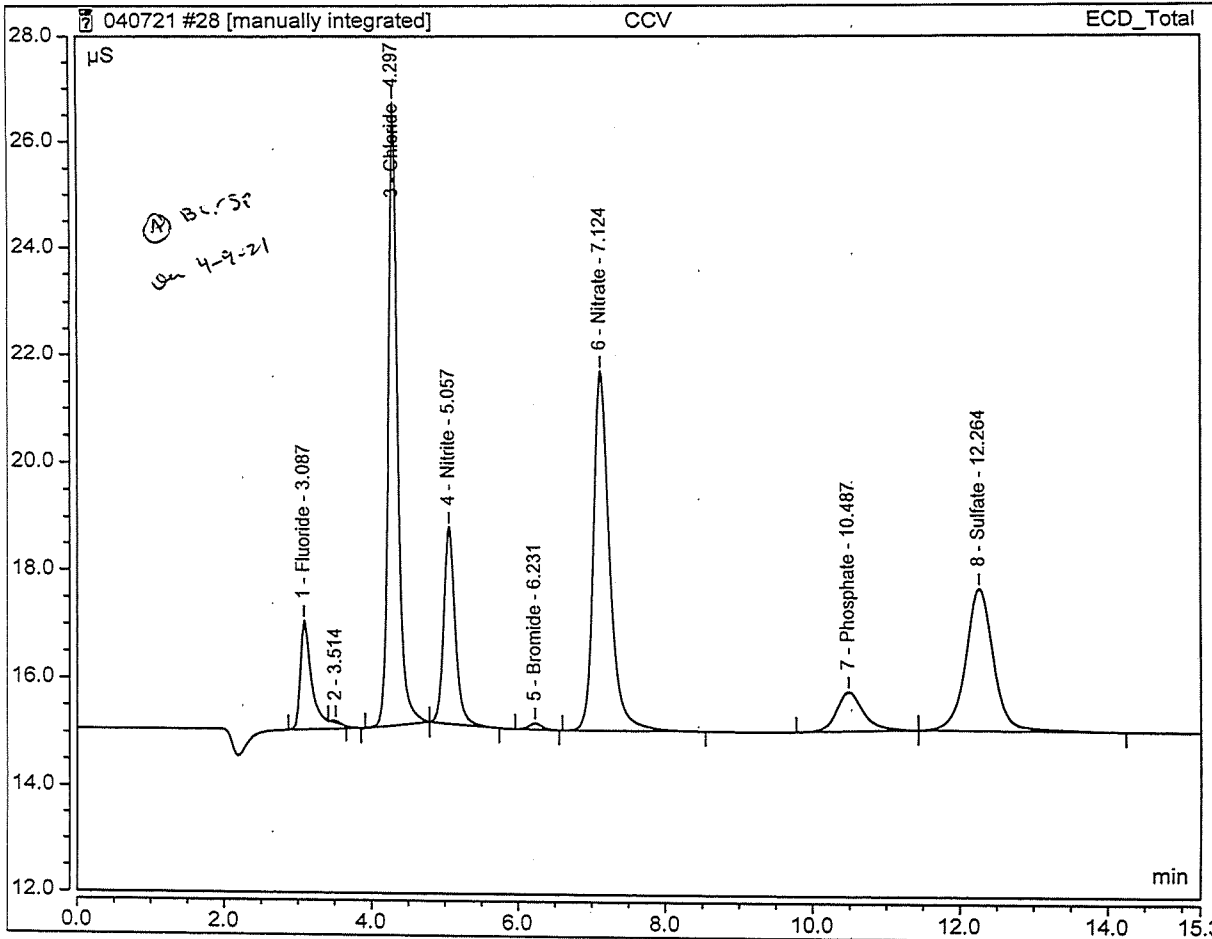


| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.314 | 1.962 | 1.6133 |
| 3 | 4.30 | Chloride | BMB | 1.689 | 11.600 | 11.5704 |
| 4 | 5.06 | Nitrite | BMB | 0.653 | 3.647 | 2.2896 |
| 5 | 6.23 | Bromide | BMB | 0.024 | 0.120 | 0.4357 |
| 6 | 7.12 | Nitrate | BMB | 1.692 | 6.658 | 4.8687 |
| 7 | 10.49 | Phosphate | BMB | 0.310 | 0.728 | 1.8041 |
| 8 | 12.26 | Sulfate | BMB | 1.146 | 2.621 | 12.0197 |
| TOTAL: | | | | 5.83 | 27.33 | 34.60 |

28 CCV
 2101270

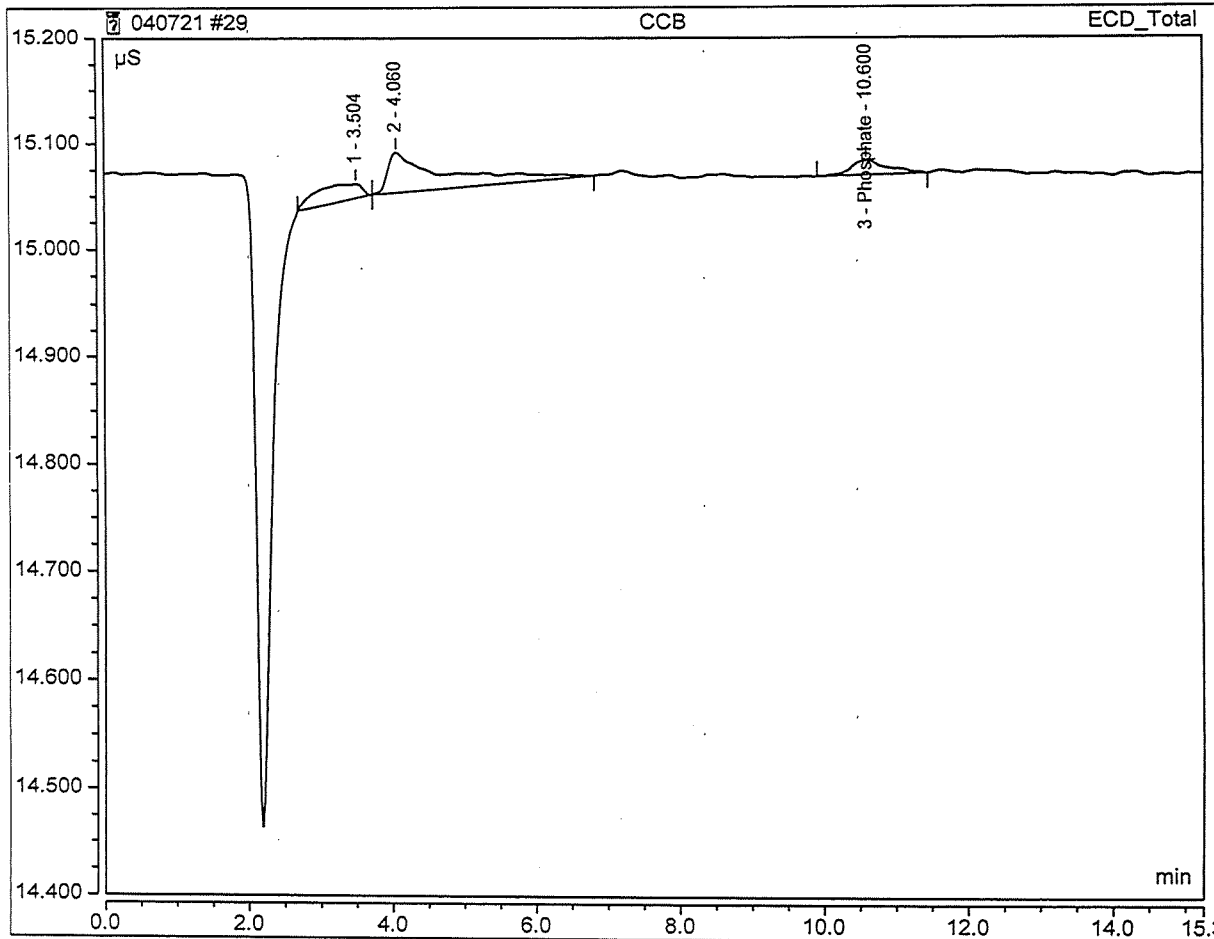
W
4/12/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1:0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 20:39 | Run Time: | 15:25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.376 | 2.011 | 1.9144 |
| 3 | 4.30 | Chloride | BMB | 1.689 | 11.600 | 11.5704 |
| 4 | 5.06 | Nitrite | BMB | 0.653 | 3.647 | 2.2896 |
| 5 | 6.23 | Bromide | BMB | 0.024 | 0.120 | 0.4357 |
| 6 | 7.12 | Nitrate | BMB | 1.692 | 6.658 | 4.8687 |
| 7 | 10.49 | Phosphate | BMB | 0.310 | 0.728 | 1.8041 |
| 8 | 12.26 | Sulfate | BMB | 1.146 | 2.621 | 12.0197 |
| TOTAL: | | | | 5.89 | 27.38 | 34.90 |

| | | | |
|--------------------|---------------------|------------------|--------|
| 29 CCB | | <i>W 4/12/21</i> | |
| Sample Name: | CCB | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 20:57 | Run Time: | 15:25 |



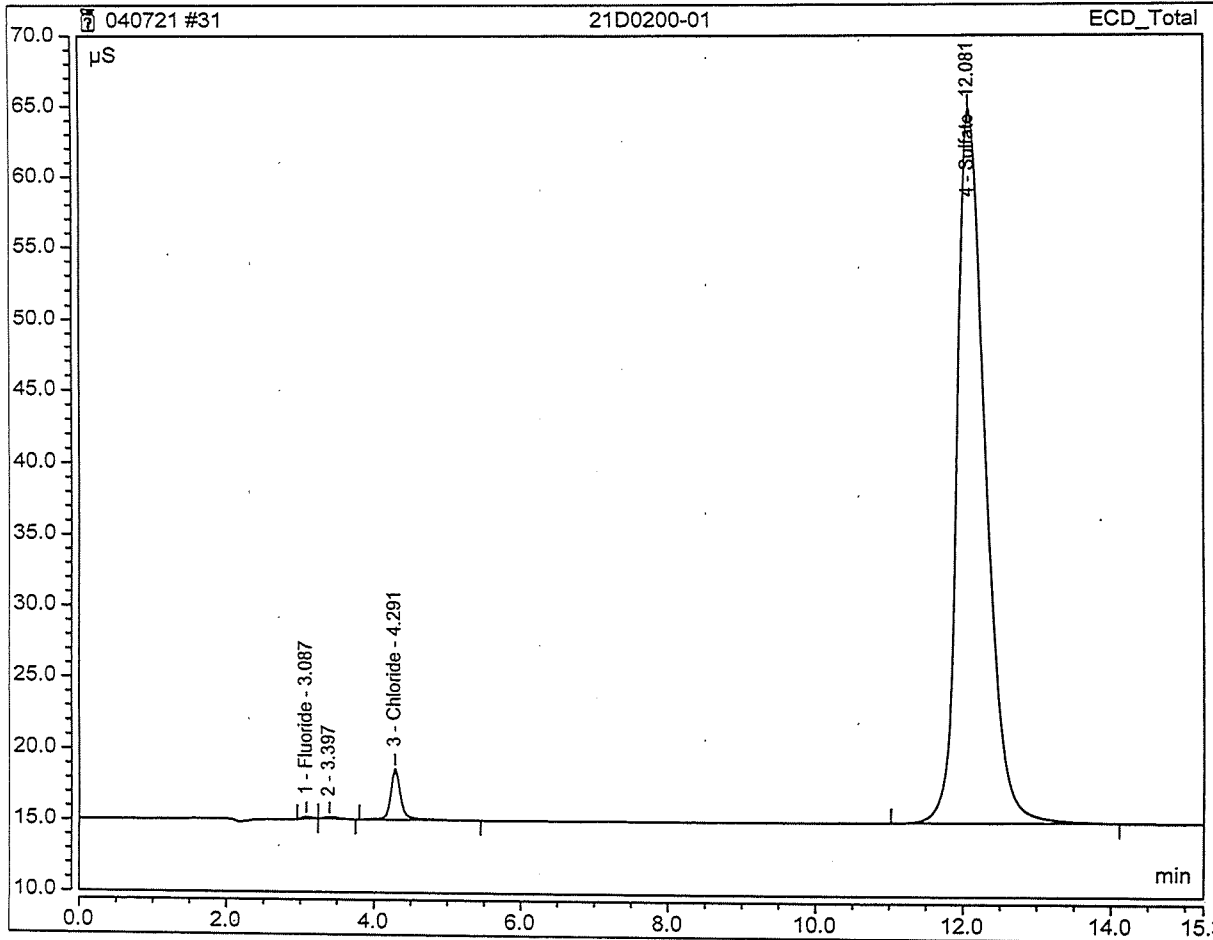
| No. | Time min. | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount PPM |
|--------|-----------|-----------|-----------|-----------------------------------|----------------------|------------|
| 3 | 10.60 | Phosphate | BMB | 0.008 | 0.013 | n.a. |
| TOTAL: | | | | 0.01 | 0.01 | 0.00 |

END
 ↓

31 21D0200-01
 F, CL, NO2, NO3, SO4

W
4/12/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 21D0200-01 | Inj. Vol.: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 21:33 | Run Time: | 15:25 |



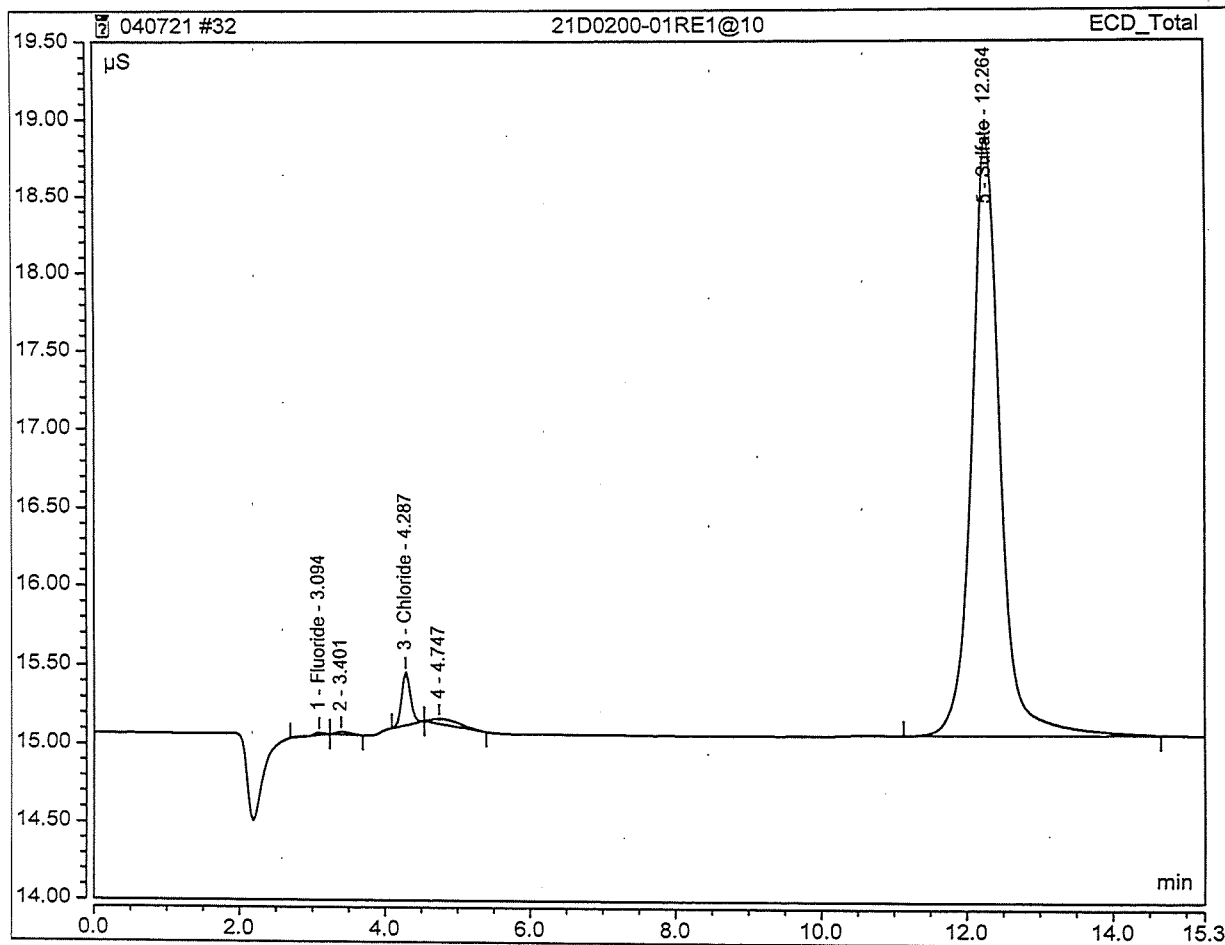
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.023 | 0.176 | 0.1988 ✓ |
| 3 | 4.29 | Chloride | BMB | 0.578 | 3.594 | 4.3360 ✓ |
| 4 | 12.08 | Sulfate | BMB | 22.061 | 49.769 | 207.0853 ↑ |
| TOTAL: | | | | 22.66 | 53.54 | 211.62 |

NO NO2, NO3

32 21D0200-01RE1@10
 (2104093) SO4

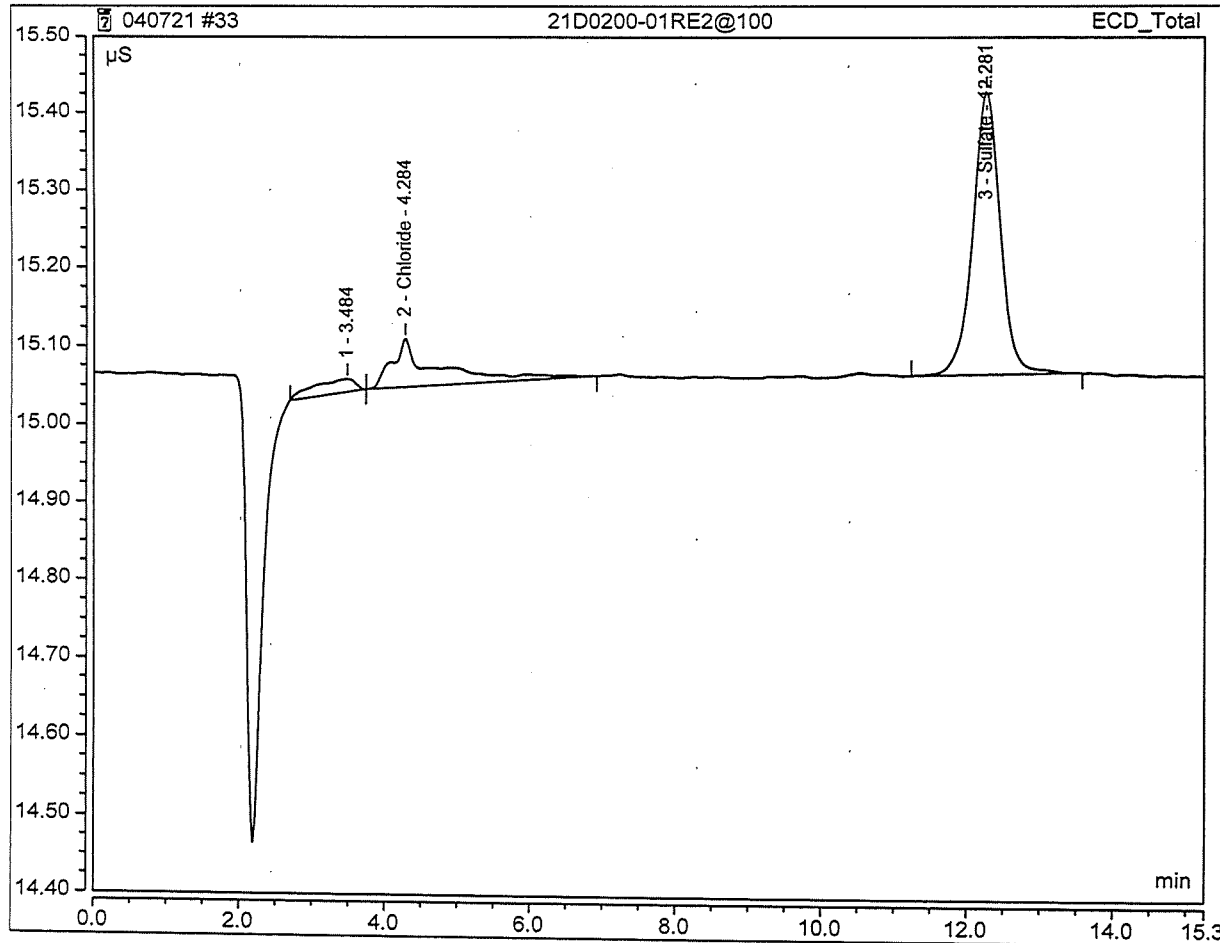
W 4/12/21

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | 21D0200-01RE1@10 | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 07-Apr-2021 / 21:51 | Run Time: | 15.25 |



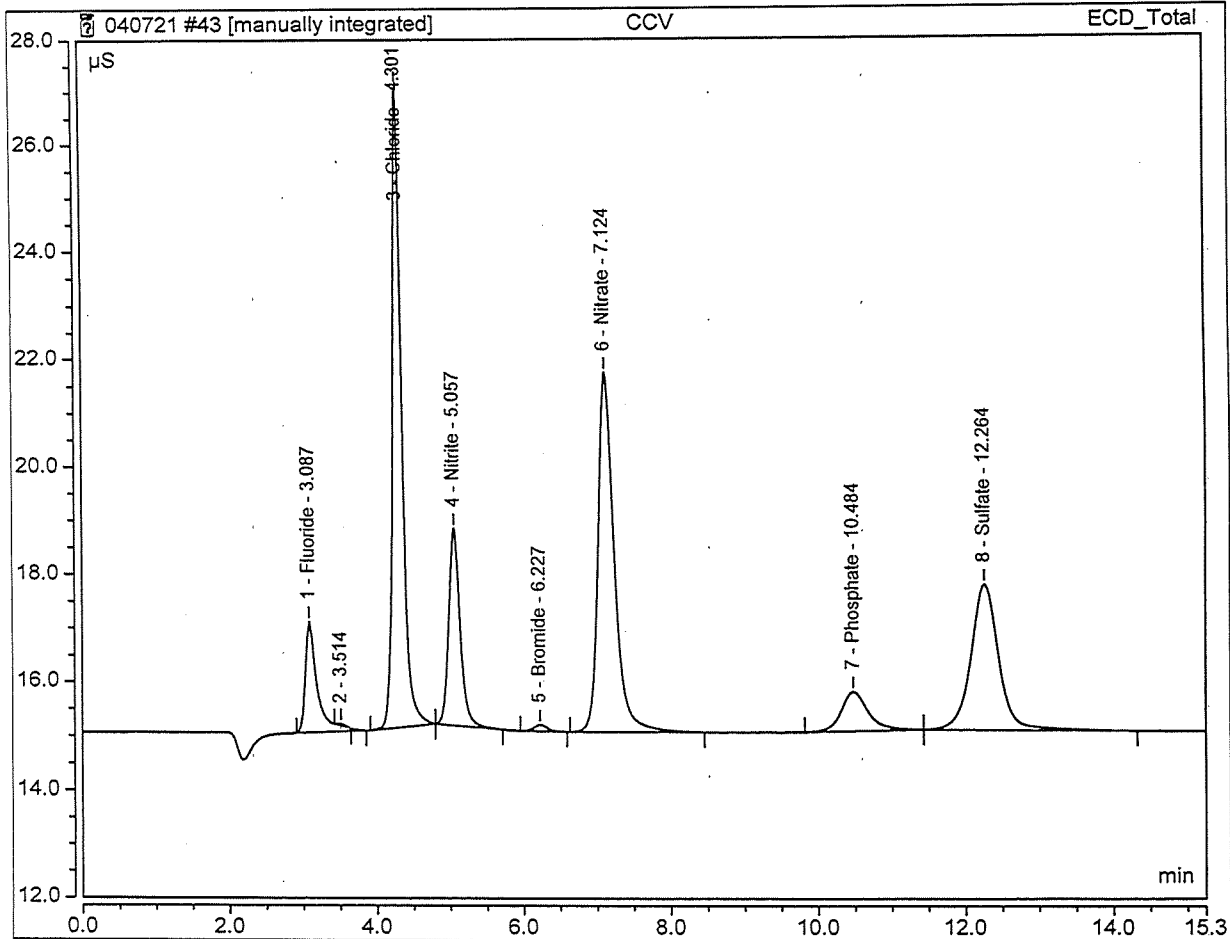
| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.003 | 0.018 | 0.1035 |
| 3 | 4.29 | Chloride | BMB | 0.047 | 0.337 | 0.8733 |
| 5 | 12.26 | Sulfate | BMB | 1.723 | 3.839 | 17.4000 ✓ |
| TOTAL: | | | | 1.77 | 4.19 | 18.38 |

| | | | | | |
|----------------------------|---------------------|------------------|--------|------------------|--|
| 33 21D0200-01RE2@100 NR | | <i>NR</i> | | <i>W 4/11/21</i> | |
| Sample Name: | 21D0200-01RE2@100 | Inj. Vol: | 25.00 | | |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 | | |
| Instrument Method: | Anions_Method | Operator: | JG | | |
| Inj. Date / Time: | 07-Apr-2021 1:22:10 | Run Time: | 15:25 | | |



| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 2 | 4.28 | Chloride | BMB | 0.044 | 0.062 | 0.8549 |
| 3 | 12.28 | Sulfate | BMB | 0.156 | 0.360 | 2.7878 |
| TOTAL: | | | | 0.20 | 0.42 | 3.64 |

| | | | |
|--------------------|---------------------|-----------------------|--------|
| 43 CCV 2101270 | | <i>WJG</i> 4/18/21 | |
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 08-Apr-2021 / 01:11 | Run Time: | 15:25 |

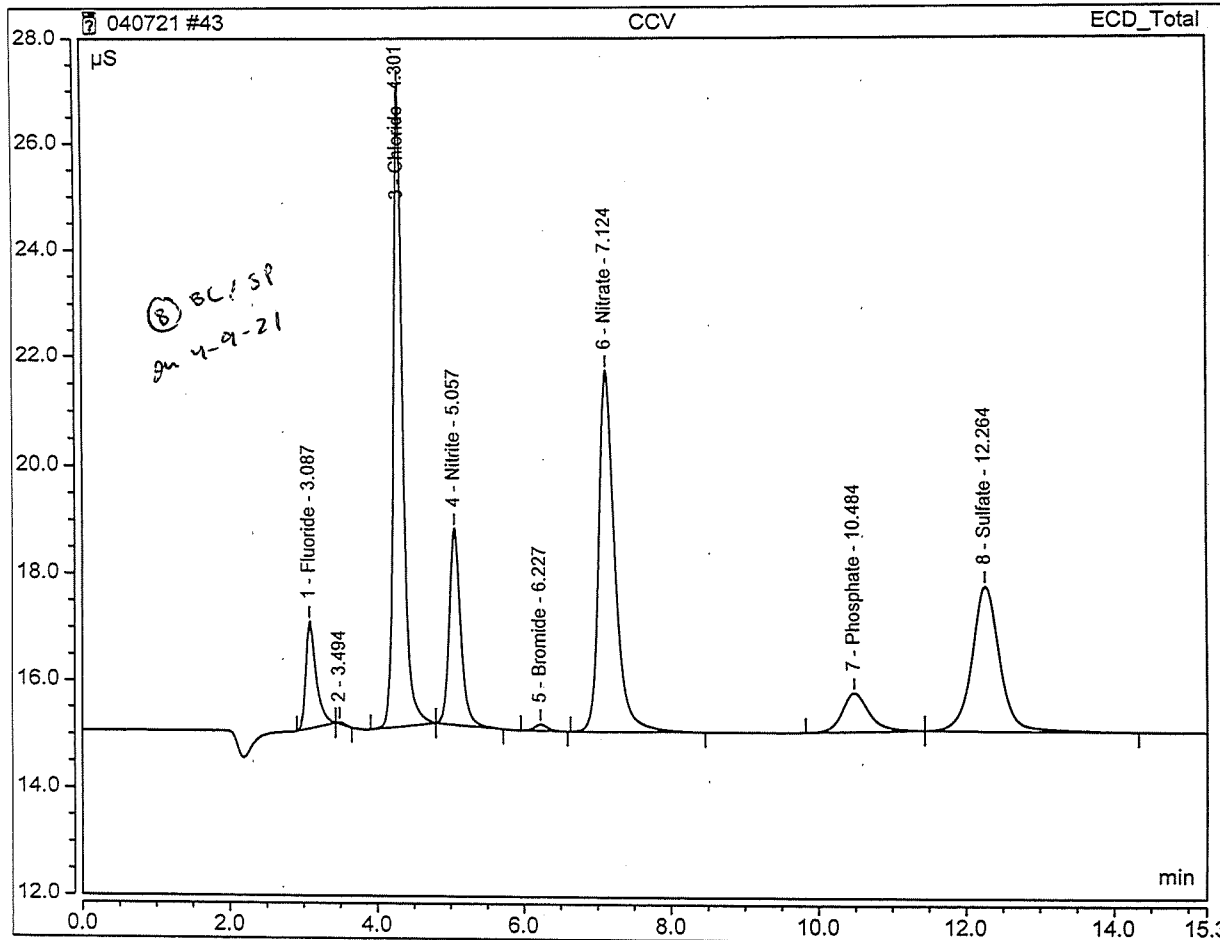


| No. | Time min. | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|-----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.379 | 2.056 | 1.9303 ✓ |
| 3 | 4.30 | Chloride | BMB | 1.743 | 11.986 | 11.9189 ✓ |
| 4 | 5.06 | Nitrite | BMB | 0.654 | 3.666 | 2.2940 ✓ |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.118 | 0.4211 ✓ |
| 6 | 7.12 | Nitrate | BMB | 1.694 | 6.692 | 4.8729 ✓ |
| 7 | 10.48 | Phosphate | BMB | 0.308 | 0.730 | 1.7910 ✓ |
| 8 | 12.26 | Sulfate | BMB | 1.178 | 2.698 | 12.3165 ✓ |
| TOTAL: | | | | 5.98 | 27.95 | 35.54 |

43 CCV
 2101270

Handwritten signature and date: 4/11/21

| | | | |
|--------------------|----------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 08-Apr-2021 10:01:11 | Run Time: | 15:25 |

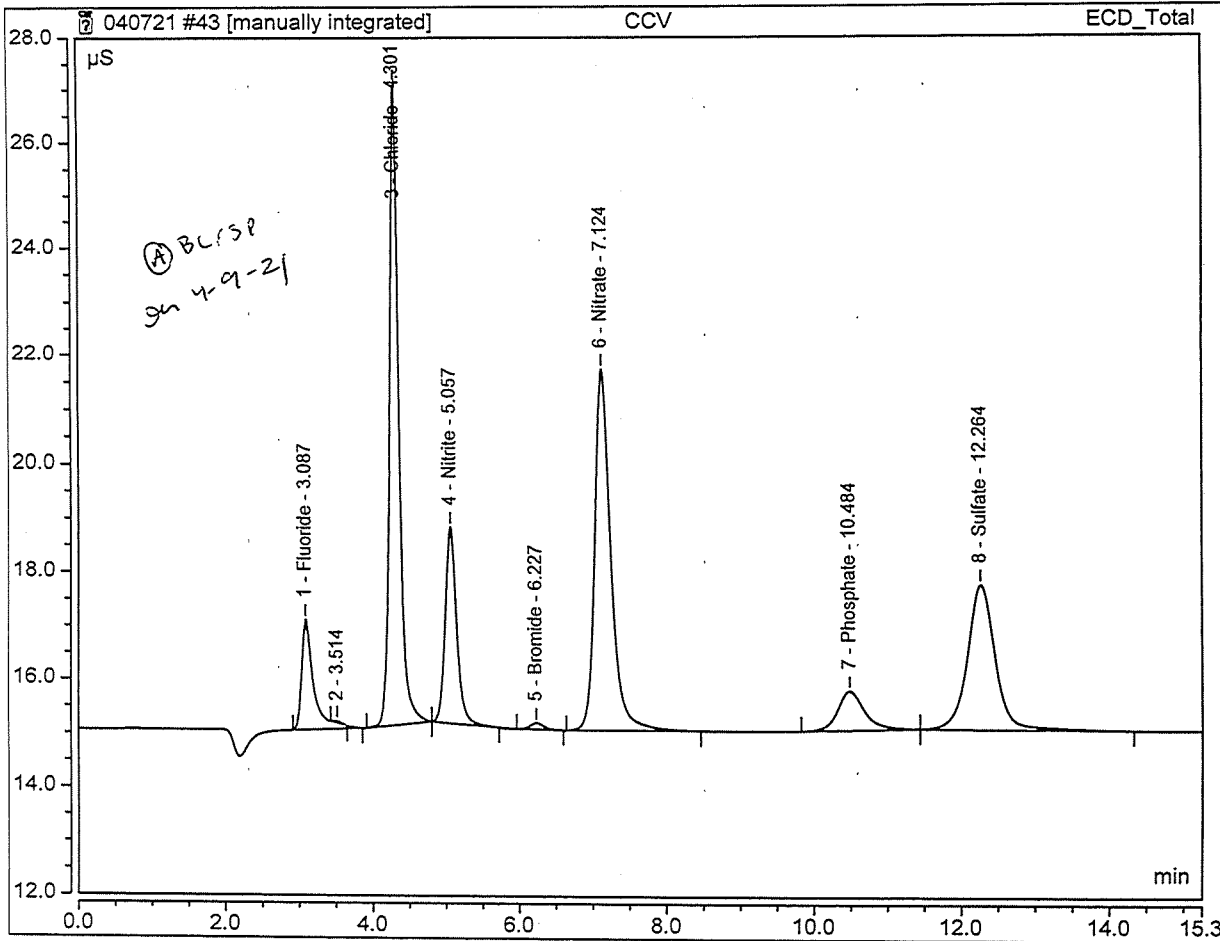


| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB | 0.319 | 2.010 | 1.6402 |
| 3 | 4.30 | Chloride | BMB | 1.743 | 11.986 | 11.9189 |
| 4 | 5.06 | Nitrite | BMB | 0.654 | 3.666 | 2.2940 |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.118 | 0.4211 |
| 6 | 7.12 | Nitrate | BMB | 1.694 | 6.692 | 4.8729 |
| 7 | 10.48 | Phosphate | BMB | 0.308 | 0.730 | 1.7910 |
| 8 | 12.26 | Sulfate | BMB | 1.178 | 2.698 | 12.3165 |
| TOTAL: | | | | 5.92 | 27.90 | 35.25 |

W 4/12/21

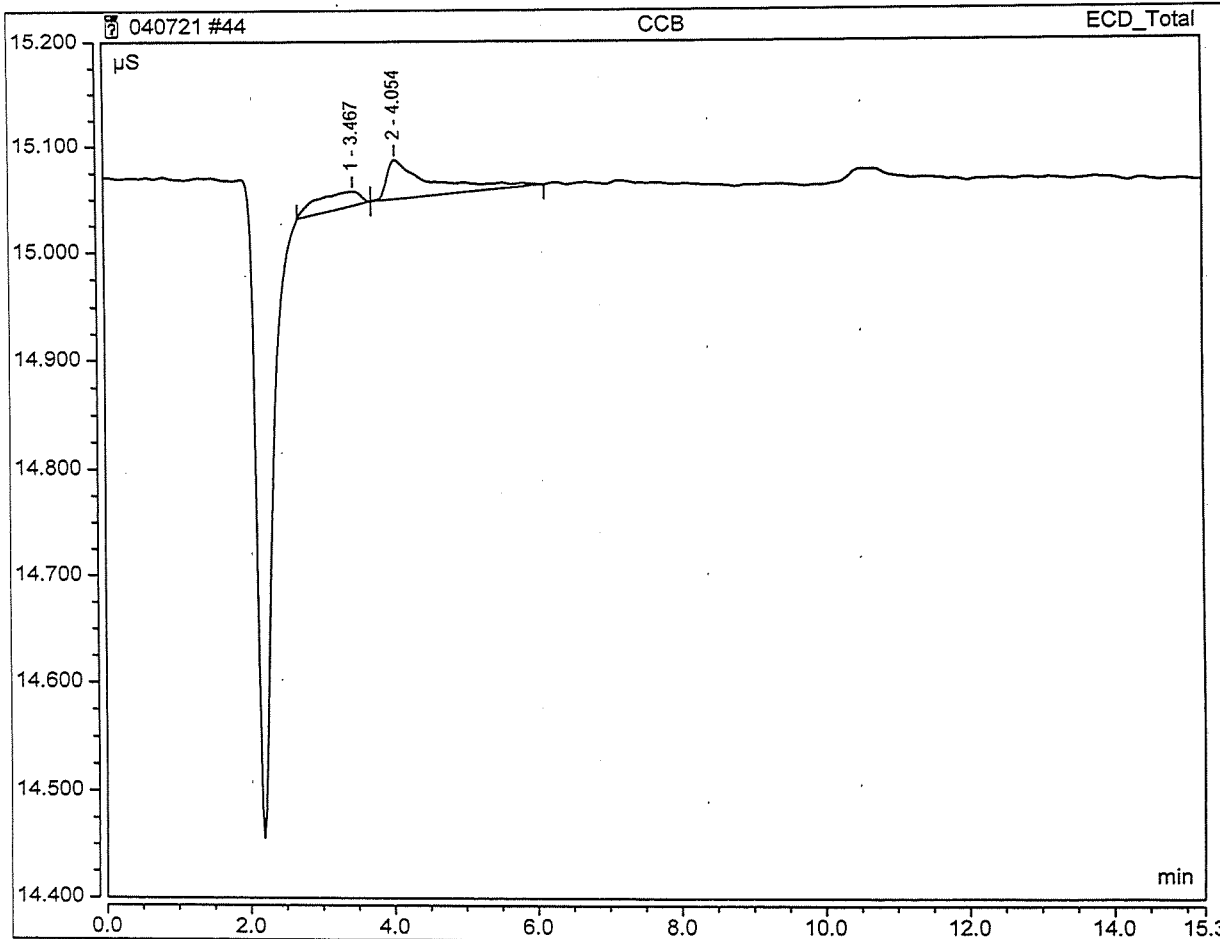
43 CCV
 2101270

| | | | |
|--------------------|---------------------|------------------|--------|
| Sample Name: | CCV | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date/Time: | 08-Apr-2021 / 01:11 | Run Time: | 15:25 |



| No. | Time min | Peak Name | Peak Type | Area µS*min | Height µS | Amount PPM |
|--------|----------|-----------|-----------|-------------|-----------|------------|
| 1 | 3.09 | Fluoride | BMB* | 0.379 | 2.056 | 1.9303 |
| 3 | 4.30 | Chloride | BMB | 1.743 | 11.986 | 11.9189 |
| 4 | 5.06 | Nitrite | BMB | 0.654 | 3.666 | 2.2940 |
| 5 | 6.23 | Bromide | BMB | 0.023 | 0.118 | 0.4211 |
| 6 | 7.12 | Nitrate | BMB | 1.694 | 6.692 | 4.8729 |
| 7 | 10.48 | Phosphate | BMB | 0.308 | 0.730 | 1.7910 |
| 8 | 12.26 | Sulfate | BMB | 1.178 | 2.698 | 12.3165 |
| TOTAL: | | | | 5.98 | 27.95 | 35.54 |

| | | | |
|--------------------|---------------------|------------------|--------|
| 44 CCB | | <i>WJL</i> | |
| Sample Name: | CCB | Inj. Vol: | 25.00 |
| Injection Type: | Unknown | Dilution Factor: | 1.0000 |
| Instrument Method: | Anions_Method | Operator: | JG |
| Inj. Date / Time: | 08-Apr-2021 / 01:29 | Run Time: | :15:25 |



| No. | Time min | Peak Name | Peak Type | Area $\mu\text{S}\cdot\text{min}$ | Height μS | Amount n.a. |
|-----|----------|-----------|-----------|-----------------------------------|----------------------|-------------|
| | | TOTAL: | | 0.00 | 0.00 | 0.00 |

Zm
 +

Analytical Standard Record

Turner Laboratories, Inc.

2101265

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | IC CAL # 1 | Expires: | 04/06/2021 |
| Standard Type: | Calibration Standard | Prepared: | 04/05/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/06/2021 09:22 by JG |

FV = 50mL in DI

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 0.5 | ug/mL |
| Sulfate | 14808-79-8 | 5 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 0.5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 0.5 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 0.5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 0.1 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 0.5 | ug/mL |
| Fluoride | 16984-48-8 | 0.5 | ug/mL |
| Chloride | 16887-00-6 | 1 | ug/mL |
| Bromide | 24959-67-9 | 0.1 | ug/mL |

Lot #: NA
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---|------------|--------------|------------|------------------------|-------|
| 2101271 | IC Spike/Low Intermediate Standard Solution | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 1 |

Analytical Standard Record

Turner Laboratories, Inc.

2101271

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | IC Spike/Low Intermediate Standard Solution | Expires: | 05/05/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/05/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 200 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/06/2021 09:18 by JG |

FV = 200mL in DI

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 25 | ug/mL |
| Sulfate | 14808-79-8 | 250 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 25 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 25 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 25 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 5 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 25 | ug/mL |
| Fluoride | 16984-48-8 | 25 | ug/mL |
| Chloride | 16887-00-6 | 50 | ug/mL |
| Bromide | 24959-67-9 | 5 | ug/mL |

Lot #: NA

Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---|------------|--------------|------------|------------------------|-------|
| 2000094 | Chloride Standard Solution 1000 ppm stock | 01/07/2020 | ** Vendor ** | 11/30/2024 | 01/07/2020 08:13 by EJ | 10 |
| 2000729 | Bromide Standard 1000 ppm | 02/19/2020 | ** Vendor ** | 07/31/2021 | 02/19/2020 07:53 by EJ | 1 |
| 2001965 | Nitrate Standard Solution 1000ppm stock | 05/06/2020 | ** Vendor ** | 03/26/2024 | 05/08/2020 10:01 by JG | 5 |
| 2002272 | Fluoride Standard Solution 1000ppm stock | 05/28/2020 | ** Vendor ** | 09/01/2021 | 05/28/2020 14:53 by JG | 5 |
| 2003362 | Sulfate Standard Solution 1000 ppm stock | 08/04/2020 | ** Vendor ** | 07/14/2022 | 08/04/2020 12:34 by JG | 50 |
| 2005011 | Phosphorous Standard Solution 1000ppm stock | 11/30/2020 | ** Vendor ** | 09/30/2024 | 11/30/2020 08:45 by JG | 5 |
| 2100843 | Nitrite Standard Solution 1000ppm stock | 02/22/2021 | ** Vendor ** | 08/22/2022 | 03/08/2021 14:33 by JG | 1 |

Analytical Standard Record

Turner Laboratories, Inc.

2000094

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Chloride Standard Solution 1000 ppm stock | Expires: | 11/30/2024 |
| Standard Type: | Other | Prepared: | 01/07/2020 |
| Solvent: | na | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 2 | Last Edit: | 01/07/2020 08:13 by EJ |

Cat# 183-49

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Chloride | 16887-00-6 | 1000 | ug/mL |

Lot #: A9305

Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2000729

| | | | |
|---------------------|---------------------------|--------------|------------------------|
| Description: | Bromide Standard 1000 ppm | Expires: | 07/31/2021 |
| Standard Type: | Other | Prepared: | 02/19/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | IC |
| Vials: | 1 | Last Edit: | 02/19/2020 07:53 by EJ |

Product No: 4400-IC8M

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Bromide | 24959-67-9 | 1000 | ug/mL |

Lot #: 1039011-3
Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2001965

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Nitrate Standard Solution 1000ppm stock | Expires: | 03/26/2024 |
| Standard Type: | Other | Prepared: | 05/06/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 2 | Last Edit: | 05/08/2020 10:01 by JG |

CAT# 12792-49

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Nitrate (As N) | 14797-55-8 | 1000 | ug/mL |

Lot #: A0086
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2002272

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Fluoride Standard Solution 1000ppm stock | Expires: | 09/01/2021 |
| Standard Type: | Other | Prepared: | 05/28/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 120 | Department: | IC |
| Vials: | 2 | Last Edit: | 05/28/2020 14:53 by JG |

Cat# 3173-4

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Fluoride | 16984-48-8 | 1000 | ug/mL |

Lot #: 1002A05
Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2003362

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Sulfate Standard Solution 1000 ppm stock | Expires: | 07/14/2022 |
| Standard Type: | Other | Prepared: | 08/04/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 4 | Last Edit: | 08/04/2020 12:34 by JG |

Cat# 2175749

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Sulfate | 14808-79-8 | 1000 | ug/mL |

Lot #: A0184

Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2005011

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Phosphorous Standard Solution 1000ppm stock | Expires: | 09/30/2024 |
| Standard Type: | Other | Prepared: | 11/30/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | IC |
| Vials: | 2 | Last Edit: | 11/30/2020 08:45 by JG |

CAT# 2321142
2 BOTTLE

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 1000 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 1000 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 1000 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 1000 | ug/mL |

Lot #: A0255

Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2100843

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Nitrite Standard Solution 1000ppm stock | Expires: | 08/22/2022 |
| Standard Type: | Other | Prepared: | 02/22/2021 |
| Solvent: | H2O | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 250 | Department: | IC |
| Vials: | 1 | Last Edit: | 03/08/2021 14:33 by JG |

P/N 4400-IC12M-250-SL

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Nitrite (As N) | 14797-65-0 | 1000 | ug/mL |

Lot #: 1059987-10

Vendor: CPI

Analytical Standard Record

Turner Laboratories, Inc.

2101266

| | |
|-------------------------------------|-----------------------------------|
| Description: IC CAL # 2 | Expires: 04/06/2021 |
| Standard Type: Calibration Standard | Prepared: 04/05/2021 |
| Solvent: H2O | Prepared By: Jenna Gossen |
| Final Volume (mls): 50 | Department: IC |
| Vials: 1 | Last Edit: 04/06/2021 09:21 by JG |

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 2.5 | ug/mL |
| Sulfate | 14808-79-8 | 12.5 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 2.5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 2.5 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 2.5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 2.5 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 5 | ug/mL |
| Fluoride | 16984-48-8 | 2 | ug/mL |
| Chloride | 16887-00-6 | 12.5 | ug/mL |
| Bromide | 24959-67-9 | 0.5 | ug/mL |

Lot #: NA
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-------------------------------------|------------|--------------|------------|------------------------|-------|
| 2101270 | IC Spike/High Intermediate Standard | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 2.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101267

Description: IC CAL # 3
 Standard Type: Calibration Standard
 Solvent: H2O
 Final Volume (mls): 50
 Vials: 1

Expires: 04/06/2021
 Prepared: 04/05/2021
 Prepared By: Jenna Gossen
 Department: IC
 Last Edit: 04/06/2021 09:21 by JG

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 3.75 | ug/mL |
| Sulfate | 14808-79-8 | 25 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 3.75 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 3.75 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 3.75 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 3.75 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 7.5 | ug/mL |
| Fluoride | 16984-48-8 | 3 | ug/mL |
| Chloride | 16887-00-6 | 18.75 | ug/mL |
| Bromide | 24959-67-9 | 0.75 | ug/mL |

Lot #: NA
 Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|--------------|------------|------------------------|-------|
| 2101270 | IC Spike/High Intermediate Standard | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 3.75 |
| 2101273 | IC Spike/SO4 Solution High Intermediate St | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 1.25 |

Analytical Standard Record

Turner Laboratories, Inc.

2101270

Description: IC Spike/High Intermediate Standard
 Standard Type: Analyte Spike
 Solvent: H2O
 Final Volume (mls): 200
 Vials: 1

Expires: 05/05/2021
 Prepared: 04/05/2021
 Prepared By: Jenna Gossen
 Department: IC
 Last Edit: 04/06/2021 09:18 by JG

FV = 200mL in DI

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 50 | ppm |
| Sulfate | 14808-79-8 | 250 | ppm |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 50 | ppm |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 50 | ppm |
| Orthophosphate (as P) | 7723-14-0 | 50 | ppm |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 50 | ppm |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 100 | ppm |
| Fluoride | 16984-48-8 | 40 | ppm |
| Chloride | 16887-00-6 | 250 | ppm |
| Bromide | 24959-67-9 | 10 | ppm |

Lot #: NA

Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---|------------|--------------|------------|------------------------|-------|
| 2000094 | Chloride Standard Solution 1000 ppm stock | 01/07/2020 | ** Vendor ** | 11/30/2024 | 01/07/2020 08:13 by EJ | 50 |
| 2000729 | Bromide Standard 1000 ppm | 02/19/2020 | ** Vendor ** | 07/31/2021 | 02/19/2020 07:53 by EJ | 2 |
| 2001965 | Nitrate Standard Solution 1000ppm stock | 05/06/2020 | ** Vendor ** | 03/26/2024 | 05/08/2020 10:01 by JG | 20 |
| 2002272 | Fluoride Standard Solution 1000ppm stock | 05/28/2020 | ** Vendor ** | 09/01/2021 | 05/28/2020 14:53 by JG | 8 |
| 2003362 | Sulfate Standard Solution 1000 ppm stock | 08/04/2020 | ** Vendor ** | 07/14/2022 | 08/04/2020 12:34 by JG | 50 |
| 2005011 | Phosphorous Standard Solution 1000ppm stock | 11/30/2020 | ** Vendor ** | 09/30/2024 | 11/30/2020 08:45 by JG | 10 |
| 2100843 | Nitrite Standard Solution 1000ppm stock | 02/22/2021 | ** Vendor ** | 08/22/2022 | 03/08/2021 14:33 by JG | 10 |

Analytical Standard Record

Turner Laboratories, Inc.

2101273

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | IC Spike/SO4 Solution High Intermediate Standard | Expires: | 05/05/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/05/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 100 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/06/2021 09:18 by JG |

25mL SO4 STD in 100mL in DI

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Sulfate | 14808-79-8 | 250 | ug/mL |

Lot #: NA

Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|--------------|------------|------------------------|-------|
| 2003362 | Sulfate Standard Solution 1000 ppm stock | 08/04/2020 | ** Vendor ** | 07/14/2022 | 08/04/2020 12:34 by JG | 25 |

Analytical Standard Record

Turner Laboratories, Inc.

2101268

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | IC CAL # 4 | Expires: | 04/06/2021 |
| Standard Type: | Calibration Standard | Prepared: | 04/05/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/06/2021 09:20 by JG |

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 5 | ug/mL |
| Sulfate | 14808-79-8 | 50 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 5 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 5 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 10 | ug/mL |
| Fluoride | 16984-48-8 | 4 | ug/mL |
| Chloride | 16887-00-6 | 25 | ug/mL |
| Bromide | 24959-67-9 | 1 | ug/mL |

Lot #: NA

Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|------------|--------------|------------|------------------------|-------|
| 2101270 | IC Spike/High Intermediate Standard | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 5 |
| 2101273 | IC Spike/SO4 Solution High Intermediate St | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101269

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | QCS STD | Expires: | 04/06/2021 |
| Standard Type: | Calibration Standard | Prepared: | 04/05/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/06/2021 09:20 by JG |

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 2.5 | ug/mL |
| Sulfate | 14808-79-8 | 12.5 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 2.5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 2.5 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 2.5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 2.5 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 5 | ug/mL |
| Fluoride | 16984-48-8 | 2 | ug/mL |
| Chloride | 16887-00-6 | 12.5 | ug/mL |
| Bromide | 24959-67-9 | 0.5 | ug/mL |

Lot #: N/A

Vendor: n/a

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---------------------------------------|------------|--------------|------------|------------------------|-------|
| 2101272 | IC QCS Intermediate Standard Solution | 04/05/2021 | Jenna Gossen | 04/30/2021 | 04/06/2021 09:18 by JG | 2.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101272

| | |
|---|---|
| Description: IC QCS Intermediate Standard Solution Standard Type: Analyte Spike Solvent: H2O Final Volume (mls): 200 Vials: 1 | Expires: 04/30/2021 Prepared: 04/05/2021 Prepared By: Jenna Gossen Department: IC Last Edit: 04/06/2021 09:18 by JG |
|---|---|

FV = 200mL in DI.

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 50 | ug/mL |
| Sulfate | 14808-79-8 | 250 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 50 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 50 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 50 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 50 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 100 | ug/mL |
| Fluoride | 16984-48-8 | 40 | ug/mL |
| Chloride | 16887-00-6 | 250 | ug/mL |
| Bromide | 24959-67-9 | 10 | ug/mL |

Lot #: NA
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---|------------|--------------|------------|------------------------|-------|
| 1904040 | Nitrate Standard Solution 1000ppm stock | 09/28/2019 | ** Vendor ** | 08/31/2023 | 09/28/2019 10:34 by EJ | 20 |
| 2001540 | Chloride Standard Solution 1000 ppm stock | 04/14/2020 | ** Vendor ** | 03/14/2025 | 07/21/2020 14:31 by JG | 50 |
| 2001966 | Phosphorous Standard Solution 1000ppm stock | 05/06/2020 | ** Vendor ** | 04/14/2024 | 05/08/2020 09:59 by JG | 10 |
| 2003443 | Bromide Standard 1000 ppm | 08/07/2020 | ** Vendor ** | 01/31/2022 | 08/07/2020 14:40 by JG | 2 |
| 2005009 | Nitrite Standard Solution 1000ppm stock | 11/30/2020 | ** Vendor ** | 04/30/2021 | 11/30/2020 08:17 by JG | 10 |
| 2005010 | Fluoride Standard Solution 1000ppm stock | 11/30/2020 | ** Vendor ** | 03/31/2022 | 11/30/2020 08:45 by JG | 8 |
| 2005012 | Sulfate Standard Solution 1000 ppm stock | 11/30/2020 | ** Vendor ** | 10/31/2022 | 11/30/2020 08:45 by JG | 50 |

Analytical Standard Record

Turner Laboratories, Inc.

1904040

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Nitrate Standard Solution 1000ppm stock | Expires: | 08/31/2023 |
| Standard Type: | Other | Prepared: | 09/28/2019 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 1 | Last Edit: | 09/28/2019 10:34 by EJ |

CAT# 1279249

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Nitrate (As N) | 14797-55-8 | 1000 | ug/mL |

Lot #: A9240
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2001540

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Chloride Standard Solution 1000 ppm stock | Expires: | 03/14/2025 |
| Standard Type: | Other | Prepared: | 04/14/2020 |
| Solvent: | na | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 2 | Last Edit: | 07/21/2020 14:31 by JG |

Cat# 183-49

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Chloride | 16887-00-6 | 1000 | ug/mL |

Lot #: A0087

Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2001966

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Phosphorous Standard Solution 1000ppm stock | Expires: | 04/14/2024 |
| Standard Type: | Other | Prepared: | 05/06/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | IC |
| Vials: | 2 | Last Edit: | 05/08/2020 09:59 by JG |

CAT# 2321142
2 BOTTLE

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 1000 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 1000 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 1000 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 1000 | ug/mL |

Lot #: A0104
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2003443

| | | | |
|---------------------|---------------------------|--------------|------------------------|
| Description: | Bromide Standard 1000 ppm | Expires: | 01/31/2022 |
| Standard Type: | Other | Prepared: | 08/07/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 120 | Department: | IC |
| Vials: | 1 | Last Edit: | 08/07/2020 14:40 by JG |

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Bromide | 24959-67-9 | 1000 | ug/mL |

Lot #: 4007J86
Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2005009

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Nitrite Standard Solution 1000ppm stock | Expires: | 04/30/2021 |
| Standard Type: | Other | Prepared: | 11/30/2020 |
| Solvent: | H2O | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 2 | Last Edit: | 11/30/2020 08:17 by JG |

CAT # 5461-16

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Nitrite (As N) | 14797-65-0 | 1000 | ug/mL |

Lot #: 4010P18

Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2005010

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Fluoride Standard Solution 1000ppm stock | Expires: | 03/31/2022 |
| Standard Type: | Other | Prepared: | 11/30/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 120 | Department: | IC |
| Vials: | 2 | Last Edit: | 11/30/2020 08:45 by JG |

Cat# 3173-4

| Analyte | CAS Number | Concentration | Units |
|----------|------------|---------------|-------|
| Fluoride | 16984-48-8 | 1000 | ug/mL |

Lot #: 1009D66
Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2005012

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Sulfate Standard Solution 1000 ppm stock | Expires: | 10/31/2022 |
| Standard Type: | Other | Prepared: | 11/30/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 2 | Last Edit: | 11/30/2020 08:45 by JG |

Cat# 2175749

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Sulfate | 14808-79-8 | 1000 | ug/mL |

Lot #: A0287

Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2101329

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | IC CAL # 2 (CCV) | Expires: | 04/08/2021 |
| Standard Type: | Calibration Standard | Prepared: | 04/07/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/08/2021 10:49 by JG |

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 2.5 | ug/mL |
| Sulfate | 14808-79-8 | 12.5 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 2.5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As Orthophosphate (as P) | 7723-14-0 | 2.5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 2.5 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 5 | ug/mL |
| Fluoride | 16984-48-8 | 2 | ug/mL |
| Chloride | 16887-00-6 | 12.5 | ug/mL |
| Bromide | 24959-67-9 | 0.5 | ug/mL |

Lot #: NA
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|-------------------------------------|------------|--------------|------------|------------------------|-------|
| 2101270 | IC Spike/High Intermediate Standard | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 2.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101330

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | PQL Check | Expires: | 04/08/2021 |
| Standard Type: | Calibration Standard | Prepared: | 04/07/2021 |
| Solvent: | H2O | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | IC |
| Vials: | 1 | Last Edit: | 04/08/2021 10:49 by JG |

| Analyte | CAS Number | Concentration | Units |
|--|------------|---------------|-------|
| Total Phosphorus (as P) | 7723-14-0 | 0.5 | ug/mL |
| Sulfate | 14808-79-8 | 5 | ug/mL |
| Phosphorus, Orthophosphate (As P) | 7723-14-0 | 0.5 | ug/mL |
| Phosphorus, Dissolved Orthophosphate (As | 7723-14-0 | 0.5 | ug/mL |
| Orthophosphate (as P) | 7723-14-0 | 0.5 | ug/mL |
| Nitrogen, Nitrite (As N) | 14797-65-0 | 0.1 | ug/mL |
| Nitrogen, Nitrate (As N) | 14797-55-8 | 0.5 | ug/mL |
| Fluoride | 16984-48-8 | 0.5 | ug/mL |
| Chloride | 16887-00-6 | 1 | ug/mL |
| Bromide | 24959-67-9 | 0.1 | ug/mL |

Lot #: NA
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|---|------------|--------------|------------|------------------------|-------|
| 2101271 | IC Spike/Low Intermediate Standard Solution | 04/05/2021 | Jenna Gossen | 05/05/2021 | 04/06/2021 09:18 by JG | 1 |

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01
2104142-MS1
2104142-MSD1

Alkalinity
SM 2320B

Analysis Date – April 9, 2021

| <u>Section</u> | <u>Page</u> |
|---------------------------------------|-------------|
| Prep Batch | 337 |
| Bench sheet | 339 |
| Standard log entries and traceability | 341 |

Date Prepared: 04/09/2021 8:00:00AM

Prep Batch: 2104142 Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /ul | Spike 2 Added /ul | Final Vol (ml) | Comments |
|-------------|-------------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|----------|
| 2104142-BLK | Blank | Non-Potable Water | | 50 | / | / | 50 | |
| 2104142-BS1 | LCS | Non-Potable Water | | 50 | 2101306/250 | / | 50 | |
| 2104142-BSD | LCS Dup | Non-Potable Water | | 50 | 2101306/250 | / | 50 | |
| 2104142-MS1 | Matrix Spike [21D0115-01] | Non-Potable Water | | 50 | 2101306/250 | / | 50 | |
| 2104142-MSD | Matrix Spike Dup [21D0115-01] | Non-Potable Water | | 50 | 2101306/250 | / | 50 | |
| 21D0115-01 | Discharge | Non-Potable Water | | 50 | | | 50 | |
| 21D0146-01 | Well | Drinking Water | | 50 | | | 50 | |
| 21D0148-01 | MW19-12-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-02 | BW-1-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-03 | VW20-16-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-04 | VW20-13-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-05 | TJ-DW19-1RRR-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-06 | TJ-MW19-13-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-07 | TW-542020-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0152-01 | Well #14 | Drinking Water | | 50 | | | 50 | |
| 21D0186-01 | AVRW0105 | Drinking Water | | 50 | | | 50 | |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 50 | | | 50 | |
| 21D0217-01 | 500 S 3rd Ave | Drinking Water | | 50 | | | 50 | |
| 21D0219-01 | AVRW0106 | Drinking Water | | 50 | | | 50 | |
| 21D0219-02 | AVRW0107 | Drinking Water | | 50 | | | 50 | |
| 21D0247-01 | HC-17 | Non-Potable Water | | 50 | | | 50 | |
| 21D0253-01 | Well #23 | Drinking Water | | 50 | | | 50 | |
| 21D0256-01 | Effluent | Non-Potable Water | | 50 | | | 50 | |

Analysis: Alkalinity

Date Prepared: 04/09/2021 10:00:00AM

Prep Batch: 2104142

Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Final Vol (ml) | Spike 2 Added /uL | Comments | | | | | | | | | | | | | | | | |
|--|---|----------|--|---------------------|-------------------|----------------|-------------------|----------|--------|----------------|----------|------------|---------|--|---------|--|---------|----------------------------------|--|--|---------|---|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Number</th> <th>Reagent Name</th> <th>Spike ID</th> <th>Spike Name</th> </tr> </thead> <tbody> <tr> <td>2000154</td> <td>Alkalinity (Phenolphthalein Indicator)</td> <td>2101306</td> <td>Alkalinity (Sodium Carbonate Spike Solution)</td> </tr> <tr> <td>2004945</td> <td>Alkalinity (0.02N Sulfuric Acid)</td> <td></td> <td></td> </tr> <tr> <td>2100856</td> <td>Alkalinity (Bromocresol green/Methyl Red Indi</td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | | Number | Reagent Name | Spike ID | Spike Name | 2000154 | Alkalinity (Phenolphthalein Indicator) | 2101306 | Alkalinity (Sodium Carbonate Spike Solution) | 2004945 | Alkalinity (0.02N Sulfuric Acid) | | | 2100856 | Alkalinity (Bromocresol green/Methyl Red Indi | | |
| Number | Reagent Name | Spike ID | Spike Name | | | | | | | | | | | | | | | | | | | | | |
| 2000154 | Alkalinity (Phenolphthalein Indicator) | 2101306 | Alkalinity (Sodium Carbonate Spike Solution) | | | | | | | | | | | | | | | | | | | | | |
| 2004945 | Alkalinity (0.02N Sulfuric Acid) | | | | | | | | | | | | | | | | | | | | | | | |
| 2100856 | Alkalinity (Bromocresol green/Methyl Red Indi | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Number</th> <th>Surrogate Name</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | | Number | Surrogate Name | | | | | | | | | | | | | | |
| Number | Surrogate Name | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Analysis: Alkalinity

Analyst: Alkalinity
Batch: 21D0148

Analyst: CB
Method: SM2320B
Date: 04-09-21

COPY

Prop: 0800
Analyzed: 1050

| Sample ID | Method Blank | Conc. (100mL) | Readout | Results mg/L | Quality Control Data-Spikes | | |
|-----------|--------------|---------------|--------------------|--------------|-----------------------------|---------|---------|
| | | | | | Amount Spiked mg/L | % REC % | % RPD % |
| 1 | LCSD | 21D0115-01 | 0.1 | 1.0 | 260 | 96.6% | |
| 2 | LCSD | 21D0148-01 | 12.1 | 242 | 260 | 96.8% | |
| 3 | LCSD | 21D0148-01 | 12.2 | 244 | 260 | 97.6% | 0.92% |
| 4 | | 21D0115-01 | 6.5 | 130 | | | |
| 5 | | 21D0148-01 | 12.1 | 242 | | | |
| 6 | | 21D0148-01 | 12.1 | 242 | | | |
| 7 | | 21D0148-01 | 12.1 | 242 | | | |
| 8 | | 21D0148-01 | 12.1 | 242 | | | |
| 9 | | 21D0148-01 | 12.1 | 242 | | | |
| 10 | | 21D0152-01 | 9.2 | 184 | | | |
| 11 | | 21D0186-01 | 3.3 | 66 | | | |
| 12 | | 21D0200-01 | 7.2 | 144 | | | |
| 13 | | 21D0217-01 | 9.4 | 188 | | | |
| 14 | | 21D0219-01 | 9.3 | 186 | | | |
| 15 | | 21D0247-01 | 16.4 | 328 | | | |
| 16 | | 21D0248-01 | PH=2.35 PH=1.97 | | | | |
| 17 | | 21D0253-01 | 5.7 | 114 | | | |
| 18 | | 21D0256-01 | 15.9 (PH=4.55) | 318 | | | |
| 19 | | 21D0115-01 | 18.5 | 370 | | | |
| 20 | | 21D0115-01 | 18.5 | 370 | | | |

Calibration Standard ID

2101306

Reagent: 0.02 N H2SO4

Bromocresol: 2004945

Phenolphthalein: 2100856

% REC = (Con. Sample + Spike) / (Con. Sample) * 100
% RPD = (1st Conc. - 2nd Conc.) / Average Conc. * 100
Potential Interference used due to color interference

Due to pH < 4.5 the following samples cannot be analyzed for alkalinity:

21D0248-01
21D0248-01
↓ -02

X The pH of sample 21D0148-01 was 12.13 which exceeds

Analysis: Alkalinity
 Batch: 2104142

Analyst: CB
 Method: SM2320B
 Date: 04-09-21



Prep: 0800
 Analyzed: 1050

| Sample ID | DF | Titration | | Results mg/L | | | | |
|--------------------|----|-----------|-----|--------------|-----|------|-----|------|
| | | P | T | HCO3 | CO3 | OH | T | P |
| 1 21D0148-01 | - | 66.1 | 1.2 | 0 | 0 | 2616 | 28 | 1322 |
| 2 \downarrow -04 | - | 0.6 | 6.6 | 108 | 24 | 0 | 132 | 12 |
| 3 21D0152-01 | - | 0.1 | 4.3 | 82 | 4 | 0 | 86 | 2 |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |

Calibration Standard ID 21041-2101306
 CB 04-09-21

OC= (Con. Sample + Spike) - (Conc. Sample) / Conc. Spike
 TD= (1st Conc. - 2nd Conc.) X 100 / Average Conc.

10/1/21

Reagent: 0.02N H2SO4: 2004945
 Indicators: Bromocresol: 2100856
 Phenolphthalein: 20001574

Analytical Standard Record

Turner Laboratories, Inc.

2101306

| | | | |
|---------------------|--|--------------|-------------------------|
| Description: | Alkalinity (Sodium Carbonate Spike Solution) | Expires: | 04/14/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/07/2021 |
| Solvent: | DI | Prepared By: | Cooper Block |
| Final Volume (mls): | 50 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/07/2021 16:30 by CWB |

Dissolve 12.5g sodium carbonate powder (2005014) in 250mL DI or
2.5g sodium carbonate in 50mL DI
1 week expiration

| Analyte | CAS Number. | Concentration | Units |
|---|-------------|---------------|-------|
| Alkalinity, Total (As CaCO ₃) | ALK | 50000 | ug/mL |
| Alkalinity, Bicarbonate (As CaCO ₃) | ALKBICARB | 50000 | ug/mL |

Lot #: NA
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

2005014

| | | | |
|---------------------|----------------------------|--------------|------------------------|
| Description: | SODIUM CARBONATE ANHYDROUS | Expires: | 11/30/2021 |
| Standard Type: | Reagent | Prepared: | 11/30/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | IC |
| Vials: | 1 | Last Edit: | 11/30/2020 08:45 by JG |

Cat#: LC22965

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: K246-22
Vendor: LAB CHEM

Analytical Standard Record

Turner Laboratories, Inc.

2004945

| | | | |
|---------------------|----------------------------------|--------------|-------------------------|
| Description: | Alkalinity (0.02N Sulfuric Acid) | Expires: | 10/31/2023 |
| Standard Type: | Reagent | Prepared: | 11/23/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 4000 | Department: | WETCHEM |
| Vials: | 2 | Last Edit: | 11/23/2020 11:52 by CWB |

CAT# 8200-1

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 2010J85
Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2000154

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | Alkalinity (Phenolphthalein Indicator) | Expires: | 07/10/2021 |
| Standard Type: | Reagent | Prepared: | 01/09/2020 |
| Solvent: | NA | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 100 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 01/14/2020 10:40 by JG |

1.0g phenolphthalein powderl (1500442) dissolved in 100mL Isopropyl Alcohol (1901645).

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: NA
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

1500442

| | | | |
|---------------------|-------------------------|--------------|------------------------|
| Description: | Phenolphthalein, powder | Expires: | 04/29/2021 |
| Standard Type: | Reagent | Prepared: | 02/04/2015 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 5 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 06/19/2017 11:31 by LH |

Re-test reagent 04/29/2021.

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 0000099135
Vendor: J.T. Baker

Analytical Standard Record

Turner Laboratories, Inc.

1901645

| | | | |
|---------------------|--------------------------------|--------------|------------------------|
| Description: | Isopropyl Alcohol 99.5% GR ACS | Expires: | 04/21/2024 |
| Standard Type: | Reagent | Prepared: | 04/22/2019 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1000 | Department: | WETCHEM |
| Vials: | 2 | Last Edit: | 08/20/2020 15:03 by EJ |

| |
|---|
| Cat# PX1835-9 A.K.A. Isopropanol 2 1L Bottles |
|---|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

| | |
|---------|-------|
| Lot #: | 58114 |
| Vendor: | EMD |

Analytical Standard Record

Turner Laboratories, Inc.

2100856

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | Alkalinity (Bromocresol green/Methyl Red Indicator) | Expires: | 09/08/2022 |
| Standard Type: | Reagent | Prepared: | 03/08/2021 |
| Solvent: | ISOPROPYL | Prepared By: | Cooper Block |
| Final Volume (mls): | 100 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 03/30/2021 09:58 by JG |

0.10g bromocresol green powder (1600102) and 0.02g Methyl red powder (2004825) dissolved in 100mL Isopropyl alcohol (1901645).

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: NA
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

1600102

| | | | |
|---------------------|--------------------------|--------------|------------------------|
| Description: | Bromocresol Green Powder | Expires: | 01/11/2023 |
| Standard Type: | Reagent | Prepared: | 01/12/2016 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 5 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 01/26/2021 09:14 by JG |

Restest on 1-11-21 Passed Extended 2 years

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | ug/mL |

Lot #: 5180
Vendor: EMD

Analytical Standard Record

Turner Laboratories, Inc.

2004825

Description: Methyl Red Powder
Standard Type: Reagent
Solvent: n/a
Final Volume (mls): 25
Vials: 1

Expires: 11/13/2025
Prepared: 11/13/2020
Prepared By: ** Vendor **
Department: WETCHEM
Last Edit: 11/13/2020 13:48 by EJ

25g bottle recieved

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: MKCJ94762
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2101306

| | | | |
|---------------------|--|--------------|-------------------------|
| Description: | Alkalinity (Sodium Carbonate Spike Solution) | Expires: | 04/14/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/07/2021 |
| Solvent: | DI | Prepared By: | Cooper Block |
| Final Volume (mls): | 50 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/07/2021 16:30 by CWB |

Dissolve 12.5g sodium carbonate powder (2005014) in 250mL DI or
2.5g sodium carbonate in 50mL DI
1 week expiration

| Analyte | CAS Number | Concentration | Units |
|---|------------|---------------|-------|
| Alkalinity, Total (As CaCO ₃) | ALK | 50000 | ug/mL |
| Alkalinity, Bicarbonate (As CaCO ₃) | ALKBICARB | 50000 | ug/mL |

Lot #: NA
Vendor: NA

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01

2104100-DUP1

Total Dissolved Solids

SM2540C

Analysis Date- April 9, 2021

| <u>Section</u> | <u>Page</u> |
|----------------|-------------|
| Prep batch | 352 |
| Bench sheet | 354 |

Date Prepared: 04/08/2021 5:00:00PM

Prep Batch: 2104100 Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /ul | Spike 2 Added /ul | Final Vol (ml) | Comments |
|-------------|------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|----------|
| 2104100-DUP | Duplicate [21D0106-01] | Non-Potable Water | | 1 | / | / | 1 | |
| 2104100-DUP | Duplicate [21D0106-03] | Non-Potable Water | | 1 | / | / | 1 | |
| 2104100-DUP | Duplicate [21D0215-01] | Non-Potable Water | | 1 | / | / | 1 | |
| 21C0683-17 | WS PE1304 | Drinking Water | | 1 | | | 1 | |
| 21C0685-03 | RAFF AF | Non-Potable Water | | 1 | | | 1 | |
| 21D0032-01 | Well | Drinking Water | | 1 | | | 1 | |
| 21D0035-01 | VW20-12-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-02 | CW21-02-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-03 | CW-211818-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-04 | TW21-01-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-05 | AML-GWB-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-06 | TW-597785-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-07 | CW-803876-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-08 | AML-GW-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0035-09 | CW-590681-20210401 | Drinking Water | | 1 | | | 1 | |
| 21D0092-17 | HJRW | Drinking Water | | 1 | | | 1 | |
| 21D0106-01 | Feed | Drinking Water | | 1 | | | 1 | |
| 21D0106-02 | Permeate | Drinking Water | | 1 | | | 1 | |
| 21D0106-03 | Concentrate | Drinking Water | | 1 | | | 1 | |
| 21D0126-01 | AVRW0104 | Drinking Water | | 1 | | | 1 | |
| 21D0146-01 | Well | Drinking Water | | 1 | | | 1 | |
| 21D0148-01 | MW19-12-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-02 | BW-1-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-03 | VW20-16-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-04 | VW20-13-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-05 | TJ-DW19-1RRR-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-06 | TJ-MW19-13-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0148-07 | TW-542020-20210405 | Drinking Water | | 1 | | | 1 | |
| 21D0152-01 | Well #14 | Drinking Water | | 1 | | | 1 | |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 1 | | | 1 | |
| 21D0215-01 | Feed | Drinking Water | | 1 | | | 1 | |
| 21D0215-02 | Permeate | Drinking Water | | 1 | | | 1 | |
| 21D0215-03 | Concentrate | Drinking Water | | 1 | | | 1 | |

Analysis: Total Dissolved Solids

Date Prepared: 04/08/2021 5:00:00PM

Prep Batch: 2104100

Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Final Vol (ml) | Spike 2 Added /uL | Comments |
|-----------|----------------------|--------|----|---------------------|-------------------|----------------|-------------------|----------------|
| Number | Reagent Name | | | | | | Number | Surrogate Name |
| | | | | | | | | |

Analysis: Total Dissolved Solids

Batch: 2104100

SOP: INORG-32

Date Prepared: 04/08/2021 8:15:00AM

Hold Time: 7 Days

Prep Code: GEN CHEM

Technician: CWB

PQL: 20mg/L

Initial Oven Temperature 180°C

Repeat Oven Temperature 180°C

Initial Oven Drying Cycle Times/Date 04-08-21 04-08-21

Repeat Oven Drying Cycle Times/Date 04-08-21 04-08-21

Initial Weighing Time/Date 04-04-21 10:30

Repeat Weighing Time/Date 04-04-21 11:00

| Sample ID | Sample ID and Source | Volume of Sample | Weight of Dish | Initial Weight of Evap Dish + Residue | Initial Weight of Residue | Repeat Weight of Evap Dish + Residue | Repeat Weight of Residue | Difference in Weight of Residue | Sample Result * | % RPD | Comments |
|-----------|--------------------------------------|------------------|----------------|---------------------------------------|---------------------------|--------------------------------------|--------------------------|---------------------------------|-----------------|-------|----------|
| B2 | P2104100-DUP1 Duplicate [21D0106-01] | 25 | 88.2069 | 88.41091 | 0.2022 | 88.4106 | 0.2027 | 1.5 | RB | 1.9% | 8072 |
| WH | P2104100-DUP2 Duplicate [21D0106-03] | ↓ | 83.2742 | 83.7217 | 0.4475 | 83.7213 | 0.4471 | 0.4 | RB | 0.09% | 17884 |
| JK | P2104100-DUP3 Duplicate [21D0215-01] | ↑ | 80.1523 | 80.3548 | 0.2025 | 80.3558 | 0.2035 | 1.0 | RB | 0.25% | 8084 |
| BS | P21C0683-17 WSP PE1304 | 100 | 81.0222 | 81.0641 | 0.0419 | 81.0589 | 0.0367 | 6.2 | RB | | 339 |
| Li | P21C0685-03 RAFF_AF | 10 | 82.0634 | 82.1451 | 0.0817 | 82.1450 | 0.0816 | 0.1 | RB | | 8160 |
| B5 | P21D0032-01 Well | 100 | 80.3242 | 82.2350 | 1.9108 | 82.2351 | 1.9109 | 0.1 | RB | | 19109 |
| O2 | P21D0035-01 VW20-12-20210401 | ↓ | 89.4275 | 89.51639 | 0.1364 | 89.51644 | 0.1369 | 0.5 | RB | | 1365 |
| Q1 | P21D0035-02 CW21-02-20210401 | ↓ | 83.1005 | 83.1733 | 0.0728 | 83.1746 | 0.0741 | 1.3 | RB | | 731 |
| Q2 | P21D0035-03 CW21-02-20210401 | ↓ | 80.3109 | 80.3744 | 0.0635 | 80.3745 | 0.0636 | 0.1 | RB | | 636 |
| Q3 | P21D0035-04 TW21-01-20210401 | ↓ | 83.6388 | 83.6974 | 0.0586 | 83.6978 | 0.0590 | 0.4 | RB | | 590 |
| Q4 | P21D0035-05 AMI-GWB-20210401 | ↓ | 81.7020 | 81.7017 | -0.0003 | 81.7021 | 0.0001 | 0.4 | RB | | 1 |
| Q5 | P21D0035-06 TW-597785-20210401 | ↓ | 82.8230 | 82.8621 | 0.0391 | 82.8624 | 0.0394 | 0.3 | RB | | 394 |
| Q6 | P21D0035-07 CW-803876-20210401 | ↓ | 82.4408 | 82.4775 | 0.0367 | 82.4789 | 0.0381 | 1.4 | RB | | 367 |
| Q7 | P21D0035-08 AMI-GW-20210401 | ↓ | 84.3839 | 84.4201 | 0.0362 | 84.4214 | 0.0375 | 1.3 | RB | | 381 |
| Q8 | P21D0035-09 CW-590681-20210401 | ↓ | 84.9043 | 84.9327 | 0.0284 | 84.9333 | 0.0290 | 0.6 | RB | | 295 |
| Q9 | P21D0092-17 HJRW | ↓ | 89.7662 | 84.7856 | 0.0194 | 84.7867 | 0.0205 | 1.1 | RB | | 209 |
| Q10 | P21D0106-01 Feed | 25 | 80.2251 | 80.4341 | 0.2090 | 80.4334 | 0.2083 | 0.7 | RB | | 224 |
| Q11 | P21D0106-02 Permeate | 100 | 79.4128 | 79.4193 | 0.0065 | 79.4192 | 0.0064 | 0.1 | RB | | 64 |
| Q12 | P21D0106-03 Concentrate | 25 | 94.2483 | 94.6951 | 0.4468 | 94.6950 | 0.4467 | 0.1 | RB | | 17868 |
| Q13 | P21D0126-01 AVRW0102 | 100 | 77.3879 | 77.4857 | 0.0978 | 77.4858 | 0.0979 | 0.1 | RB | | 979 |
| Q14 | P21D0146-01 Well | ↓ | 80.5534 | 80.5963 | 0.0429 | 80.5967 | 0.0433 | 0.4 | RB | | 433 |
| Q15 | P21D0148-01 MW19-12-20210405 | ↓ | 90.0308 | 90.1795 | 0.1487 | 90.1787 | 0.1479 | 0.8 | RB | | 1460 |
| Q16 | P21D0148-02 BW-1-20210405 | ↓ | 90.6754 | 90.6770 | 0.0216 | 90.6982 | 0.0228 | 1.2 | RB | | 224 |

Balance Checked CG Date: 04-09-21, 04-11-21, 04-08-21

mw 411914

Initial Oven Temperature See Page 1
 Initial Oven Drying Cycle Times/Date _____
 Initial Weighing Time/Date _____

Repeat Oven Temperature See Page 1
 Repeat Oven Drying Cycle Times/Date _____
 Repeat Weighing Time/Date _____

| Sample ID | Sample ID and Source Sample | Volume of Sample | Weight of Evap Dish | Initial Weight of Evap Dish + Residue | Initial Weight of Residue | Repeat Weight of Evap Dish + Residue | Repeat Weight of Residue | Difference In Weight of Residue | Sample Result * | % RPD | Comments |
|-----------------|--------------------------------|------------------|---------------------|---------------------------------------|---------------------------|--------------------------------------|--------------------------|---------------------------------|-----------------|-------|----------|
| AT04 | P1D0148-03 VW-20-16-20210405 | 50 mL | 86.2490 | 86.3172 | 0.0682 | 86.3172 | 0.0682 | 0 | 68 mg/L | | |
| PB | P1D0148-04 VW-20-13-20210405 | 100 | 81.9230 | 81.9392 | 0.0162 | 81.9400 | 0.0170 | 0.8 | PB | | 170 |
| Mg | P1D0148-05 TSDW19-1RRR-2021040 | 50 | 81.3948 | 81.5020 | 0.1072 | 81.5039 | 0.1091 | 1.9 | PB | | 2169 |
| AN | P1D0148-06 TS-MW19-13-20210405 | ↓ | 79.2881 | 79.4320 | 0.1439 | 79.4316 | 0.1435 | 0.4 | 2870 | | |
| 2 nd | P1D0148-07 TW-542020-20210405 | 100 | 72.7332 | 72.7838 | 0.0506 | 72.7836 | 0.0504 | 0.2 | 504 | | |
| 2 nd | P1D0152-01 Well #14 | ↓ | 71.1399 | 71.1673 | 0.0274 | 71.1670 | 0.0271 | 0.3 | 271 | | |
| LPD | P1D0200-01 MW-9-20210407 | ↓ | 76.3350 | 76.3710 | 0.0360 | 76.3207 | 0.0357 | 0.3 | 357 | | |
| Ag | P1D0215-01 Feed | 25 | 74.3435 | 74.5457 | 0.2022 | 74.5461 | 0.2026 | 0.4 | 8104 | | |
| PLC | P1D0215-02 Permeate | 100 | 80.6945 | 80.7029 | 0.0084 | 80.7040 | 0.0065 | 1.1 | PB | | 55 |
| SF | P1D0215-03 Concentrate | 25 | 99.6717 | 99.7265 | 0.4548 | 99.7254 | 0.4537 | 1.1 | PB | | 18100 |

TDS (mg/L) = ((Weight of dish and residue - Weight of dish) x 1,000,000) / volume of sample
 Relative Percent Difference (RPD) = (1st value - 2nd value) / Average Value x 100
 *Final sample result calculated using the repeat weight.

low
 411312

Balance Checked CR Date: 04-09-21, 04-11-21, 04-28-21

Method: SM 2840C

RB3: 04-11-21
1630

Analysis: VD
Date/Time: 04-11-21
1630

FT4: 180°C
RB4: 04-12-21
0946-1314

Hold Time: 7 days
PAL: 20 mg/L
SOP: INORG-32

EW3: 04-12-21 | 0923

EW4: 04-12-21 | 1539

| Diab # | Sample ID | Sample Type | Volume of Sample | Weight of Hvy Dish | Weight of Hvy Dish + Residue | Initial Weight of Residue | Report Weight of Hvy Dish + Residue | Report Weight of Residue | Difference in Weight of Residue | Sample Residue | %RPD |
|--------|-------------|-------------|------------------|--------------------|------------------------------|---------------------------|-------------------------------------|--------------------------|---------------------------------|----------------|------|
| BK | 21D0106-01 | BUR SAMP | 25 ml | 88.2069 | 88.4087 | 0.2018 | - | - | < 0.6 mg or 4% | 8072 | |
| SKR | 21D0215-01 | BUR SAMP | ↓ | 80.1523 | 80.3544 | 0.2021 | - | - | 1.9 / 0.94% | 8084 | |
| 500x | 21C01683-17 | SAMP | 100 | 81.0222 | 81.0565 | 0.0343 | 81.0516 | 0.0339 | 1.4 / 0.69% | 339 | |
| O2 | 21D0035-01 | SAMP | ↓ | 89.4275 | 89.5640 | 0.1365 | - | - | 0.4 | 1365 | |
| Q1 | -02 | SAMP | ↓ | 83.1005 | 83.1716 | 0.0711 | 83.1733 | 0.0728 | 1.7 | RB | |
| BK | -07 | SAMP | ↓ | 82.4408 | 82.4771 | 0.0363 | 82.4774 | 0.0367 | 0.3 | 367 | |
| FML | -08 | SAMP | ↓ | 84.3839 | 84.4204 | 0.0365 | 84.4198 | 0.0359 | 0.5 | RB | |
| PE | -09 | SAMP | ↓ | 84.9043 | 84.9343 | 0.0300 | 84.9338 | 0.0295 | 1.8 / 0.64% | RB | |
| DW1 | 21D0092-17 | SAMP | ↓ | 84.7662 | 84.7871 | 0.0209 | - | - | 0.4 | 209 | |
| 18 | 21D0106-01 | SAMP | 25 | 80.2251 | 80.4307 | 0.2056 | - | - | 2.7 / 1.3% | 8224 | |
| CA | -03 | SAMP | ↓ | 94.2463 | - | - | - | - | | | |
| 80 | 21D0148-01 | SAMP | 100 | 90.0308 | 90.1768 | 0.1460 | - | - | 1.9 / 1.3% | 1460 | |
| R | -02 | SAMP | ↓ | 90.6754 | 90.6978 | 0.0224 | - | - | 0.4 | 224 | |
| Pb | -04 | SAMP | ↓ | 81.9230 | 81.9379 | 0.0149 | 81.9389 | 0.0159 | 1.0 | RB | |
| Mg | -05 | SAMP | 50 | 81.3948 | 81.5032 | 0.1084 | - | - | 0.7 / 0.64% | 2168 | |
| TL2 | 21D0215-02 | SAMP | 100 | 80.6975 | 80.7029 | 0.0054 | 80.7030 | 0.0055 | 0.1 | 55 | |
| SF | -03 | SAMP | 25 | 98.6719 | 99.1242 | 0.4525 | - | - | 1.2 / 0.26% | 18100 | |
| | | SAMP | | | | | | | | | |
| | | SAMP | | | | | | | | | |
| | | SAMP | | | | | | | | | |
| | | SAMP | | | | | | | | | |
| | | DUP | | | | | | | | | |

Rollup Percent Difference (RPD) = (1st value - 2nd value) / Average Value * 100
Final sample result calculated using the report weight.

Balance Checked *CS*

Comments

Www
04/13/21

08 04-12-21

Method: SM 2840C

1216: 1300
208: 04-12-21 04-13-21
1545 - 0835

Analyst: EK
Date/Time:
04-12-21
1545

1216: 1300
208: 04-13-21
1000 - 1309

Hold Time: 7 days
PAL: 20 mg/L
SOP: INORG-32

208: 04-13-21/0947

208: 04-13-21/1343

| Diab # | Sample ID | Sample Type | Volume of Sample ml | Weight of Evap Dish g | Initial Weight of Evap Dish + Residue g | Initial Weight of Residue g | Report Weight of Evap Dish + Residue g | Report Weight of Residue g | Difference in Weight of Residue | Sample Residue mg/L | %RPD |
|--------|------------|-------------|---------------------|-----------------------|---|-----------------------------|--|----------------------------|---------------------------------|---------------------|------|
| C1 | 21D0035-02 | SAMP | 100 | 83.1005 | 83.1736 | 0.0731 | - | - | < 0.6 mg or 4% | 731 | 6% |
| FML | -06 | SAMP | ↓ | 84.3939 | 84.4023 | 0.0084 | 84.4220 | 0.0381 | 0.3 | 381 | |
| PE | -09 | SAMP | | 84.9073 | 84.9338 | 0.0265 | - | - | 0 | 295 | |
| PB | 21D0148-04 | SAMP | ↓ | 81.9230 | 81.9404 | 0.0174 | 81.9400 | 0.0170 | 0.4 | 170 | |
| | | SAMP | | | | | | | | | |
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| | | SAMP | | | | | | | | | |
| | | SAMP | | | | | | | | | |
| | | DUP | | | | | | | | | |

Relative Percent Difference (RPD) = (Ret Value - 2nd Value) / Average Value * 100
Final sample result calculated using the report weight.

AS
04-12-21

Balance Checked

Comments

low
4/15/21

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.
21D0200-01
2104144-DUP1

Total Suspended Solids
SM2540D

Analysis Date – April 12, 2021

| <u>Section</u> | <u>Page</u> |
|----------------|-------------|
| Prep batch | 359 |
| Bench sheet | 361 |

Date Prepared: 04/12/2021 10:58:00AM

Prep Batch: 2104144 Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|--------------------|-------------------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|--------------------|
| 2104144-DUP | Duplicate [21D0149-02] | Non-Potable Water | | 1 | / | / | 1 | |
| 2104144-DUP | Duplicate [21D0175-02] | Non-Potable Water | | 1 | / | / | 1 | |
| 21D0111-01 | Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0112-01 | AMARG Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0118-01 | Loc 1-Bus Maint. by Pumps-Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0118-03 | Loc 2- Autoshop-Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0119-01 | Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0122-01 | Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0124-01 | Location 300 | Non-Potable Water | | 1 | | | 1 | |
| 21D0149-02 | Effluent | Non-Potable Water | | 1 | | | 1 | |
| 21D0175-01 | Inf Comp | Non-Potable Water | | 1 | | | 1 | |
| 21D0175-02 | Eff Comp | Non-Potable Water | | 1 | | | 1 | |
| 21D0176-01 | Composite | Non-Potable Water | | 1 | | | 1 | |
| 21D0177-03 | 040721-TSS | Non-Potable Water | | 1 | | | 1 | |
| 21D0178-01 | FDB | Non-Potable Water | | 1 | | | 1 | |
| 21D0184-01 | Comp | Non-Potable Water | | 1 | | | 1 | Custom Alert Level |
| 21D0185-01 | Tribal Herd DW62 Well Id 263 | Drinking Water | | 1 | | | 1 | |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 1 | | | 1 | |
| 21D0273-01 | Feed | Drinking Water | | 1 | | | 1 | |
| 21D0273-02 | Permeate | Drinking Water | | 1 | | | 1 | |
| 21D0273-03 | Concentrate | Drinking Water | | 1 | | | 1 | |

Analysis: Total Suspended Solids

Date Prepared: 04/12/2021 10:58:00AM

Prep Batch: 2104144 Prep Code: GEN CHEM

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Final Vol (ml) | Spike 2 Added /uL | Comments |
|-----------|----------------------|--------|----|---------------------|-------------------|----------------|-------------------|----------------|
| Number | Reagent Name | | | Spike ID | Spike Name | | Number | Surrogate Name |

Analysis: Total Suspended Solids

Batch: 2104144
Date Prepared: 04/11/2021 4:06:00PM

Prep Code: GEN CHEM
Initial Oven Temperature: 104°C
Initial Oven Drying Cycle Times/Date: 04-12-21 1058 - 1360
Initial Weighting Time/Date: 04-12-21 1316

Date Analyzed: 04-12-21
Repeat Oven Temperature: 104°C
Repeat Oven Drying Cycle Times/Date: 04-12-21 1326 - 1337
Repeat Weighting Time/Date: 04-12-21 1615

Technician: CWB

| Sample ID | Sample ID and Source | Volume of Sample | Weight of Filler & Pan | Initial Weight of Filler & Pan + Residue | Initial Weight of Residue | Repeat Weight of Filler & Pan + Residue | Repeat Weight of Residue | Difference in Weight of Residue | Sample Result * | % RPD | Comments |
|-----------|-------------------------------------|------------------|------------------------|--|---------------------------|---|--------------------------|---------------------------------|-----------------|-------|--------------------|
| 1 | 2104144-DUP1 Duplicate [21D0149-02] | 100 | 1.3893 | 1.3890 | -0.0003 | 1.3894 | 0.0002 | 0.4 | 2 | | Q9 |
| 2 | 2104144-DUP2 Duplicate [21D0175-02] | ↓ | 1.4191 | 1.4187 | -0.0004 | 1.4191 | 0 | 0.4 | 0 | | ↓ |
| 3 | 21D0111-01 Composite | 15 | 1.4232 | 1.4495 | 0.0263 | 1.4499 | 0.0267 | 0.4 | 1446.7 | | Q9 |
| 4 | 21D0112-01 ANARG Composite | 100 | 1.4172 | 1.4182 | 0.0010 | 1.4182 | 0.0010 | 0 | 10 | | Q9 |
| 5 | 21D0118-01 Loc 1-Bus Maint. by Pump | | 1.4080 | 1.4080 | 0 | 1.4084 | 0.0004 | 0.4 | 4 | | ↓ |
| 6 | 21D0118-03 Loc 2-Autoshop-Compos | | 1.3917 | 1.4075 | 0.0158 | 1.4077 | 0.0160 | 0.2 | 160 | | ↓ |
| 7 | 21D0119-01 Composite | | 1.4116 | 1.4116 | 0 | 1.4120 | 0.0004 | 0.4 | 2 | | Q9 |
| 8 | 21D0122-01 Composite | | 1.4097 | 1.4106 | 0.0009 | 1.4110 | 0.0013 | 0.4 | 13 | | ↓ |
| 9 | 21D0124-01 Location 300 | | 1.3994 | 1.4049 | 0.0055 | 1.4052 | 0.0058 | 0.3 | 58 | | |
| 10 | 21D0149-02 Effluent | ↓ | 1.4141 | 1.4138 | -0.0003 | 1.4142 | 0.0001 | 0.4 | 1 | | Q9 |
| 11 | 21D0175-01 Inf Comp | 15 | 1.4190 | 1.4906 | 0.0716 | 1.4910 | 0.0820 | 0.4 | 5466.7 | | |
| 12 | 21D0175-02 Eff Comp | 100 | 1.3998 | 1.3995 | -0.0003 | 1.3999 | 0.0001 | 0.4 | 1 | | Q9 |
| 13 | 21D0176-01 Composite | | 1.4050 | 1.4058 | 0.0008 | 1.4062 | 0.0012 | 0.4 | 12 | | ↓ |
| 14 | 21D0177-03 040721-TSS | | 1.4020 | 1.4021 | 0.0001 | 1.4024 | 0.0004 | 0.3 | 4 | | ↓ |
| 15 | 21D0178-01 FDB | | 1.4167 | 1.4199 | 0.0032 | 1.4203 | 0.0036 | 0.4 | 36 | | |
| 16 | 21D0184-01 Comp | | 1.4147 | 1.4240 | 0.0093 | 1.4244 | 0.0097 | 0.4 | 97 | | Custom Alert Level |
| 17 | 21D0185-01 Tribal Herd DW62 Well Id | | 1.4206 | 1.4204 | -0.0002 | 1.4208 | 0.0002 | 0.4 | 2 | | Q9 |
| 18 | 21D0200-01 MW-9-20210407 | | 1.3972 | 1.4071 | 0.0099 | 1.4075 | 0.0103 | 0.4 | 103 | | |
| 19 | 21D0273-01 Feed | ↓ | 1.4218 | 1.4225 | 0.0007 | 1.4229 | 0.0011 | 0.4 | 11 | | Q9 |
| 20 | 21D0273-02 Permeate | 50 | 1.3978 | 1.3974 | -0.0004 | 1.3978 | 0 | 0.4 | 0 | | ↓ |
| 21 | 21D0273-03 Concentrate | 25 | 1.4006 | 1.4353 | 0.0347 | 1.4353 | 0.0347 | 0 | 1388 | | |

TSS (mg/L) = (Weight of dish and residue - Weight of dish) x 1,000,000 / Volume of sample
Relative Percent Difference (RPD) = (1st value - 2nd value) / Average Value x 100
*Final sample result calculated using the repeat weight.

Balance Checked CB Date: 04-12-21

WMA
4/12/21

Analysis: TSS Filter Prep
Method: SM 2540D

Analyst: CB

SOP: INORG-33

Initial Oven Temp/Date/Time: 105°C / 04-06-21 / 1051--1230
Initial Weighing Time: 04-06-21 / 1250

Repeat Oven Temp/Date/Time: 105°C / 04-06-21 / 1309
Repeat Weighing Time: 04-06-21 / 1014

Silver

| Pan Number | Initial Dry Weight of Filter & Pan g | Repeat Dry Weight of Filter & Pan g | Difference in Weight <0.5 mg |
|------------|--------------------------------------|-------------------------------------|------------------------------|
| 1 | 1.3888 | 1.3892 | 0.4 |
| 2 | 1.4187 | 1.4191 | 0.4 |
| 3 | 1.4229 | 1.4232 | 0.3 |
| 4 | 1.4171 | 1.4172 | 0.1 |
| 5 | 1.39080 | 1.4080 | 0 |
| 6 | 1.3915 | 1.3917 | 0.2 |
| 7 | 1.4114 | 1.4116 | 0.2 |
| 8 | 1.4094 | 1.4097 | 0.3 |
| 9 | 1.3991 | 1.3994 | 0.3 |
| 10 | 1.4146 | 1.4141 | 0.1 |
| 11 | 1.4087 | 1.4090 | 0.3 |
| 12 | 1.3995 | 1.3998 | 0.3 |
| 13 | 1.4049 | 1.4056 | 0.1 |
| 14 | 1.4018 | 1.4020 | 0.2 |
| 15 | 1.4164 | 1.4167 | 0.3 |
| 16 | 1.4143 | 1.4147 | 0.4 |
| 17 | 1.4202 | 1.4206 | 0.4 |
| 18 | 1.3968 | 1.3972 | 0.4 |
| 19 | 1.4214 | 1.4218 | 0.4 |
| 20 | 1.3974 | 1.3978 | 0.4 |
| 21 | 1.4025 | 1.4029 | 0.4 |
| 22 | 1.4004 | 1.4006 | 0.2 |

Temperature measured in °C

JMM

Balance Checked

CB

4/13/21

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01

2104117-MS1

2104117-MSD1

Cyanide

SM4500-CN B,E

Analysis Date – April 8, 2021

| <u>Section</u> | <u>Page</u> |
|---------------------------------------|-------------|
| Prep batch | 364 |
| Bench sheet | 366 |
| Standard log entries and traceability | 367 |

Date Prepared: 04/08/2021 8:30:00AM

Prep Batch: 2104117 Prep Code: SPECTRO PREP Technician: JG

| Sample ID | Sample ID and Source Sample | Matrix | pH | Initial Volume (ml) | Spike 1 Added µl | Spike 2 Added µl | Final Vol (ml) | Comments |
|-------------|--------------------------------|-------------------|----|---------------------------|---------------------|---------------------|----------------------|-------------------|
| 2104117-BLK | Blank | Non-Potable Water | | 50 | / | / | 50 | |
| 2104117-BS1 | LCS | Non-Potable Water | | 50 | 2101351/1000 | / | 50 | |
| 2104117-BSD | LCS Dup | Non-Potable Water | | 50 | 2101351/1000 | / | 50 | |
| 2104117-MRL | MRL Check | Non-Potable Water | | 50 | 2101355/50 | / | 50 | |
| 2104117-MS1 | Matrix Spike [21D0035-07] | Non-Potable Water | | 50 | 2101351/1000 | / | 50 | |
| 2104117-MSD | Matrix Spike Dup [21D0035-07] | Non-Potable Water | | 50 | 2101351/1000 | / | 50 | |
| 21D0035-01 | VW20-12-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-02 | CW21-02-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-03 | CW211818-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-04 | TW21-01-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-05 | AMI-GWB-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-06 | TW-597785-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-07 | CW-803876-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-08 | AMI-GW-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0035-09 | CW-590681-20210401 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |
| 21D0112-02 | AMARG Grab | Non-Potable Water | | 50 | | | 50 | |
| 21D0115-01 | Discharge | Non-Potable Water | | 50 | | | 50 | |
| 21D0148-01 | MWV19-12-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-02 | BW-1-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-03 | VW20-16-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-04 | VW-20-13-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-05 | TSDW19-1RRR-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-06 | TS-MWV19-13-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0148-07 | TW-542020-20210405 | Drinking Water | | 50 | | | 50 | |
| 21D0178-02 | CSB #2 | Non-Potable Water | | 50 | | | 50 | |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 50 | | | 50 | Run as MS/MSD/DUP |

Analysis: Cyanide

Date Prepared: 04/08/2021 8:30:00AM

Prep Batch: 2104117 Prep Code: SPECTRO PREP

Technician: JG

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added μ L | Final Vol (ml) | Spike 2 Added μ L | Comments |
|-----------------------|---|--------|----|---------------------|-----------------------|----------------|-----------------------|----------|
| Number | | | | | | | | |
| 2100291 | CN - 51% Magnesium Chloride | | | | | | | |
| 2100416 | CN - Sulfamic Acid | | | | | | | |
| 2100509 | CN - Color Reagent | | | | | | | |
| 2100510 | CN - ACETATE BUFFER | | | | | | | |
| 2101347 | CN - 50% H2SO4 | | | | | | | |
| 2101352 | CN - 0.04 N Sodium Hydroxide Absorbion So | | | | | | | |
| 2101353 | CN Chloramine T | | | | | | | |
| Spike ID | | | | | | | | |
| 2101351 | Cyanide spike 2.0 ppm | | | | | | | |
| 2101355 | CN 100 ppm CVS/CCV | | | | | | | |
| Reagent Name | | | | | | | | |
| Spike Name | | | | | | | | |
| Number | | | | | | | | |
| Surrogate Name | | | | | | | | |

Analysis: Cyanide

Analysis: Cyanide
 Method: SM4500-BE/EPA 335.4
 Analyst: JG
 Date/Time: 4-8-21
 4-9-21
 2104117
 Date/Time: 08:30
 ANALYZED: 11:50
 Hold Time: 14 days
 POL: 0.10 mg/L
 SOP: INORG-13

| Sample ID | Type | pH | Chlorine (Y/N) | DF | Readout | mg/L | Std. ID | Conc. of Std | Aliquot of Std | Solvent | Final Volume | Final Conc. | %REC | %RPD |
|-------------------|---------|---------|----------------|----|---------|-------|---------|--------------|----------------|-------------|--------------|-------------|---------------|-------|
| 0.10 mg/L | ICAL | | | | 0.010 | | 2101354 | 10 | 1.0 | Reagent H2O | 1.0 | 0.10 | ± 10% GC/VICV | ± 15% |
| 0.50 mg/L | ICAL | | | | 0.194 | | | 10 | 0.1 | Reagent H2O | 1.0 | 0.50 | | |
| 1.0 mg/L | ICAL | | | | 0.436 | | | 10 | 0.2 | Reagent H2O | 1.0 | 1.0 | | |
| 2.0 mg/L | ICAL | | | | 0.847 | | | 10 | 0.3 | Reagent H2O | 1.0 | 2.0 | | |
| 3.0 mg/L | ICAL | | | | 1.249 | | 2101355 | 100 | 0.5 | Reagent H2O | 50 | 3.0 | 91.7 | |
| 1.0 mg/L | CVS | | | | 0.354 | 0.917 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | 91.6 | |
| 2.0 mg/L | ICV/IPC | | | | 0.748 | 1.832 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| Calibration Blank | CB | | | | 0.000 | 0.001 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| Method Blank | MBLK | | | | 0.001 | 0.001 | 2101351 | 100 | 1.0 | Reagent H2O | 50 | 2.0 | 95.5 / 92.9 | 2.8 |
| LCS | LCS | | | | 0.779 | 1.911 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| LCSD | LCSD | | | | 0.007 | 0.016 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 1 2100035-01 | SAMP | pH 7.2 | N | 1 | 0.003 | 0.006 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 2 2100035-01 | SAMP | | | | 0.004 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 3 | SAMP | | | | 0.006 | 0.013 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 4 | SAMP | | | | 0.001 | 0.001 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 5 | SAMP | | | | 0.005 | 0.013 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 6 | SAMP | | | | 0.006 | 0.015 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 7 | SAMP | | | | 0.005 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 8 | SAMP | | | | 0.003 | 0.008 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 9 | SAMP | | | | 0.003 | 0.008 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 10 2100112-02 | SAMP | | | | 0.771 | 1.939 | 2101355 | 100 | 1.0 | Reagent H2O | 50 | 2.0 | 92.0 | |
| 2.0 mg/L | CCV | | | | 0.000 | 0.001 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| Calibration Blank | CB | | | | 0.004 | 0.020 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 11 2100115-01 | SAMP | pH > 12 | N | 1 | 0.005 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 12 2100148-01 | SAMP | | | | 0.005 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 13 | SAMP | | | | 0.004 | 0.009 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 14 | SAMP | | | | 0.005 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 15 | SAMP | | | | 0.005 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 16 | SAMP | | | | 0.004 | 0.011 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 17 | SAMP | | | | 0.004 | 0.009 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 18 | SAMP | | | | 0.011 | 0.027 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | | |
| 19 2100178-02 | SAMP | | | | 0.005 | 0.011 | 2101351 | 100 | 1.0 | 210035-01 | 50 | 2.0 | 95.1 | |
| 20 2100200-01 | SAMP | | | | 0.797 | 1.901 | | 100 | 1.0 | | 50 | 2.0 | 93.9 | 1.3 |
| 2100355-01 | MSD | | | | 0.787 | 1.877 | | 100 | 1.0 | Reagent H2O | 50 | 2.0 | 96.6 | |
| 2.0 mg/L | CCV | | | | 0.610 | 1.932 | 2101355 | 100 | 1.0 | Reagent H2O | 50 | 0.1 | 77.3 | |
| Calibration Blank | PQL | | | | 0.032 | 0.077 | | 100 | 0.05 | Reagent H2O | 50 | 0.1 | | |
| Calibration Blank | PQL | | | | 0.000 | 0.001 | | 100 | 0.05 | Reagent H2O | 50 | 0.1 | | |

Relative Percent Difference (RPD) = (1st value - 2nd value) / Average Value * 100
 Percent Recovery (REC) = (100) ((Conc. Sample + Spike) - (Conc. Sample)) / Spike conc.
 CN = ((readout value - y-intercept) / slope) (Dilution Factor)
 Method Blank < PQL

Reagent IDs:
 0.04 N NaOH 2101352 Sulfamic Acid 2100416
 CN Color Reagent 2100509 Acetate Buffer 2100510
 Chloramine T 2101353 50% H2SO4 2101347
 51% Magnesium Chloride 2100291

Coefficient of Determination R²: 0.9912
 Slope: 0.4194
 y-intercept: -0.0004

Comments: WWS 4/14/21

CN.xls 3/31/2021

Analytical Standard Record

Turner Laboratories, Inc.

2101354

| | | | |
|---------------------|-------------------------------|--------------|------------------------|
| Description: | Cyanide spike 10 ppm CAL stds | Expires: | 04/10/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/09/2021 |
| Solvent: | na | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 25 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:25 by JG |

0.25 mL of 1000ppm KCN stock standard in 25 mLs of 0.04 N NaOH.

| Analyte | CAS Number | Concentration | Units |
|-----------------------------------|------------|---------------|-------|
| Cyanide, Amenable to Chlorination | 57-12-5 | 10 | ug/mL |
| Cyanide | 57-12-5 | 10 | ug/mL |

Lot #: na

Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2100091 | (KCN) CN 1000 ppm Stock Standard | 01/11/2021 | Jenna Gossen | 07/11/2022 | 01/11/2021 16:13 by JG | 0.25 |

Analytical Standard Record

Turner Laboratories, Inc.

2100091

| | | | |
|---------------------|----------------------------------|--------------|------------------------|
| Description: | (KCN) CN 1000 ppm Stock Standard | Expires: | 07/11/2022 |
| Standard Type: | Analyte Spike | Prepared: | 01/11/2021 |
| Solvent: | DI water | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 100 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 01/11/2021 16:13 by JG |

0.2510g KCN (1600763) in 100 mL, with one pellet of KOH as a preservative
18 MONTH IN LAB EXPIRATION

| Analyte | CAS Number | Concentration | Units |
|-----------------------------------|------------|---------------|-------|
| Cyanide, Amenable to Chlorination | 57-12-5 | 1000 | ug/mL |
| Cyanide | 57-12-5 | 1000 | ug/mL |

Lot #: 975321

Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

1600763

| | | | |
|---------------------|------------------------|--------------|------------------------|
| Description: | CN - Potassium Cyanide | Expires: | 02/28/2023 |
| Standard Type: | Reagent | Prepared: | 02/29/2016 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 25 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 03/02/2021 07:57 by JG |

P/N 207810-25G
Retested 3-1-21 Extended 2 years

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: MKBT5031V
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2101355

| | | | |
|---------------------|--------------------|--------------|------------------------|
| Description: | CN 100 ppm CVS/CCV | Expires: | 04/10/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/08/2021 |
| Solvent: | na | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 25 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:25 by JG |

2.5 mL -1000ppm NaCN stock standard in 25 ml 0.25N NaOH.

| Analyte | CAS Number | Concentration | Units |
|-----------------------------------|------------|---------------|-------|
| Cyanide, Amenable to Chlorination | 57-12-5 | 100 | ug/mL |
| Cyanide | 57-12-5 | 100 | ug/mL |

Lot #: na
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|--|----------|--------------|------------|------------------------|-------|
| 2100092 | (NaCN) CN 1000 ppm Stock Standard (CVS01/11/2021 | | Jenna Gossen | 07/11/2022 | 01/11/2021 16:14 by JG | 2.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2100092

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | (NaCN) CN 1000 ppm Stock Standard (CVS/CCV) | Expires: | 07/11/2022 |
| Standard Type: | Analyte Spike | Prepared: | 01/11/2021 |
| Solvent: | DI water | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 100 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 01/11/2021 16:14 by JG |

0.191g NaCN (1600762) in 100mL with one NaOH pellet added as a preservative

| Analyte | CAS Number | Concentration | Units |
|-----------------------------------|------------|---------------|-------|
| Cyanide, Amenable to Chlorination | 57-12-5 | 1000 | ug/mL |
| Cyanide | 57-12-5 | 1000 | ug/mL |

Lot #: 975321

Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

1600762

| | | | |
|---------------------|---------------------|--------------|------------------------|
| Description: | CN - Sodium Cyanide | Expires: | 02/28/2023 |
| Standard Type: | Reagent | Prepared: | 02/29/2016 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 100 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 03/02/2021 07:58 by JG |

P/N 380970-100g
Retested 3-1-21 retest extended 2 years

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: MKBX0939V
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2101351

| | | | |
|---------------------|-----------------------|--------------|------------------------|
| Description: | Cyanide spike 2.0 ppm | Expires: | 04/10/2021 |
| Standard Type: | Analyte Spike | Prepared: | 04/08/2021 |
| Solvent: | na | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 25 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:26 by JG |

2.5 ml -1000ppm KCN stock standard in 25 ml 0.25N NaOH.

| Analyte | CAS Number | Concentration | Units |
|-----------------------------------|------------|---------------|-------|
| Cyanide, Amenable to Chlorination | 57-12-5 | 100 | ug/mL |
| Cyanide | 57-12-5 | 100 | ug/mL |

Lot #: na
Vendor: NA

Parent Standards used in this standard:

| Standard | Description | Prepared | Prepared By | Expires | Last Edit | (mls) |
|----------|----------------------------------|------------|--------------|------------|------------------------|-------|
| 2100091 | (KCN) CN 1000 ppm Stock Standard | 01/11/2021 | Jenna Gossen | 07/11/2022 | 01/11/2021 16:13 by JG | 2.5 |

Analytical Standard Record

Turner Laboratories, Inc.

2101352

| | | | |
|---------------------|--|--------------|------------------------|
| Description: | CN - 0.04 N Sodium Hydroxide Absorbtion Solution | Expires: | 04/10/2021 |
| Standard Type: | Reagent | Prepared: | 04/09/2021 |
| Solvent: | DI water | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 1000 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:24 by JG |

1.6g NaOH (1902821) in 1 L

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: NA
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

2100509

| | | | |
|---------------------|--------------------|--------------|------------------------|
| Description: | CN - Color Reagent | Expires: | 08/09/2021 |
| Standard Type: | Reagent | Prepared: | 02/09/2021 |
| Solvent: | na | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 1000 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 02/12/2021 08:37 by JG |

60.0 g Barbarturic Acid (2003361), 300mL Pyridine (1904633), 60mL HCl (2003514), DI to 1000mL.
6 month expiration

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: na
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

2003361

| | | | |
|---------------------|----------------------|--------------|------------------------|
| Description: | CN - BARBITURIC ACID | Expires: | 08/04/2025 |
| Standard Type: | Reagent | Prepared: | 08/04/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 08/04/2020 12:30 by JG |

| |
|---|
| Part # 185698 PCode: 101943551 No expiration given by manufacturer - retest in 5 years. |
|---|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: WXBC8508V
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

1904633

| | | | |
|---------------------|---------------|--------------|------------------------|
| Description: | CN - PYRIDINE | Expires: | 10/30/2024 |
| Standard Type: | Reagent | Prepared: | 10/31/2019 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1000 | Department: | SPECTRO |
| Vials: | 3 | Last Edit: | 09/25/2020 09:47 by JG |

Part # 360570-1L
No expiration given by manufacturer, set to 5 years

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: SHBL2526
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2003514

| | | | |
|---------------------|-------------------------------|--------------|------------------------|
| Description: | Hydrochloric Acid Trace Metal | Expires: | 03/24/2023 |
| Standard Type: | Reagent | Prepared: | 08/13/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | ICP |
| Vials: | 4 | Last Edit: | 08/13/2020 12:24 by MH |

Received in lab: 4) 2.5 L HCl

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: 4120020
Vendor: Fisher

Analytical Standard Record

Turner Laboratories, Inc.

2101353

| | | | |
|---------------------|-----------------|--------------|------------------------|
| Description: | CN Chloramine T | Expires: | 04/10/2021 |
| Standard Type: | Reagent | Prepared: | 04/09/2021 |
| Solvent: | DI water | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 50 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:24 by JG |

0.5 g Chloramine T (1803484) (Retest 07/19/23) in 50mls DI water

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 47208

Vendor: EMD

Analytical Standard Record

Turner Laboratories, Inc.

1803484

| | | | |
|---------------------|-------------------------|--------------|------------------------|
| Description: | Chloramine T Trihydrite | Expires: | 07/19/2023 |
| Standard Type: | Reagent | Prepared: | 08/24/2018 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/05/2021 15:44 by JG |

100G BOTTLE RETEST 07/19/23

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 18241184
Vendor: GFS

Analytical Standard Record

Turner Laboratories, Inc.

2100416

Description: CN - Sulfamic Acid
Standard Type: Reagent
Solvent: n/a
Final Volume (mls): 100
Vials: 1

Expires: 01/31/2022
Prepared: 02/02/2021
Prepared By: ** Vendor **
Department: SPECTRO
Last Edit: 02/02/2021 09:18 by JG

1 BOTTLE 100G EACH
RETEST 01/31/2021

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: BCCC7172
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2100510

| | | | |
|---------------------|---------------------|--------------|------------------------|
| Description: | CN - ACETATE BUFFER | Expires: | 02/09/2022 |
| Standard Type: | Reagent | Prepared: | 02/09/2021 |
| Solvent: | na | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 500 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/05/2021 15:46 by JG |

Add approximately 247 g Anhydrous Sodium Acetate (2002713) to 500ml of Reagent Water.
Add approximately 500 mL Glacial Acetic Acid (1903871) to a final pH of 4.5.
1 YEAR EXP

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: n/a
Vendor: NA

Analytical Standard Record

Turner Laboratories, Inc.

2002713

Description: Sodium Acetate Anhydrous
Standard Type: Reagent
Solvent: N/A
Final Volume (mls): 500
Vials: 1

Expires: 05/11/2025
Prepared: 06/24/2020
Prepared By: Jenna Gossen
Department: SPECTRO
Last Edit: 06/24/2020 15:18 by JG

CAS# 127-09-3
Retest date : 5/ 11/ 2025

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 0000219656
Vendor: J.T. Baker

Analytical Standard Record

Turner Laboratories, Inc.

1903871

| | | | |
|---------------------|----------------------------------|--------------|------------------------|
| Description: | Acetic Acid, Glacial, Omni-Trace | Expires: | 05/14/2024 |
| Standard Type: | Reagent | Prepared: | 09/16/2019 |
| Solvent: | Acetic Acid | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | ICP |
| Vials: | 1 | Last Edit: | 09/16/2019 14:11 by EJ |

Acetic Acid
Item # AX0077-2
Retest 9/15/24, 5 year from manufacturer date

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: 59107
Vendor: EMD

Analytical Standard Record

Turner Laboratories, Inc.

2101347

| | | | |
|---------------------|---|--------------|------------------------|
| Description: | CN - 50% H ₂ SO ₄ | Expires: | 10/08/2022 |
| Standard Type: | Reagent | Prepared: | 04/08/2021 |
| Solvent: | n/a | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 1000 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/09/2021 08:07 by JG |

500 mL conc H₂SO₄ (2005234) in 500 mL DI H₂O
(18 month Exp)

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: n/a
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2005234

| | | | |
|---------------------|---------------|--------------|------------------------|
| Description: | Sulfuric Acid | Expires: | 12/16/2021 |
| Standard Type: | Reagent | Prepared: | 12/16/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | Hg |
| Vials: | 4 | Last Edit: | 12/21/2020 14:36 by LB |

| |
|--|
| Rcvd in lab: 4) 2.5 Liters P/N SX1247-2 93-98% OmniTrace |
|--|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: 60150
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2100291

| | | | |
|---------------------|-----------------------------|--------------|------------------------|
| Description: | CN - 51% Magnesium Chloride | Expires: | 05/31/2022 |
| Standard Type: | Reagent | Prepared: | 01/22/2021 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1000 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 01/22/2021 15:32 by EJ |

CAT# 4470-32

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 1005E34
Vendor: Ricca

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01

2104145-MS1

2104145-MSD1

Nitrogen, Ammonia as N

SM450-NH3 B,C

Analysis Date – April 9, 2021

| Section | Page |
|---------------------------------------|-------------|
| Prep batch | 389 |
| Bench Sheet | 391 |
| Standard log entries and traceability | 392 |

Date Prepared: 04/09/2021 10:30:00AM

Prep Batch: 2104145 Prep Code: GEN CHEM

Technician: JG

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments |
|-------------|-------------------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|--------------------------|
| 2104145-BLK | Blank | Non-Potable Water | | 25 | / | / | 25 | |
| 2104145-BS1 | LCS | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 2104145-BSD | LCS Dup | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 2104145-MRL | MRL Check | Non-Potable Water | | 25 | 1903267/125 | / | 25 | |
| 2104145-MS1 | Matrix Spike [21D0005-01] | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 2104145-MS2 | Matrix Spike [21D0008-01] | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 2104145-MSD | Matrix Spike Dup [21D0005-01] | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 2104145-MSD | Matrix Spike Dup [21D0008-01] | Non-Potable Water | | 25 | 1903267/1250 | / | 25 | |
| 21C0652-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0001-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0005-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0008-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0035-05 | AMI-GWb-20210401 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0035-06 | TW-597785-20210401 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0035-07 | CW-803876-20210401 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0035-08 | AMI-GW-20210401 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0035-09 | CW-590681-20210401 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0113-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0120-01 | Reclaim | Non-Potable Water | | 25 | | | 25 | |
| 21D0148-01 | MW19-12-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-02 | BW-1-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-03 | VW20-16-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-04 | VW-20-13-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-05 | TSDW19-1RRR-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-06 | TS-MW19-13-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0148-07 | TW-542020-20210405 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0175-03 | Eff Grab | Non-Potable Water | | 25 | | | 25 | Art Dechlorinates |
| 21D0200-01 | MW-9-20210407 | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |

Analysis: Nitrogen, Ammonia as N

Date Prepared: 04/09/2021 10:30:00AM

Prep Batch: 2104145 Prep Code: GEN CHEM

Technician: JG

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /uL | Spike 2 Added /uL | Final Vol (ml) | Comments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------------------|----------|-----------------|---------------------|-------------------|-------------------|----------------|----------|--------|--------------|----------|------------|--------|----------------|---------|---------------------|---------|-----------------|--|--|---------|----------------------------------|--|--|--|--|---------|------------------------------|--|--|--|--|---------|------------------------------|--|--|--|--|---------|-----------------------|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Number</th> <th>Reagent Name</th> <th>Spike ID</th> <th>Spike Name</th> <th>Number</th> <th>Surrogate Name</th> </tr> </thead> <tbody> <tr> <td>2004590</td> <td>1N NaOH for Ammonia</td> <td>1903267</td> <td>Ammonia 100 ppm</td> <td></td> <td></td> </tr> <tr> <td>2004945</td> <td>Alkalinity (0.02N Sulfuric Acid)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2101241</td> <td>1N Sulfuric Acid for Ammonia</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2101377</td> <td>Ammonia Boric Acid Indicator</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2101378</td> <td>Ammonia Borate Buffer</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | | | | Number | Reagent Name | Spike ID | Spike Name | Number | Surrogate Name | 2004590 | 1N NaOH for Ammonia | 1903267 | Ammonia 100 ppm | | | 2004945 | Alkalinity (0.02N Sulfuric Acid) | | | | | 2101241 | 1N Sulfuric Acid for Ammonia | | | | | 2101377 | Ammonia Boric Acid Indicator | | | | | 2101378 | Ammonia Borate Buffer | | | | |
| Number | Reagent Name | Spike ID | Spike Name | Number | Surrogate Name | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2004590 | 1N NaOH for Ammonia | 1903267 | Ammonia 100 ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2004945 | Alkalinity (0.02N Sulfuric Acid) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2101241 | 1N Sulfuric Acid for Ammonia | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2101377 | Ammonia Boric Acid Indicator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2101378 | Ammonia Borate Buffer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Analysis: Nitrogen, Ammonia as N

Analysis: Ammonia (NH3)
Method: SM 4500-NH₃-B,C

2104145

Analyst: JCA/KJR
Date/Time: 4-9-21

PEEP: 10:30

AWAYED: 16:50

Hold Time: 28 days
PQL: 0.5 mg/L
SOP: INORG-4

| Sample ID | Sample Type | A mL Sample | B mL 0.02N H2SO4 | Sample Result mg/L | Std. ID | Conc. of Std mg/L | Alliquot of Std mL | Matrix | Final Volume mL | Final Conc. mg/L | %REC ±10% LC/SILCSD/QCS/ICV ±20% MS/MSD | %RPD <10% LC/SILCSD <20% MS/MSD |
|---------------|-------------|----------------|---------------------|-----------------------|---------|----------------------|-----------------------|--------|--------------------|---------------------|---|---------------------------------------|
| MBLK | MBLK | 25 | 0.000 | 0.050 | | | | DI | 25 | 0.5 | 94.1 | |
| 0.5 mg/L | MRL | 25 | 0.042 | 0.470 | 1903267 | 100 | 0.125 | DI | 25 | 2.5 | 100.8 | |
| 2.5 mg/L | ICV | 25 | 0.225 | 2.520 | | 100 | 0.625 | DI | 25 | 10.0 | 93.6 | |
| 10.0 mg/L | ICV | 25 | 0.880 | 9.856 | | 100 | 2.5 | DI | 25 | 5.0 | 95.4 | |
| 5.0 mg/L | QCS | 25 | 0.426 | 4.771 | 1903268 | 100 | 1.25 | DI | 25 | 5.0 | 96.3 | |
| LCS | LCS | 25 | 0.430 | 4.816 | 1903267 | 100 | 1.25 | DI | 25 | 5.0 | 96.8 | 0.5 |
| LCSD | LCSD | 25 | 0.432 | 4.838 | | 100 | 1.25 | DI | 25 | 5.0 | | |
| 1 2100052-01 | SAMP | 25 | 0.064 | 0.717 | | | | | 25 | 5.0 | 96.3 | 0.4 |
| 2 2100001-01 | SAMP | 25 | 0.068 | 0.762 | | | | | 25 | 5.0 | 95.9 | |
| 3 2100005-01 | SAMP | 25 | 0.088 | 0.986 | | | | | 25 | 5.0 | | |
| 4 2100008-01 | SAMP | 25 | 0.012 | 0.134 | | | | | 25 | 5.0 | | |
| 5 2100035-05 | SAMP | 25 | 0.004 | 0.045 | | | | | 25 | 5.0 | | |
| 6 | SAMP | 25 | 0.002 | 0.022 | | | | | 25 | 5.0 | | |
| 7 | SAMP | 25 | 0.002 | 0.022 | | | | | 25 | 5.0 | | |
| 8 | SAMP | 25 | 0.004 | 0.045 | | | | | 25 | 5.0 | | |
| 9 | SAMP | 25 | 0.060 | 0.672 | | | | | 25 | 5.0 | | |
| 10 2100113-01 | MS | 25 | 0.498 | 5.578 | 1903267 | 100 | 1.25 | | 25 | 5.0 | 95.9 | 0.4 |
| 11 2100120-01 | SAMP | 25 | 0.072 | 0.806 | | | | | 25 | 5.0 | | |
| 12 2100148-01 | SAMP | 25 | 0.368 | 4.054 | | | | | 25 | 5.0 | | |
| 13 | SAMP | 25 | 0.010 | 0.112 | | | | | 25 | 5.0 | | |
| 14 | SAMP | 25 | 0.000 | 0.000 | | | | | 25 | 5.0 | | |
| 15 | SAMP | 25 | 0.014 | 0.157 | | | | | 25 | 5.0 | | |
| 16 | SAMP | 25 | 0.000 | 0.000 | | | | | 25 | 5.0 | | |
| 17 | SAMP | 25 | 0.004 | 0.045 | | | | | 25 | 5.0 | | |
| 18 | SAMP | 25 | 0.000 | 0.000 | | | | | 25 | 5.0 | | |
| 19 2100175-03 | SAMP | 25 | 0.000 | 0.000 | | | | | 25 | 5.0 | | |
| 20 2100200-01 | SAMP | 25 | 0.498 | 5.578 | 1903267 | 100 | 1.25 | | 25 | 5.0 | 91.8 | 0.4 |
| 21 2100008-01 | MS | 25 | 0.500 | 5.606 | | 100 | 1.25 | | 25 | 5.0 | 94.3 | |
| 6.0 mg/L | MSD | 25 | 0.430 | 4.816 | | 100 | 1.25 | | 25 | 5.0 | | |
| CCB | CCB | 25 | 0.000 | 0.000 | | | | | 25 | 5.0 | | |

| Reagent IDs |
|---------------|
| Borate Buffer |
| Boric Acid |
| 0.02N H2SO4 |

Relative Percent Difference (RPD) = (1st value - 2nd value) / Average Value * 100
Percent Recovery (REC) = (100) * ((Conc. Sample + Spike) - (Conc. Sample)) / Spike conc.
NH3 = (Blank mL/200)A

Comments:

Ww 4/12/21

Analytical Standard Record

Turner Laboratories, Inc.

1903267

| | | | |
|---------------------|-----------------|--------------|------------------------|
| Description: | Ammonia 100 ppm | Expires: | 07/31/2024 |
| Standard Type: | Analyte Spike | Prepared: | 08/07/2019 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | WETCHEM |
| Vials: | 2 | Last Edit: | 08/07/2019 14:21 by EJ |

cat# 24065-49

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Ammonia (As N) | 7664-41-7 | 100 | ug/mL |

Lot #: A9184
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

1903268

| | | | |
|---------------------|-----------------|--------------|------------------------|
| Description: | Ammonia 100 ppm | Expires: | 07/31/2024 |
| Standard Type: | Analyte Spike | Prepared: | 08/07/2019 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 08/07/2019 14:24 by EJ |

cat# 24065-49

| Analyte | CAS Number | Concentration | Units |
|--------------------------|------------|---------------|-------|
| Nitrogen, Ammonia (As N) | 7664-41-7 | 100 | ug/mL |

Lot #: A9193
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2101378

| | | | |
|---------------------|-----------------------|--------------|------------------------|
| Description: | Ammonia Borate Buffer | Expires: | 04/10/2021 |
| Standard Type: | Reagent | Prepared: | 04/09/2021 |
| Solvent: | DI | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 3500 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/12/2021 08:08 by JG |

1750mls of 0.025 M Sodium tetraborate (16.625 g Sodium tetraborate (2002619) in 1750 mls DI). Adjust the pH to 9.5 with 308mls of 0.1N NaOH (2101328), dilute to 3500 mls with DI

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: NA
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2002619

| | | | |
|---------------------|-----------------------------------|--------------|------------------------|
| Description: | Sodium Borate Decahydrate for NH3 | Expires: | 12/13/2024 |
| Standard Type: | Reagent | Prepared: | 06/19/2020 |
| Solvent: | n/a | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 500 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 06/19/2020 10:50 by JG |

| |
|---|
| 500g SX0355-1 retest 5 years after manufacture date 12/13/24 |
|---|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 2019111354
Vendor: EMD

Analytical Standard Record

Turner Laboratories, Inc.

2101328

Description: 0.1N NaOH for Ammonia
Standard Type: Reagent
Solvent: DI Water
Final Volume (mls): 1000
Vials: 1

Expires: 10/07/2021
Prepared: 04/07/2021
Prepared By: Jenna Gossen
Department: WETCHEM
Last Edit: 04/08/2021 09:15 by JG

4.0g NaOH (1902821) diluted to 1000mL with DI Water
Use 88 mL for every liter of Ammonia Borate Buffer
6 MONTH EXP

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: n/a
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

1902821

| | | | |
|---------------------|--------------------------|--------------|------------------------|
| Description: | Sodium Hydroxide Pellets | Expires: | 04/17/2022 |
| Standard Type: | Reagent | Prepared: | 07/09/2019 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 06/25/2020 12:12 by JG |

221465-2.5KG
Recommended Retest Date (per C of A): April 2020 Retest Passed
Retest Date: April 2022

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: MKCC2622
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2101377

| | | | |
|---------------------|------------------------------|--------------|------------------------|
| Description: | Ammonia Boric Acid Indicator | Expires: | 04/10/2021 |
| Standard Type: | Reagent | Prepared: | 04/09/2021 |
| Solvent: | DI | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 2000 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/12/2021 08:07 by JG |

40 g Boric Acid (2003737)+ 5 mL Mixed Indicator solution (2101128) diluted to 2 L with DI Water

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: NA
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2003737

| | | | |
|---------------------|---------------------------------------|--------------|------------------------|
| Description: | Boric Acid Granular (ACS) for TKN/NH3 | Expires: | 08/18/2024 |
| Standard Type: | Reagent | Prepared: | 08/31/2020 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | WETCHEM |
| Vials: | 6 | Last Edit: | 08/31/2020 10:21 by JG |

| |
|---|
| CCI P/N 087000-80101 - 500g CAS: 10043-35-3 40g in 2000 mL for TKN/NH3 analysis |
|---|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 2019100913
Vendor: CCI

Analytical Standard Record

Turner Laboratories, Inc.

2101128

| | | | |
|---------------------|------------------------------------|--------------|------------------------|
| Description: | Ammonia - Mixed Indicator Solution | Expires: | 04/26/2021 |
| Standard Type: | Reagent | Prepared: | 03/26/2021 |
| Solvent: | Isopropyl Alcohol/48225 | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 75 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 03/26/2021 14:25 by JG |

0.10g. methyl red indicator (2004825) in 50mL isopropyl alcohol + 0.05g. methylene blue (2003269) in 25mL isopropyl alcohol (1901645). Combine solutions.
(1 month expiration, given in Standard Methods)

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: n/a

Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2004825

| | | | |
|---------------------|-------------------|--------------|------------------------|
| Description: | Methyl Red Powder | Expires: | 11/13/2025 |
| Standard Type: | Reagent | Prepared: | 11/13/2020 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 25 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 11/13/2020 13:48 by EJ |

25g bottle recieved

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: MKCJ94762
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

2003269

| | | | |
|---------------------|-----------------------|--------------|------------------------|
| Description: | Methylene Blue Powder | Expires: | 07/24/2025 |
| Standard Type: | Reagent | Prepared: | 07/29/2020 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 25 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 12/15/2020 09:21 by JG |

Vendor: SIGMA PRODUCT #: M9140-25G
Retest in 5 years after open RETEST 7/24/25: EXTENDED 2 YEARS

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

Lot #: SHBL6024
Vendor: Sigma-Aldrich

Analytical Standard Record

Turner Laboratories, Inc.

1901645

| | | | |
|---------------------|--------------------------------|--------------|------------------------|
| Description: | Isopropyl Alcohol 99.5% GR ACS | Expires: | 04/21/2024 |
| Standard Type: | Reagent | Prepared: | 04/22/2019 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 1000 | Department: | WETCHEM |
| Vials: | 2 | Last Edit: | 08/20/2020 15:03 by EJ |

| |
|---|
| Cat# PX1835-9 A.K.A. Isopropanol 2 1L Bottles |
|---|

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 58114
Vendor: EMD

Analytical Standard Record

Turner Laboratories, Inc.

2004945

| | | | |
|---------------------|----------------------------------|--------------|-------------------------|
| Description: | Alkalinity (0.02N Sulfuric Acid) | Expires: | 10/31/2023 |
| Standard Type: | Reagent | Prepared: | 11/23/2020 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 4000 | Department: | WETCHEM |
| Vials: | 2 | Last Edit: | 11/23/2020 11:52 by CWB |

CAT# 8200-1

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 2010J85
Vendor: Ricca

Analytical Standard Record

Turner Laboratories, Inc.

2004590

| | | | |
|---------------------|---------------------|--------------|------------------------|
| Description: | 1N NaOH for Ammonia | Expires: | 04/27/2022 |
| Standard Type: | Reagent | Prepared: | 10/27/2020 |
| Solvent: | DI Water | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 250 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 10/27/2020 14:17 by JG |

10.0g NaOH (1902821) diluted to 250mL with DI Water
Neutralizing agent for samples, 18 month expiration

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: n/a
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2101241

| | | | |
|---------------------|------------------------------|--------------|------------------------|
| Description: | 1N Sulfuric Acid for Ammonia | Expires: | 10/02/2022 |
| Standard Type: | Reagent | Prepared: | 04/02/2021 |
| Solvent: | N/A | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 250 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/02/2021 14:14 by JG |

7.0 mL sulfuric acid (2000273) in 250mL DI. Neutralizing agent for samples

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: N/A
Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2000273

| | | | |
|---------------------|---------------|--------------|------------------------|
| Description: | Sulfuric Acid | Expires: | 10/08/2025 |
| Standard Type: | Reagent | Prepared: | 01/16/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | EXPIRED STANDARDS |
| Vials: | 1 | Last Edit: | 10/09/2020 14:42 by MH |

Rcvd in lab: 4) 2.5 Liters
P/N SX1247-4
CONSUMED

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: K0618
Vendor: ACP

Analytical Standard Record

Turner Laboratories, Inc.

2101241

| | | | |
|---------------------|------------------------------|--------------|------------------------|
| Description: | 1N Sulfuric Acid for Ammonia | Expires: | 10/02/2022 |
| Standard Type: | Reagent | Prepared: | 04/02/2021 |
| Solvent: | N/A | Prepared By: | Jenna Gossen |
| Final Volume (mls): | 250 | Department: | WETCHEM |
| Vials: | 1 | Last Edit: | 04/02/2021 14:14 by JG |

7.0 mL sulfuric acid (2000273) in 250mL DI. Neutralizing agent for samples

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: N/A
Vendor: n/a

TURNER LABORATORIES, INC.

DATA VALIDATION REPORT

LEVEL IV

Work Order No.

21D0200-01
2104210-MS1
2104210-MSD1

Dissolved Silica
SM4500-SiO₂ C

Analysis Date – April 7, 2021

| Section | Page |
|---------------------------------------|-------------|
| Prep batch | 410 |
| Bench Sheet | 411 |
| Standard log entries and traceability | 414 |

Date Prepared: 04/16/2021 1:25:00PM

Prep Batch: 2104210 Prep Code: SPECTRO PREP

Technician: CWB

| Sample ID | Sample ID and Source | Matrix | pH | Initial Volume (ml) | Spike 1 Added /ul | Spike 2 Added /ul | Final Vol (ml) | Comments |
|---|----------------------|-------------------|----|---------------------|-------------------|-------------------|----------------|---------------------------------|
| 2104210-BLK Blank | | Drinking Water | | 25 | / | / | 25 | |
| 2104210-BS1 LCS | | Drinking Water | | 25 | 2100713/200 | / | 25 | |
| 2104210-BSD LCS Dup | | Drinking Water | | 25 | 2100713/200 | / | 25 | |
| 2104210-MS1 Matrix Spike [21D0200-01] | | Drinking Water | | 5 | 2100713/200 | / | 5 | [Spk] 5ml->25ml; 25ml->25ml; Si |
| 2104210-MSD Matrix Spike Dup [21D0200-01] | | Drinking Water | | 5 | 2100713/200 | / | 5 | [Spk] 5ml->25ml; 25ml->25ml; Si |
| 21D0185-01 Tribal Herd DW62 Well Id 263 | | Drinking Water | | 25 | | | 25 | |
| 21D0200-01 MW-9-20210407 | | Drinking Water | | 25 | | | 25 | Report samples/MB to MDL |
| 21D0248-01 PLS | | Non-Potable Water | | 25 | | | 25 | |
| 21D0248-02 RAFF | | Non-Potable Water | | 25 | | | 25 | |
| 21D0342-01 Range Well E1 Well Id #606 | | Drinking Water | | 25 | | | 25 | |
| 21D0437-01 Feed | | Drinking Water | | 25 | | | 25 | |
| 21D0437-02 Permeate | | Drinking Water | | 25 | | | 25 | |

| Number | Reagent Name |
|---------|--------------------------------------|
| 2100425 | Silica - 1:1 HCl Solution |
| 2100638 | Silica - Ammonium Molybdate Solution |
| 2100639 | Silica - Oxalic Acid Solution |

| Spike ID | Spike Name |
|----------|----------------------------------|
| 2100713 | Silica Standard Solution 1000ppm |

| Number | Surrogate Name |
|--------|----------------|
| | |

Analysis: Silica, Dissolved

Analysis: Silica, Dissolved
Method: SM 4500-SiO2 C

2104210

Analyst: CB
Date/Time: 04-16-21

Prep: 1325 Analyzed: 1415

Hold Time: 28 days
PQL: 2 mg/L
SOP: INORG-28

| Sample ID | Sample Type | DF | Readout | Sample Result mg/L | Amount Spiked mg/L | Std ID | Conc. of Std mg/L | Aliquot of Std mL | Solvent | Final Volume mL | Final Conc. mg/L | % REC + 10% ICV/CV/LCS/LCSD 30% MS/MSD (MW) MS/MSD (DW) | % RPD +15% <20% LCS/LCSD <20% MS/MSD |
|--------------|-------------|-----|---------|-----------------------|--------------------------|---------|-------------------------|----------------------|---------|--------------------|---------------------|--|---|
| 2 mg/L | ICAL | 1x | 0.135 | | 8 | 2105713 | 1000 | 0.05 | DI | 25 | 2 | | |
| 8 mg/L | ICAL | 1 | 0.481 | | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | | |
| 16 mg/L | ICAL | 1 | 0.924 | | 8 | 2105713 | 1000 | 0.4 | DI | 25 | 16 | | |
| 8 mg/L | ICV | 1 | 0.497 | 8.377 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 104.7% | |
| MBLK | MBLK | | 0.004 | -0.379 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| LCS | LCS | 1 | 0.487 | 8.199 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 102.5% | |
| LCSD | LCSD | 1 | 0.494 | 8.323 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 104.0% | 1.5% |
| 2105185-01 | SAMP | 5x | 0.492 | 8.199 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | | |
| 2105000-01 | SAMP | 1 | 0.247 | 3.936 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 3105048-01 | SAMP | 10x | 0.510 | 8.607 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 4 | SAMP | 10x | 0.874 | 15.072 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 5 2105342-01 | SAMP | 5x | 0.606 | 10.312 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 6 2105137-01 | SAMP | 10x | 0.870 | 15.001 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 7 | SAMP | 1x | 0.110 | 1.503 | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 8 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 9 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 10 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 11 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 12 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 13 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 14 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 15 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 16 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 17 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 18 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 19 | SAMP | | | | 8 | 2105713 | 1000 | | DI | 25 | 8 | | |
| 20 | SAMP | 1x | 0.134 | 1.929 | 8 | 2105713 | 1000 | 0.05 | DI | 25 | 8 | | |
| 2105000-01 | MS | 5x | 0.739 | 12.675 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 109.2% | |
| MSD | MSD | 1 | 0.734 | 12.586 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 108.1% | |
| 8 mg/L | CCV | 1x | 0.498 | 8.394 | 8 | 2105713 | 1000 | 0.2 | DI | 25 | 8 | 104.9% | 0.7% |

Reagent IDs:
Ammonium Molybdate: 2100638
Oxalic Acid: 2100639
1:1HCl: 2100425

Relative Percent Difference (RPD) = (1st value - 2nd value) / Average Value * 100
Percent Recovery (REC) = (100) [(Conc. Sample + Spike) - (Conc. Sample)] / Spike conc.
Method Blank < PQL

for
differences

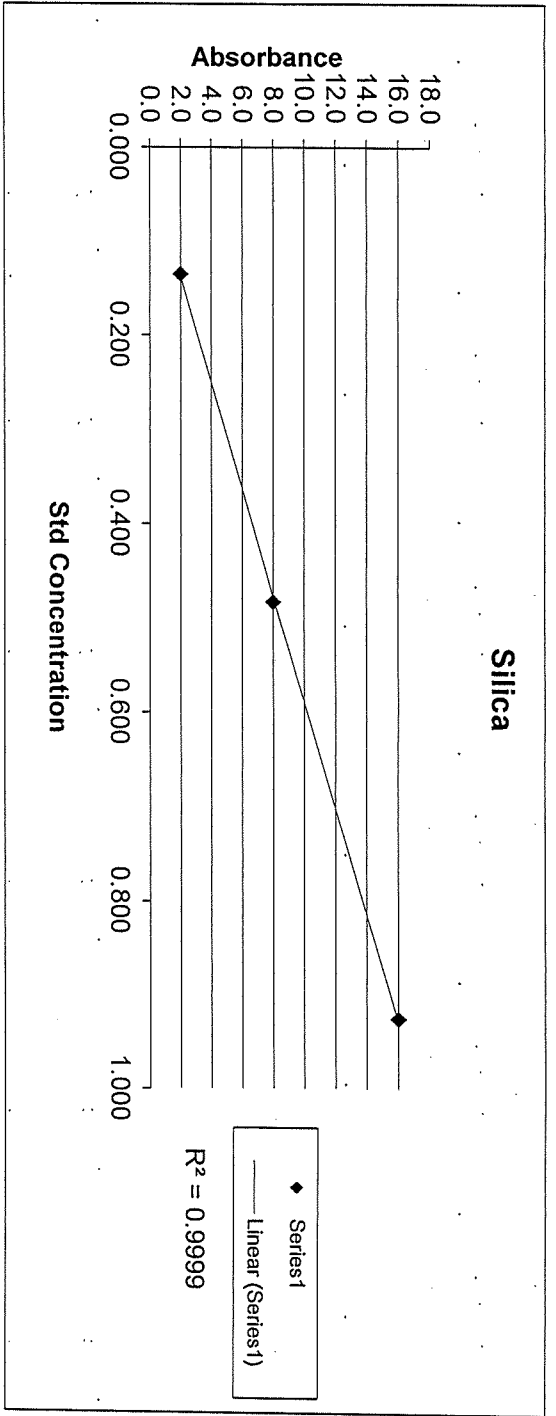
2104210

4/16/2021 Silica dissolved regression

| | Absorbance (y) | Concentration (x) | | |
|----------------|----------------|-------------------|---------------|-------|
| Cal 1 | 0.135 | 2.0 | | |
| Cal 2 | 0.481 | 8.0 | | |
| Cal 3 | 0.924 | 16.0 | | |
| Intercept | 0.0254 | | | |
| Slope | 0.0563 | | r^2 | |
| Corr Coeff. -r | 0.9999 | | 0.9999 | |
| | | | % REC | % RPD |
| ICV/QCS | 0.497 | 8.377 | 104.7 | |
| Blank | 0.004 | -0.379 | | |
| LCS | 0.487 | 8.199 | 102.5 | 1.5 |
| LCSD | 0.494 | 8.323 | 104.0 | |
| 1 | 0.492 | 8.288 | | |
| 2 | 0.247 | 3.936 | | |
| 3 | 0.510 | 8.607 | | |
| 4 | 0.874 | 15.072 | | |
| 5 | 0.606 | 10.312 | | |
| 6 | 0.870 | 15.001 | | |
| 7 | 0.110 | 1.503 | | |
| 8 | | -0.450 | | |
| 9 | | -0.450 | | |
| 10 | | -0.450 | | |
| 11 | | -0.450 | | |
| 12 | | -0.450 | | |
| 13 | | -0.450 | | |
| 14 | | -0.450 | | |
| 15 | | -0.450 | | |
| 16 | | -0.450 | | |
| 17 | | -0.450 | | |
| 18 | | -0.450 | | |
| 19 | | -0.450 | | |
| 20 | | -0.450 | | |
| PQL | 0.134 | 1.929 | 96.5 | |
| MS 1 | 0.739 | 12.675 | 54.8 | 0.7 |
| MSD 1 | 0.734 | 12.586 | 53.7 | |
| CCV | 0.498 | 8.394 | 104.9 | |

100
4/16/21

2104210



uv
4/16/14

Analytical Standard Record

Turner Laboratories, Inc.

1302714

| | | | |
|---------------------|---------------------------------|--------------|-------------------------|
| Description: | Oxalic Acid, Dihydrate, Crystal | Expires: | 08/01/2022 |
| Standard Type: | Reagent | Prepared: | 08/01/2013 |
| Solvent: | NA | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 03/31/2021 14:43 by CWB |

No expiration date given by manufacturer. Retest after 5 years from received date.
6/21/2018 - visually inspected, retest date extended 2 years

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| | | | NA |

Lot #: K50465
Vendor: J.T. Baker

Analytical Standard Record

Turner Laboratories, Inc.

2100713

| | | | |
|---------------------|----------------------------------|--------------|------------------------|
| Description: | Silica Standard Solution 1000ppm | Expires: | 01/31/2022 |
| Standard Type: | Analyte Spike | Prepared: | 02/25/2021 |
| Solvent: | n/a | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 500 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 04/05/2021 08:01 by MH |

Cat# 194-49

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1000 | mg/L |

Lot #: A1011
Vendor: Hach

Analytical Standard Record

Turner Laboratories, Inc.

2005064

| | | | |
|---------------------|-----------------------------------|--------------|------------------------|
| Description: | Silica QCS Stock Standard 1000ppm | Expires: | 07/31/2026 |
| Standard Type: | Analyte Spike | Prepared: | 12/01/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 125 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 12/08/2020 16:13 by MH |

QCS STANDARD
CAT # ICP-014A

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1000 | ug/mL |

Lot #: 0006470623

Vendor: Agilent

Analytical Standard Record

Turner Laboratories, Inc.

2100638

| | | | |
|---------------------|--------------------------------------|--------------|-------------------------|
| Description: | Silica - Ammonium Molybdate Solution | Expires: | 02/19/2022 |
| Standard Type: | Reagent | Prepared: | 02/19/2021 |
| Solvent: | DI Water | Prepared By: | Cooper Block |
| Final Volume (mls): | 250 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 02/19/2021 14:29 by CWB |

Dissolve 20.0g Ammonium Molybdate crystal (2003091) in 200mL DI, adjust pH to between 7-8 w/NaOH (50% solution - 2003268)

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1 | NA |

Lot #: n/a

Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2003268

Description: 50 % SODIUM HYDROXIDE
Standard Type: Reagent
Solvent: n/a
Final Volume (mls): 4000
Vials: 1

Expires: 06/30/2021
Prepared: 07/29/2020
Prepared By: ** Vendor **
Department: WETCHEM
Last Edit: 07/29/2020 11:35 by JG

CAT # BDH7246-4

Analyte

CAS Number

Concentration

Units

ug/mL

Lot #: 19F2656173

Vendor: VWR

Analytical Standard Record

Turner Laboratories, Inc.

2100425

| | | | |
|---------------------|---------------------------|--------------|------------------------|
| Description: | Silica - 1:1 HCl Solution | Expires: | 08/03/2021 |
| Standard Type: | Reagent | Prepared: | 02/02/2021 |
| Solvent: | n/a | Prepared By: | Cooper Block |
| Final Volume (mls): | 200 | Department: | SPECTRO |
| Vials: | 1 | Last Edit: | 02/11/2021 08:28 by JG |

100 ml DI, 100 ml HCL (2003514)

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
| Silica | 7631-86-9 | 1 | NA |

Lot #: n/a

Vendor: n/a

Analytical Standard Record

Turner Laboratories, Inc.

2003514

| | | | |
|---------------------|-------------------------------|--------------|------------------------|
| Description: | Hydrochloric Acid Trace Metal | Expires: | 03/24/2023 |
| Standard Type: | Reagent | Prepared: | 08/13/2020 |
| Solvent: | N/A | Prepared By: | ** Vendor ** |
| Final Volume (mls): | 2500 | Department: | EXPIRED STANDARDS |
| Vials: | 4 | Last Edit: | 05/05/2021 09:22 by MH |

Received in lab: 4) 2.5 L HCl
CONSUMED

| Analyte | CAS Number | Concentration | Units |
|---------|------------|---------------|-------|
|---------|------------|---------------|-------|

ug/mL

Lot #: 4120020
Vendor: Fisher



December 15, 2021

Louise Spencer
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

RE: AMI-310

Work Order No.: 21F0336
Order Name: Hermosa Project

Dear Louise Spencer,

Turner Laboratories, Inc. received 7 sample(s) on 06/09/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Kevin Brim
Project Manager

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

Order: Hermosa Project

Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date/Time |
|----------------------|-------------------------|---------------|-----------------------------|
| 21F0336-03 | MW-9-20210608 | Ground Water | 06/08/2021 1030 |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

Case Narrative

E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.

E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.

M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

Q9 Insufficient sample received to meet method QC requirements.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Lab Sample ID: 21F0336-03

Client Sample ID: MW-9-20210608
Collection Date/Time: 06/08/2021 1030
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|

Hardness-Calculation

| | | | | | | | | | | |
|--|--|--|--|--|------|---|------------|-----------------|-----|----|
| Hardness, Calcium/Magnesium (As 120 CaCO3) | | | | | mg/L | 1 | 06/15/2021 | 120: 06/17/2021 | 121 | MH |
|--|--|--|--|--|------|---|------------|-----------------|-----|----|

ICP Dissolved Metals-E 200.7 (4.4)

| | | | | | | | | | | |
|-----------|-------|--------|------|----|------|---|------------|-----------------|-----|----|
| Boron | 0.16 | | 0.10 | | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Calcium | 31 | | 4.0 | | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Iron | 0.036 | 0.0031 | 0.30 | E4 | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Magnesium | 1.1 | 0.10 | 3.0 | E4 | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Potassium | 0.94 | 0.14 | 5.0 | E4 | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Silica | 17 | | 0.20 | | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |
| Sodium | 79 | | 5.0 | | mg/L | 1 | 06/10/2021 | 110: 06/17/2021 | 172 | MH |

ICP/MS Dissolved Metals-E 200.8 (5.4)

| | | | | | | | | | | |
|-----------|---------|----------|--------|----|------|---|------------|-----------------|-----|----|
| Aluminum | ND | 0.066 | 0.20 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Antimony | ND | 0.00020 | 0.0025 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Arsenic | 0.0056 | | 0.0025 | | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Barium | 0.021 | | 0.0025 | | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Beryllium | ND | 0.000066 | 0.0013 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Cadmium | ND | 0.00025 | 0.0013 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Chromium | ND | 0.00012 | 0.0025 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Cobalt | ND | 0.000052 | 0.0013 | E4 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Copper | 0.0086 | | 0.0025 | M2 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Lead | ND | 0.00029 | 0.0025 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Manganese | 0.23 | | 0.0013 | | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Nickel | 0.0089 | | 0.0025 | | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Selenium | 0.0013 | | 0.013 | M2 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Silver | ND | | 0.0025 | M2 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Thallium | ND | 0.00012 | 0.0025 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Uranium | 0.00035 | 0.000074 | 0.0025 | E4 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |
| Zinc | ND | 0.011 | 0.20 | E8 | mg/L | 5 | 06/10/2021 | 110: 06/10/2021 | 154 | CR |

CVAA Dissolved Mercury-E 245.1

| | | | | | | | | | | |
|---------|----|-----------|--------|----|------|---|------------|-----------------|-----|----|
| Mercury | ND | 0.0000041 | 0.0010 | E8 | mg/L | 1 | 06/11/2021 | 084: 06/11/2021 | 123 | CR |
|---------|----|-----------|--------|----|------|---|------------|-----------------|-----|----|

ICP Total Metals-E200.7 (4.4)

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Lab Sample ID: 21F0336-03

Client Sample ID: MW-9-20210608
Collection Date/Time: 06/08/2021 1030
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|-----------|--------|------|------|------|-------|----|------------|----------------|---------|
| Boron | 0.21 | | 0.20 | | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Calcium | 42 | | 8.0 | | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Iron | 6.5 | | 0.60 | M3 | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Magnesium | 4.7 | 0.21 | 6.0 | E4 | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Potassium | 3.7 | 0.28 | 10 | E4 | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Silica | 59 | | 0.40 | | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |
| Sodium | 78 | | 10 | | mg/L | 1 | 06/15/2021 | 120:06/17/2021 | 121 MH |

ICP/MS Total Metals-E200.8 (5.4)

| | | | | | | | | | |
|-----------|---------|----------|---------|-----------|------|---|------------|----------------|--------|
| Aluminum | 6.1 | | 0.40 | | mg/L | 5 | 06/15/2021 | 124:06/15/2021 | 162 CR |
| Antimony | 0.00072 | 0.00016 | 0.0020 | E4, M2 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Arsenic | 0.015 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Barium | 0.13 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Beryllium | 0.00048 | 0.000052 | 0.0010 | E4 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Cadmium | ND | 0.00020 | 0.0010 | E8 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Chromium | 0.0060 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Cobalt | 0.00293 | | 0.00100 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Copper | 0.027 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Lead | 0.094 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Manganese | 0.47 | | 0.0010 | M2 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Nickel | 0.0097 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Selenium | ND | 0.0010 | 0.010 | E8 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Silver | 0.00048 | 0.00021 | 0.0050 | E4 | mg/L | 5 | 06/15/2021 | 124:06/15/2021 | 175 CR |
| Thallium | 0.0013 | 0.000093 | 0.0020 | E4 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Uranium | 0.0033 | | 0.0020 | | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |
| Zinc | 0.14 | 0.0091 | 0.16 | E4 | mg/L | 2 | 06/15/2021 | 124:06/15/2021 | 134 CR |

CVAA Total Mercury-E245.1

| | | | | | | | | | |
|---------|----|---------|--------|----|------|---|------------|----------------|--------|
| Mercury | ND | 0.00071 | 0.0020 | E8 | mg/L | 1 | 06/15/2021 | 082:06/15/2021 | 141 CR |
|---------|----|---------|--------|----|------|---|------------|----------------|--------|

Anions by Ion Chromatography-E300.0 (2.1)

| | | | | | | | | | |
|--------------------------|-----|-------|------|----|------|----|------------|----------------|--------|
| Chloride | 5.1 | | 1.0 | | mg/L | 1 | 06/09/2021 | 151:06/09/2021 | 221 JG |
| Fluoride | ND | 0.29 | 0.50 | E8 | mg/L | 1 | 06/09/2021 | 151:06/09/2021 | 221 JG |
| Nitrogen, Nitrate (As N) | ND | 0.20 | 0.50 | E8 | mg/L | 1 | 06/09/2021 | 151:06/09/2021 | 221 JG |
| Nitrogen, Nitrite (As N) | ND | 0.027 | 0.10 | E8 | mg/L | 1 | 06/09/2021 | 151:06/09/2021 | 221 JG |
| Sulfate | 170 | | 100 | | mg/L | 20 | 06/09/2021 | 151:06/14/2021 | 234 JG |

Calculation-Ion Balance

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Lab Sample ID: 21F0336-03

Client Sample ID: MW-9-20210608
Collection Date/Time: 06/08/2021 1030
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|--|--------|-------|------|------|-------|----|----------------|----------------|---------|
| Anion | 6.78 | | | | meq/L | 1 | 06/22/2021 140 | 06/22/2021 140 | KB |
| Cation | 5.11 | | | | meq/L | 1 | 06/22/2021 140 | 06/22/2021 140 | KB |
| Cation/Anion, % Difference | 14.1 | | | | meq/L | 1 | 06/22/2021 140 | 06/22/2021 140 | KB |
| Alkalinity-SM2320B | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO3) | 130 | | 2.0 | | mg/L | 1 | 06/11/2021 080 | 06/11/2021 140 | JG |
| Alkalinity, Carbonate (As CaCO3) | ND | | 2.0 | | mg/L | 1 | 06/11/2021 080 | 06/11/2021 140 | JG |
| Alkalinity, Hydroxide (As CaCO3) | ND | | 2.0 | | mg/L | 1 | 06/11/2021 080 | 06/11/2021 140 | JG |
| Alkalinity, Total (As CaCO3) | 130 | | 2.0 | | mg/L | 1 | 06/11/2021 080 | 06/11/2021 140 | JG |
| Total Dissolved Solids (Residue, Filterable)-SM2540 C | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 380 | | 20 | | mg/L | 1 | 06/11/2021 104 | 06/15/2021 122 | EJ |
| Total Suspended Solids (Residue, Non-Filterable)-SM2540 D | | | | | | | | | |
| Total Suspended Solids | 240 | | 10 | | mg/L | 1 | 06/11/2021 101 | 06/11/2021 152 | CWB |
| Cyanide-SM4500-CN BE | | | | | | | | | |
| Cyanide | ND | | 0.10 | | mg/L | 1 | 06/10/2021 080 | 06/11/2021 142 | JG |
| Ammonia as N-SM4500-NH3 B,C | | | | | | | | | |
| Nitrogen, Ammonia (As N) | 0.20 | 0.045 | 0.50 | E4 | mg/L | 1 | 06/15/2021 080 | 06/15/2021 124 | JG |
| Silica-SM4500-SiO2 C | | | | | | | | | |
| Silica | 19 | | 10 | | mg/L | 5 | 06/11/2021 122 | 06/11/2021 140 | CWB |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|------|
| Batch 2106071 - E 200.7 (4.4) | | | | | | | | | | |
| Blank (2106071-BLK1) Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | ND | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | 0.029 | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |
| LCS (2106071-BS1) Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 104 | 85-115 | | | |
| Calcium | 10 | 4.0 | mg/L | 10.00 | | 101 | 85-115 | | | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | | 109 | 85-115 | | | |
| Magnesium | 10 | 3.0 | mg/L | 10.00 | | 102 | 85-115 | | | |
| Potassium | 10 | 5.0 | mg/L | 10.00 | | 101 | 85-115 | | | |
| Sodium | 10 | 5.0 | mg/L | 10.00 | | 101 | 85-115 | | | |
| LCS (2106071-BS2) Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Silica | 9.4 | 0.20 | mg/L | 10.00 | | 94 | 85-115 | | | |
| LCS Dup (2106071-BSD1) Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 102 | 85-115 | 2 | 20 | |
| Calcium | 10 | 4.0 | mg/L | 10.00 | | 103 | 85-115 | 1 | 20 | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | | 111 | 85-115 | 1 | 20 | |
| Magnesium | 10 | 3.0 | mg/L | 10.00 | | 103 | 85-115 | 0.6 | 20 | |
| Potassium | 10 | 5.0 | mg/L | 10.00 | | 103 | 85-115 | 1 | 20 | |
| Sodium | 10 | 5.0 | mg/L | 10.00 | | 104 | 85-115 | 3 | 20 | |
| LCS Dup (2106071-BSD2) Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Silica | 9.4 | 0.20 | mg/L | 10.00 | | 94 | 85-115 | 0.7 | 20 | |
| Matrix Spike (2106071-MS1) Source: 21F0336-03 Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Boron | 1.2 | 0.10 | mg/L | 1.000 | 0.16 | 104 | 70-130 | | | |
| Calcium | 41 | 4.0 | mg/L | 10.00 | 31 | 100 | 70-130 | | | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | 0.036 | 107 | 70-130 | | | |
| Magnesium | 11 | 3.0 | mg/L | 10.00 | 1.1 | 101 | 70-130 | | | |
| Potassium | 12 | 5.0 | mg/L | 10.00 | 0.94 | 106 | 70-130 | | | |
| Sodium | 88 | 5.0 | mg/L | 10.00 | 79 | 91 | 70-130 | | | |
| Matrix Spike (2106071-MS2) Source: 21F0282-01 Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Boron | 1.2 | 0.10 | mg/L | 1.000 | 0.15 | 104 | 70-130 | | | |
| Calcium | 120 | 4.0 | mg/L | 10.00 | 110 | 89 | 70-130 | | | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | 0.016 | 106 | 70-130 | | | |
| Magnesium | 16 | 3.0 | mg/L | 10.00 | 6.2 | 101 | 70-130 | | | |
| Potassium | 16 | 5.0 | mg/L | 10.00 | 4.9 | 106 | 70-130 | | | |
| Sodium | 55 | 5.0 | mg/L | 10.00 | 47 | 85 | 70-130 | | | |
| Matrix Spike (2106071-MS3) Source: 21F0336-03 Prepared: 06/16/2021 Analyzed: 06/17/2021 | | | | | | | | | | |
| Silica | 30 | 0.20 | mg/L | 10.00 | 17 | 126 | 70-130 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|------|

Batch 2106071 - E 200.7 (4.4)

| Matrix Spike (2106071-MS4) | | | Source: 21F0282-01 | | Prepared: 06/16/2021 | | Analyzed: 06/17/2021 | | | |
|-----------------------------------|----|------|---------------------------|-------|----------------------|-----|----------------------|--|--|--|
| Silica | 28 | 0.20 | mg/L | 10.00 | 17 | 105 | 70-130 | | | |

Batch 2106123 - E 200.8 (5.4)

| Blank (2106123-BLK1) | | | Prepared: 06/08/2021 Analyzed: 06/10/2021 | | | | | | | |
|-----------------------------|--|--|---|--|--|--|--|--|--|--|
|-----------------------------|--|--|---|--|--|--|--|--|--|--|

| | | | | | | | | | | |
|-----------|----------|---------|------|--|--|--|--|--|--|--|
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | ND | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | ND | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.00025 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | 0.000089 | 0.00025 | mg/L | | | | | | | |
| Nickel | ND | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | ND | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |

LCS (2106123-BS1)

| LCS (2106123-BS1) | | | Prepared: 06/08/2021 Analyzed: 06/10/2021 | | | | | | | |
|--------------------------|--|--|---|--|--|--|--|--|--|--|
|--------------------------|--|--|---|--|--|--|--|--|--|--|

| | | | | | | | | | | |
|-----------|-------|---------|------|---------|--|-----|--------|--|--|--|
| Aluminum | 0.11 | 0.040 | mg/L | 0.1000 | | 107 | 85-115 | | | |
| Antimony | 0.050 | 0.00050 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Arsenic | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Barium | 0.051 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Beryllium | 0.050 | 0.00025 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Cadmium | 0.050 | 0.00025 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Chromium | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Cobalt | 0.051 | 0.00025 | mg/L | 0.05000 | | 102 | 85-115 | | | |
| Copper | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Lead | 0.051 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Manganese | 0.051 | 0.00025 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Nickel | 0.051 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Selenium | 0.049 | 0.0025 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Silver | 0.050 | 0.00050 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Thallium | 0.051 | 0.00050 | mg/L | 0.05000 | | 102 | 85-115 | | | |
| Uranium | 0.050 | 0.00050 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Zinc | 0.10 | 0.040 | mg/L | 0.1000 | | 102 | 85-115 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--------------------------------------|--------|-----------------|-------|---|---------------|---|-------------|-----|-----------|------|
| Batch 2106123 - E 200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2106123-BSD1) | | | | Prepared: 06/08/2021 Analyzed: 06/10/2021 | | | | | | |
| Aluminum | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | 3 | 20 | |
| Antimony | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 2 | 20 | |
| Arsenic | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | 2 | 20 | |
| Barium | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | 3 | 20 | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | | 97 | 85-115 | 3 | 20 | |
| Cadmium | 0.049 | 0.00025 | mg/L | 0.05000 | | 98 | 85-115 | 1 | 20 | |
| Chromium | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | 2 | 20 | |
| Cobalt | 0.049 | 0.00025 | mg/L | 0.05000 | | 99 | 85-115 | 3 | 20 | |
| Copper | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 3 | 20 | |
| Lead | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 4 | 20 | |
| Manganese | 0.049 | 0.00025 | mg/L | 0.05000 | | 99 | 85-115 | 2 | 20 | |
| Nickel | 0.050 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | 2 | 20 | |
| Selenium | 0.047 | 0.0025 | mg/L | 0.05000 | | 94 | 85-115 | 4 | 20 | |
| Silver | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 2 | 20 | |
| Thallium | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 4 | 20 | |
| Uranium | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 2 | 20 | |
| Zinc | 0.099 | 0.040 | mg/L | 0.1000 | | 99 | 85-115 | 2 | 20 | |
| Matrix Spike (2106123-MS1) | | | | Source: 21F0282-01 | | Prepared: 06/08/2021 Analyzed: 06/10/2021 | | | | |
| Aluminum | 0.12 | 0.20 | mg/L | 0.1000 | ND | 115 | 70-130 | | | |
| Antimony | 0.051 | 0.0025 | mg/L | 0.05000 | ND | 102 | 70-130 | | | |
| Arsenic | 0.063 | 0.0025 | mg/L | 0.05000 | 0.011 | 102 | 70-130 | | | |
| Barium | 0.10 | 0.0025 | mg/L | 0.05000 | 0.047 | 104 | 70-130 | | | |
| Beryllium | 0.050 | 0.0013 | mg/L | 0.05000 | ND | 99 | 70-130 | | | |
| Cadmium | 0.049 | 0.0013 | mg/L | 0.05000 | ND | 97 | 70-130 | | | |
| Chromium | 0.049 | 0.0025 | mg/L | 0.05000 | 0.00013 | 97 | 70-130 | | | |
| Cobalt | 0.049 | 0.0013 | mg/L | 0.05000 | 0.00015 | 98 | 70-130 | | | |
| Copper | 0.039 | 0.0025 | mg/L | 0.05000 | ND | 77 | 70-130 | | | |
| Lead | 0.058 | 0.0025 | mg/L | 0.05000 | ND | 117 | 70-130 | | | |
| Manganese | 0.52 | 0.0013 | mg/L | 0.05000 | 0.45 | 128 | 70-130 | | | |
| Nickel | 0.050 | 0.0025 | mg/L | 0.05000 | 0.0015 | 96 | 70-130 | | | |
| Selenium | 0.040 | 0.013 | mg/L | 0.05000 | ND | 80 | 70-130 | | | |
| Silver | 0.036 | 0.0025 | mg/L | 0.05000 | ND | 72 | 70-130 | | | |
| Thallium | 0.059 | 0.0025 | mg/L | 0.05000 | ND | 117 | 70-130 | | | |
| Uranium | 0.065 | 0.0025 | mg/L | 0.05000 | 0.00023 | 130 | 70-130 | | | |
| Zinc | 0.098 | 0.20 | mg/L | 0.1000 | ND | 98 | 70-130 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|---------------------------------|----------------------|------|---------------------------------|-----|-----------|------|
| Batch 2106123 - E 200.8 (5.4) | | | | | | | | | | |
| Matrix Spike (2106123-MS2) | | Source: 21F0336-03 | | | Prepared: 06/08/2021 | | Analyzed: 06/10/2021 | | | |
| Aluminum | 0.10 | 0.20 | mg/L | 0.1000 | ND | 104 | 70-130 | | | |
| Antimony | 0.047 | 0.0025 | mg/L | 0.05000 | ND | 95 | 70-130 | | | |
| Arsenic | 0.052 | 0.0025 | mg/L | 0.05000 | 0.0056 | 92 | 70-130 | | | |
| Barium | 0.070 | 0.0025 | mg/L | 0.05000 | 0.021 | 97 | 70-130 | | | |
| Beryllium | 0.046 | 0.0013 | mg/L | 0.05000 | ND | 92 | 70-130 | | | |
| Cadmium | 0.045 | 0.0013 | mg/L | 0.05000 | ND | 90 | 70-130 | | | |
| Chromium | 0.045 | 0.0025 | mg/L | 0.05000 | ND | 90 | 70-130 | | | |
| Cobalt | 0.045 | 0.0013 | mg/L | 0.05000 | 0.000084 | 89 | 70-130 | | | |
| Copper | 0.035 | 0.0025 | mg/L | 0.05000 | 0.0086 | 52 | 70-130 | | | M2 |
| Lead | 0.055 | 0.0025 | mg/L | 0.05000 | ND | 110 | 70-130 | | | |
| Manganese | 0.28 | 0.0013 | mg/L | 0.05000 | 0.23 | 100 | 70-130 | | | |
| Nickel | 0.053 | 0.0025 | mg/L | 0.05000 | 0.0089 | 88 | 70-130 | | | |
| Selenium | 0.026 | 0.013 | mg/L | 0.05000 | 0.0013 | 49 | 70-130 | | | M2 |
| Silver | 0.027 | 0.0025 | mg/L | 0.05000 | ND | 55 | 70-130 | | | M2 |
| Thallium | 0.055 | 0.0025 | mg/L | 0.05000 | ND | 109 | 70-130 | | | |
| Uranium | 0.061 | 0.0025 | mg/L | 0.05000 | 0.00035 | 122 | 70-130 | | | |
| Zinc | 0.096 | 0.20 | mg/L | 0.1000 | ND | 96 | 70-130 | | | |
| Batch 2106159 - E 245.1 | | | | | | | | | | |
| Blank (2106159-BLK1) | | | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Mercury | ND | 0.0010 | mg/L | | | | | | | |
| LCS (2106159-BS1) | | | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | | 101 | 85-115 | | | |
| LCS Dup (2106159-BSD1) | | | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | | 101 | 85-115 | 0.2 | 20 | |
| Matrix Spike (2106159-MS1) | | | | Source: 21F0336-03 | | | Prepared & Analyzed: 06/11/2021 | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | ND | 103 | 70-130 | | | |
| Matrix Spike (2106159-MS2) | | | | Source: 21F0202-01 | | | Prepared & Analyzed: 06/11/2021 | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | ND | 102 | 70-130 | | | |
| Matrix Spike Dup (2106159-MSD1) | | | | Source: 21F0336-03 | | | Prepared & Analyzed: 06/11/2021 | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | ND | 103 | 70-130 | 0.1 | 20 | |
| Matrix Spike Dup (2106159-MSD2) | | | | Source: 21F0202-01 | | | Prepared & Analyzed: 06/11/2021 | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | ND | 98 | 70-130 | 3 | 20 | |
| Batch 2106207 - E245.1 | | | | | | | | | | |
| Blank (2106207-BLK1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | ND | 0.0010 | mg/L | | | | | | | |
| LCS (2106207-BS1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 0.0051 | 0.0010 | mg/L | 0.005000 | | 102 | 85-115 | | | |
| LCS Dup (2106207-BSD1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 0.0050 | 0.0010 | mg/L | 0.005000 | | 100 | 85-115 | 2 | 20 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | Limit | RPD | RPD Limit | Qual |
|--|----------|---------------------------|-------|---------------------------------|---------------|-----------|--------|-----|-----------|------|
| Batch 2106207 - E245.1 | | | | | | | | | | |
| Matrix Spike (2106207-MS1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 5.0 | | ug/L | 5.000 | -0.0088 | 100 | 70-130 | | | |
| Matrix Spike (2106207-MS2) | | Source: 21F0247-01 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 0.0050 | 0.0010 | mg/L | 0.005000 | ND | 100 | 70-130 | | | |
| Matrix Spike Dup (2106207-MSD1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 5.0 | | ug/L | 5.000 | -0.0088 | 101 | 70-130 | 0.4 | 20 | |
| Matrix Spike Dup (2106207-MSD2) | | Source: 21F0247-01 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Mercury | 0.0050 | 0.0010 | mg/L | 0.005000 | ND | 101 | 70-130 | 0.7 | 20 | |
| Batch 2106215 - E200.8 (5.4) | | | | | | | | | | |
| Blank (2106215-BLK1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | ND | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | ND | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.000250 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | 0.000098 | 0.00025 | mg/L | | | | | | | |
| Nickel | ND | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | ND | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |
| LCS (2106215-BS1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Aluminum | 0.098 | 0.040 | mg/L | 0.1000 | | 98 | 85-115 | | | |
| Antimony | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | | | |
| Arsenic | 0.049 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | | | |
| Barium | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | | 96 | 85-115 | | | |
| Cadmium | 0.048 | 0.00025 | mg/L | 0.05000 | | 96 | 85-115 | | | |
| Chromium | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | | | |
| Cobalt | 0.0455 | 0.000250 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Copper | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Lead | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Manganese | 0.047 | 0.00025 | mg/L | 0.05000 | | 94 | 85-115 | | | |
| Nickel | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | | | |
| Selenium | 0.051 | 0.0025 | mg/L | 0.05000 | | 102 | 85-115 | | | |
| Silver | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | | | |
| Thallium | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Uranium | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | | | |
| Zinc | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|-----------------|-------|---------------------------------|---------------|---------------------------------|-------------|-----|-----------|------|
| Batch 2106215 - E200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2106215-BSD1) | | | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Aluminum | 0.096 | 0.040 | mg/L | 0.1000 | | 96 | 85-115 | 2 | 20 | |
| Antimony | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | 0.3 | 20 | |
| Arsenic | 0.048 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | 0.5 | 20 | |
| Barium | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | 0.7 | 20 | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | | 96 | 85-115 | 0.2 | 20 | |
| Cadmium | 0.048 | 0.00025 | mg/L | 0.05000 | | 95 | 85-115 | 0.4 | 20 | |
| Chromium | 0.048 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | 1 | 20 | |
| Cobalt | 0.0461 | 0.000250 | mg/L | 0.05000 | | 92 | 85-115 | 1 | 20 | |
| Copper | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | 0.4 | 20 | |
| Lead | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | 0.3 | 20 | |
| Manganese | 0.047 | 0.00025 | mg/L | 0.05000 | | 94 | 85-115 | 0.2 | 20 | |
| Nickel | 0.047 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | 0.7 | 20 | |
| Selenium | 0.051 | 0.0025 | mg/L | 0.05000 | | 102 | 85-115 | 0.5 | 20 | |
| Silver | 0.050 | 0.00050 | mg/L | 0.05000 | | 101 | 85-115 | 0.2 | 20 | |
| Thallium | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | 1 | 20 | |
| Uranium | 0.047 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | 1 | 20 | |
| Zinc | 0.10 | 0.040 | mg/L | 0.1000 | | 103 | 85-115 | 0.3 | 20 | |
| Matrix Spike (2106215-MS1) | | | | Source: 21F0320-01 | | Prepared & Analyzed: 06/15/2021 | | | | |
| Aluminum | 0.13 | 0.040 | mg/L | 0.1000 | 0.035 | 99 | 70-130 | | | |
| Antimony | 0.051 | 0.00050 | mg/L | 0.05000 | 0.00015 | 102 | 70-130 | | | |
| Arsenic | 0.064 | 0.00050 | mg/L | 0.05000 | 0.013 | 103 | 70-130 | | | |
| Barium | 0.075 | 0.00050 | mg/L | 0.05000 | 0.025 | 101 | 70-130 | | | |
| Beryllium | 0.049 | 0.00025 | mg/L | 0.05000 | ND | 97 | 70-130 | | | |
| Cadmium | 0.048 | 0.00025 | mg/L | 0.05000 | ND | 95 | 70-130 | | | |
| Chromium | 0.049 | 0.00050 | mg/L | 0.05000 | 0.0026 | 93 | 70-130 | | | |
| Cobalt | 0.0455 | 0.000250 | mg/L | 0.05000 | 0.0000815 | 91 | 70-130 | | | |
| Copper | 0.099 | 0.00050 | mg/L | 0.05000 | 0.057 | 85 | 70-130 | | | |
| Lead | 0.054 | 0.00050 | mg/L | 0.05000 | 0.0033 | 100 | 70-130 | | | |
| Manganese | 0.055 | 0.00025 | mg/L | 0.05000 | 0.0075 | 94 | 70-130 | | | |
| Nickel | 0.061 | 0.00050 | mg/L | 0.05000 | 0.016 | 89 | 70-130 | | | |
| Selenium | 0.051 | 0.0025 | mg/L | 0.05000 | ND | 103 | 70-130 | | | |
| Silver | 0.041 | 0.00050 | mg/L | 0.05000 | 0.000036 | 81 | 70-130 | | | |
| Thallium | 0.051 | 0.00050 | mg/L | 0.05000 | 0.00021 | 102 | 70-130 | | | |
| Uranium | 0.060 | 0.00050 | mg/L | 0.05000 | 0.0038 | 112 | 70-130 | | | |
| Zinc | 0.22 | 0.040 | mg/L | 0.1000 | 0.12 | 99 | 70-130 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|---------------------------|-------|---|---------------------------------|------|-------------|-----|-----------|------|
| Batch 2106215 - E200.8 (5.4) | | | | | | | | | | |
| Matrix Spike (2106215-MS2) | | Source: 21F0336-03 | | | Prepared & Analyzed: 06/15/2021 | | | | | |
| Aluminum | 6.3 | 0.40 | mg/L | 0.2000 | 6.1 | 99 | 70-130 | | | |
| Antimony | 0.063 | 0.0020 | mg/L | 0.1000 | 0.00072 | 62 | 70-130 | | | M2 |
| Arsenic | 0.11 | 0.0020 | mg/L | 0.1000 | 0.015 | 95 | 70-130 | | | |
| Barium | 0.22 | 0.0020 | mg/L | 0.1000 | 0.13 | 85 | 70-130 | | | |
| Beryllium | 0.098 | 0.0010 | mg/L | 0.1000 | 0.00048 | 97 | 70-130 | | | |
| Cadmium | 0.096 | 0.0010 | mg/L | 0.1000 | ND | 96 | 70-130 | | | |
| Chromium | 0.10 | 0.0020 | mg/L | 0.1000 | 0.0060 | 94 | 70-130 | | | |
| Cobalt | 0.0943 | 0.00100 | mg/L | 0.1000 | 0.00293 | 91 | 70-130 | | | |
| Copper | 0.11 | 0.0020 | mg/L | 0.1000 | 0.027 | 86 | 70-130 | | | |
| Lead | 0.19 | 0.0020 | mg/L | 0.1000 | 0.094 | 93 | 70-130 | | | |
| Manganese | 0.48 | 0.0010 | mg/L | 0.1000 | 0.47 | 1 | 70-130 | | | M2 |
| Nickel | 0.10 | 0.0020 | mg/L | 0.1000 | 0.0097 | 91 | 70-130 | | | |
| Selenium | 0.094 | 0.010 | mg/L | 0.1000 | ND | 94 | 70-130 | | | |
| Silver | 0.10 | 0.0050 | mg/L | 0.1000 | 0.00048 | 101 | 70-130 | | | |
| Thallium | 0.097 | 0.0020 | mg/L | 0.1000 | 0.0013 | 96 | 70-130 | | | |
| Uranium | 0.11 | 0.0020 | mg/L | 0.1000 | 0.0033 | 103 | 70-130 | | | |
| Zinc | 0.31 | 0.16 | mg/L | 0.2000 | 0.14 | 86 | 70-130 | | | |
| Batch 2106226 - E200.7 (4.4) | | | | | | | | | | |
| Blank (2106226-BLK1) | | | | Prepared: 06/15/2021 Analyzed: 06/17/2021 | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | ND | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | ND | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |
| LCS (2106226-BS1) | | | | Prepared: 06/15/2021 Analyzed: 06/17/2021 | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 102 | 85-115 | | | |
| Calcium | 9.9 | 4.0 | mg/L | 10.00 | | 99 | 85-115 | | | |
| Iron | 1.1 | 0.30 | mg/L | 1.000 | | 106 | 85-115 | | | |
| Magnesium | 9.8 | 3.0 | mg/L | 10.00 | | 98 | 85-115 | | | |
| Potassium | 9.8 | 5.0 | mg/L | 10.00 | | 98 | 85-115 | | | |
| Sodium | 10 | 5.0 | mg/L | 10.00 | | 100 | 85-115 | | | |
| LCS (2106226-BS2) | | | | Prepared: 06/15/2021 Analyzed: 06/17/2021 | | | | | | |
| Silica | 9.4 | 0.20 | mg/L | 10.00 | | 94 | 85-115 | | | |
| LCS Dup (2106226-BSD1) | | | | Prepared: 06/15/2021 Analyzed: 06/17/2021 | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 104 | 85-115 | 2 | 20 | |
| Calcium | 9.8 | 4.0 | mg/L | 10.00 | | 98 | 85-115 | 0.6 | 20 | |
| Iron | 1.0 | 0.30 | mg/L | 1.000 | | 104 | 85-115 | 1 | 20 | |
| Magnesium | 9.7 | 3.0 | mg/L | 10.00 | | 97 | 85-115 | 1 | 20 | |
| Potassium | 9.8 | 5.0 | mg/L | 10.00 | | 98 | 85-115 | 0.4 | 20 | |
| Sodium | 9.8 | 5.0 | mg/L | 10.00 | | 98 | 85-115 | 2 | 20 | |
| LCS Dup (2106226-BSD2) | | | | Prepared: 06/15/2021 Analyzed: 06/17/2021 | | | | | | |
| Silica | 9.2 | 0.20 | mg/L | 10.00 | | 92 | 85-115 | 2 | 20 | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|---------------------------|-------|-------------|----------------------|------|----------------------|-----|-----------|------|
| Batch 2106226 - E200.7 (4.4) | | | | | | | | | | |
| Matrix Spike (2106226-MS1) | | Source: 21F0336-03 | | | Prepared: 06/15/2021 | | Analyzed: 06/17/2021 | | | |
| Boron | 1.1 | | mg/L | 1.000 | 0.11 | 99 | 70-130 | | | |
| Calcium | 31 | | mg/L | 10.00 | 21 | 100 | 70-130 | | | |
| Iron | 5.1 | | mg/L | 1.000 | 3.2 | 188 | 70-130 | | | M3 |
| Magnesium | 13 | | mg/L | 10.00 | 2.4 | 107 | 70-130 | | | |
| Potassium | 13 | | mg/L | 10.00 | 1.9 | 110 | 70-130 | | | |
| Sodium | 49 | | mg/L | 10.00 | 39 | 98 | 70-130 | | | |
| Matrix Spike (2106226-MS2) | | Source: 21F0194-01 | | | Prepared: 06/15/2021 | | Analyzed: 06/17/2021 | | | |
| Boron | 1.2 | 0.10 | mg/L | 1.000 | 0.15 | 102 | 70-130 | | | |
| Calcium | 95 | 4.0 | mg/L | 10.00 | 90 | 50 | 70-130 | | | M3 |
| Iron | 1.7 | 0.30 | mg/L | 1.000 | 0.67 | 102 | 70-130 | | | |
| Magnesium | 21 | 3.0 | mg/L | 10.00 | 12 | 96 | 70-130 | | | |
| Potassium | 17 | 5.0 | mg/L | 10.00 | 6.6 | 102 | 70-130 | | | |
| Sodium | 84 | 5.0 | mg/L | 10.00 | 79 | 51 | 70-130 | | | M3 |
| Matrix Spike (2106226-MS3) | | Source: 21F0194-01 | | | Prepared: 06/15/2021 | | Analyzed: 06/17/2021 | | | |
| Silica | 40 | 0.20 | mg/L | 10.00 | 33 | 77 | 70-130 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|---|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|------|
| Batch 2106138 - SM2540 C | | | | | | | | | | |
| Duplicate (2106138-DUP1) Source: 21F0336-03 Prepared: 06/11/2021 Analyzed: 06/15/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 390 | 20 | mg/L | | 380 | | | 2 | 5 | |
| Duplicate (2106138-DUP2) Source: 21F0336-04 Prepared: 06/11/2021 Analyzed: 06/15/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 360 | 20 | mg/L | | 360 | | | 0.6 | 5 | |
| Duplicate (2106138-DUP3) Source: 21F0336-05 Prepared: 06/11/2021 Analyzed: 06/15/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 360 | 20 | mg/L | | 350 | | | 2 | 5 | |
| Batch 2106160 - SM2540 D | | | | | | | | | | |
| Blank (2106160-BLK1) Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Total Suspended Solids | ND | 10 | mg/L | | | | | | | Q9 |
| Duplicate (2106160-DUP1) Source: 21F0336-03 Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Total Suspended Solids | 240 | 10 | mg/L | | 240 | | | 0.8 | 5 | |
| Duplicate (2106160-DUP2) Source: 21F0362-04 Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Total Suspended Solids | 6900 | 10 | mg/L | | 7000 | | | 2 | 5 | |
| Batch 2106175 - SM4500-CN BE | | | | | | | | | | |
| Blank (2106175-BLK1) Prepared: 06/10/2021 Analyzed: 06/11/2021 | | | | | | | | | | |
| Cyanide | ND | 0.10 | mg/L | | | | | | | |
| LCS (2106175-BS1) Prepared: 06/10/2021 Analyzed: 06/11/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | | 93 | 85-115 | | | |
| LCS Dup (2106175-BSD1) Prepared: 06/10/2021 Analyzed: 06/11/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | | 93 | 85-115 | 0.2 | 15 | |
| Matrix Spike (2106175-MS1) Source: 21F0336-03 Prepared: 06/10/2021 Analyzed: 06/11/2021 | | | | | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | ND | 95 | 80-120 | | | |
| Matrix Spike Dup (2106175-MSD1) Source: 21F0336-03 Prepared: 06/10/2021 Analyzed: 06/11/2021 | | | | | | | | | | |
| Cyanide | 1.7 | 0.10 | mg/L | 2.000 | ND | 86 | 80-120 | 11 | 15 | |
| Batch 2106177 - SM2320B | | | | | | | | | | |
| Blank (2106177-BLK1) Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO ₃) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Carbonate (As CaCO ₃) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Hydroxide (As CaCO ₃) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Total (As CaCO ₃) | ND | 2.0 | mg/L | | | | | | | |
| LCS (2106177-BS1) Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO ₃) | 260 | 2.0 | mg/L | 250.0 | | 103 | 90-110 | | | |
| LCS Dup (2106177-BSD1) Prepared & Analyzed: 06/11/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO ₃) | 260 | 2.0 | mg/L | 250.0 | | 102 | 90-110 | 0.8 | 10 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21F0336
 Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------------|-------|---------------------------------|---------------|------|-------------|-----|-----------|------|
| Batch 2106177 - SM2320B | | | | | | | | | | |
| Matrix Spike (2106177-MS1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Alkalinity, Total (As CaCO3) | 380 | 2.0 | mg/L | 250.0 | 130 | 98 | 70-130 | | | |
| Matrix Spike Dup (2106177-MSD1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Alkalinity, Total (As CaCO3) | 370 | 2.0 | mg/L | 250.0 | 130 | 94 | 70-130 | 2 | 10 | |
| Batch 2106180 - SM4500-SiO2 C | | | | | | | | | | |
| Blank (2106180-BLK1) | | Prepared & Analyzed: 06/11/2021 | | | | | | | | |
| Silica | ND | 2.0 | mg/L | | | | | | | |
| LCS (2106180-BS1) | | Prepared & Analyzed: 06/11/2021 | | | | | | | | |
| Silica | 8.1 | 2.0 | mg/L | 8.000 | | 102 | 90-110 | | | |
| LCS Dup (2106180-BSD1) | | Prepared & Analyzed: 06/11/2021 | | | | | | | | |
| Silica | 8.0 | 2.0 | mg/L | 8.000 | | 101 | 90-110 | 1 | 20 | |
| Matrix Spike (2106180-MS1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Silica | 57 | 10 | mg/L | 40.00 | 19 | 93 | 85-115 | | | |
| Matrix Spike Dup (2106180-MSD1) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/11/2021 | | | | | | |
| Silica | 56 | 10 | mg/L | 40.00 | 19 | 92 | 85-115 | 0.8 | 20 | |
| Batch 2106228 - SM4500-NH3 B,C | | | | | | | | | | |
| Blank (2106228-BLK1) | | Prepared & Analyzed: 06/15/2021 | | | | | | | | |
| Nitrogen, Ammonia (As N) | ND | 0.50 | mg/L | | | | | | | |
| LCS (2106228-BS1) | | Prepared & Analyzed: 06/15/2021 | | | | | | | | |
| Nitrogen, Ammonia (As N) | 4.9 | 0.50 | mg/L | 5.000 | | 98 | 90-110 | | | |
| LCS Dup (2106228-BSD1) | | Prepared & Analyzed: 06/15/2021 | | | | | | | | |
| Nitrogen, Ammonia (As N) | 5.0 | 0.50 | mg/L | 5.000 | | 99 | 90-110 | 0.9 | 10 | |
| Matrix Spike (2106228-MS1) | | Source: 21F0030-01 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 4.9 | 0.50 | mg/L | 5.000 | 0.067 | 96 | 75-120 | | | |
| Matrix Spike (2106228-MS2) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 4.7 | 0.50 | mg/L | 5.000 | 0.20 | 90 | 75-120 | | | |
| Matrix Spike Dup (2106228-MSD1) | | Source: 21F0030-01 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 5.0 | 0.50 | mg/L | 5.000 | 0.067 | 99 | 75-120 | 2 | 20 | |
| Matrix Spike Dup (2106228-MSD2) | | Source: 21F0336-03 | | Prepared & Analyzed: 06/15/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 4.8 | 0.50 | mg/L | 5.000 | 0.20 | 92 | 75-120 | 2 | 20 | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21F0336
Date Received: 06/09/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|-----------------|-------|---------------------------------|---------------|---|-------------|------|-----------|------|
| Batch 2106130 - E300.0 (2.1) | | | | | | | | | | |
| Blank (2106130-BLK1) | | | | Prepared & Analyzed: 06/09/2021 | | | | | | |
| Chloride | ND | 1.0 | mg/L | | | | | | | |
| Fluoride | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrate (As N) | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrite (As N) | ND | 0.10 | mg/L | | | | | | | |
| Sulfate | ND | 5.0 | mg/L | | | | | | | |
| LCS (2106130-BS1) | | | | Prepared & Analyzed: 06/09/2021 | | | | | | |
| Chloride | 13 | 1.0 | mg/L | 12.50 | | 102 | 90-110 | | | |
| Fluoride | 2.1 | 0.50 | mg/L | 2.000 | | 107 | 90-110 | | | |
| Nitrogen, Nitrate (As N) | 5.3 | 0.50 | mg/L | 5.000 | | 105 | 90-110 | | | |
| Nitrogen, Nitrite (As N) | 2.5 | 0.10 | mg/L | 2.500 | | 102 | 90-110 | | | |
| Sulfate | 13 | 5.0 | mg/L | 12.50 | | 105 | 90-110 | | | |
| LCS Dup (2106130-BSD1) | | | | Prepared & Analyzed: 06/09/2021 | | | | | | |
| Chloride | 13 | 1.0 | mg/L | 12.50 | | 102 | 90-110 | 0.07 | 10 | |
| Fluoride | 2.1 | 0.50 | mg/L | 2.000 | | 104 | 90-110 | 3 | 10 | |
| Nitrogen, Nitrate (As N) | 5.3 | 0.50 | mg/L | 5.000 | | 106 | 90-110 | 0.4 | 10 | |
| Nitrogen, Nitrite (As N) | 2.5 | 0.10 | mg/L | 2.500 | | 101 | 90-110 | 0.5 | 10 | |
| Sulfate | 13 | 5.0 | mg/L | 12.50 | | 105 | 90-110 | 0.02 | 10 | |
| Matrix Spike (2106130-MS1) | | | | Source: 21F0336-03 | | Prepared: 06/10/2021 Analyzed: 06/17/2021 | | | | |
| Chloride | 1200 | 100 | mg/L | 1250 | ND | 97 | 80-120 | | | |
| Fluoride | 180 | 50 | mg/L | 200.0 | ND | 91 | 80-120 | | | |
| Nitrogen, Nitrate (As N) | 530 | 50 | mg/L | 500.0 | ND | 107 | 80-120 | | | |
| Nitrogen, Nitrite (As N) | 210 | 10 | mg/L | 250.0 | ND | 84 | 80-120 | | | |
| Sulfate | 1400 | 500 | mg/L | 1250 | ND | 115 | 80-120 | | | |
| Matrix Spike (2106130-MS2) | | | | Source: 21F0335-01 | | Prepared: 06/10/2021 Analyzed: 06/17/2021 | | | | |
| Nitrogen, Nitrate (As N) | 54 | 5.0 | mg/L | 50.00 | ND | 108 | 80-120 | | | |
| Sulfate | 280 | 50 | mg/L | 125.0 | 190 | 74 | 80-120 | | | M2 |
| Matrix Spike (2106130-MS3) | | | | Source: 21F0311-01 | | Prepared: 06/10/2021 Analyzed: 06/22/2021 | | | | |
| Sulfate | 19000 | 5000 | mg/L | 12500 | 13000 | 44 | 80-120 | | | M2 |
| Matrix Spike Dup (2106130-MSD1) | | | | Source: 21F0336-03 | | Prepared: 06/10/2021 Analyzed: 06/17/2021 | | | | |
| Chloride | 1200 | 100 | mg/L | 1250 | ND | 97 | 80-120 | 0.5 | 10 | |
| Fluoride | 180 | 50 | mg/L | 200.0 | ND | 91 | 80-120 | 0.3 | 10 | |
| Nitrogen, Nitrate (As N) | 530 | 50 | mg/L | 500.0 | ND | 107 | 80-120 | 0.01 | 10 | |
| Nitrogen, Nitrite (As N) | 210 | 10 | mg/L | 250.0 | ND | 84 | 80-120 | 0.05 | 10 | |
| Sulfate | 1400 | 500 | mg/L | 1250 | ND | 115 | 80-120 | 0.3 | 10 | |
| Matrix Spike Dup (2106130-MSD2) | | | | Source: 21F0335-01 | | Prepared: 06/10/2021 Analyzed: 06/17/2021 | | | | |
| Nitrogen, Nitrate (As N) | 54 | 5.0 | mg/L | 50.00 | ND | 108 | 80-120 | 0.3 | 10 | |
| Sulfate | 280 | 50 | mg/L | 125.0 | 190 | 75 | 80-120 | 0.7 | 10 | M2 |
| Matrix Spike Dup (2106130-MSD3) | | | | Source: 21F0311-01 | | Prepared: 06/10/2021 Analyzed: 06/22/2021 | | | | |
| Sulfate | 19000 | 5000 | mg/L | 12500 | 13000 | 43 | 80-120 | 0.2 | 10 | M2 |



December 15, 2021

Louise Spencer
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

RE: AMI-310

Work Order No.: 21I0664
Order Name: Hermosa Project

Dear Louise Spencer,

Turner Laboratories, Inc. received 3 sample(s) on 09/24/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Kevin Brim
Project Manager

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21I0664
Date Received: 09/24/2021

Order: Hermosa Project

Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date/Time |
|----------------------|-------------------------|---------------|-----------------------------|
| 21I0664-01 | MW-9-2021-20922 | Ground Water | 09/23/2021 1025 |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

Case Narrative

TW-618224-20210923 is a resample of TW-618224-20210915. Only Nitrate, Nitrite, Total Dissolved Solids and Total Suspended Solids were needed.

N1 = The Sample / Sample Duplicate recovered slightly above the 5% acceptance limits for the RPD. A lower sample volume was used due to limited sample volume for the sample that was duplicated. The original analysis of the sample correlates with the re-analysis within 5%.

- E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
 - E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
 - H2 Initial analysis was performed within holding time. Reanalysis for the required dilution was past holding time.
 - M1 Matrix spike recovery was high; the associated LCS/LCSD was acceptable.
 - M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
 - M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
 - N1 See case narrative.
 - Q9 Insufficient sample received to meet method QC requirements.
 - R12 RPD/RSD exceeded the method acceptance limit. Result less than 5 times the PQL.
 - V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.
- ND Not Detected at or above the PQL
 - PQL Practical Quantitation Limit
 - DF Dilution Factor
-

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21I0664
Lab Sample ID: 21I0664-01

Client Sample ID: MW-9-2021-20922
Collection Date/Time: 09/23/2021 1025
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|
|----------|--------|-----|-----|------|-------|----|-----------|---------------|---------|

Hardness-Calculation

| | | | | | | | | | | |
|--|--|--|--|--|------|---|------------|-----------------|-----|----|
| Hardness, Calcium/Magnesium (As 110 CaCO3) | | | | | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 | MH |
|--|--|--|--|--|------|---|------------|-----------------|-----|----|

ICP Dissolved Metals-E 200.7 (4.4)

| | | | | | | | | | | |
|-----------|-------|--------|------|----|------|---|------------|-----------------|-----|----|
| Boron | 0.12 | | 0.10 | | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Calcium | 30 | | 4.0 | | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Iron | 0.084 | 0.0031 | 0.30 | E4 | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Magnesium | 0.95 | 0.10 | 3.0 | E4 | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Potassium | 0.91 | 0.14 | 5.0 | E4 | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Silica | 19 | | 0.20 | | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |
| Sodium | 74 | | 5.0 | | mg/L | 1 | 09/30/2021 | 095: 10/01/2021 | 123 | MH |

ICP/MS Dissolved Metals-E 200.8 (5.4)

| | | | | | | | | | | |
|-----------|----------|----------|---------|----|------|---|------------|-----------------|-----|----|
| Aluminum | ND | 0.013 | 0.040 | E8 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Antimony | 0.000082 | 0.000039 | 0.00050 | E4 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Arsenic | 0.010 | | 0.00050 | | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Barium | 0.023 | | 0.00050 | | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Beryllium | ND | 0.000013 | 0.00025 | E8 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Cadmium | ND | 0.000050 | 0.00025 | E8 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Chromium | 0.000074 | 0.000023 | 0.00050 | E4 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Cobalt | ND | | 0.00025 | | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Copper | ND | 0.00015 | 0.00050 | E8 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Lead | ND | 0.000057 | 0.00050 | E8 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Manganese | 0.35 | | 0.00025 | | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Nickel | ND | 0.000015 | 0.00050 | E8 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Selenium | ND | 0.00025 | 0.0025 | E8 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |
| Silver | ND | 0.000021 | 0.00050 | E8 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Thallium | ND | 0.000023 | 0.00050 | E8 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Uranium | 0.00034 | 0.000015 | 0.00050 | E4 | mg/L | 1 | 09/30/2021 | 095: 10/04/2021 | 124 | CR |
| Zinc | ND | 0.0023 | 0.040 | E8 | mg/L | 1 | 09/30/2021 | 095: 09/30/2021 | 185 | CR |

CVAA Dissolved Mercury-E 245.1

| | | | | | | | | | | |
|---------|----|----------|--------|----|------|---|------------|-----------------|-----|-----|
| Mercury | ND | 0.000041 | 0.0010 | E8 | mg/L | 1 | 10/04/2021 | 100: 10/04/2021 | 145 | RAD |
|---------|----|----------|--------|----|------|---|------------|-----------------|-----|-----|

ICP Total Metals-E 200.7 (4.4)

Turner Laboratories, Inc.

Date: 12/15/2021

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 21I0664
 Lab Sample ID: 21I0664-01

Client Sample ID: MW-9-2021-20922
 Collection Date/Time: 09/23/2021 1025
 Matrix: Ground Water
 Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|-----------|--------|------|------|------|-------|----|------------|-----------------|---------|
| Boron | 0.20 | | 0.10 | | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Calcium | 38 | | 4.0 | | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Iron | 3.8 | | 0.30 | | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Magnesium | 2.9 | 0.10 | 3.0 | E4 | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Potassium | 2.4 | 0.14 | 5.0 | E4 | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Silica | 43 | | 0.20 | | mg/L | 1 | 10/01/2021 | 091: 10/04/2021 | 134 MH |
| Sodium | 78 | | 25 | | mg/L | 5 | 10/01/2021 | 091: 10/05/2021 | 101 MH |

ICP/MS Total Metals-E200.8 (5.4)

| | | | | | | | | | |
|-----------|---------|----------|----------|----|------|----|------------|-----------------|--------|
| Aluminum | 3.3 | | 0.40 | | mg/L | 10 | 10/01/2021 | 082: 10/05/2021 | 162 CR |
| Antimony | 0.00055 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Arsenic | 0.013 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Barium | 0.10 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Beryllium | 0.00023 | 0.000013 | 0.00025 | E4 | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Cadmium | 0.00067 | | 0.00025 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Chromium | 0.0037 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Cobalt | 0.00158 | | 0.000250 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Copper | 0.011 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Lead | 0.045 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Manganese | 0.52 | | 0.00025 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Nickel | 0.0040 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Selenium | 0.00098 | 0.00025 | 0.0025 | E4 | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Silver | 0.00012 | 0.000021 | 0.00050 | E4 | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Thallium | 0.00018 | 0.000023 | 0.00050 | E4 | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Uranium | 0.0023 | | 0.00050 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |
| Zinc | 0.064 | | 0.040 | | mg/L | 1 | 10/01/2021 | 082: 10/05/2021 | 160 CR |

CVAA Total Mercury-E245.1

| | | | | | | | | | |
|---------|----|---------|--------|----|------|---|------------|-----------------|---------|
| Mercury | ND | 0.00036 | 0.0010 | E8 | mg/L | 1 | 10/01/2021 | 130: 10/01/2021 | 164 RAD |
|---------|----|---------|--------|----|------|---|------------|-----------------|---------|

Anions by Ion Chromatography-E300.0 (2.1)

| | | | | | | | | | |
|--------------------------|------|--|------|-----------|------|---|------------|-----------------|--------|
| Chloride | 4.3 | | 1.0 | | mg/L | 1 | 09/24/2021 | 141: 09/24/2021 | 141 EJ |
| Fluoride | ND | | 0.50 | | mg/L | 1 | 09/24/2021 | 141: 09/24/2021 | 141 EJ |
| Nitrogen, Nitrate (As N) | 0.23 | | 0.50 | | mg/L | 1 | 09/24/2021 | 141: 09/24/2021 | 141 EJ |
| Nitrogen, Nitrite (As N) | ND | | 0.10 | H2, V1 | mg/L | 1 | 09/24/2021 | 141: 09/28/2021 | 234 EJ |
| Sulfate | 160 | | 25 | | mg/L | 5 | 09/24/2021 | 141: 09/29/2021 | 000 EJ |

Calculation-Ion Balance

Turner Laboratories, Inc.**Date: 12/15/2021**

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 21I0664
Lab Sample ID: 21I0664-01

Client Sample ID: MW-9-2021-20922
Collection Date/Time: 09/23/2021 1025
Matrix: Ground Water
Order Name: Hermosa Project

| Analyses | Result | MDL | PQL | Qual | Units | DF | Prep Date | Analysis Date | Analyst |
|--|--------|-------|------|--------|-------|----|------------|---------------|--------------------|
| Anion | 6.77 | | | | meq/L | 1 | 10/08/2021 | 160 | 10/08/2021 160 KB |
| Cation | 4.83 | | | | meq/L | 1 | 10/08/2021 | 160 | 10/08/2021 160 KB |
| Cation/Anion, % Difference | 16.7 | | | | meq/L | 1 | 10/08/2021 | 160 | 10/08/2021 160 KB |
| Alkalinity-SM2320B | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO3) | 140 | | 2.0 | | mg/L | 1 | 09/29/2021 | 110 | 09/29/2021 130 AGC |
| Alkalinity, Carbonate (As CaCO3) | ND | | 2.0 | | mg/L | 1 | 09/29/2021 | 110 | 09/29/2021 130 AGC |
| Alkalinity, Hydroxide (As CaCO3) | ND | | 2.0 | | mg/L | 1 | 09/29/2021 | 110 | 09/29/2021 130 AGC |
| Alkalinity, Phenolphthalein (As CaCO3) | ND | | 2.0 | | mg/L | 1 | 09/29/2021 | 110 | 09/29/2021 130 AGC |
| Alkalinity, Total (As CaCO3) | 140 | | 2.0 | | mg/L | 1 | 09/29/2021 | 110 | 09/29/2021 130 AGC |
| Total Dissolved Solids (Residue, Filterable)-SM2540 C | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 330 | | 20 | | mg/L | 1 | 09/28/2021 | 081 | 09/30/2021 123 AGC |
| Total Suspended Solids (Residue, Non-Filterable)-SM2540 D | | | | | | | | | |
| Total Suspended Solids | 72 | | 10 | | mg/L | 1 | 09/28/2021 | 081 | 09/29/2021 083 AGC |
| Cyanide-SM4500-CN BE | | | | | | | | | |
| Cyanide | ND | 0.067 | 0.10 | E8, V1 | mg/L | 1 | 09/30/2021 | 083 | 10/01/2021 110 ACG |
| Ammonia as N-SM4500-NH3 B,C | | | | | | | | | |
| Nitrogen, Ammonia (As N) | ND | 0.045 | 0.50 | E8 | mg/L | 1 | 10/06/2021 | 140 | 10/06/2021 172 ACG |
| Silica-SM4500-SiO2 C | | | | | | | | | |
| Silica | 19 | | 10 | M1 | mg/L | 5 | 10/04/2021 | 100 | 10/04/2021 110 AGC |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--------------------------------------|--------|-----------------|-------|-------------|---|------|-------------|-----|-----------|------|
| Batch 2109293 - E 200.8 (5.4) | | | | | | | | | | |
| Blank (2109293-BLK1) | | | | | | | | | | |
| | | | | | Prepared: 09/23/2021 Analyzed: 10/01/2021 | | | | | |
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | ND | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | ND | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.00025 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | ND | 0.00025 | mg/L | | | | | | | |
| Nickel | ND | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | ND | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |

| | | | | | | | | | | |
|--------------------------|-------|---------|------|---------|---|-----|--------|--|--|--|
| LCS (2109293-BS1) | | | | | | | | | | |
| | | | | | Prepared: 09/23/2021 Analyzed: 10/01/2021 | | | | | |
| Aluminum | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | | | |
| Antimony | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Arsenic | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Barium | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Beryllium | 0.050 | 0.00025 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Cadmium | 0.046 | 0.00025 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Chromium | 0.047 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Cobalt | 0.045 | 0.00025 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Copper | 0.046 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Lead | 0.046 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Manganese | 0.046 | 0.00025 | mg/L | 0.05000 | | 92 | 85-115 | | | |
| Nickel | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Selenium | 0.048 | 0.0025 | mg/L | 0.05000 | | 95 | 85-115 | | | |
| Silver | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | | | |
| Thallium | 0.052 | 0.00050 | mg/L | 0.05000 | | 105 | 85-115 | | | |
| Uranium | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | | | |
| Zinc | 0.096 | 0.040 | mg/L | 0.1000 | | 96 | 85-115 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--------------------------------------|--------|-----------------|-------|---|---------------|---|-------------|-----|-----------|------|
| Batch 2109293 - E 200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2109293-BSD1) | | | | Prepared: 09/23/2021 Analyzed: 10/01/2021 | | | | | | |
| Aluminum | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | 0.2 | 20 | |
| Antimony | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 0.7 | 20 | |
| Arsenic | 0.045 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | 1 | 20 | |
| Barium | 0.046 | 0.00050 | mg/L | 0.05000 | | 91 | 85-115 | 0.6 | 20 | |
| Beryllium | 0.050 | 0.00025 | mg/L | 0.05000 | | 101 | 85-115 | 0.6 | 20 | |
| Cadmium | 0.046 | 0.00025 | mg/L | 0.05000 | | 91 | 85-115 | 0.8 | 20 | |
| Chromium | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | 0.7 | 20 | |
| Cobalt | 0.045 | 0.00025 | mg/L | 0.05000 | | 89 | 85-115 | 2 | 20 | |
| Copper | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 2 | 20 | |
| Lead | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | 1 | 20 | |
| Manganese | 0.046 | 0.00025 | mg/L | 0.05000 | | 91 | 85-115 | 0.8 | 20 | |
| Nickel | 0.046 | 0.00050 | mg/L | 0.05000 | | 92 | 85-115 | 0.8 | 20 | |
| Selenium | 0.046 | 0.0025 | mg/L | 0.05000 | | 93 | 85-115 | 2 | 20 | |
| Silver | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 0.6 | 20 | |
| Thallium | 0.053 | 0.00050 | mg/L | 0.05000 | | 106 | 85-115 | 1 | 20 | |
| Uranium | 0.045 | 0.00050 | mg/L | 0.05000 | | 90 | 85-115 | 0.3 | 20 | |
| Zinc | 0.094 | 0.040 | mg/L | 0.1000 | | 94 | 85-115 | 2 | 20 | |
| Matrix Spike (2109293-MS1) | | | | Source: 2110620-01 | | Prepared: 09/23/2021 Analyzed: 10/01/2021 | | | | |
| Aluminum | 0.096 | 0.040 | mg/L | 0.1000 | ND | 96 | 70-130 | | | |
| Antimony | 0.065 | 0.00050 | mg/L | 0.05000 | 0.00012 | 131 | 70-130 | | | M1 |
| Arsenic | 0.066 | 0.00050 | mg/L | 0.05000 | 0.00044 | 131 | 70-130 | | | M1 |
| Barium | 0.11 | 0.00050 | mg/L | 0.05000 | 0.049 | 127 | 70-130 | | | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | ND | 96 | 70-130 | | | |
| Cadmium | 0.061 | 0.00025 | mg/L | 0.05000 | ND | 121 | 70-130 | | | |
| Chromium | 0.059 | 0.00050 | mg/L | 0.05000 | 0.000044 | 119 | 70-130 | | | |
| Cobalt | 0.055 | 0.00025 | mg/L | 0.05000 | 0.000030 | 110 | 70-130 | | | |
| Copper | 0.055 | 0.00050 | mg/L | 0.05000 | 0.0018 | 106 | 70-130 | | | |
| Lead | 0.061 | 0.00050 | mg/L | 0.05000 | 0.000070 | 122 | 70-130 | | | |
| Manganese | 0.20 | 0.00025 | mg/L | 0.05000 | 0.14 | 111 | 70-130 | | | |
| Nickel | 0.055 | 0.00050 | mg/L | 0.05000 | 0.000029 | 110 | 70-130 | | | |
| Selenium | 0.072 | 0.0025 | mg/L | 0.05000 | 0.0047 | 134 | 70-130 | | | M1 |
| Silver | 0.056 | 0.00050 | mg/L | 0.05000 | ND | 111 | 70-130 | | | |
| Thallium | 0.060 | 0.00050 | mg/L | 0.05000 | 0.000059 | 120 | 70-130 | | | |
| Uranium | 0.072 | 0.00050 | mg/L | 0.05000 | 0.0068 | 131 | 70-130 | | | M1 |
| Zinc | 0.13 | 0.040 | mg/L | 0.1000 | 0.020 | 112 | 70-130 | | | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 2110664
 Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--------------------------------------|--------|---------------------------------|-------|-------------|----------------------|------|----------------------|-----|-----------|------|
| Batch 2109293 - E 200.8 (5.4) | | | | | | | | | | |
| Matrix Spike (2109293-MS2) | | Source: 2110621-02 | | | Prepared: 09/23/2021 | | Analyzed: 10/01/2021 | | | |
| Aluminum | 0.099 | 0.040 | mg/L | 0.1000 | ND | 99 | 70-130 | | | |
| Antimony | 0.063 | 0.00050 | mg/L | 0.05000 | 0.00039 | 125 | 70-130 | | | |
| Arsenic | 0.065 | 0.00050 | mg/L | 0.05000 | 0.0045 | 121 | 70-130 | | | |
| Barium | 0.072 | 0.00050 | mg/L | 0.05000 | 0.012 | 121 | 70-130 | | | |
| Beryllium | 0.050 | 0.00025 | mg/L | 0.05000 | ND | 100 | 70-130 | | | |
| Cadmium | 0.060 | 0.00025 | mg/L | 0.05000 | ND | 120 | 70-130 | | | |
| Chromium | 0.058 | 0.00050 | mg/L | 0.05000 | 0.000083 | 116 | 70-130 | | | |
| Cobalt | 0.056 | 0.00025 | mg/L | 0.05000 | 0.000086 | 111 | 70-130 | | | |
| Copper | 0.055 | 0.00050 | mg/L | 0.05000 | 0.00028 | 109 | 70-130 | | | |
| Lead | 0.058 | 0.00050 | mg/L | 0.05000 | ND | 116 | 70-130 | | | |
| Manganese | 0.18 | 0.00025 | mg/L | 0.05000 | 0.12 | 115 | 70-130 | | | |
| Nickel | 0.056 | 0.00050 | mg/L | 0.05000 | 0.00063 | 111 | 70-130 | | | |
| Selenium | 0.064 | 0.0025 | mg/L | 0.05000 | ND | 127 | 70-130 | | | |
| Silver | 0.055 | 0.00050 | mg/L | 0.05000 | 0.000021 | 110 | 70-130 | | | |
| Thallium | 0.057 | 0.00050 | mg/L | 0.05000 | ND | 113 | 70-130 | | | |
| Uranium | 0.060 | 0.00050 | mg/L | 0.05000 | 0.00037 | 119 | 70-130 | | | |
| Zinc | 0.12 | 0.040 | mg/L | 0.1000 | ND | 119 | 70-130 | | | |
| Batch 2109367 - E 200.7 (4.4) | | | | | | | | | | |
| Blank (2109367-BLK1) | | Prepared & Analyzed: 10/01/2021 | | | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | ND | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | ND | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |
| LCS (2109367-BS1) | | Prepared & Analyzed: 10/01/2021 | | | | | | | | |
| Boron | 0.97 | 0.10 | mg/L | 1.000 | | 97 | 85-115 | | | |
| Calcium | 9.6 | 4.0 | mg/L | 10.00 | | 96 | 85-115 | | | |
| Iron | 0.94 | 0.30 | mg/L | 1.000 | | 94 | 85-115 | | | |
| Magnesium | 9.9 | 3.0 | mg/L | 10.00 | | 99 | 85-115 | | | |
| Potassium | 10 | 5.0 | mg/L | 10.00 | | 100 | 85-115 | | | |
| Sodium | 9.7 | 5.0 | mg/L | 10.00 | | 97 | 85-115 | | | |
| LCS (2109367-BS2) | | Prepared & Analyzed: 10/01/2021 | | | | | | | | |
| Silica | 2.1 | 0.20 | mg/L | 2.143 | | 96 | 85-115 | | | |
| LCS Dup (2109367-BSD1) | | Prepared & Analyzed: 10/01/2021 | | | | | | | | |
| Boron | 0.97 | 0.10 | mg/L | 1.000 | | 97 | 85-115 | 0.3 | 20 | |
| Calcium | 9.5 | 4.0 | mg/L | 10.00 | | 95 | 85-115 | 0.2 | 20 | |
| Iron | 0.94 | 0.30 | mg/L | 1.000 | | 94 | 85-115 | 0.2 | 20 | |
| Magnesium | 9.9 | 3.0 | mg/L | 10.00 | | 99 | 85-115 | 0.3 | 20 | |
| Potassium | 9.9 | 5.0 | mg/L | 10.00 | | 99 | 85-115 | 1 | 20 | |
| Sodium | 9.6 | 5.0 | mg/L | 10.00 | | 96 | 85-115 | 0.8 | 20 | |
| LCS Dup (2109367-BSD2) | | Prepared & Analyzed: 10/01/2021 | | | | | | | | |
| Silica | 2.1 | 0.20 | mg/L | 2.143 | | 96 | 85-115 | 0.4 | 20 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 2110664
 Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|-------------|---------------------------------|------|-------------|-----|-----------|------|
| Batch 2109367 - E 200.7 (4.4) | | | | | | | | | | |
| Matrix Spike (2109367-MS1) | | Source: 2110639-01 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Boron | 1.3 | 0.10 | mg/L | 1.000 | 0.055 | 122 | 70-130 | | | |
| Calcium | 73 | 4.0 | mg/L | 10.00 | 64 | 87 | 70-130 | | | |
| Iron | 1.2 | 0.30 | mg/L | 1.000 | 0.20 | 102 | 70-130 | | | |
| Magnesium | 31 | 3.0 | mg/L | 10.00 | 21 | 99 | 70-130 | | | |
| Potassium | 16 | 5.0 | mg/L | 10.00 | 4.7 | 108 | 70-130 | | | |
| Sodium | 50 | 5.0 | mg/L | 10.00 | 41 | 92 | 70-130 | | | |
| Matrix Spike (2109367-MS2) | | Source: 2110639-01 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Silica | 19 | 0.20 | mg/L | 2.143 | 17 | 76 | 70-130 | | | |
| Batch 2110010 - E245.1 | | | | | | | | | | |
| Blank (2110010-BLK1) | | | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | ND | 0.0010 | mg/L | | | | | | | |
| LCS (2110010-BS1) | | | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | | 99 | 85-115 | | | |
| LCS Dup (2110010-BSD1) | | | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0050 | 0.0010 | mg/L | 0.005000 | | 99 | 85-115 | 0.7 | 20 | |
| Matrix Spike (2110010-MS1) | | Source: 2110620-04 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | ND | 99 | 70-130 | | | |
| Matrix Spike (2110010-MS2) | | Source: 2110621-01 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | ND | 98 | 70-130 | | | |
| Matrix Spike Dup (2110010-MSD1) | | Source: 2110620-04 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | ND | 99 | 70-130 | 0.1 | 20 | |
| Matrix Spike Dup (2110010-MSD2) | | Source: 2110621-01 | | | Prepared & Analyzed: 10/01/2021 | | | | | |
| Mercury | 0.0048 | 0.0010 | mg/L | 0.005000 | ND | 96 | 70-130 | 2 | 20 | |
| Batch 2110014 - E200.8 (5.4) | | | | | | | | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|---------|-----------------|-------|---|---------------|------|-------------|-----|-----------|------|
| Batch 2110014 - E200.8 (5.4) | | | | | | | | | | |
| Blank (2110014-BLK1) | | | | Prepared: 10/01/2021 Analyzed: 10/05/2021 | | | | | | |
| Aluminum | ND | 0.040 | mg/L | | | | | | | |
| Antimony | ND | 0.00050 | mg/L | | | | | | | |
| Arsenic | ND | 0.00050 | mg/L | | | | | | | |
| Barium | ND | 0.00050 | mg/L | | | | | | | |
| Beryllium | ND | 0.00025 | mg/L | | | | | | | |
| Cadmium | ND | 0.00025 | mg/L | | | | | | | |
| Chromium | ND | 0.00050 | mg/L | | | | | | | |
| Cobalt | ND | 0.000250 | mg/L | | | | | | | |
| Copper | ND | 0.00050 | mg/L | | | | | | | |
| Lead | ND | 0.00050 | mg/L | | | | | | | |
| Manganese | ND | 0.00025 | mg/L | | | | | | | |
| Nickel | ND | 0.00050 | mg/L | | | | | | | |
| Selenium | ND | 0.0025 | mg/L | | | | | | | |
| Silver | 0.00021 | 0.00050 | mg/L | | | | | | | |
| Thallium | ND | 0.00050 | mg/L | | | | | | | |
| Uranium | ND | 0.00050 | mg/L | | | | | | | |
| Zinc | ND | 0.040 | mg/L | | | | | | | |
| LCS (2110014-BS1) | | | | | | | | | | |
| | | | | Prepared: 10/01/2021 Analyzed: 10/05/2021 | | | | | | |
| Aluminum | 0.11 | 0.040 | mg/L | 0.1000 | | 105 | 85-115 | | | |
| Antimony | 0.050 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Arsenic | 0.049 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | | | |
| Barium | 0.049 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | | | |
| Beryllium | 0.049 | 0.00025 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Cadmium | 0.049 | 0.00025 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Chromium | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Cobalt | 0.0492 | 0.000250 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Copper | 0.049 | 0.00050 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Lead | 0.048 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | | | |
| Manganese | 0.049 | 0.00025 | mg/L | 0.05000 | | 99 | 85-115 | | | |
| Nickel | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | | | |
| Selenium | 0.050 | 0.0025 | mg/L | 0.05000 | | 100 | 85-115 | | | |
| Silver | 0.052 | 0.00050 | mg/L | 0.05000 | | 104 | 85-115 | | | |
| Thallium | 0.046 | 0.00050 | mg/L | 0.05000 | | 93 | 85-115 | | | |
| Uranium | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | | | |
| Zinc | 0.10 | 0.040 | mg/L | 0.1000 | | 101 | 85-115 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|-----------------|-------|--|---------------|------|-------------|-----|-----------|------|
| Batch 2110014 - E200.8 (5.4) | | | | | | | | | | |
| LCS Dup (2110014-BSD1) | | | | Prepared: 10/01/2021 Analyzed: 10/05/2021 | | | | | | |
| Aluminum | 0.10 | 0.040 | mg/L | 0.1000 | | 104 | 85-115 | 1 | 20 | |
| Antimony | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | 4 | 20 | |
| Arsenic | 0.047 | 0.00050 | mg/L | 0.05000 | | 94 | 85-115 | 3 | 20 | |
| Barium | 0.048 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | 2 | 20 | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | | 97 | 85-115 | 1 | 20 | |
| Cadmium | 0.048 | 0.00025 | mg/L | 0.05000 | | 97 | 85-115 | 2 | 20 | |
| Chromium | 0.048 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | 4 | 20 | |
| Cobalt | 0.0482 | 0.000250 | mg/L | 0.05000 | | 96 | 85-115 | 2 | 20 | |
| Copper | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | 3 | 20 | |
| Lead | 0.049 | 0.00050 | mg/L | 0.05000 | | 98 | 85-115 | 3 | 20 | |
| Manganese | 0.048 | 0.00025 | mg/L | 0.05000 | | 96 | 85-115 | 3 | 20 | |
| Nickel | 0.048 | 0.00050 | mg/L | 0.05000 | | 95 | 85-115 | 3 | 20 | |
| Selenium | 0.049 | 0.0025 | mg/L | 0.05000 | | 98 | 85-115 | 3 | 20 | |
| Silver | 0.056 | 0.00050 | mg/L | 0.05000 | | 111 | 85-115 | 7 | 20 | |
| Thallium | 0.048 | 0.00050 | mg/L | 0.05000 | | 96 | 85-115 | 3 | 20 | |
| Uranium | 0.049 | 0.00050 | mg/L | 0.05000 | | 97 | 85-115 | 3 | 20 | |
| Zinc | 0.099 | 0.040 | mg/L | 0.1000 | | 99 | 85-115 | 2 | 20 | |
| Matrix Spike (2110014-MS1) | | | | Source: 2110580-01 Prepared: 10/01/2021 Analyzed: 10/05/2021 | | | | | | |
| Aluminum | 0.19 | 0.040 | mg/L | 0.1000 | 0.078 | 110 | 70-130 | | | |
| Antimony | 0.049 | 0.00050 | mg/L | 0.05000 | 0.000044 | 98 | 70-130 | | | |
| Arsenic | 0.050 | 0.00050 | mg/L | 0.05000 | 0.0018 | 97 | 70-130 | | | |
| Barium | 0.075 | 0.00050 | mg/L | 0.05000 | 0.028 | 95 | 70-130 | | | |
| Beryllium | 0.048 | 0.00025 | mg/L | 0.05000 | 0.000013 | 96 | 70-130 | | | |
| Cadmium | 0.047 | 0.00025 | mg/L | 0.05000 | ND | 93 | 70-130 | | | |
| Chromium | 0.052 | 0.00050 | mg/L | 0.05000 | 0.0069 | 91 | 70-130 | | | |
| Cobalt | 0.0442 | 0.000250 | mg/L | 0.05000 | 0.000132 | 88 | 70-130 | | | |
| Copper | 0.051 | 0.00050 | mg/L | 0.05000 | 0.0082 | 86 | 70-130 | | | |
| Lead | 0.051 | 0.00050 | mg/L | 0.05000 | 0.0024 | 98 | 70-130 | | | |
| Manganese | 0.067 | 0.00025 | mg/L | 0.05000 | 0.024 | 85 | 70-130 | | | |
| Nickel | 0.048 | 0.00050 | mg/L | 0.05000 | 0.0047 | 86 | 70-130 | | | |
| Selenium | 0.044 | 0.0025 | mg/L | 0.05000 | 0.00053 | 87 | 70-130 | | | |
| Silver | 0.048 | 0.00050 | mg/L | 0.05000 | 0.0021 | 91 | 70-130 | | | |
| Thallium | 0.048 | 0.00050 | mg/L | 0.05000 | 0.00034 | 94 | 70-130 | | | |
| Uranium | 0.058 | 0.00050 | mg/L | 0.05000 | 0.0030 | 111 | 70-130 | | | |
| Zinc | 0.58 | 0.040 | mg/L | 0.1000 | 0.48 | 91 | 70-130 | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | %REC Limits | RPD | RPD Limit | Qual |
|-------------------------------------|--------|---|-------|-------------|----------------------|-----------|----------------------|------|-----------|------|
| Batch 2110014 - E200.8 (5.4) | | | | | | | | | | |
| Matrix Spike (2110014-MS2) | | Source: 2110592-01 | | | Prepared: 10/01/2021 | | Analyzed: 10/05/2021 | | | |
| Aluminum | 0.12 | 0.040 | mg/L | 0.1000 | 0.015 | 100 | 70-130 | | | |
| Antimony | 0.049 | 0.00050 | mg/L | 0.05000 | 0.00015 | 98 | 70-130 | | | |
| Arsenic | 0.049 | 0.00050 | mg/L | 0.05000 | 0.0013 | 95 | 70-130 | | | |
| Barium | 0.15 | 0.00050 | mg/L | 0.05000 | 0.10 | 98 | 70-130 | | | |
| Beryllium | 0.045 | 0.00025 | mg/L | 0.05000 | 0.000015 | 90 | 70-130 | | | |
| Cadmium | 0.045 | 0.00025 | mg/L | 0.05000 | 0.000099 | 89 | 70-130 | | | |
| Chromium | 0.047 | 0.00050 | mg/L | 0.05000 | 0.0022 | 90 | 70-130 | | | |
| Cobalt | 0.0441 | 0.000250 | mg/L | 0.05000 | 0.000163 | 88 | 70-130 | | | |
| Copper | 0.098 | 0.00050 | mg/L | 0.05000 | 0.058 | 79 | 70-130 | | | |
| Lead | 0.050 | 0.00050 | mg/L | 0.05000 | ND | 100 | 70-130 | | | |
| Manganese | 0.047 | 0.00025 | mg/L | 0.05000 | 0.0023 | 90 | 70-130 | | | |
| Nickel | 0.042 | 0.00050 | mg/L | 0.05000 | ND | 83 | 70-130 | | | |
| Selenium | 0.083 | 0.0025 | mg/L | 0.05000 | 0.038 | 90 | 70-130 | | | |
| Silver | 0.046 | 0.00050 | mg/L | 0.05000 | 0.0013 | 90 | 70-130 | | | |
| Thallium | 0.051 | 0.00050 | mg/L | 0.05000 | 0.00032 | 101 | 70-130 | | | |
| Uranium | 0.089 | 0.00050 | mg/L | 0.05000 | 0.032 | 115 | 70-130 | | | |
| Zinc | 0.092 | 0.040 | mg/L | 0.1000 | 0.010 | 81 | 70-130 | | | |
| Batch 2110021 - E200.7 (4.4) | | | | | | | | | | |
| Blank (2110021-BLK1) | | Prepared: 10/01/2021 Analyzed: 10/04/2021 | | | | | | | | |
| Boron | ND | 0.10 | mg/L | | | | | | | |
| Calcium | ND | 4.0 | mg/L | | | | | | | |
| Iron | 0.0097 | 0.30 | mg/L | | | | | | | |
| Magnesium | ND | 3.0 | mg/L | | | | | | | |
| Potassium | ND | 5.0 | mg/L | | | | | | | |
| Silica | ND | 0.20 | mg/L | | | | | | | |
| Sodium | ND | 5.0 | mg/L | | | | | | | |
| LCS (2110021-BS1) | | Prepared: 10/01/2021 Analyzed: 10/04/2021 | | | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 103 | 85-115 | | | |
| Calcium | 11 | 4.0 | mg/L | 10.00 | | 105 | 85-115 | | | |
| Iron | 1.0 | 0.30 | mg/L | 1.000 | | 102 | 85-115 | | | |
| Magnesium | 10 | 3.0 | mg/L | 10.00 | | 100 | 85-115 | | | |
| Potassium | 9.5 | 5.0 | mg/L | 10.00 | | 95 | 85-115 | | | |
| Sodium | 9.9 | 5.0 | mg/L | 10.00 | | 99 | 85-115 | | | |
| LCS (2110021-BS2) | | Prepared: 10/01/2021 Analyzed: 10/04/2021 | | | | | | | | |
| Silica | 9.5 | 0.20 | mg/L | 10.00 | | 95 | 85-115 | | | |
| LCS Dup (2110021-BSD1) | | Prepared: 10/01/2021 Analyzed: 10/04/2021 | | | | | | | | |
| Boron | 1.0 | 0.10 | mg/L | 1.000 | | 103 | 85-115 | 0.02 | 20 | |
| Calcium | 11 | 4.0 | mg/L | 10.00 | | 106 | 85-115 | 0.7 | 20 | |
| Iron | 1.0 | 0.30 | mg/L | 1.000 | | 103 | 85-115 | 0.6 | 20 | |
| Magnesium | 9.9 | 3.0 | mg/L | 10.00 | | 99 | 85-115 | 0.3 | 20 | |
| Potassium | 9.4 | 5.0 | mg/L | 10.00 | | 94 | 85-115 | 0.4 | 20 | |
| Sodium | 9.9 | 5.0 | mg/L | 10.00 | | 99 | 85-115 | 0.1 | 20 | |
| LCS Dup (2110021-BSD2) | | Prepared: 10/01/2021 Analyzed: 10/04/2021 | | | | | | | | |
| Silica | 9.5 | 0.20 | mg/L | 10.00 | | 95 | 85-115 | 0.04 | 20 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 2110664
 Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|-------------|---------------------------------|------|----------------------|-----|-----------|------|
| Batch 2110021 - E200.7 (4.4) | | | | | | | | | | |
| Matrix Spike (2110021-MS1) | | Source: 2110510-01 | | | Prepared: 10/01/2021 | | Analyzed: 10/04/2021 | | | |
| Boron | 1.1 | 0.10 | mg/L | 1.000 | 0.050 | 104 | 70-130 | | | |
| Calcium | 51 | 4.0 | mg/L | 10.00 | 42 | 90 | 70-130 | | | |
| Iron | 1.2 | 0.30 | mg/L | 1.000 | 0.23 | 100 | 70-130 | | | |
| Magnesium | 13 | 3.0 | mg/L | 10.00 | 4.0 | 93 | 70-130 | | | |
| Potassium | 15 | 5.0 | mg/L | 10.00 | 5.3 | 97 | 70-130 | | | |
| Sodium | 43 | 5.0 | mg/L | 10.00 | 34 | 98 | 70-130 | | | |
| Matrix Spike (2110021-MS2) | | Source: 2110613-01 | | | Prepared: 10/01/2021 | | Analyzed: 10/04/2021 | | | |
| Boron | 1.6 | 0.10 | mg/L | 1.000 | 0.56 | 102 | 70-130 | | | |
| Calcium | 75 | 4.0 | mg/L | 10.00 | 66 | 94 | 70-130 | | | |
| Iron | 5.3 | 0.30 | mg/L | 1.000 | 4.3 | 95 | 70-130 | | | |
| Magnesium | 12 | 3.0 | mg/L | 10.00 | 2.5 | 92 | 70-130 | | | |
| Potassium | 110 | 5.0 | mg/L | 10.00 | 98 | 69 | 70-130 | | | M3 |
| Sodium | 170 | 5.0 | mg/L | 10.00 | 160 | 48 | 70-130 | | | M3 |
| Matrix Spike (2110021-MS3) | | Source: 2110520-01 | | | Prepared: 10/01/2021 | | Analyzed: 10/04/2021 | | | |
| Silica | 43 | 0.20 | mg/L | 10.00 | 34 | 93 | 70-130 | | | |
| Batch 2110029 - E 245.1 | | | | | | | | | | |
| Blank (2110029-BLK1) | | | | | Prepared & Analyzed: 10/04/2021 | | | | | |
| Mercury | ND | 0.0010 | mg/L | | | | | | | |
| LCS (2110029-BS1) | | | | | Prepared & Analyzed: 10/04/2021 | | | | | |
| Mercury | 0.0048 | 0.0010 | mg/L | 0.005000 | | 97 | 85-115 | | | |
| LCS Dup (2110029-BSD1) | | | | | Prepared & Analyzed: 10/04/2021 | | | | | |
| Mercury | 0.0048 | 0.0010 | mg/L | 0.005000 | | 97 | 85-115 | 0.1 | 20 | |
| Matrix Spike (2110029-MS1) | | Source: 2110639-02 | | | Prepared & Analyzed: 10/04/2021 | | | | | |
| Mercury | 0.0048 | 0.0010 | mg/L | 0.005000 | ND | 97 | 70-130 | | | |
| Matrix Spike Dup (2110029-MSD1) | | Source: 2110639-02 | | | Prepared & Analyzed: 10/04/2021 | | | | | |
| Mercury | 0.0049 | 0.0010 | mg/L | 0.005000 | ND | 97 | 70-130 | 0.5 | 20 | |

Client: Arizona Minerals Inc.
 Project: AMI-310
 Work Order: 2110664
 Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | %REC Limits | RPD RPD | RPD Limit | Qual |
|---|--------|-----------------|-------|-------------|---------------|-----------|-------------|---------|-----------|---------|
| Batch 2109334 - SM2540 D | | | | | | | | | | |
| Duplicate (2109334-DUP1) Source: 2110529-01 Prepared: 09/28/2021 Analyzed: 09/29/2021 | | | | | | | | | | |
| Total Suspended Solids | 22 | 10 | mg/L | | 24 | | | 9 | 5 | Q9, R12 |
| Duplicate (2109334-DUP2) Source: 2110525-01 Prepared: 09/28/2021 Analyzed: 09/29/2021 | | | | | | | | | | |
| Total Suspended Solids | 39 | 10 | mg/L | | 43 | | | 10 | 5 | R12 |
| Batch 2109336 - SM2540 C | | | | | | | | | | |
| Duplicate (2109336-DUP1) Source: 2110621-02RE1 Prepared: 09/28/2021 Analyzed: 09/30/2021 | | | | | | | | | | |
| Total Dissolved Solids (Residue, Filterable) | 240 | 20 | mg/L | | 220 | | | 7 | 5 | N1 |
| Batch 2109353 - SM2320B | | | | | | | | | | |
| Blank (2109353-BLK1) Prepared & Analyzed: 09/29/2021 | | | | | | | | | | |
| Alkalinity, Bicarbonate (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Carbonate (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Hydroxide (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Phenolphthalein (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| Alkalinity, Total (As CaCO3) | ND | 2.0 | mg/L | | | | | | | |
| LCS (2109353-BS1) Prepared & Analyzed: 09/29/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 250 | 2.0 | mg/L | 250.0 | | 100 | 90-110 | | | |
| LCS Dup (2109353-BSD1) Prepared & Analyzed: 09/29/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 250 | 2.0 | mg/L | 250.0 | | 100 | 90-110 | 0 | 10 | |
| Matrix Spike (2109353-MS1) Source: 2110704-02 Prepared & Analyzed: 09/29/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 340 | 2.0 | mg/L | 250.0 | 92 | 98 | 70-130 | | | |
| Matrix Spike Dup (2109353-MSD1) Source: 2110704-02 Prepared & Analyzed: 09/29/2021 | | | | | | | | | | |
| Alkalinity, Total (As CaCO3) | 340 | 2.0 | mg/L | 250.0 | 92 | 100 | 70-130 | 2 | 10 | |
| Batch 2110027 - SM4500-SiO2 C | | | | | | | | | | |
| Blank (2110027-BLK1) Prepared & Analyzed: 10/04/2021 | | | | | | | | | | |
| Silica | ND | 2.0 | mg/L | | | | | | | |
| LCS (2110027-BS1) Prepared & Analyzed: 10/04/2021 | | | | | | | | | | |
| Silica | 8.2 | 2.0 | mg/L | 8.000 | | 102 | 90-110 | | | |
| LCS Dup (2110027-BSD1) Prepared & Analyzed: 10/04/2021 | | | | | | | | | | |
| Silica | 8.2 | 2.0 | mg/L | 8.000 | | 102 | 90-110 | 0 | 20 | |
| Matrix Spike (2110027-MS1) Source: 2110664-01 Prepared & Analyzed: 10/04/2021 | | | | | | | | | | |
| Silica | 65 | 10 | mg/L | 40.00 | 19 | 115 | 85-115 | | | M1 |
| Matrix Spike Dup (2110027-MSD1) Source: 2110664-01 Prepared & Analyzed: 10/04/2021 | | | | | | | | | | |
| Silica | 64 | 10 | mg/L | 40.00 | 19 | 113 | 85-115 | 1 | 20 | |
| Batch 2110028 - SM4500-CN BE | | | | | | | | | | |
| Blank (2110028-BLK1) Prepared: 09/30/2021 Analyzed: 10/01/2021 | | | | | | | | | | |
| Cyanide | ND | 0.10 | mg/L | | | | | | | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|---|---------------|------|-------------|-----|-----------|------|
| Batch 2110028 - SM4500-CN BE | | | | | | | | | | |
| LCS (2110028-BS1) | | | | Prepared: 09/30/2021 Analyzed: 10/01/2021 | | | | | | |
| Cyanide | 2.0 | 0.10 | mg/L | 2.000 | | 100 | 85-115 | | | |
| LCS Dup (2110028-BSD1) | | | | Prepared: 09/30/2021 Analyzed: 10/01/2021 | | | | | | |
| Cyanide | 2.0 | 0.10 | mg/L | 2.000 | | 102 | 85-115 | 2 | 15 | |
| Matrix Spike (2110028-MS1) | | Source: 2110621-02 | | Prepared: 09/30/2021 Analyzed: 10/01/2021 | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | ND | 96 | 80-120 | | | |
| Matrix Spike Dup (2110028-MSD1) | | Source: 2110621-02 | | Prepared: 09/30/2021 Analyzed: 10/01/2021 | | | | | | |
| Cyanide | 1.9 | 0.10 | mg/L | 2.000 | ND | 96 | 80-120 | 0 | 15 | |
| Batch 2110083 - SM4500-NH3 B,C | | | | | | | | | | |
| Blank (2110083-BLK1) | | | | Prepared & Analyzed: 10/06/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | ND | 0.50 | mg/L | | | | | | | |
| LCS (2110083-BS1) | | | | Prepared & Analyzed: 10/06/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 5.2 | 0.50 | mg/L | 5.000 | | 104 | 90-110 | | | |
| LCS Dup (2110083-BSD1) | | | | Prepared & Analyzed: 10/06/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 5.1 | 0.50 | mg/L | 5.000 | | 103 | 90-110 | 1 | 10 | |
| Matrix Spike (2110083-MS1) | | Source: 2110639-01 | | Prepared & Analyzed: 10/06/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 4.8 | 0.50 | mg/L | 5.000 | ND | 96 | 75-120 | | | |
| Matrix Spike Dup (2110083-MSD1) | | Source: 2110639-01 | | Prepared & Analyzed: 10/06/2021 | | | | | | |
| Nitrogen, Ammonia (As N) | 4.9 | 0.50 | mg/L | 5.000 | ND | 98 | 75-120 | 2 | 20 | |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC %REC | %REC Limits | RPD RPD | RPD Limit | Qual |
|--|--------|-----------------|-------|---------------------------------|---------------|---|-------------|---------|-----------|------|
| Batch 2109306 - E300.0 (2.1) | | | | | | | | | | |
| Blank (2109306-BLK1) | | | | Prepared & Analyzed: 09/24/2021 | | | | | | |
| Chloride | ND | 1.0 | mg/L | | | | | | | |
| Fluoride | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrate (As N) | ND | 0.50 | mg/L | | | | | | | |
| Nitrogen, Nitrite (As N) | ND | 0.10 | mg/L | | | | | | | |
| Sulfate | ND | 5.0 | mg/L | | | | | | | |
| LCS (2109306-BS1) | | | | Prepared & Analyzed: 09/24/2021 | | | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 94 | 90-110 | | | |
| Fluoride | 2.0 | 0.50 | mg/L | 2.000 | | 98 | 90-110 | | | |
| Nitrogen, Nitrate (As N) | 4.9 | 0.50 | mg/L | 5.000 | | 97 | 90-110 | | | |
| Nitrogen, Nitrite (As N) | 2.3 | 0.10 | mg/L | 2.500 | | 91 | 90-110 | | | |
| Sulfate | 13 | 5.0 | mg/L | 12.50 | | 106 | 90-110 | | | |
| LCS Dup (2109306-BSD1) | | | | Prepared & Analyzed: 09/24/2021 | | | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 95 | 90-110 | 0.9 | 10 | |
| Fluoride | 2.0 | 0.50 | mg/L | 2.000 | | 98 | 90-110 | 0.3 | 10 | |
| Nitrogen, Nitrate (As N) | 4.9 | 0.50 | mg/L | 5.000 | | 98 | 90-110 | 0.8 | 10 | |
| Nitrogen, Nitrite (As N) | 2.3 | 0.10 | mg/L | 2.500 | | 91 | 90-110 | 0.8 | 10 | |
| Sulfate | 13 | 5.0 | mg/L | 12.50 | | 105 | 90-110 | 0.7 | 10 | |
| Matrix Spike (2109306-MS1) | | | | Source: 2110664-02 | | Prepared & Analyzed: 09/24/2021 | | | | |
| Chloride | 16 | 1.0 | mg/L | 12.50 | 4.4 | 93 | 80-120 | | | |
| Fluoride | 1.7 | 0.50 | mg/L | 2.000 | ND | 87 | 80-120 | | | |
| Nitrogen, Nitrate (As N) | 5.1 | 0.50 | mg/L | 5.000 | 0.36 | 94 | 80-120 | | | |
| Sulfate | 26 | 5.0 | mg/L | 12.50 | 16 | 76 | 80-120 | | | M2 |
| Matrix Spike (2109306-MS2) | | | | Source: 2110657-01 | | Prepared: 09/24/2021 Analyzed: 09/28/2021 | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 96 | 80-120 | | | |
| Fluoride | 2.8 | 0.50 | mg/L | 2.000 | | 139 | 80-120 | | | |
| Nitrogen, Nitrate (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 95 | 80-120 | | | |
| Nitrogen, Nitrite (As N) | 2.2 | 0.10 | mg/L | 2.500 | | 90 | 80-120 | | | |
| Sulfate | 61 | 5.0 | mg/L | 12.50 | 200000 | NR | 80-120 | | | |
| Matrix Spike (2109306-MS3) | | | | Source: 2110657-02 | | Prepared: 09/24/2021 Analyzed: 09/28/2021 | | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 96 | 80-120 | | | |
| Fluoride | 2.8 | 0.50 | mg/L | 2.000 | | 142 | 80-120 | | | |
| Nitrogen, Nitrate (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 96 | 80-120 | | | |
| Nitrogen, Nitrite (As N) | 2.2 | 0.10 | mg/L | 2.500 | | 88 | 80-120 | | | |
| Sulfate | 65 | 5.0 | mg/L | 12.50 | 260000 | NR | 80-120 | | | |
| Matrix Spike Dup (2109306-MSD1) | | | | Source: 2110664-02 | | Prepared & Analyzed: 09/24/2021 | | | | |
| Chloride | 16 | 1.0 | mg/L | 12.50 | 4.4 | 93 | 80-120 | 0.7 | 10 | |
| Fluoride | 1.7 | 0.50 | mg/L | 2.000 | ND | 87 | 80-120 | 0.9 | 10 | |
| Nitrogen, Nitrate (As N) | 5.1 | 0.50 | mg/L | 5.000 | 0.36 | 95 | 80-120 | 0.7 | 10 | |
| Sulfate | 26 | 5.0 | mg/L | 12.50 | 16 | 75 | 80-120 | 0.4 | 10 | M2 |

Client: Arizona Minerals Inc.
Project: AMI-310
Work Order: 2110664
Date Received: 09/24/2021

QC Summary

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qual |
|--|--------|---------------------------|-------|-------------|----------------------|------|----------------------|------|-----------|------|
| Batch 2109306 - E300.0 (2.1) | | | | | | | | | | |
| Matrix Spike Dup (2109306-MSD2) | | Source: 2110657-01 | | | Prepared: 09/24/2021 | | Analyzed: 09/28/2021 | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 96 | 80-120 | 0.09 | 10 | |
| Fluoride | 2.8 | 0.50 | mg/L | 2.000 | | 139 | 80-120 | 0.2 | 10 | |
| Nitrogen, Nitrate (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 95 | 80-120 | 0.09 | 10 | |
| Nitrogen, Nitrite (As N) | 2.3 | 0.10 | mg/L | 2.500 | | 91 | 80-120 | 1 | 10 | |
| Sulfate | 58 | 5.0 | mg/L | 12.50 | 200000 | NR | 80-120 | | 10 | |
| Matrix Spike Dup (2109306-MSD3) | | Source: 2110657-02 | | | Prepared: 09/24/2021 | | Analyzed: 09/28/2021 | | | |
| Chloride | 12 | 1.0 | mg/L | 12.50 | | 96 | 80-120 | 0.2 | 10 | |
| Fluoride | 2.8 | 0.50 | mg/L | 2.000 | | 142 | 80-120 | 0.1 | 10 | |
| Nitrogen, Nitrate (As N) | 4.8 | 0.50 | mg/L | 5.000 | | 96 | 80-120 | 0.3 | 10 | |
| Nitrogen, Nitrite (As N) | 2.2 | 0.10 | mg/L | 2.500 | | 88 | 80-120 | 0.07 | 10 | |
| Sulfate | 64 | 5.0 | mg/L | 12.50 | 260000 | NR | 80-120 | | 10 | |

January 24, 2022

Report to:

Kara Haas
South32
2210 E Ft. Lowell Rd.
Tucson, AZ 85719

Bill to:

Accounts Payable
South32
2210 E Fort Lowell Road
Tucson, AZ 85719

cc: Matthew Tooke

Project ID: 4542257445

ACZ Project ID: L70437

Kara Haas:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 11, 2021. This project has been assigned to ACZ's project number, L70437. Please reference this number in all future inquiries.

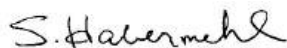
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L70437. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after January 14, 2024. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Scott Habermehl has reviewed
and approved this report.



Arizona Minerals Inc.Project ID: 4542257445
Sample ID: MW-9-20211209ACZ Sample ID: **L70437-01**
Date Sampled: 12/09/21 15:40
Date Received: 12/11/21
Sample Matrix: *Groundwater*

Inorganic Prep

| Parameter | EPA Method | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date | Analyst |
|------------------------------|------------------------------|----------|--------|------|----|-------|-----|-----|----------------|-------------|
| Cyanide, total | M335.4 - Manual Distillation | | | | | | | | 12/21/21 10:36 | wtc |
| Total Hot Plate Digestion | M200.2 ICP-MS | | | | | | | | 12/22/21 11:21 | mfm/sc p |
| Total Hot Plate Digestion | M200.2 ICP | | | | | | | | 12/22/21 19:01 | kja |

Arizona Minerals Inc.

Project ID: 4542257445
 Sample ID: MW-9-20211209

ACZ Sample ID: **L70437-01**
 Date Sampled: 12/09/21 15:40
 Date Received: 12/11/21
 Sample Matrix: Groundwater

Metals Analysis

| Parameter | EPA Method | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date | Analyst |
|----------------------|---------------|----------|----------|------|----|-------|---------|---------|----------------|---------|
| Aluminum, dissolved | M200.7 ICP | 1 | <0.05 | U | | mg/L | 0.05 | 0.25 | 12/29/21 17:24 | kja |
| Aluminum, total | M200.7 ICP | 1 | 4.24 | | * | mg/L | 0.05 | 0.25 | 12/29/21 7:03 | jlw |
| Antimony, dissolved | M200.8 ICP-MS | 1 | <0.0004 | U | | mg/L | 0.0004 | 0.002 | 01/20/22 19:19 | mfm |
| Antimony, total | M200.8 ICP-MS | 1 | 0.00079 | B | | mg/L | 0.0004 | 0.002 | 12/29/21 13:07 | mfm |
| Arsenic, dissolved | M200.8 ICP-MS | 1 | 0.00998 | | | mg/L | 0.0002 | 0.001 | 01/11/22 14:59 | cja/mfm |
| Arsenic, total | M200.8 ICP-MS | 1 | 0.0122 | | | mg/L | 0.0002 | 0.001 | 12/29/21 13:07 | mfm |
| Barium, dissolved | M200.7 ICP | 1 | 0.0269 | B | | mg/L | 0.007 | 0.035 | 12/29/21 17:24 | kja |
| Barium, total | M200.7 ICP | 1 | 0.0715 | | | mg/L | 0.007 | 0.035 | 12/29/21 7:03 | jlw |
| Beryllium, dissolved | M200.8 ICP-MS | 1 | <0.00008 | U | * | mg/L | 0.00008 | 0.00025 | 01/11/22 14:59 | cja/mfm |
| Beryllium, total | M200.8 ICP-MS | 1 | 0.000131 | B | | mg/L | 0.00008 | 0.00025 | 12/29/21 13:07 | mfm |
| Boron, dissolved | M200.7 ICP | 1 | 0.135 | | | mg/L | 0.03 | 0.1 | 12/29/21 17:24 | kja |
| Boron, total | M200.7 ICP | 1 | 0.133 | | | mg/L | 0.03 | 0.1 | 12/29/21 7:03 | jlw |
| Cadmium, dissolved | M200.8 ICP-MS | 1 | <0.00005 | U | * | mg/L | 0.00005 | 0.00025 | 01/14/22 16:28 | cja/mfm |
| Cadmium, total | M200.8 ICP-MS | 1 | 0.00149 | | | mg/L | 0.00005 | 0.00025 | 12/29/21 13:07 | mfm |
| Calcium, dissolved | M200.7 ICP | 1 | 32.4 | | | mg/L | 0.1 | 0.5 | 12/29/21 17:24 | kja |
| Calcium, total | M200.7 ICP | 1 | 35.6 | | | mg/L | 0.1 | 0.5 | 12/29/21 7:03 | jlw |
| Chromium, dissolved | M200.8 ICP-MS | 1 | <0.0005 | U | | mg/L | 0.0005 | 0.002 | 01/11/22 14:59 | cja/mfm |
| Chromium, total | M200.8 ICP-MS | 1 | 0.00287 | | | mg/L | 0.0005 | 0.002 | 12/29/21 13:07 | mfm |
| Cobalt, dissolved | M200.7 ICP | 1 | <0.02 | U | | mg/L | 0.02 | 0.05 | 12/29/21 17:24 | kja |
| Cobalt, total | M200.7 ICP | 1 | <0.02 | U | | mg/L | 0.02 | 0.05 | 12/29/21 7:03 | jlw |
| Copper, dissolved | M200.8 ICP-MS | 1 | <0.0008 | U | | mg/L | 0.0008 | 0.002 | 01/11/22 14:59 | cja/mfm |
| Copper, total | M200.8 ICP-MS | 1 | 0.00785 | | | mg/L | 0.0008 | 0.002 | 12/29/21 13:07 | mfm |
| Iron, dissolved | M200.7 ICP | 1 | 0.136 | B | | mg/L | 0.06 | 0.15 | 12/29/21 17:24 | kja |
| Iron, total | M200.7 ICP | 1 | 3.65 | | | mg/L | 0.06 | 0.15 | 12/29/21 7:03 | jlw |
| Lead, dissolved | M200.8 ICP-MS | 1 | <0.0001 | U | * | mg/L | 0.0001 | 0.0005 | 01/18/22 11:51 | kja |
| Lead, total | M200.8 ICP-MS | 1 | 0.0293 | | | mg/L | 0.0001 | 0.0005 | 12/29/21 13:07 | mfm |
| Magnesium, dissolved | M200.7 ICP | 1 | 1.07 | | | mg/L | 0.2 | 1 | 12/29/21 17:24 | kja |
| Magnesium, total | M200.7 ICP | 1 | 2.32 | | | mg/L | 0.2 | 1 | 12/29/21 7:03 | jlw |
| Manganese, dissolved | M200.7 ICP | 1 | 0.503 | | | mg/L | 0.01 | 0.05 | 12/29/21 17:24 | kja |
| Manganese, total | M200.7 ICP | 1 | 0.585 | | * | mg/L | 0.01 | 0.05 | 12/29/21 7:03 | jlw |
| Mercury, dissolved | M245.1 CVAA | 1 | <0.0002 | U | | mg/L | 0.0002 | 0.001 | 12/17/21 9:34 | mlh |
| Mercury, total | M245.1 CVAA | 1 | <0.0002 | U | | mg/L | 0.0002 | 0.001 | 12/20/21 16:17 | mlh |
| Nickel, dissolved | M200.7 ICP | 1 | <0.008 | U | | mg/L | 0.008 | 0.04 | 12/29/21 17:24 | kja |
| Nickel, total | M200.7 ICP | 1 | <0.008 | U | | mg/L | 0.008 | 0.04 | 12/29/21 7:03 | jlw |
| Potassium, dissolved | M200.7 ICP | 1 | 0.96 | B | | mg/L | 0.2 | 1 | 12/29/21 17:24 | kja |
| Potassium, total | M200.7 ICP | 1 | 1.95 | | | mg/L | 0.2 | 1 | 12/29/21 7:03 | jlw |
| Selenium, dissolved | M200.8 ICP-MS | 1 | <0.0001 | U | | mg/L | 0.0001 | 0.00025 | 01/20/22 19:19 | mfm |
| Selenium, total | M200.8 ICP-MS | 1 | <0.0001 | U | | mg/L | 0.0001 | 0.00025 | 12/29/21 13:07 | mfm |
| Silica, dissolved | M200.7 ICP | 1 | 19.7 | | | mg/L | 0.2 | 1 | 12/29/21 17:24 | kja |
| Silica, total | M200.7 ICP | 1 | 36.1 | | * | mg/L | 0.2 | 1 | 12/29/21 7:03 | jlw |
| Silver, dissolved | M200.8 ICP-MS | 1 | <0.0001 | U | | mg/L | 0.0001 | 0.0005 | 01/14/22 16:28 | cja/mfm |
| Silver, total | M200.8 ICP-MS | 1 | <0.0001 | U | | mg/L | 0.0001 | 0.0005 | 12/29/21 13:07 | mfm |
| Sodium, dissolved | M200.7 ICP | 1 | 77.3 | | | mg/L | 0.2 | 1 | 12/29/21 17:24 | kja |

Arizona Minerals Inc.

Project ID: 4542257445
Sample ID: MW-9-20211209

ACZ Sample ID: **L70437-01**
Date Sampled: 12/09/21 15:40
Date Received: 12/11/21
Sample Matrix: *Groundwater*

| | | | | | | | | | |
|---------------------|---------------|---|---------|---|------|--------|--------|----------------|---------|
| Sodium, total | M200.7 ICP | 1 | 79.9 | | mg/L | 0.2 | 1 | 12/29/21 7:03 | jlw |
| Thallium, dissolved | M200.8 ICP-MS | 1 | <0.0001 | U | mg/L | 0.0001 | 0.0005 | 01/11/22 14:59 | rja/mfm |
| Thallium, total | M200.8 ICP-MS | 1 | 0.00015 | B | mg/L | 0.0001 | 0.0005 | 12/29/21 13:07 | mfm |
| Uranium, dissolved | M200.8 ICP-MS | 1 | 0.00052 | | mg/L | 0.0001 | 0.0005 | 01/11/22 14:59 | rja/mfm |
| Uranium, total | M200.8 ICP-MS | 1 | 0.00182 | | mg/L | 0.0001 | 0.0005 | 12/29/21 13:07 | mfm |
| Zinc, dissolved | M200.7 ICP | 1 | <0.02 | U | mg/L | 0.02 | 0.05 | 12/29/21 17:24 | kja |
| Zinc, total | M200.7 ICP | 1 | 0.049 | B | mg/L | 0.02 | 0.05 | 12/29/21 7:03 | jlw |

Wet Chemistry

| Parameter | EPA Method | Dilution | Result | Qual | XQ | Units | MDL | PQL | Date | Analyst |
|-----------------------------------|--|----------|--------|------|----|----------|-------|------|----------------|---------|
| Alkalinity as CaCO3 | SM2320B - Titration | | | | | | | | | |
| Bicarbonate as CaCO3 | | 1 | 72.2 | | | mg/L | 2 | 20 | 12/20/21 0:00 | jck |
| Carbonate as CaCO3 | | 1 | <2 | U | | mg/L | 2 | 20 | 12/20/21 0:00 | jck |
| Hydroxide as CaCO3 | | 1 | <2 | U | | mg/L | 2 | 20 | 12/20/21 0:00 | jck |
| Total Alkalinity | | 1 | 72.2 | | | mg/L | 2 | 20 | 12/20/21 0:00 | jck |
| Cation-Anion Balance | Calculation | | | | | | | | | |
| Cation-Anion Balance | | | 1.0 | | | % | | | 01/21/22 0:00 | calc |
| Sum of Anions | | | 5.1 | | | meq/L | | | 01/21/22 0:00 | calc |
| Sum of Cations | | | 5.2 | | | meq/L | | | 01/21/22 0:00 | calc |
| Chloride | SM4500Cl-E | 1 | 4.15 | | | mg/L | 0.5 | 2 | 01/04/22 14:04 | md |
| Conductivity @25C | SM2510B | 1 | 536 | | | umhos/cm | 1 | 10 | 12/20/21 22:10 | jck |
| Cyanide, total | M335.4 - Colorimetric w/ distillation | 0.5 | <0.003 | U | * | mg/L | 0.003 | 0.01 | 12/22/21 16:01 | bls/md |
| Fluoride | SM4500F-C | 1 | 0.31 | B | | mg/L | 0.15 | 0.35 | 01/05/22 15:51 | eep |
| Hardness as CaCO3 (dissolved) | SM2340B - Calculation | | 85 | | | mg/L | 0.2 | 5 | 01/21/22 0:00 | calc |
| Nitrate/Nitrite as N | M353.2 - H2SO4 preserved | 1 | <0.02 | U | * | mg/L | 0.02 | 0.1 | 12/30/21 1:02 | pjb |
| Nitrogen, ammonia | M350.1 Auto Salicylate w/gas diffusion | 1 | 0.138 | B | * | mg/L | 0.05 | 0.2 | 12/21/21 16:50 | syw |
| pH (lab) | SM4500H+ B | | | | | | | | | |
| pH | | 1 | 8.0 | H | | units | 0.1 | 0.1 | 12/20/21 0:00 | jck |
| pH measured at | | 1 | 22.4 | | | C | 0.1 | 0.1 | 12/20/21 0:00 | jck |
| Residue, Filterable (TDS) @180C | SM2540C | 1 | 352 | | | mg/L | 20 | 40 | 12/15/21 18:32 | eep |
| Sulfate | D516-02/-07/-11 - TURBIDIMETRIC | 5 | 169 | | * | mg/L | 5 | 25 | 01/05/22 11:46 | wtc |
| TDS (calculated) | Calculation | | 355 | | | mg/L | | | 01/21/22 0:00 | calc |
| TDS (ratio - measured/calculated) | Calculation | | 0.99 | | | | | | 01/21/22 0:00 | calc |

Arizona license number: AZ0102

Report Header Explanations

| | |
|----------------|--|
| <i>Batch</i> | A distinct set of samples analyzed at a specific time |
| <i>Found</i> | Value of the QC Type of interest |
| <i>Limit</i> | Upper limit for RPD, in %. |
| <i>Lower</i> | Lower Recovery Limit, in % (except for LCSS, mg/Kg) |
| <i>MDL</i> | Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations. |
| <i>PCN/SCN</i> | A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis |
| <i>PQL</i> | Practical Quantitation Limit. Synonymous with the EPA term "minimum level". |
| <i>QC</i> | True Value of the Control Sample or the amount added to the Spike |
| <i>Rec</i> | Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg) |
| <i>RPD</i> | Relative Percent Difference, calculation used for Duplicate QC Types |
| <i>Upper</i> | Upper Recovery Limit, in % (except for LCSS, mg/Kg) |
| <i>Sample</i> | Value of the Sample of interest |

QC Sample Types

| | | | |
|--------------|--|--------------|--|
| <i>AS</i> | Analytical Spike (Post Digestion) | <i>LCSWD</i> | Laboratory Control Sample - Water Duplicate |
| <i>ASD</i> | Analytical Spike (Post Digestion) Duplicate | <i>LFB</i> | Laboratory Fortified Blank |
| <i>CCB</i> | Continuing Calibration Blank | <i>LFM</i> | Laboratory Fortified Matrix |
| <i>CCV</i> | Continuing Calibration Verification standard | <i>LFMD</i> | Laboratory Fortified Matrix Duplicate |
| <i>DUP</i> | Sample Duplicate | <i>LRB</i> | Laboratory Reagent Blank |
| <i>ICB</i> | Initial Calibration Blank | <i>MS</i> | Matrix Spike |
| <i>ICV</i> | Initial Calibration Verification standard | <i>MSD</i> | Matrix Spike Duplicate |
| <i>ICSAB</i> | Inter-element Correction Standard - A plus B solutions | <i>PBS</i> | Prep Blank - Soil |
| <i>LCSS</i> | Laboratory Control Sample - Soil | <i>PBW</i> | Prep Blank - Water |
| <i>LCSSD</i> | Laboratory Control Sample - Soil Duplicate | <i>PQV</i> | Practical Quantitation Verification standard |
| <i>LCSW</i> | Laboratory Control Sample - Water | <i>SDL</i> | Serial Dilution |

QC Sample Type Explanations

| | |
|-------------------------|---|
| Blanks | Verifies that there is no or minimal contamination in the prep method or calibration procedure. |
| Control Samples | Verifies the accuracy of the method, including the prep procedure. |
| Duplicates | Verifies the precision of the instrument and/or method. |
| Spikes/Fortified Matrix | Determines sample matrix interferences, if any. |
| Standard | Verifies the validity of the calibration. |

ACZ Qualifiers (Qual)

| | |
|---|---|
| B | Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity. |
| H | Analysis exceeded method hold time. pH is a field test with an immediate hold time. |
| L | Target analyte response was below the laboratory defined negative threshold. |
| U | The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. |

Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste.
- (5) Standard Methods for the Examination of Water and Wastewater.

Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
- (5) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:

<https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG533951 | | | | | | | | | | | | | |
| WG533951PBW1 | PBW | 12/20/21 19:13 | | | | 4 | mg/L | | -20 | 20 | | | |
| WG533951LCSW3 | LCSW | 12/20/21 19:33 | WC211215-1 | 820.0001 | | 766 | mg/L | 93 | 90 | 110 | | | |
| L70436-06DUP | DUP | 12/20/21 22:01 | | | 158 | 158.5 | mg/L | | | | 0 | 20 | |
| WG533951LCSW6 | LCSW | 12/20/21 23:02 | WC211215-1 | 820.0001 | | 794.9 | mg/L | 97 | 90 | 110 | | | |
| WG533951PBW2 | PBW | 12/20/21 23:10 | | | | 4.5 | mg/L | | -20 | 20 | | | |
| WG533951LCSW9 | LCSW | 12/21/21 2:37 | WC211215-1 | 820.0001 | | 772.4 | mg/L | 94 | 90 | 110 | | | |
| WG533951PBW3 | PBW | 12/21/21 2:44 | | | | 3.2 | mg/L | | -20 | 20 | | | |
| WG533951LCSW12 | LCSW | 12/21/21 6:37 | WC211215-1 | 820.0001 | | 791.2 | mg/L | 96 | 90 | 110 | | | |
| WG533951PBW4 | PBW | 12/21/21 6:44 | | | | 3.5 | mg/L | | -20 | 20 | | | |
| WG533951LCSW15 | LCSW | 12/21/21 10:28 | WC211215-1 | 820.0001 | | 783.5 | mg/L | 96 | 90 | 110 | | | |

Aluminum, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 1.977 | mg/L | 99 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.15 | 0.15 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 1.0008 | | 1.023 | mg/L | 102 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 1.0008 | .158 | 1.183 | mg/L | 102 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 1.0008 | .158 | 1.176 | mg/L | 102 | 85 | 115 | 1 | 20 | |

Aluminum, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.957 | mg/L | 98 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.15 | 0.15 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.11 | 0.11 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 1.0008 | | 1.043 | mg/L | 104 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 2.0038 | 1.5 | 4.702 | mg/L | 160 | 70 | 130 | | | M1 |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 2.0038 | 1.5 | 4.68 | mg/L | 159 | 70 | 130 | 0 | 20 | M1 |

Antimony, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG535368 | | | | | | | | | | | | | |
| WG535368ICV | ICV | 01/20/22 19:06 | MS220105-1 | .0201 | | .01892 | mg/L | 94 | 90 | 110 | | | |
| WG535368ICB | ICB | 01/20/22 19:08 | | | | U | mg/L | | -0.00088 | 0.00088 | | | |
| WG535368LFB | LFB | 01/20/22 19:10 | MS211216-3 | .01 | | .00906 | mg/L | 91 | 85 | 115 | | | |
| L70383-01AS | AS | 01/20/22 19:15 | MS211216-3 | .05 | U | .047 | mg/L | 94 | 70 | 130 | | | |
| L70383-01ASD | ASD | 01/20/22 19:17 | MS211216-3 | .05 | U | .04847 | mg/L | 97 | 70 | 130 | 3 | 20 | |

Antimony, total M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .0201 | | .01867 | mg/L | 93 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0012 | 0.0012 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00088 | 0.00088 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .01 | | .01034 | mg/L | 103 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .01 | U | .01043 | mg/L | 104 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .01 | U | .0106 | mg/L | 106 | 70 | 130 | 2 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Arsenic, dissolved

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .05054 | mg/L | 101 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | .00022 | mg/L | | -0.00044 | 0.00044 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05005 | | .04863 | mg/L | 97 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05005 | .00174 | .05059 | mg/L | 98 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05005 | .00174 | .05195 | mg/L | 100 | 70 | 130 | 3 | 20 | |

Arsenic, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .04877 | mg/L | 98 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0006 | 0.0006 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00044 | 0.00044 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05005 | | .04843 | mg/L | 97 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05005 | .00076 | .04694 | mg/L | 92 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05005 | .00076 | .04855 | mg/L | 95 | 70 | 130 | 3 | 20 | |

Barium, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 2.014 | mg/L | 101 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.021 | 0.021 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .5 | | .497 | mg/L | 99 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .5 | .0405 | .5387 | mg/L | 100 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .5 | .0405 | .5333 | mg/L | 99 | 85 | 115 | 1 | 20 | |

Barium, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|--------|-------|------|---------|--------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.9775 | mg/L | 99 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.021 | 0.021 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.0154 | 0.0154 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .5 | | .4953 | mg/L | 99 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 1.003 | .0304 | 1.0486 | mg/L | 102 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 1.003 | .0304 | 1.0404 | mg/L | 101 | 70 | 130 | 1 | 20 | |

Beryllium, dissolved

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|---------|-------|------|-----------|----------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .051911 | mg/L | 104 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | .00014 | mg/L | | -0.000176 | 0.000176 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05005 | | .048917 | mg/L | 98 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05005 | U | .047011 | mg/L | 94 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05005 | U | .048545 | mg/L | 97 | 70 | 130 | 3 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Beryllium, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|---------|-------|------|-----------|----------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .049908 | mg/L | 100 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.00024 | 0.00024 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | .000084 | mg/L | | -0.000176 | 0.000176 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05005 | | .048291 | mg/L | 96 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05005 | .00077 | .039839 | mg/L | 78 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05005 | .00077 | .040339 | mg/L | 79 | 70 | 130 | 1 | 20 | |

Boron, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 1.999 | mg/L | 100 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.09 | 0.09 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .5005 | | .51 | mg/L | 102 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .5005 | U | .531 | mg/L | 106 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .5005 | U | .528 | mg/L | 105 | 85 | 115 | 1 | 20 | |

Boron, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 2.01 | mg/L | 101 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.09 | 0.09 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.066 | 0.066 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .5005 | | .513 | mg/L | 102 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 1.001 | U | 1.099 | mg/L | 110 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 1.001 | U | 1.086 | mg/L | 108 | 70 | 130 | 1 | 20 | |

Cadmium, dissolved

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|---------|---------|-------|------|----------|---------|-----|-------|------|
| WG534897 | | | | | | | | | | | | | |
| WG534897ICV | ICV | 01/14/22 16:21 | MS220105-1 | .05 | | .045316 | mg/L | 91 | 90 | 110 | | | |
| WG534897ICB | ICB | 01/14/22 16:24 | | | | U | mg/L | | -0.00011 | 0.00011 | | | |
| WG534897LFB | LFB | 01/14/22 16:26 | MS211216-3 | .05005 | | .059301 | mg/L | 118 | 85 | 115 | | | LA |
| L70482-02AS | AS | 01/14/22 16:36 | MS211216-3 | .05005 | .000089 | .068746 | mg/L | 137 | 70 | 130 | | | M1 |
| L70482-02ASD | ASD | 01/14/22 16:38 | MS211216-3 | .05005 | .000089 | .07012 | mg/L | 140 | 70 | 130 | 2 | 20 | M1 |

Cadmium, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|---------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .050062 | mg/L | 100 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | .000055 | mg/L | | -0.00015 | 0.00015 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | .000071 | mg/L | | -0.00011 | 0.00011 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05005 | | .048017 | mg/L | 96 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05005 | .00338 | .05112 | mg/L | 95 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05005 | .00338 | .051214 | mg/L | 96 | 70 | 130 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 100 | | 99.47 | mg/L | 99 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.3 | 0.3 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 67.98808 | | 69.33 | mg/L | 102 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 67.98808 | 7.18 | 77.27 | mg/L | 103 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 67.98808 | 7.18 | 76.91 | mg/L | 103 | 85 | 115 | 0 | 20 | |

Calcium, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 100 | | 98.98 | mg/L | 99 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.3 | 0.3 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.22 | 0.22 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 67.98808 | | 71.39 | mg/L | 105 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 136.0667 | 514 | 659.8 | mg/L | 107 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 136.0667 | 514 | 676.6 | mg/L | 120 | 70 | 130 | 3 | 20 | |

Chloride SM4500Cl-E

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|-------------|-------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534429 | | | | | | | | | | | | | |
| WG534429ICV | ICV | 01/04/22 13:52 | WI210503-1 | 54.89 | | 55.18 | mg/L | 101 | 90 | 110 | | | |
| WG534429ICB | ICB | 01/04/22 13:52 | | | | 1.29 | mg/L | | -1.5 | 1.5 | | | |
| WG534429LFB1 | LFB | 01/04/22 13:53 | WI210908-11 | 29.97 | | 28.95 | mg/L | 97 | 90 | 110 | | | |
| L70436-03AS | AS | 01/04/22 14:01 | WI210908-11 | 29.97 | 6.64 | 36.97 | mg/L | 101 | 90 | 110 | | | |
| L70436-06DUP | DUP | 01/04/22 14:03 | | | 11.1 | 11.3 | mg/L | | | | 2 | 20 | |
| WG534429LFB2 | LFB | 01/04/22 14:08 | WI210908-11 | 29.97 | | 28.69 | mg/L | 96 | 90 | 110 | | | |

Chromium, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|---------|--------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .05153 | mg/L | 103 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | U | mg/L | | -0.0011 | 0.0011 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05 | | .04806 | mg/L | 96 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05 | U | .04575 | mg/L | 92 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05 | U | .04661 | mg/L | 93 | 70 | 130 | 2 | 20 | |

Chromium, total M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|---------|--------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .0497 | mg/L | 99 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0015 | 0.0015 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.0011 | 0.0011 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05 | | .04772 | mg/L | 95 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05 | .0005 | .04612 | mg/L | 91 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05 | .0005 | .04752 | mg/L | 94 | 70 | 130 | 3 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2.01 | | 1.942 | mg/L | 97 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.06 | 0.06 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .5005 | | .489 | mg/L | 98 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .5005 | U | .496 | mg/L | 99 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .5005 | U | .492 | mg/L | 98 | 85 | 115 | 1 | 20 | |

Cobalt, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|-------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2.01 | | 1.964 | mg/L | 98 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.06 | 0.06 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.044 | 0.044 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .5005 | | .489 | mg/L | 98 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 1.005 | U | .998 | mg/L | 99 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 1.005 | U | 1.003 | mg/L | 100 | 70 | 130 | 0 | 20 | |

Conductivity @25C SM2510B

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|------|--------|-------|----------|------|-------|-------|-----|-------|------|
| WG533951 | | | | | | | | | | | | | |
| WG533951LCSW2 | LCSW | 12/20/21 19:21 | PCN64229 | 1409 | | 1440 | umhos/cm | 102 | 90 | 110 | | | |
| L70436-06DUP | DUP | 12/20/21 22:01 | | | 2970 | 2970 | umhos/cm | | | | 0 | 20 | |
| WG533951LCSW5 | LCSW | 12/20/21 22:48 | PCN64229 | 1409 | | 1431 | umhos/cm | 102 | 90 | 110 | | | |
| WG533951LCSW8 | LCSW | 12/21/21 2:24 | PCN64229 | 1409 | | 1426 | umhos/cm | 101 | 90 | 110 | | | |
| WG533951LCSW11 | LCSW | 12/21/21 6:23 | PCN64229 | 1409 | | 1418 | umhos/cm | 101 | 90 | 110 | | | |
| WG533951LCSW14 | LCSW | 12/21/21 10:16 | PCN64229 | 1409 | | 1412 | umhos/cm | 100 | 90 | 110 | | | |

Copper, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .05097 | mg/L | 102 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | U | mg/L | | -0.00176 | 0.00176 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05 | | .04683 | mg/L | 94 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05 | U | .0444 | mg/L | 89 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05 | U | .04477 | mg/L | 90 | 70 | 130 | 1 | 20 | |

Copper, total M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .04992 | mg/L | 100 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0024 | 0.0024 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00176 | 0.00176 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05 | | .04848 | mg/L | 97 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05 | .0594 | .10273 | mg/L | 87 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05 | .0594 | .10493 | mg/L | 91 | 70 | 130 | 2 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cyanide, total M335.4 - Colorimetric w/ distillation

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534089 | | | | | | | | | | | | | |
| WG534089ICV | ICV | 12/22/21 15:54 | WI211209-3 | .3003 | | .3062 | mg/L | 102 | 90 | 110 | | | |
| WG534089ICB | ICB | 12/22/21 15:55 | | | | U | mg/L | | -0.003 | 0.003 | | | |
| WG533966LRB | LRB | 12/22/21 15:56 | | | | U | mg/L | | -0.003 | 0.003 | | | |
| WG533966LFB | LFB | 12/22/21 15:57 | WI211208-2 | .2 | | .2113 | mg/L | 106 | 90 | 110 | | | |
| L70436-05DUP | DUP | 12/22/21 15:58 | | | | U | U | mg/L | | | 0 | 20 | RA |
| L70436-06LFM | LFM | 12/22/21 16:00 | WI211208-2 | .2 | .0041 | .1529 | mg/L | 74 | 90 | 110 | | | M2 |

Fluoride SM4500F-C

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534489 | | | | | | | | | | | | | |
| WG534489ICV | ICV | 01/05/22 14:26 | WC220104-1 | 2.008 | | 2.15 | mg/L | 107 | 90 | 110 | | | |
| WG534489ICB | ICB | 01/05/22 14:30 | | | | U | mg/L | | -0.3 | 0.3 | | | |
| WG534489LFB1 | LFB | 01/05/22 14:39 | WC220104-2 | 5.02 | | 5.33 | mg/L | 106 | 90 | 110 | | | |
| L70436-06AS | AS | 01/05/22 15:35 | WC220104-2 | 5.02 | 1.13 | 6.31 | mg/L | 103 | 90 | 110 | | | |
| L70436-06ASD | ASD | 01/05/22 15:43 | WC220104-2 | 5.02 | 1.13 | 6.22 | mg/L | 101 | 90 | 110 | 1 | 20 | |
| WG534489LFB3 | LFB | 01/05/22 21:15 | WC220104-2 | 5.02 | | 5.16 | mg/L | 103 | 90 | 110 | | | |

Iron, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 1.95 | mg/L | 98 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.18 | 0.18 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 1.0001 | | .995 | mg/L | 99 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 1.0001 | .133 | 1.119 | mg/L | 99 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 1.0001 | .133 | 1.109 | mg/L | 98 | 85 | 115 | 1 | 20 | |

Iron, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.945 | mg/L | 97 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.18 | 0.18 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.132 | 0.132 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 1.0001 | | 1.049 | mg/L | 105 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 2.0022 | 3.79 | 6.15 | mg/L | 118 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 2.0022 | 3.79 | 6.154 | mg/L | 118 | 70 | 130 | 0 | 20 | |

Lead, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG535154 | | | | | | | | | | | | | |
| WG535154ICV | ICV | 01/18/22 11:41 | MS220105-1 | .05 | | .05283 | mg/L | 106 | 90 | 110 | | | |
| WG535154ICB | ICB | 01/18/22 11:43 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG535154LFB | LFB | 01/18/22 11:45 | MS211216-3 | .05005 | | .05935 | mg/L | 119 | 85 | 115 | | | LA |
| L70521-03AS | AS | 01/18/22 11:59 | MS211216-3 | .05005 | .00017 | .06164 | mg/L | 123 | 70 | 130 | | | |
| L70521-03ASD | ASD | 01/18/22 12:02 | MS211216-3 | .05005 | .00017 | .06192 | mg/L | 123 | 70 | 130 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Lead, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .05161 | mg/L | 103 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | .00014 | mg/L | | -0.0003 | 0.0003 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | .00017 | mg/L | | -0.00022 | 0.00022 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05005 | | .04977 | mg/L | 99 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05005 | .00024 | .05178 | mg/L | 103 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05005 | .00024 | .05173 | mg/L | 103 | 70 | 130 | 0 | 20 | |

Magnesium, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 100 | | 96.79 | mg/L | 97 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 49.99847 | | 49.11 | mg/L | 98 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 49.99847 | 2.28 | 52.03 | mg/L | 100 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 49.99847 | 2.28 | 51.88 | mg/L | 99 | 85 | 115 | 0 | 20 | |

Magnesium, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 100 | | 95.33 | mg/L | 95 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.44 | 0.44 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 49.99847 | | 50.26 | mg/L | 101 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 100.1149 | 200 | 304.8 | mg/L | 105 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 100.1149 | 200 | 310.8 | mg/L | 111 | 70 | 130 | 2 | 20 | |

Manganese, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 1.943 | mg/L | 97 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.03 | 0.03 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .499 | | .493 | mg/L | 99 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .499 | U | .496 | mg/L | 99 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .499 | U | .492 | mg/L | 99 | 85 | 115 | 1 | 20 | |

Manganese, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.934 | mg/L | 97 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.03 | 0.03 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.022 | 0.022 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .499 | | .497 | mg/L | 100 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 1 | 20.6 | 21.56 | mg/L | 96 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 1 | 20.6 | 22.16 | mg/L | 156 | 70 | 130 | 3 | 20 | M3 |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, dissolved

M245.1 CVAA

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|---------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG533707 | | | | | | | | | | | | | |
| WG533707ICV | ICV | 12/17/21 8:20 | HG211213-3 | .00501 | | .00524 | mg/L | 105 | 95 | 105 | | | |
| WG533707ICB | ICB | 12/17/21 8:21 | | | | U | mg/L | | -0.0002 | 0.0002 | | | |
| WG533708 | | | | | | | | | | | | | |
| WG533708LRB | LRB | 12/17/21 9:32 | | | | U | mg/L | | -0.00044 | 0.00044 | | | |
| WG533708LFB | LFB | 12/17/21 9:33 | HG211213-6 | .002002 | | .002 | mg/L | 100 | 85 | 115 | | | |
| L70437-01LFM | LFM | 12/17/21 9:35 | HG211213-6 | .002002 | U | .00209 | mg/L | 104 | 85 | 115 | | | |
| L70437-01LFMD | LFMD | 12/17/21 9:36 | HG211213-6 | .002002 | U | .00217 | mg/L | 108 | 85 | 115 | 4 | 20 | |

Mercury, total

M245.1 CVAA

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|---------|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG533892 | | | | | | | | | | | | | |
| WG533892ICV | ICV | 12/20/21 13:49 | HG211213-3 | .00501 | | .00521 | mg/L | 104 | 95 | 105 | | | |
| WG533892ICB | ICB | 12/20/21 13:49 | | | | U | mg/L | | -0.0002 | 0.0002 | | | |
| WG533916 | | | | | | | | | | | | | |
| WG533916LRB | LRB | 12/20/21 16:10 | | | | U | mg/L | | -0.00044 | 0.00044 | | | |
| WG533916LFB | LFB | 12/20/21 16:11 | HG211213-6 | .002002 | | .00199 | mg/L | 99 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/20/21 16:15 | HG211213-6 | .002002 | U | .00198 | mg/L | 99 | 85 | 115 | | | |
| L70436-06LFMD | LFMD | 12/20/21 16:16 | HG211213-6 | .002002 | U | .00203 | mg/L | 101 | 85 | 115 | 2 | 20 | |

Nickel, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----|--------|--------|-------|------|--------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 2.0008 | mg/L | 100 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.024 | 0.024 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .5 | | .5065 | mg/L | 101 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .5 | U | .5151 | mg/L | 103 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .5 | U | .5083 | mg/L | 102 | 85 | 115 | 1 | 20 | |

Nickel, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|------|--------|--------|-------|------|---------|--------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.99 | mg/L | 100 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.024 | 0.024 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.0176 | 0.0176 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .5 | | .5129 | mg/L | 103 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | .999 | .0536 | 1.0548 | mg/L | 100 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | .999 | .0536 | 1.059 | mg/L | 101 | 70 | 130 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534256 | | | | | | | | | | | | | |
| WG534256ICV | ICV | 12/29/21 23:20 | WI211205-1 | 2.4161 | | 2.339 | mg/L | 97 | 90 | 110 | | | |
| WG534256ICB | ICB | 12/29/21 23:22 | | | | U | mg/L | | -0.02 | 0.02 | | | |
| WG534257 | | | | | | | | | | | | | |
| WG534257LFB1 | LFB | 12/30/21 0:50 | WI211001-5 | 2 | | 1.977 | mg/L | 99 | 90 | 110 | | | |
| L70436-06DUP | DUP | 12/30/21 0:59 | | | U | U | mg/L | | | | 0 | 20 | RA |
| L70436-06AS | AS | 12/30/21 1:00 | WI211001-5 | 2 | U | 2.139 | mg/L | 107 | 90 | 110 | | | |
| WG534257LFB2 | LFB | 12/30/21 1:31 | WI211001-5 | 2 | | 1.922 | mg/L | 96 | 90 | 110 | | | |

Nitrogen, ammonia M350.1 Auto Salicylate w/gas diffusion

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|--------|-------|------|-------|-------|-----|-------|------|
| WG533932 | | | | | | | | | | | | | |
| WG533932ICV | ICV | 12/20/21 19:55 | WI211206-3 | 12.024 | | 12.109 | mg/L | 101 | 90 | 110 | | | |
| WG533932ICB | ICB | 12/20/21 19:57 | | | | U | mg/L | | -0.05 | 0.05 | | | |
| WG533932LFB1 | LFB | 12/20/21 19:58 | WI210901-5 | 10 | | 9.658 | mg/L | 97 | 90 | 110 | | | |
| WG533932ICV1 | ICV | 12/21/21 16:28 | WI211206-3 | 12.024 | | 11.545 | mg/L | 96 | 90 | 110 | | | |
| WG533932ICB1 | ICB | 12/21/21 16:29 | | | | U | mg/L | | -0.05 | 0.05 | | | |
| WG533932LFB2 | LFB | 12/21/21 16:39 | WI210901-5 | 10 | | 10.009 | mg/L | 100 | 90 | 110 | | | |
| L70489-01AS | AS | 12/21/21 16:57 | WI210901-5 | 10 | U | 9.979 | mg/L | 100 | 90 | 110 | | | |
| L70490-01DUP | DUP | 12/21/21 17:00 | | | U | U | mg/L | | | | 0 | 20 | RA |

pH (lab) SM4500H+ B

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|----|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG533951 | | | | | | | | | | | | | |
| WG533951LCSW1 | LCSW | 12/20/21 19:19 | PCN62948 | 6 | | 6.1 | units | 102 | 5.9 | 6.1 | | | |
| L70436-06DUP | DUP | 12/20/21 22:01 | | | 7.8 | 7.8 | units | | | | 0 | 20 | |
| WG533951LCSW4 | LCSW | 12/20/21 22:46 | PCN62948 | 6 | | 6.1 | units | 102 | 5.9 | 6.1 | | | |
| WG533951LCSW7 | LCSW | 12/21/21 2:22 | PCN62948 | 6 | | 6.1 | units | 102 | 5.9 | 6.1 | | | |
| WG533951LCSW10 | LCSW | 12/21/21 6:21 | PCN62948 | 6 | | 6.1 | units | 102 | 5.9 | 6.1 | | | |
| WG533951LCSW13 | LCSW | 12/21/21 10:14 | PCN62948 | 6 | | 6.1 | units | 102 | 5.9 | 6.1 | | | |

Potassium, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 20 | | 19.94 | mg/L | 100 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 99.96008 | | 100.2 | mg/L | 100 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 99.96008 | 2.15 | 103.9 | mg/L | 102 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 99.96008 | 2.15 | 103.4 | mg/L | 101 | 85 | 115 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Potassium, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 20 | | 19.63 | mg/L | 98 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.44 | 0.44 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 99.96008 | | 102.2 | mg/L | 102 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 200.0188 | 6.55 | 218.8 | mg/L | 106 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 200.0188 | 6.55 | 219 | mg/L | 106 | 70 | 130 | 0 | 20 | |

Residue, Filterable (TDS) @180C SM2540C

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|----------|------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG533641 | | | | | | | | | | | | | |
| WG533641PBW | PBW | 12/15/21 18:00 | | | | U | mg/L | | -20 | 20 | | | |
| WG533641LCSW | LCSW | 12/15/21 18:02 | PCN64712 | 1000 | | 986 | mg/L | 99 | 80 | 120 | | | |
| L70436-06DUP | DUP | 12/15/21 18:30 | | | 2980 | 2954 | mg/L | | | | 1 | 10 | |

Selenium, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG535368 | | | | | | | | | | | | | |
| WG535368ICV | ICV | 01/20/22 19:06 | MS220105-1 | .05 | | .05218 | mg/L | 104 | 90 | 110 | | | |
| WG535368ICB | ICB | 01/20/22 19:08 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG535368LFB | LFB | 01/20/22 19:10 | MS211216-3 | .05 | | .04387 | mg/L | 88 | 85 | 115 | | | |
| L70383-01AS | AS | 01/20/22 19:15 | MS211216-3 | .25 | .0278 | .28985 | mg/L | 105 | 70 | 130 | | | |
| L70383-01ASD | ASD | 01/20/22 19:17 | MS211216-3 | .25 | .0278 | .28877 | mg/L | 104 | 70 | 130 | 0 | 20 | |

Selenium, total M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .04912 | mg/L | 98 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0003 | 0.0003 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05 | | .04842 | mg/L | 97 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05 | .00014 | .04862 | mg/L | 97 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05 | .00014 | .04966 | mg/L | 99 | 70 | 130 | 2 | 20 | |

Silica, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 42.8 | | 43.35 | mg/L | 101 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 21.404 | | 21.73 | mg/L | 102 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 21.404 | 9.3 | 31.51 | mg/L | 104 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 21.404 | 9.3 | 31.24 | mg/L | 103 | 85 | 115 | 1 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Silica, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 42.8 | | 42.79 | mg/L | 100 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.44 | 0.44 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 21.404 | | 21.86 | mg/L | 102 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 42.83 | 32.6 | 61.36 | mg/L | 67 | 70 | 130 | | | M2 |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 42.83 | 32.6 | 60.74 | mg/L | 66 | 70 | 130 | 1 | 20 | M2 |

Silver, dissolved M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534897 | | | | | | | | | | | | | |
| WG534897ICV | ICV | 01/14/22 16:21 | MS220105-1 | .02 | | .01841 | mg/L | 92 | 90 | 110 | | | |
| WG534897ICB | ICB | 01/14/22 16:24 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG534897LFB | LFB | 01/14/22 16:26 | MS211216-3 | .01 | | .0096 | mg/L | 96 | 85 | 115 | | | |
| L70482-02AS | AS | 01/14/22 16:36 | MS211216-3 | .01 | U | .00903 | mg/L | 90 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/14/22 16:38 | MS211216-3 | .01 | U | .00907 | mg/L | 91 | 70 | 130 | 0 | 20 | |

Silver, total M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .02 | | .0208 | mg/L | 104 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0003 | 0.0003 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .01 | | .00988 | mg/L | 99 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .01 | U | .00889 | mg/L | 89 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .01 | U | .00902 | mg/L | 90 | 70 | 130 | 1 | 20 | |

Sodium, dissolved M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|----------|--------|--------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 100 | | 100.38 | mg/L | 100 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | 100.0086 | | 100.9 | mg/L | 101 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | 100.0086 | 16.1 | 117.7 | mg/L | 102 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | 100.0086 | 16.1 | 117.2 | mg/L | 101 | 85 | 115 | 0 | 20 | |

Sodium, total M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|----------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 100 | | 98.92 | mg/L | 99 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.6 | 0.6 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.44 | 0.44 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | 100.0086 | | 101.6 | mg/L | 102 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | 200.0124 | 34.2 | 246.2 | mg/L | 106 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | 200.0124 | 34.2 | 246.6 | mg/L | 106 | 70 | 130 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate

D516-02/-07/-11 - TURBIDIMETRIC

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|------|--------|--------|-------|------|-------|-------|-----|-------|------|
| WG534438 | | | | | | | | | | | | | |
| WG534438ICB | ICB | 01/05/22 10:42 | | | | U | mg/L | | -3 | 3 | | | |
| WG534438ICV | ICV | 01/05/22 10:42 | WI211230-3 | 19.9 | | 20.6 | mg/L | 104 | 90 | 110 | | | |
| L70405-02AS | AS | 01/05/22 11:46 | SO4TURB25X | 50 | 4370 | 4453.6 | mg/L | 167 | 90 | 110 | | | M3 |
| WG534438LFB | LFB | 01/05/22 11:47 | WI211230-5 | 9.95 | | 9.2 | mg/L | 92 | 90 | 110 | | | |
| L70436-06DUP | DUP | 01/05/22 13:04 | | | 1940 | 1918.4 | mg/L | | | | 1 | 20 | |

Thallium, dissolved

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .05403 | mg/L | 108 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | .00014 | mg/L | | -0.00022 | 0.00022 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05 | | .04888 | mg/L | 98 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05 | U | .05161 | mg/L | 103 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05 | U | .05123 | mg/L | 102 | 70 | 130 | 1 | 20 | |

Thallium, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .05216 | mg/L | 104 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0003 | 0.0003 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05 | | .04766 | mg/L | 95 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05 | .00014 | .05107 | mg/L | 102 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05 | .00014 | .05091 | mg/L | 102 | 70 | 130 | 0 | 20 | |

Uranium, dissolved

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534783 | | | | | | | | | | | | | |
| WG534783ICV | ICV | 01/11/22 14:53 | MS220105-1 | .05 | | .05264 | mg/L | 105 | 90 | 110 | | | |
| WG534783ICB | ICB | 01/11/22 14:55 | | | | .00013 | mg/L | | -0.00022 | 0.00022 | | | |
| WG534783LFB | LFB | 01/11/22 14:57 | MS211216-3 | .05 | | .04859 | mg/L | 97 | 85 | 115 | | | |
| L70482-02AS | AS | 01/11/22 15:08 | MS211216-3 | .05 | .00874 | .06193 | mg/L | 106 | 70 | 130 | | | |
| L70482-02ASD | ASD | 01/11/22 15:10 | MS211216-3 | .05 | .00874 | .06166 | mg/L | 106 | 70 | 130 | 0 | 20 | |

Uranium, total

M200.8 ICP-MS

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|-----|--------|--------|-------|------|----------|---------|-----|-------|------|
| WG534224 | | | | | | | | | | | | | |
| WG534224ICV | ICV | 12/29/21 12:35 | MS211013-2 | .05 | | .0515 | mg/L | 103 | 90 | 110 | | | |
| WG534224ICB | ICB | 12/29/21 12:37 | | | | U | mg/L | | -0.0003 | 0.0003 | | | |
| WG534043LRB | LRB | 12/29/21 12:39 | | | | U | mg/L | | -0.00022 | 0.00022 | | | |
| WG534043LFB | LFB | 12/29/21 12:41 | MS211216-3 | .05 | | .04902 | mg/L | 98 | 85 | 115 | | | |
| L70593-06LFM | LFM | 12/29/21 13:24 | MS211216-3 | .05 | .00012 | .056 | mg/L | 112 | 70 | 130 | | | |
| L70593-06LFMD | LFMD | 12/29/21 13:25 | MS211216-3 | .05 | .00012 | .05593 | mg/L | 112 | 70 | 130 | 0 | 20 | |

AZMINING

ACZ Project ID: **L70437**

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|----------------|------------|--------|--------|-------|-------|------|-------|-------|-----|-------|------|
| WG534226 | | | | | | | | | | | | | |
| WG534226ICV | ICV | 12/29/21 16:48 | II211214-2 | 2 | | 1.981 | mg/L | 99 | 95 | 105 | | | |
| WG534226ICB | ICB | 12/29/21 16:55 | | | | U | mg/L | | -0.06 | 0.06 | | | |
| WG534226LFB | LFB | 12/29/21 17:08 | II211228-2 | .50045 | | .513 | mg/L | 103 | 85 | 115 | | | |
| L70563-02AS | AS | 12/29/21 17:33 | II211228-2 | .50045 | U | .529 | mg/L | 106 | 85 | 115 | | | |
| L70563-02ASD | ASD | 12/29/21 17:37 | II211228-2 | .50045 | U | .525 | mg/L | 105 | 85 | 115 | 1 | 20 | |

Zinc, total

M200.7 ICP

| ACZ ID | Type | Analyzed | PCN/SCN | QC | Sample | Found | Units | Rec% | Lower | Upper | RPD | Limit | Qual |
|-----------------|------|---------------|------------|--------|--------|-------|-------|------|--------|-------|-----|-------|------|
| WG534166 | | | | | | | | | | | | | |
| WG534166ICV | ICV | 12/29/21 5:24 | II211215-1 | 2 | | 1.958 | mg/L | 98 | 95 | 105 | | | |
| WG534166ICB | ICB | 12/29/21 5:30 | | | | U | mg/L | | -0.06 | 0.06 | | | |
| WG534081LRB | LRB | 12/29/21 5:43 | | | | U | mg/L | | -0.044 | 0.044 | | | |
| WG534081LFB | LFB | 12/29/21 5:46 | II211217-2 | .50045 | | .531 | mg/L | 106 | 85 | 115 | | | |
| L70436-06LFM | LFM | 12/29/21 6:51 | II2XWATER | .9884 | 4.36 | 5.412 | mg/L | 106 | 70 | 130 | | | |
| L70436-06LFMD | LFMD | 12/29/21 7:00 | II2XWATER | .9884 | 4.36 | 5.558 | mg/L | 121 | 70 | 130 | 3 | 20 | |

Arizona Minerals Inc.

ACZ Project ID: **L70437**

| ACZ ID | WORKNUM | PARAMETER | METHOD | QUAL | DESCRIPTION |
|-----------|----------|----------------------|--|------|---|
| L70437-01 | WG534166 | Aluminum, total | M200.7 ICP | M1 | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable. |
| | WG534783 | Beryllium, dissolved | M200.8 ICP-MS | VC | CCV recovery was above the acceptance limits. Target analyte was not detected in the sample [$<$ MDL]. |
| | WG534897 | Cadmium, dissolved | M200.8 ICP-MS | LA | Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [$<$ MDL]. |
| | | | M200.8 ICP-MS | M1 | Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable. |
| | WG534089 | Cyanide, total | M335.4 - Colorimetric w/ distillation | M2 | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable. |
| | | | M335.4 - Colorimetric w/ distillation | RA | Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL). |
| | WG535154 | Lead, dissolved | M200.8 ICP-MS | LA | Recovery for target analyte in the control sample (LCS or LFB) exceeded the acceptance criteria. Target analyte was not detected in the sample [$<$ MDL]. |
| | WG534166 | Manganese, total | M200.7 ICP | M3 | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |
| | WG534257 | Nitrate/Nitrite as N | M353.2 - H2SO4 preserved | RA | Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL). |
| | WG533932 | Nitrogen, ammonia | M350.1 Auto Salicylate w/gas diffusion | RA | Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation ($<$ 10x MDL). |
| | WG534166 | Silica, total | M200.7 ICP | M2 | Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable. |
| | | | M200.7 ICP | ZS | Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements. |
| | WG534438 | Sulfate | D516-02/-07/-11 - TURBIDIMETRIC | M3 | The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable. |

Arizona Minerals Inc.

ACZ Project ID: **L70437**

No certification qualifiers associated with this analysis

Arizona Minerals Inc.
 4542257445

ACZ Project ID: L70437
 Date Received: 12/11/2021 10:19
 Received By:
 Date Printed: 1/21/2022

Receipt Verification

| | YES | NO | NA |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1) Is a foreign soil permit included for applicable samples? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2) Is the Chain of Custody form or other directive shipping papers present? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3) Does this project require special handling procedures such as CLP protocol? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4) Are any samples NRC licensable material? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5) If samples are received past hold time, proceed with requested short hold time analyses? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6) Is the Chain of Custody form complete and accurate? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Samples/Containers

| | YES | NO | NA |
|---|-------------------------------------|--------------------------|-------------------------------------|
| 8) Are all containers intact and with no leaks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9) Are all labels on containers and are they intact and legible? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11) For preserved bottle types, was the pH checked and within limits? ¹ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12) Is there sufficient sample volume to perform all requested work? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13) Is the custody seal intact on all containers? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 14) Are samples that require zero headspace acceptable? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 15) Are all sample containers appropriate for analytical requirements? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16) Is there an Hg-1631 trip blank present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 17) Is there a VOA trip blank present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 18) Were all samples received within hold time? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

| Cooler Id | Temp (°C) | Temp Criteria (°C) | Rad (µR/Hr) | Custody Seal Intact? |
|-----------|-----------|--------------------|-------------|----------------------|
| ----- | ----- | ----- | ----- | ----- |
| 6549 | 3.8 | <=6.0 | 15 | Yes |

Was ice present in the shipment container(s)?

Yes - Wet ice was present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

Arizona Minerals Inc.
4542257445

ACZ Project ID: L70437
Date Received: 12/11/2021 10:19
Received By:
Date Printed: 1/21/2022

¹ The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCl preserved vial (organics), Na₂S₂O₃ preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).



Accredited Environmental Testing

2773 Downhill Drive Steamboat Springs, CO 80487 (970) 879-6590

L70437

CHAIN of CUSTODY

Report to:

Name: Kara Haas, Company: AMI/South32, E-mail: Kara.Haas@south32.net, Address: 749 Harshaw Road, Patagonia, AZ 85624, Telephone: 505.947.1738

Copy of Report to:

Name: Matthew Tooke, Company: NewFields, E-mail: mtooke@newfields.com, Telephone: 406.210.7824

Invoice to:

Name: Kara Haas, Company: AMI/South32, E-mail: kara.haas@south32.net, Address: 749 Harshaw Road, Patagonia, AZ 85624, Telephone: 505.947.1738

Copy of Invoice to:

Name: South32, Company: AMI/South32, E-mail: sscinvoices@south32.net, Address: NA, Telephone: NA

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES [checked] NO []

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring? Yes [] No [checked]

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Marc Taylor, Sampler's Site Information, State AZ, Zip code 85624, Time Zone MST

*Sampler's Signature: [Signature], I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

ANALYSES REQUESTED (attach list or use quote number)

Table with columns: Quote #, PO#, Reporting state, Check box, SAMPLE IDENTIFICATION, DATE: TIME, Matrix, # of Containers, GW BASELINE, and 10 analysis columns. Row 1: MW-9-20211209, 12-10-11 1540, Matrix, 6, [checked], []

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

Table with columns: RELINQUISHED BY, DATE: TIME, RECEIVED BY, DATE: TIME. Row 1: Marc Taylor, 12-10-11 0900, [Signature], 12/11/21 10:19

Qualtrax ID: 1984 Revision #: 2 White - Return with sample. Yellow - Retain for your records.

L70437 Chain of Custody